



Draft Public Realm & Transport Strategy



Comhairle Contae
Fhine Gall
Fingal County
Council



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1. Introduction

1.1 Overview

The purpose of Sustainable Swords is to produce a place-making strategy focused on the strategic regeneration and compact, sustainable development of Swords. The goals are to increase the resilience of the local economy and to provide for an enhanced, accessible, inclusive, child-friendly, and healthy urban environment.

Existing strategic documents, Your Swords: An Emerging City - Strategic Vision 2035 and the current Fingal Development Plan 2017-2023 are key drivers of Sustainable Swords. The vision of the former is to consolidate and strengthen the historic town centre of Swords; whilst the latter describes several specific objectives for the town centre within the context of a plan-led development strategy. Other policy has informed the development of Sustainable Swords such as the Climate Action Plan 2019 and Project Ireland 2040.

The ambition for Sustainable Swords is to form a coordinating device that will establish a package of measures and projects that are prioritised and programmed to be impactful, and that critically will enable the coordination of investment and decision-making across multiple stakeholders, maximising private sector engagement and identifying synergies and opportunities.

DBFL Consulting Engineers Ltd. (DBFL) and Nicholas de Jong Associates (NdJ) have been commissioned by Fingal County Council (FCC) and KPMG Future Analytics Consultants (FAC) to undertake the public realm and transport planning elements of the overarching Sustainable Swords placemaking project.

The work to date by DBFL and NdJ culminates in the Public Realm & Transport Strategy (this report) which presents an overview of the key findings, recommendations, and proposals to underpin the compact growth of Swords as an Emerging City of Scale and to provide a platform for its reimagining as an accessible, vibrant, and healthy place in which to live, work, play and invest.

1.2 What is Placemaking?

Placemaking is generally recognised as a process for creating places in which people want to live, work, or explore. It is a process because it involves multiple steps relating to design, location, infrastructure, logistics, services, and most importantly, the needs of the people that the places are being created for.

It involves working collaboratively across sectors and disciplines to comprehensively consider the future development of distinctive and vibrant places. People are placed at the heart of the process for the purpose of creating places that are vibrant, have a clear identity and where people can develop a sense of belonging. Effective community-based participation is essential at the project identification and development stages of a placemaking strategy, to ensure that it results in the creation of quality public spaces that contribute to people's health, happiness, and wellbeing.

The Placemaking Strategy for Swords is underpinned by current and emerging best practice that puts the needs and aspirations of the local community first while recognising the importance of the public realm for creating places that people want to positively identify with and enjoy.

Project for Public Spaces (PPS), a cross-disciplinary non-profit organisation based in New York, has pioneered a Placemaking approach to public spaces since 1975. It now has experience of working with over 3,500 communities, throughout the US and in over 50 countries, which shows by example the significance of placemaking in creating and revitalizing public spaces.

The PPS approach sets out several Key Principles of Placemaking to facilitate creative patterns of use, while paying particular attention to the physical, cultural, and social identities that define a place and support its ongoing evolution.

In addition to fostering community practices, PPS has published guidelines on developing great public spaces and providing recommendations on how to improve city living. The organisation has rapidly evolved as the central hub of the global Placemaking movement, connecting people to ideas, resources, expertise, and partners.

public spaces have since been developed based around the principles of placemaking, one of which has received a national award (Civic Square at the Metals).

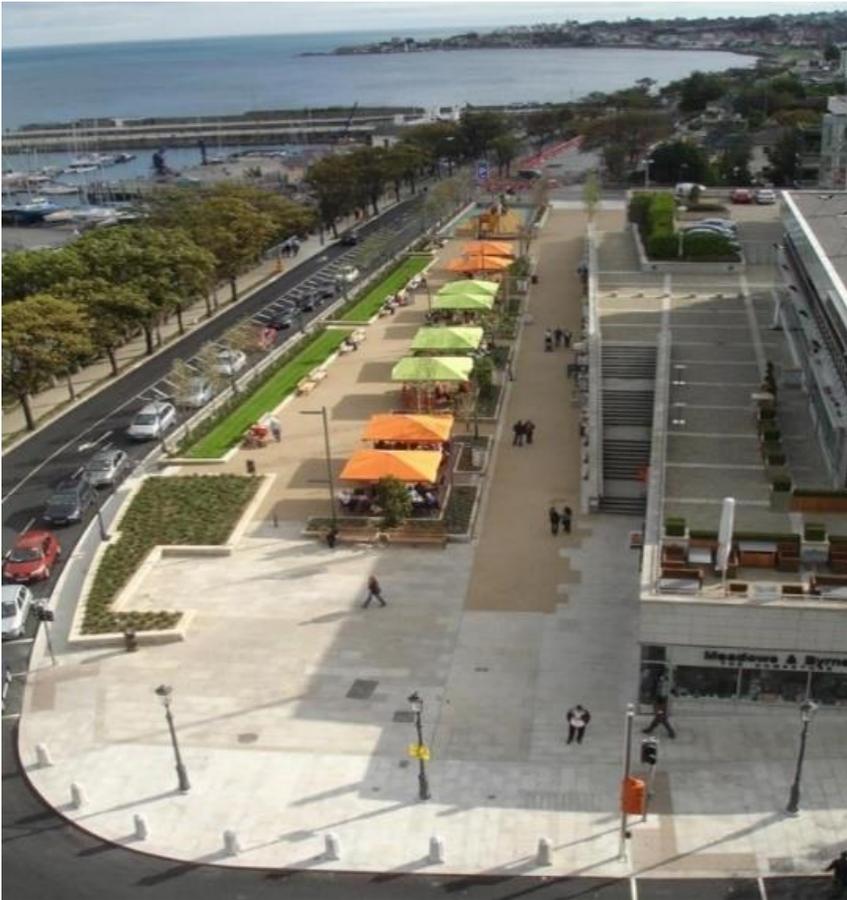


Image 2: The Metals, Dún Laoghaire. Source: NdJ Associates.



Image 3: Placemaking at George's Street, Dún Laoghaire. Source: NdJ Associates.

Other placemaking initiatives in Dún Laoghaire aimed at creating vitality include:

- Supporting the commercial activities of the Town, particularly along George's Street.
- Creation of an 18hr economy.
- Increasing the residential population, including student accommodation, to create demand and critical mass for local services.
- Developing the Waterfront as a marine, leisure and tourism destination and creating a high-quality public realm.
- Redefining George's Street Quarters and The Waterfront.

Placemaking Wales

Placemaking is enshrined in planning at the national level in Wales. A Placemaking Charter has been developed in collaboration with representatives of a wide range of stakeholders and organisations associated with the built environment. This group, known as the Placemaking Wales Partnership, have signed up to the Charter to demonstrate the collective desire to improve the quality of places in Wales.

The resultant 'Place Making Guide 2020' sets out the strategy and objectives for placemaking and is aimed at everyone involved in creating successful places, including the local community, environmental professionals and local authorities. The document sets out in detail what placemaking means, particularly in the planning context in Wales, and covers at a high level the key aspects of placemaking that should be considered. The key principles for achieving successful placemaking are identified in the Guide as outlined below.

People and Community

The local community are involved in the development of proposals. The needs, aspirations, health and well-being of all people are considered at the outset. Proposals are shaped to help to meet these needs as well as create, integrate, protect and/or enhance a sense of community and promote equality.

Location

Places grow and develop in a way that uses land efficiently, supports and enhances existing places and is well connected. The location of housing, employment, leisure and other facilities are planned to help reduce the need to travel.

Movement

Walking, cycling and public transport are prioritised to provide a choice of transport modes and avoid dependence on private vehicles. Well-designed and safe active travel routes connect to the wider active travel and public transport network, and public transport stations and stops are positively integrated.

Mix of Uses

Places have a range of purposes which provide opportunities for community development, local business growth and access to jobs, services and facilities via walking, cycling or public transport. Development density and a mix of uses and tenures helps to support a diverse community and vibrant public realm.

Public Realm

Streets and public spaces are well defined, welcoming, safe and inclusive with a distinct identity. They are designed to be robust and adaptable with landscape, green infrastructure and sustainable drainage well integrated. They are well connected to existing places and promote opportunities for social interaction and a range of activities for all people.

Identity

The positive, distinctive qualities of existing places are valued and respected. The unique features and opportunities of a location, including heritage, culture, language, built and natural physical attributes, are identified and responded to.



Image 4: Creating Space for People. Coal Drops Yard, Kings Cross, London.

'Town Centre First, A Policy Approach for Irish Towns' (Government of Ireland 2022) supports the placemaking principles by offering a new approach to the development of towns where local communities and local businesses can be central to reimagining their own towns and planning their own futures.

The document demonstrates a strong commitment to 'place-making' for strengthening the relative attractiveness and vibrancy of towns and as a key element in gaining competitive advantage. The guidance indicates that many Irish towns have already implemented significant placemaking initiatives that are having a transformative effect on the town centre environment and its 'sense of place'. These are recognised as providing the template for placemaking in the Town Centre First policy. Foreign Direct Investment is also recognised as being strongly influenced by the quality-of-life towns can offer to prospective talent. Vibrant towns are important catalysts for balanced regional development with placemaking identified as a key differentiator in 'Enterprise 2025, Ireland's National Enterprise Policy'.

The Town Centre First policy sets out a range of Actions centred around improving knowledge and understanding of towns and what they need, enhancing the capacity of delivery agents to implement this ambitious policy, building new structures at national and local level, and ensuring that new and existing funds are coordinated and targeted toward the implementation of Town Centre First.



Image 5: Tipperary Town Main Street.

The Town Centre First policy recognises that successful places:

- Are characterised by an attractive public realm (streets, spaces and parks) that is designed to invite people to meet, mingle and dwell;
- Contain a variety of services/shops that provide employment opportunities, enable people to shop locally and meet the needs of the local community;
- Provide a range of cultural, recreational and community spaces (that includes scope for periodic events and festivals) that bring together community members and attract visitors/tourists;
- Contain a well maintained building stock that creates visual interest and animates streets and spaces;
- Conserve, adapt and highlight historical buildings and streetscapes that provide the town with a unique identity;
- Are attractive vibrant places for enterprises to grow and develop;
- Are well connected and accessible to sustainable modes of transport, enabling a high proportion of journeys to be made by foot and/or bicycle from the immediate hinterland (e.g. the '10 minute town' concept);
- Manage traffic within central areas so that streets prioritise vulnerable users (pedestrians and cyclists), enabling them to move about safely and in comfort;
- Provide a mix of housing typologies and tenures to cater for diverse communities in terms of age, income and mobility;
- Utilise digital technology to enhance the experience of living and working in towns, enabling greater choices in terms of location and lifestyle;
- Provide opportunities for the amenity, health and well-being of residents, workers and visitors.



Design Manual for Urban Roads and Streets (DMURS), Dept. of Transport, Tourism and Sport (updated 2019)

The principles of placemaking at the National policy level are also reflected in this influential Design Manual which sets out a completely different perspective on street design in urban areas.

It requires a shift away from conventional design solutions toward those which prioritise sustainable transport, safeguard vulnerable users and promote a sense of place. The design of safer, more attractive, and vibrant streets is highlighted as being of benefit to everyone by generating and sustaining communities, with wide ranging economic, social and environmental consequences.

This alternative approach is principally based around the application of a more integrated model of street design, where real and perceived barriers to movement are removed to promote more equitable interaction between users in a safe and traffic calmed environment. In this way, street design can be more effective in cost and efficiency, slowing traffic speeds, through understanding and addressing driver behaviour. Careful place-making will protect heritage and tourism potential whilst facilitating growth and new uses. Better quality public realm will promote civic confidence and can attract stakeholder investment, thus creating jobs. Encouraging walking and cycling, linked to easier access for a broad range of ages and abilities, will ensure liveliness and interaction on streets, thereby increasing vibrancy and improving commercial and retail activity.



Image 6: Traffic Calming and Increased Footways Along Church Street, Athlone.

1.3 The Sustainable Swords Placemaking Strategy

Placemaking is central to Fingal County Council's policy for supporting the development of a hierarchy of high quality, vibrant, consolidated, and attractive urban settlements. Chapter 3 of the current Fingal Development Plan 2017-2023 sets out a detailed approach to achieving good placemaking:

"Adhering to the principles of placemaking will achieve accessible, safe and sustainable built and natural environments, which reflect the special character and heritage of the County and its varied townscapes and landscapes".

The Sustainable Swords placemaking strategy is also a direct outcome of the planned development strategy for Swords as contained in Chapter 4 of the Development Plan. It is anticipated that the following key objectives of the placemaking strategy will be delivered by Sustainable Swords:

- Expanding upon the recommendations in the Swords section of the South Fingal Transport Study and developing a multi-modal transport strategy for Swords which encourages the transition towards sustainable and low carbon transport modes.
- Considering innovative measures to reduce reliance on the car and to the provision of high-quality walking and cycling permeability by offering direct routes to local destinations and public transportation hubs.
- Supporting community cohesion measures, such as a collaborative 'what works' approach to promoting safer neighbourhoods and reducing anti-social behaviour to enable everyone to contribute to a sense of well-being within an improved quality of life.
- Identifying measures to enable regeneration of lands within the study area to ensure rejuvenation of the town centre and to enable activation of land for compact development.
- Establishing a prioritised, programmed and impactful package of measures and projects necessary.

The placemaking strategy seeks to create a distinct urban identity for Sustainable Swords and a destination for citizen and visitors. The public realm is recognized as having a key role to play in this process. It is acknowledged that a successful public realm is a component of a successful place.

This Public Realm and Transport Strategy provides the framework for developing and delivering these placemaking objectives within the context of the overarching Sustainable Swords Strategy Report.

1.4 Strategy Scope & Structure

The Public Realm & Transport Strategy is an integral part of the overall Sustainable Swords project, focused on underpinning the strategic regeneration and compact, sustainable development of Swords in a manner that increases the resilience of the local economy and to provide for an accessible, inclusive, child-friendly, and healthy urban environment.

The Public Realm and Transport elements of the project are central to the overall Placemaking Strategy for the town centre and have been informed by previous studies and statutory documents, current best practice and guidance, and the findings of public engagement undertaken to date as part of the wider study.

The Public Realm element is also required to complement measures in the South Fingal Transport Study (SFTS) to ensure that quality public realm considerations are integrated into transport projects. The SFTS includes for a range of measures to improve the quality and experience of the environment, in particular increased opportunities to reallocate road space for sustainable mobility, to reduce traffic movements in the town centre including the reduction of on-street car parking.

Other key considerations of the Public Realm and Transport Strategy include:

- Character of the town including its natural, built and cultural heritage.
- The image of the town and its tourism function.
- Liveability/quality of life relating to the urban environment.
- Opportunities to enhance vibrancy and vitality, ease of access to amenities and services.
- Opportunities to re-invigorate public realm areas, to create new space or re-function old space, that contribute to place making, regeneration and the development of areas in the town.
- Opportunities for linkages through public realm areas to key opportunity sites and to residential and employment areas.
- Accessibility, universal design and public safety considerations.
- Promoting health and well-being and Swords as a Healthy City, Child Friendly City and Age Friendly City.
- The town's green network identified in the Development Plan.
- Linking initiatives to climate action, opportunities for greening and for green design features such as SuDS measures control surface water run-off, enhance biodiversity or promote a varied streetscape.
- Quality of appearance and durability/ sustainability of materials/street furniture.
- Preventative measures to avoid anti-social behaviour in the public realm.

- Opportunities to enhance public realm at night.
- Opportunities that provide quick wins or temporary solutions as part of a delivery strategy.
- Conservation designations.

The public realm strategy for Swords Town Centre is informed by the Swords Health Check, undertaken as an integral part of the study for Sustainable Swords, the community engagement that has been undertaken to date, current guidelines and policy documents, and the core documents that underpin the vision to 'develop Swords as an Emerging Green City'. Main references include:

- 'Town Centre First | A Policy Approach for Irish Towns', Government of Ireland (2022).
- 'Design Manual for Urban Roads and Streets' (DMURS), Dept. of Transport, Tourism and Sport (2013).
- Fingal Development Plan 2017-2023.
- 'Your Swords An Emerging City - Strategic Vision 2035'.
- 'Swords Castle Cultural Quarter, Architectural Masterplan 2009'.

The scope and methodology of the transport planning element of the Strategy is based on best practice guidance devised by the National Transport Authority (NTA) and Transport Infrastructure Ireland (TII) on Area Based Transport Assessments (ABTA). The ABTA process is focused around five stages:

- 1) Baseline Assessment of Study Area.
- 2) Establish Context for the ABTA.
- 3) Option Development and Assessment.
- 4) Refinement and Sense-Check.
- 5) Finalisation of the Strategy.

Extensive technical analysis has been undertaken at each stage to inform the development of the Strategy. By carefully considering the combined qualitative analysis of the existing physical assets and condition of the town and, the quantitative baseline data, as well as international good practice in public realm design and sustainable mobility, a suite of recommendations that are based on robust evidence, voices from the community and that are in line with the Sustainable Development Goals (SDGs) has been developed and culminates in this Report. This Report summarises the process of each stage and outlines the final recommendations.

This Strategy provides further detail and guidance regarding sustainable development, including public realm and sustainable mobility developments, that are already provided for, in general terms, by the existing land use planning and transport framework such as the Fingal Development Plan and the Greater Dublin Area Cycle Network Plan, that has already been subject to appropriate levels of environmental assessment.

Any proposals for land use development or activity progressed under this Strategy shall be required to comply with provisions of the current and future Fingal Development Plan and the Draft Greater Dublin Area Transport Strategy.

All drawings, routes and illustrations contained within this document are indicative only, for illustration purposes. All greenway and cycleway routes are taken from the Greater Dublin Area Cycle Network Plan for Swords.

The draft Public Realm & Transport Strategy report is structured as follows:

- This section, **Section 1**, is the Report's introductory chapter, setting out the Strategy's purpose and an overview of its scope and methodology.
- **Section 2** discusses the importance of good quality public realm and how sustainable mobility can support this.
- **Section 3** sets out a summary of the current conditions of Swords' public realm and transport environment.
- **Section 4** provides the policy context that the Strategy is based on, as well as a number of international best practice case studies which have been reviewed for their successful approaches to the public realm and sustainable mobility. It also presents future transport proposals for Swords relevant to the Strategy such as BusConnects and the R132 Connectivity Scheme.
- **Section 5** summarises the transport option development and assessment process including the Transport Objectives, Multi-Criteria Analysis of the options, and the findings of the modelling assessment.
- **Section 6** presents, at a high level, the Strategy for the Swords including a preliminary movement strategy and the Strategy's street hierarchy in accordance with DMURS.
- **Section 7** presents the Public Realm and Transport Strategy's key projects, recommendations, and supporting measures.
- **Section 8**, the final section of the Report, concludes by providing guidance for the use of materials and maintenance of the Sustainable Swords public realm and transport schemes.



Make A Submission

Tell us what you think about plans for Sustainable Swords. Make a submission on the Consult Portal today.

MAKE A SUBMISSION

1.5 Public Consultation

The success of the Sustainable Swords Strategy is underpinned by ongoing meaningful and open engagement with a wide range of stakeholders. The involvement in the whole community is an integral facet to successful placemaking.

There have been many opportunities to engage throughout the process thus far, which have in turn influenced and shaped the recommendations herein. These opportunities include:

- Sustainable Swords Webinars.
- Online Surveys via Fingal County Council Consult Portal.
- Strategic Conversations.
- Town Centre Health Check.
- Healthy Streets Check.
- Green Schools Audit.

The outcomes of these engagements are summarised in Section 3 of the Sustainable Swords Strategy.



2. Public Realm and Transportation Context

2.1 A Shared Approach

The advent of the private car changed the way in which our urban areas function and were designed. Our streets became dominated by cars, and neighbourhoods were often planned in a way that prioritised vehicular traffic.

There has been a step-change in recent years, however, to re-examine the role our streets play as places that support a much broader range of functions, rather than solely a link for traffic movement. This shift in focus aligns with recognition of the impacts that congestion and emissions have on the environment and people's quality of life.

Cities and towns around the globe are reconfiguring and reimagining their public spaces to encourage healthier lifestyles, improve local air quality, and support local communities and economies.



Image 7: Traffic-Calmed Street in Preston, UK. Source: NdJ Associates.

In Ireland, the Design Manual for Urban Roads and Streets (DMURS) has been especially influential in prioritizing pedestrian movements in the transport hierarchy and sets out a completely different perspective on street design in urban areas.

The national guidance requires a shift away from conventional design solutions toward those which prioritise sustainable modes of transport, safeguard vulnerable users and promote a sense of place. The design of safer, more attractive and vibrant streets is highlighted as being of benefit to everyone by generating and sustaining communities and neighbourhoods, with wide ranging economic, social and environmental consequences.

This alternative approach is principally based around the application of a more integrated model of street design, where real and perceived barriers to movement are removed to promote more equitable interaction between users in a safe and traffic calmed environment. In this way, street design can be more effective in cost and efficiency, slowing traffic speeds, through understanding and addressing driver behaviour.

Encouraging walking and cycling, linked to easier access for a broad range of ages and abilities, will ensure liveliness and interaction on streets, thereby increasing vibrancy and improving commercial and retail activity.

The Sustainable Swords Public Realm & Transport Strategy represents an opportunity to move away from the traditional highways engineering-led approach in Swords and acknowledges that the design of the built environment is a key determinant of how people move around.

Better street design in urban areas will encourage more people to choose to walk, cycle or use public transport by making the overall experience safe and more attractive. It will lower traffic speeds, reduce unnecessary car use, and create a built environment that responds more sympathetically to the distinctive character of Swords.



Image 8: A Street for People: Dordrecht, Holland.

2.2 The Story So Far

The rapid increase in the volume of traffic, particularly on Main Street, and associated parking and circulation requirements, have been especially influential on the character of Swords town centre. Current infrastructure within Swords is deficient and largely of poor quality, particularly with regard to walking and cycling facilities.

In most cases, the streets and public spaces of Swords town centre have lost their traditional function as civic/cultural spaces and instead are used as parking areas. The dominance of vehicles within the public realm has contributed to the decline of the town centre as an attractive place to be in, and as a conducive place in which to live or visit for extended periods. The public realm can also present significant access challenges for people with disabilities and for other vulnerable road users.

Historically, transit movement in Swords has been concentrated along the north-south corridors of Main Street/Dublin Road and the R132 - with the outdated layout of these roads prioritising travel via motorised vehicles with data showing that there is a high level of car dependency in the town.



Image 9: Vehicle Dominance on Swords Main Street.

At present, approximately 25% of work trips and 60% of school trips remain within Swords which could be served by more sustainable travel, i.e., walking, cycling, scooting and public transport. The current daily generation of approximately 21,000 work trips and 10,500 school trips places a significant burden on existing transportation infrastructure and services such as bus services and the existing road network.

The historic spatial layout of Swords, with Main Street bisecting the residential areas to the west from the existing and future proposed commercial and employment focused lands to the east poses a challenge in retrofitting high-quality linkages and filtered permeability that could promote more sustainable mobility in and around Swords.

The public realm and transport planning elements of Sustainable Swords will aim to capitalise on the transformational opportunities offered by the investment in significant transport infrastructure such as the NTA's Active Travel and Sustainable Transport funding schemes, MetroLink, Dublin BusConnects, strategic greenways, and the reallocation of road space on the R132 to facilitate greater levels of walking, cycling and public transport use.

2.3 Why the Public Realm is Important

The public realm is commonly defined as all areas between buildings including streets, laneways and open squares that are accessible to the public. From earliest times, public spaces have played a vital role in the cultural, political, commercial, social, and recreational development of communities. People are the lifeblood of successful towns and community life develops through everyday encounters and interactions. Public spaces are essentially outdoor places where people can meet, mix, engage and exchange.

The benefit of redefining streets as social spaces is becoming increasingly recognized, especially in the context of competing activities such as out-of-town retail and on-line shopping. Examples from cities all over the world illuminate the importance of life and activity as an urban attraction. People always gather where things are happening and spontaneously seek the presence of others.

The clear shift from vehicle movement driven street design (as advocated by DMURS) to an approach that acknowledges the social and place-making functions of streets and incorporates these into the design, forms an important component of achieving a more sustainable society.



Image 10: People-watching is one of the most popular activities of urban life.

The Covid-19 pandemic has raised further awareness of the importance of quality streets in providing places for people to socialise and recreate. It has also highlighted the quality of the public realm, the narrowness of footpaths on many streets, inadequate pedestrian crossings, and the lack of available outdoor spaces in which people can comfortably interact. In addition, post-pandemic, many people have become more aware of the benefits of easy local access to many of their daily needs, especially those within easy walking or cycling distance of their home.

Well-designed and connected public spaces are known to enhance the physical environment and improve the 'liveability' and sustainability of towns and cities. They provide a communal focal point and a place where residents and visitors alike can congregate for a variety of purposes.

The public realm therefore needs to be designed for a variety of users and should be visually attractive and encourage social interaction, promoting the concept of urban space as public meeting place.



Image 11: Streets can be repurposed on a permanent or occasional basis.



Image 12: Streets that were once dominated by the private car can be reimagined as people-friendly places. Source: DBFL.

The benefits of public realm enhancements can include:

Health

- A recent study in Somerset demonstrated that 85% of residents feel that the quality of public space has a direct positive impact on their lives and on the way they feel.
- Increased levels of well-being and reduction in stress.
- Increased pedestrian safety through traffic calming measures.
- Increased walkability and cycle access leading to greater levels of activity
- Reduction in noise and air pollution through reduced traffic and increased green infrastructure.

Social

- Reinforcing a sense of place.
- Providing an inclusive environment and free resource to be enjoyed by all the community.
- A place for public events to bring the community together.
- A reduction in crime and anti-social behaviour.
- Diversity of uses within the town centre.

Environmental

- Increased urban greening and access to green space.
- Increased biodiversity through different planting techniques.

- Reduced risk of surface water flooding through the use of SuDS and increased tree canopy.
- Reduction in noise and air pollution.
- Increased urban shading and climate change adaptation.
- Improved air quality.

Economic

- Well-planned improvements to public spaces within town centres can boost commercial trading by up to 40% and generate significant private sector investment (CABE Space 2004).
- Similar public realm works have seen relative increases in footfall in excess of 10%.
- Town markets and events can increase footfall by 15-27%.
- Public realm and lighting enhancements can help support the night-time economy.
- Improvements to the public realm have been shown to increase residential and commercial property values.



Image 13: Good placemaking can generate attractive environments and enliven streets and civic spaces. Source: DBFL.

Good placemaking and public realm enhancements can generate attractive environments and enliven streets and civic spaces and encourage inward investment. The ease at which people move around impacts positively on our quality of life and boosts the attractiveness of Swords as a place to live, work and visit. Similarly, the ease at which goods can be moved from place to place is vital to an efficient and vibrant economy. In this way, it supports the economic, social, cultural and sustainability progress of Swords.

Careful place-making will protect heritage and tourism potential whilst facilitating growth and new uses. Better quality public realm will promote civic confidence and can attract stakeholder investment, thus creating jobs.



Image 14: Public Realm as a Focus for Community and Visitor Interaction. Source: NdJ.

	<p>Public realm improvements can strengthen a place’s values and assets, creating a legible identity and sense of place.</p>
	<p>An Irish study showed that residents living in walkable neighbourhoods exhibit at least 80% greater levels of social capital than those living in car dependent ones.</p>
	<p>High street walking, cycling and public realm improvement can increase retail sales by up to 40%.</p>
	<p>High street improvements in London led to a 216% increase in people stopping, sitting, or socialising. 72% of businesses in Blackrock viewed the reallocation of street space to pedestrians and cyclists as a positive addition to the Main Street.</p>
	<p>The introduction of a School Streets Zone in Fingal resulted in a 20% reduction in air pollution around the zone.</p>
	<p>Regular walking and cycling decreases consistently the risk of type 2 diabetes, coronary heart disease, and all-cause mortality by 20%.</p>
	<p>Street trees inherently clean the air - 17 trees can absorb enough CO₂ annually to offset 26,000 miles of driving.</p>

3. Swords Today

3.1 Overview

The following section provides a summary of the existing public realm and transport conditions of Swords, informed by a comprehensive analysis of the physical environment, existing travel patterns and demand, and public feedback. Extensive public consultation was undertaken as part of Sustainable Swords through the form of webinars, the Fingal County Council's Consult Portal, the Town Health Check, the Healthy Streets Check and the Green Schools Audit.

The [Sustainable Swords Town Health Check report](#) (July 2021) details extensively the existing conditions of Swords in terms of Town Character and Urban Realm; Natural Environment; Permeability, Accessibility and Transport; and Community Infrastructure. A summary of relevant themes is presented here.



3.2 Study Area

The Study Area for Sustainable Swords, as illustrated in Figure 1 and Figure 2, encompasses Swords Town Centre and is bound to the east by the R132, to the north by the roundabout on the R125, to the south by the Dublin Road roundabout, and to the west, it extends out to parts of Forest Road and the Ward River Valley Park. Some recommendations for areas outside of this Study Area but within its functional catchment area, however, may arise to improve connectivity to/from Swords.

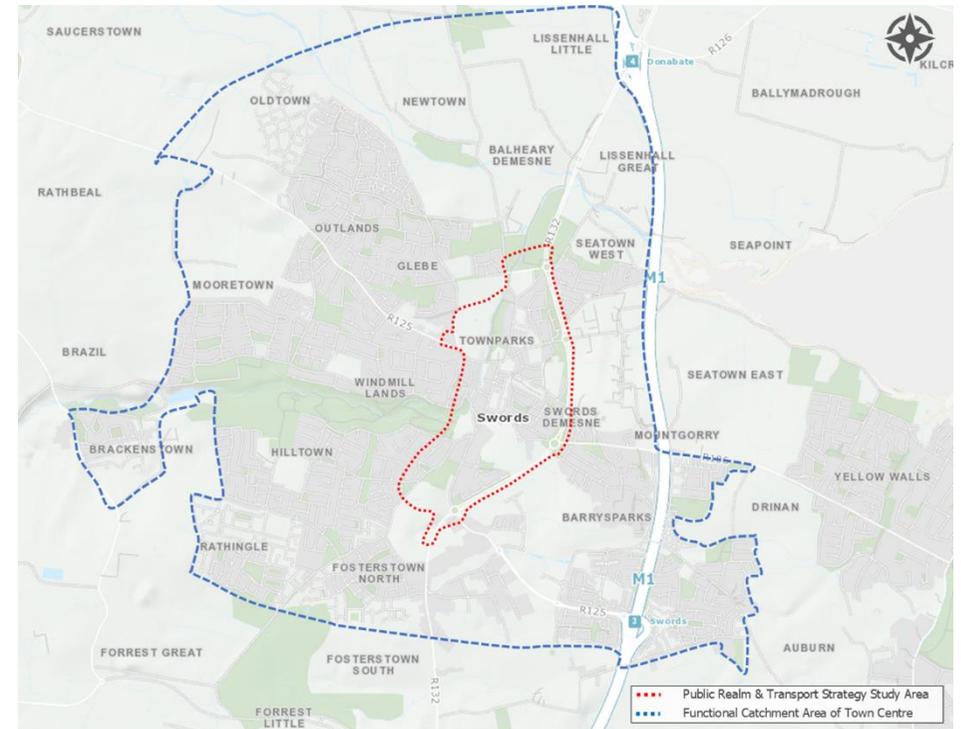


Figure 1: Sustainable Swords Study Area and Functional Catchment Area of Swords Town Centre.

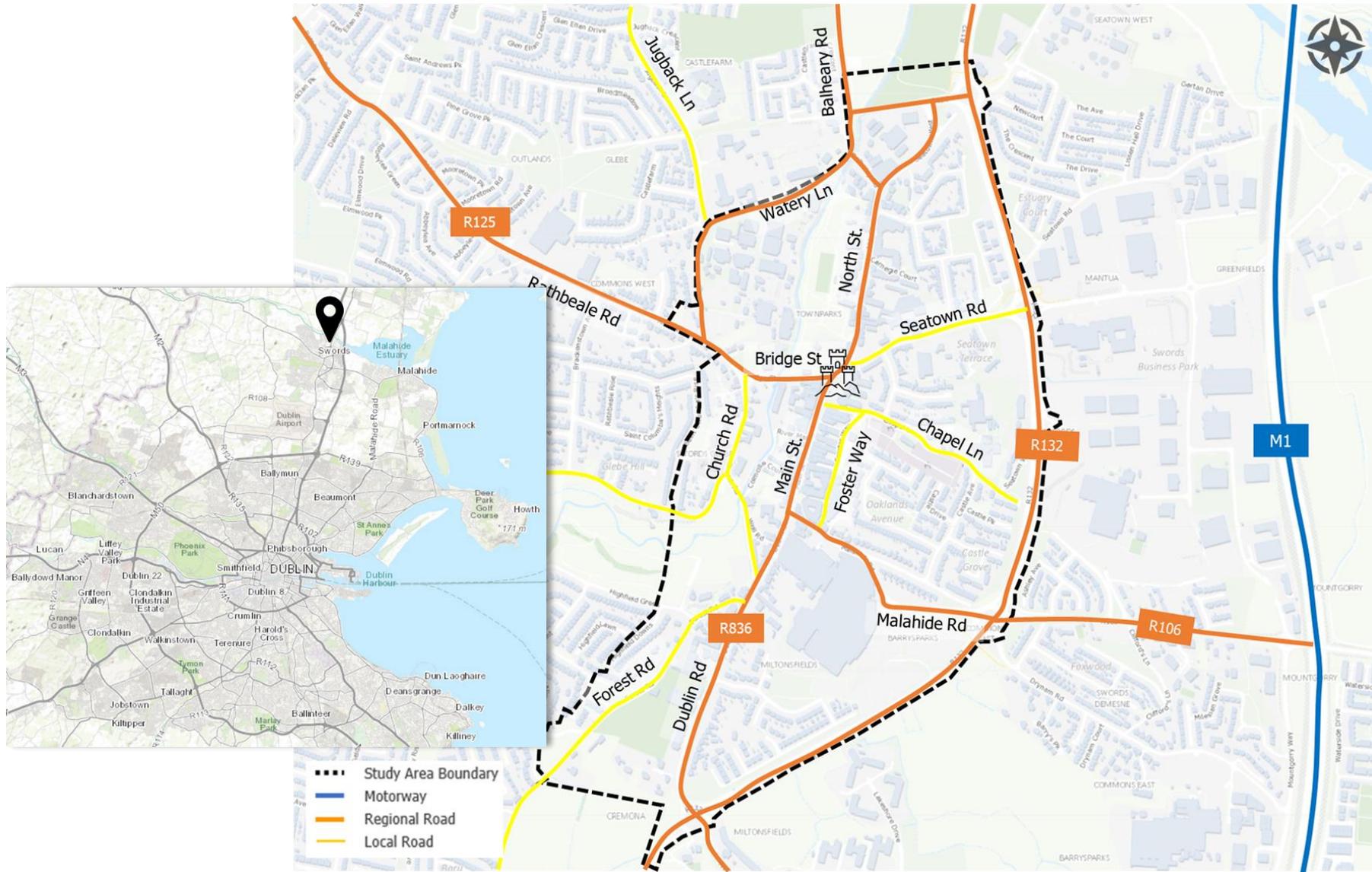


Figure 2: Sustainable Swords Study Area and Existing Road and Street Network.

3.3 Swords Town Centre in Context

Swords is the administrative capital of Fingal County Council with a population of 44,446 within the development boundary, as per the 2016 Census; 6,000 more than the Census of 2011, making Swords one of the largest and fastest growing towns in Ireland. Due to its strategic location, with direct links to the National road network (M1, M50 and Dublin Tunnel) as well as proximity to the Dublin/Belfast Economic Corridor, Swords plays a vital role, fulfilling key residential and employment functions.

Swords is home to some of the largest employers in the country, including highly skilled employment centres arising through links with Dublin Airport and business parks along the R132 (including Airside, Swords Business Park and Swords Business Campus).

Residential development in Swords continues within establishing areas to the west and south of the town including Oldtown-Mooretown and Ridgewood with the longer-term residential potential of the town focused on the strategic land bank of Lissenhall to the east. It is envisaged that this important reserve could accommodate a significant mixed-use employment district in addition to providing between 6,000 and 7,000 residential units. Swords Masterplans (Barryspark, Crowcastle, Fosterstown and Estuary West) while providing a framework for the delivery of employment and opportunities for commercial floorspace, also offer the potential for medium/long term residential development into the future.

3.4 Distinctive Qualities

Swords is a compact place of many different characters, stemming from its ancient beginnings and geographic location. The Town of Swords dates back 512AD with the foundation of a monastery by St. Colmcille, one of Ireland's three patron saints. According to legend, the saint blessed the local well, thus giving the town its name 'Sord', being the Irish Gaelic for 'clear' or 'pure'. However, 'An Sord' also means 'the water source', which could indicate that a large communal drinking well had existed here in antiquity. The water from St. Colmcille's Well is said to have great healing powers and remains on consecrated grounds at Well Road to the south-west of present Main Street.

The original extent of the early monastic foundation associated with St. Colmcille is evident today from the boundary of Swords Glebe together with the curving alignment of the Brackenstown Road, Church Road and Rathbeale. St. Colmcille's Roman Catholic Church (early 19th-century) is located on Chapel Lane. Within the

grounds of St. Columba's Church on Church Road, an imposing early Christian Round Tower (9th-century) associated with the monastic enclosure occupies an elevated location to the north-east of the town.



Image 15: St. Columba's Church and Round Tower, Church Road.

The subsequent development of Swords was strongly influenced by the transfer of the monastery to the first Norman bishop of Dublin, who built an expansive castle at the northern end of the town in the early 13th-century, around 200m northeast of the ecclesiastical site and prominently situated above the Ward River. Elevated land to the north of the castle, known as Spittal Hill, is reputed to be the funeral place of Irish high king Brian Boru, after he was killed at the Battle of Clontarf.

The town continued to evolve as both an ecclesiastical and defensive settlement, strategically positioned on the principal arterial route from Dublin north to Donaghadee. Throughout the medieval period it consisted principally of one long wide street, known as High Street, which corresponds with the present Main Street. Long burgage plots were laid at in a regular pattern perpendicular to the street, extending eastwards to the Ward River and westwards to the boundary with Swords Demesne, forming a nucleated settlement core focused on the castle.



Image 16: Swords Castle.

Swords Demesne extended between Chapel Lane, Sea Town or School Lane, Main Street and Malahide Road, with Swords House positioned on its northern edge opposite the castle at the corner of Chapel Lane. The main entrance to the large elegant red brick building, occupied by local landlord Colonel Forster, was bounded by a high stone wall and a large stand of evergreen Irish Oak trees.



Image 17: Former Swords House (the 'big red house').

The designated built heritage of the town is considerable, as detailed in the Sustainable Swords Health Check, and includes the following notable protected structures - Swords Castle; the Court House; the Carnegie Library; the Old Borough School; the Sexton's House; the Old Vicarage, St. Columba's Church and St. Columcille's Church; the old School House; the National Irish Bank; the Parochial House; the Mill Bridge; Accord; and Swords Youth and Resource Centre.

There are also many other undesigned structures that contribute and provide special character to the town and its historic streetscapes. Some of these are neglected or poorly maintained, and others obscured by later additions and poor signage.

Whereas the urban morphology of Main Street remained largely intact for several centuries, with the castle and ecclesiastical enclosures clearly discernible, by the late-20th and early 21st centuries the character and identity of Swords had significantly changed with the rapid increase in traffic and demands of private vehicles.



Image 18: Main Street, early 1900s.





Image 19: Swords Main Street, today.

Large-scale shopping centres and multi-storey car parking further contributed to the pronounced change in townscape character. The main retail area continues to be focused on the town's wide, tree-lined Main Street, together with the extensive combined shopping centres of The Pavilions and Swords Central. There are also two smaller retail developments at Swords Plaza, Swords Castle Shopping Centre, and Swords Town Mall.

Swords House was replaced by the new County Hall in 2001 and the demesne, part of which had earlier formed the Town Park, substantially redeveloped. The dominant stand of evergreen oaks remains to the front of the Civic Offices, and the eastern boundary of the former Demesne is now Forster Way.

The west of the urban area is mostly residential. The main business and industrial areas are located to the east of the town centre, along the R132 dual carriageway.

There are significant areas of existing public open space along the existing water courses of the town along the Ward River Valley, the Broadmeadow River Valley and Estuary, forming key elements of green infrastructure for Swords and contributing importantly to the town's sense of place.

Ward River Valley Regional Park ('The Jacko') is an attractive linear park on the banks of the Ward River, covering an area of 89 ha. (220 acres) between Swords

Town Centre and Knocksedan Bridge. The park includes tree-lined pathways, viewing points, picnic sites, exercise equipment and sports pitches. A new all-weather sports pitch is currently under construction within the park, featuring a synthetic floodlit pitch to full-size GAA and soccer standards, together with car, coach and bicycle parking to service the needs of the pitch users and to improve access to the park. The Park is connected by a narrow strip of open space along the Ward River and Colmcille Way to Swords Town Park, which extends northwards from Swords Castle and includes a playground and tennis courts.



Image 20: Ward River Valley Regional Park.

3.5 Key Qualities

Swords remains a distinctive town with many natural and built heritage features and with well-defined boundaries and a strong landscape setting. It has retained its compact urban character due to the established green belt areas to the south and east, between Swords-Dublin Airport and Swords-Malahide. The Airport has prevented the town from expanding further south, while expansion eastwards is limited by the large Broadmeadow Estuary and Malahide. Further north and west beyond the settlement boundary of Swords, there is mostly sparsely populated, relatively flat farmland.

Swords is already home to some of the largest employers in the County and performs as a high functioning employment centre. The proposed route for MetroLink will act to further enhance and strengthen Swords' strategic location.

Other strategic features that make Swords an attractive place to live and invest in include:

- Direct access to the national motorway network via the M1.
- Direct access to Dublin City/ Port via the M1 and Port Tunnel.
- Direct access to Dublin Airport, which is located immediately to the south, via the M1 or the R132.
- Regional shopping centre in the form of the Pavilions, accessible from Main Street and the R132.
- Established large-scale commercial and employment uses
- Mature residential areas.
- Strong landscape quality and green infrastructure network.



Figure 3: Existing Built Form and Main Uses of the Town Centre.

3.6 Character Areas

As identified in 'Swords, an Emerging City – Strategic Vision 2035', the current town centre of Swords is defined by the following four main Character Areas:

1. Retail Core

This area comprises Main Street and extends to the Pavilions Shopping Centre site. The majority of the small-scale retail/services functions within the Town Centre are focused on Main Street and its associated side streets, while the large-scale retailers are facilitated within the Pavilions Shopping Centre.

2. Commercial /Residential Core

North Street is characterised by a more commercial focus, with offices, small scale retail outlets, small mix of terraced housing, public houses, apartments and a hotel. The current trend is for medium size offices to locate here. To the south, Dublin Street similarly accommodates a range of small-scale commercial units, as well as residential uses.

3. Civic Core

Located at the junction of Main Street and North Street, with the dominant uses being the Courthouse, Fingal County Council offices, and the historic administrative centre of Swords Castle.

4. Recreational Core

The Ward River provides the recreational spine to Swords Town Centre. From the Ward River Valley, the Ward flows to the rear of Main Street and links into the Town Park at the northern end of Main Street, ultimately terminating in the Broadmeadow Estuary.



Figure 4: Swords Town Centre Character Areas.



3.7 Pedestrian Environment

Much of the public realm in Swords is dominated by car movement and storage. On Main Street alone, up to 75% of the available public space accommodates either the movement or parking of vehicles.

Public space is often cluttered by traditional traffic engineering methods including bollards, signage, light poles, and pedestrian guardrails that are now generally considered superfluous to a high-quality public realm and town centre environment.

There are several areas throughout Swords where footpaths are discontinuous or too narrow to support the safe movement of people. There are several instances of natural and man-made barriers including cul-de-sac residential development, lack of river crossings and community severance that must be addressed as part of this Strategy to provide a safer, more permeable network to schools, shopping areas, cultural and community facilities. There are several pedestrian crossings, but the location of parking, street furniture and general visual clutter can sometimes lead to blocking views and create unsafe conditions for pedestrians.

There is also a general lack of safe and accessible east-west permeability between the more residential areas to the west of Main Street and the more employment-led uses to the east. To the west of Main Street, there are several areas currently used as surface car parking that could be better used to provide safe, green, and traffic-free north-south alternative.

Despite being home to rich built heritage and natural amenity in the form of Ward River Valley, the wide variety of existing visitor attractions are not instantly apparent. This is due mostly to the lack of a coherent signage strategy throughout the town.

Also, parts of the town lack distinctive character in the public realm that can help visitors navigate easily. Creating unique experience using paving material, vegetation, public art, and distinctive street furniture leading to landmarks would all serve to enhance the visual experience journey through the town.



Image 21: No Footpath on Route Adjacent to St. Colmcille's Court Car Park.



Image 22: Street Clutter on Main Street Footpath Across from Swords Castle.

3.8 Cycle Network

The environment for cyclists in and around Swords is generally poor with limited dedicated cycling facilities in place. In order to foster a culture of cycling, and to support aspirations for achieving a greater uptake of cycling and scooting across Swords, more dedicated infrastructure in the form of segregated lanes, junction upgrades and an uplift in cycle parking is required.

Cycle parking provision appears to be infrequent, with evidence of bicycles fly-parked to poles and guard railing indicating an unmet demand for quality, well-located cycle parking provision.

The dockless BleeperBike system was extended to Swords in 2019. These bikes allow connectivity across Fingal including Malahide and Howth, DART rail stations and a significant portion of Dublin City.

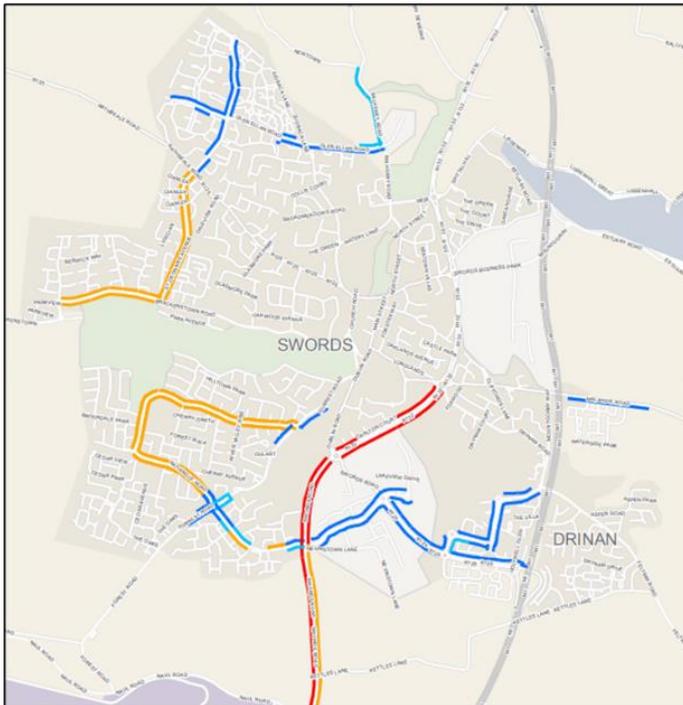


Figure 5: Existing Cycle Network in Swords. Source: GDA Cycle Network Plan.



Image 23: Recent addition to the cycle network in Swords on Bridge Street/Rathbeale Road.

3.9 Public Transport Network

Swords is relatively well served by bus transport. Dublin Bus operates several routes connecting Swords with the wider Metropolitan Area including Dublin City Centre, Dublin Airport, Rush, Balbriggan and Malahide. These include route numbers 33, 41, 141b, 41x.

Go Ahead Ireland operates route number 102 connecting Swords with other destinations across Fingal such as Malahide, Portmarnock and Sutton.

Swords Express also operates in this area. This service connects Swords with Dublin City Centre in a more direct fashion through the Port Tunnel. These routes are: 500, 500X, 501, 502, 503, 505, 505X, 506, 507.

In addition to the above routes connecting Dublin City with Swords, there are several Local Link services operating in Fingal, offering a connection from other towns in the nearby to Swords. These are the following:

- Ballyboughal Area to Swords.
- North Fingal/Swords to Beaumont Hospital.
- Knocksedan to Swords.
- Howth to Swords.

Currently, buses in Swords have no priority over general traffic with the exception of one short section of a Quality Bus Corridor (QBC) between Malahide Road Roundabout and Pinnock Hill Roundabout, in both directions. Bus services consequently experience delays at peak times, thus reducing reliability and overall quality of services.

3.11 Car Parking

There are several areas of public and private parking, both on- and off-street, in and around Main Street that draw traffic into the town centre, approach roads and adjacent streets. The consolidation and redistribution of car parking to more appropriate, dedicated facilities outside of Swords Town Centre core will form a key part of achieving the objectives of this Strategy.



Image 24: Surface car park off of Swords Main Street. Source: DBFL.

3.10 Road and Street Network

The road network in Swords is predominantly orientated on a north-south axis, due to its historical development along the R132 which was previously a National Primary route connecting Dublin and Belfast. This route has been superseded by the M1. The R132 has since become an integral part of Swords' urban fabric, and functions as a local traffic distributor with planning permission recently granted for a major upgrade, with a focus on retrofitting pedestrian and cycling facilities.

The R836 runs north-south in parallel to the west of the R132 and comprises North Street, Main Street and Dublin Road. A series of Regional and Local routes run east-west from this N-S axis connecting the town centre with the residential areas.

Many junctions within the Study Area pose a barrier for people walking and cycling due to wide splays and turning lanes increasing crossing distances, and a lack of priority, dropped kerbs, and at-grade crossings. Many are considered to not be DMURS-compliant for these reasons. While the R132's roundabouts are to be upgraded to signalised junctions, many other local junctions will require attention.

3.12 Healthy Streets Check

The Healthy Streets Approach™ was developed by Lucy Saunders based on research into the health impacts of public realm and urban planning. The approach is based upon the principle that the key elements necessary for public spaces to improve people's health are the same as those needed to make urban places socially and economically vibrant and environmentally sustainable.

Healthy Streets is a concept that supports liveable, high quality and people-friendly streets and provides the framework for putting human health and experience at the heart of planning. It uses ten evidence-based indicators, to assess the quality of a street as shown in Figure 6.



Figure 6: Healthy Streets Approach Indicators. Source: Lucy Saunders.

A Healthy Streets Check of Swords was undertaken in March 2021 by a number of groups made up of a mix of genders, ages, and nationalities to ensure a balanced perspective and that a range of views and perceptions of the space was captured. The Check focused on the Main Street which scored a combined average of 8/20.

The participants highlighted the following **positive** aspects of Main Street:

- Interesting town with things to see and do including shops and Swords Castle.
- People of all ages seen in the street.
- Laneways give a sense of character.

The following were identified as **negative** aspects:

- The natural and built environmental assets of the town are hidden in plain sight and not obvious.
- Traffic dominated.
- Difficult to cross.
- Lack of seating and places to rest.
- Noisy and poor air quality because of the cars.
- Lack of cycle provision.

3.13 Green Schools Audit

The school community of Swords has immense potential to make a huge difference and determine how Swords is shaped and re-designed for the benefit of current and future students.

Green Schools were engaged to work with schools in Swords to ensure that school children have a voice when it comes to developing a Sustainable Swords. They carried out walkability and cyclability audits of the most popular routes to school at the nine participating schools.



From a broad analysis of these reports, survey feedback and conversations with the schools, the items below have been identified as the main infrastructural issues to be addressed to improve safety and thereby encourage active travel:

- Junctions and Roundabouts.
- Lack of Permeability.
- Pedestrian Crossings.
- Barriers to Cycling.
- Insufficient/Lack of Footpaths.
- Front of School.
- High Speed Limits.

3.14 Current Movement Patterns

An analysis of travel patterns in Swords was undertaken as part of the Baseline Assessment, mostly using 2016 POWSCAR (Place of Work, School and College) data derived from the 2016 Census as well as key findings from the previously undertaken *South Fingal Transport Study* (SFTS).

Key findings from this analysis relevant to Sustainable Swords are as follows:

- The population of Swords generates total daily work and school trips of around 21,000 and 10,500 respectively.
- Of the 21,000 work trips, nearly 5,000 stay within Swords. Over 9,000 travel within the M50, and around 2,000 travel to Dublin Airport.
- Of the 10,500 school trips, 6,000 stay within Swords, 2,000 travel within the M50, and 1,600 travel to Malahide or Portmarnock.
- Of the 11,000 work and school trips that stay within Swords, 43% are active modes, 49% car and 8% public transport.
- Of the nearly 6,000 work related trips within the M50 (excluding Dublin city centre) 84% travel by car. Around 3,000 trips are destined for the city centre, however 42% of these go by car and 55% take public transport.
- Swords currently has an overall 60%/40% car/non-car modal split for all trips within Swords, as shown in Figure 7.
- Levels of cycling are particularly low with only 3% of the population travelling by bike.
- 50% of educational trips within the Swords area are by active modes, i.e., walking and cycling. This presents significant potential to further increase this mode share.
- A high number of trips are less than 4km, meaning that there is potential to increase levels of walking and cycling in Swords. The largest potential gain could come from increasing cycling as it is currently a very low base.
- The only significant public transport mode share is from Swords to the City Centre (60% public transport).
- The only significant active travel mode share is for those trips which stay within Swords (43% active modes).
- Given its proximity to Swords, work trips to Dublin Airport are car dominated (75% of the approximately 2,000 trips).



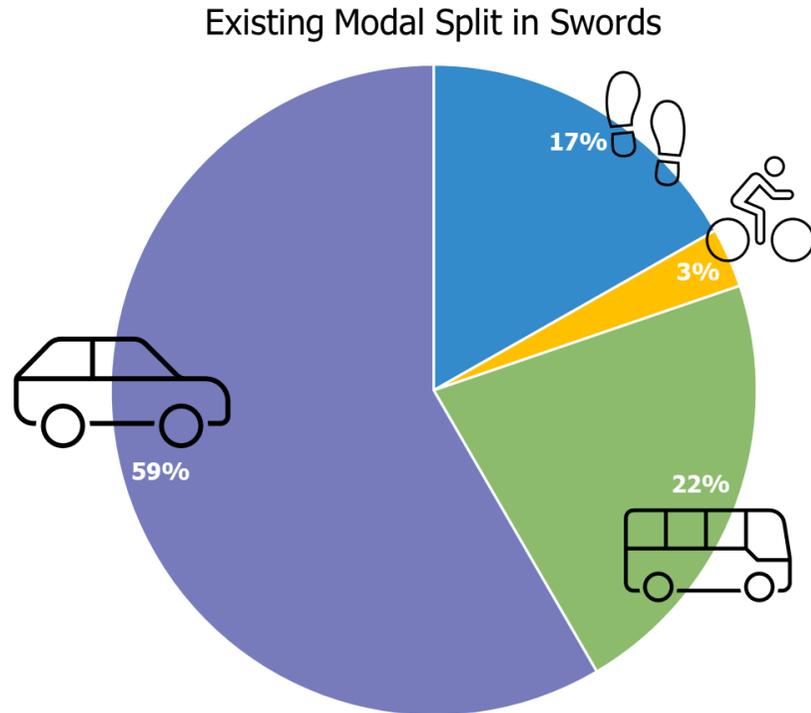


Figure 7: Baseline Modal Split for Swords. Source: CSO, 2016.

3.15 The Challenge for Swords

The vision for Swords to grow into a sustainable new City of Scale poses many challenges from social, cultural, economic and environmental points of view in terms of providing a high quality of living for both existing and future population growth, from housing delivery, from a movement, accessibility and overall quality of life perspective.

While the overarching Sustainable Swords Strategy takes a holistic view of dealing with these challenges, the Public Realm & Transport Strategy (this report) which forms an integral part of the overall Sustainable Swords Strategy, focuses specifically on the design of the urban realm and movement within the town centre and its immediate surroundings to support this growth and to facilitate a more resilient town centre for living and with a stronger sense of place.

The key challenge to achieving enhanced 'liveability' in Swords town centre is to address the significant increase in existing and projected population in the context of a town centre environment that has effectively stagnated. Survey and analysis carried out as part of the SCQ Architectural Masterplan identify these key challenges for Swords town centre as:

- Lacking a strong distinct urban identity and civic quality with no defined civic space or a town centre focal point.
- Main Street has lost its historic civic function as a meeting place, a market and an event space.
- The Castle is beginning to emerge, but parts remain hidden from the town. Public space outside the castle is not defined or easily accessible.
- Fingal County Hall is also largely hidden from the town with poor connection between the public space and the street.
- Poor links and visibility and lack of connectivity between the key civic components – the Castle, County Hall, and Town Park.
- The town centre is overwhelmed at times by high volumes of traffic and parking.

3.16 S.W.O.C. Analysis

A Strengths, Weaknesses, Opportunities and Challenges analysis for of the public realm and transport network in Swords is summarised below.

Strengths

- Swords is steeped in rich, natural heritage including the Town Park, Ward River Valley Park and Broad Meadow River, and in proximity to Estuary. The availability of blue and green spaces can boost mental and physical wellbeing of residents, improve air quality, and provide opportunities for off-road leisure and utility active travel.
- The architecture and streetscape of the Main Street provides a village feel. Significant funding opportunities through the Urban Regeneration Development Fund, the NTA's 5-year delivery programme, Sustainable Transport Measures Grants, and Safe Routes to School.
- Strong retailing base including the Pavilions Shopping Centre, Swords Central, and Castle Shopping Centre in the centre of town attracting large volumes of footfall, as well as the Airside Retail Park which is a significant retail destination on the outskirts of Swords.
- Swords' relatively flat topography is highly amenable for walking and cycling.
- Transformational public transport investment in BusConnects Dublin and MetroLink.
- Planned investment in the Swords Cultural Quarter.
- Strategic location on Dublin – Belfast Economic Corridor – strong employment base.
- The town's proximity to Dublin International Airport.
- Excellent road connections with City Centre, Dublin Port, and other areas of the GDA via the M1, M50, and Port Tunnel.

Opportunities

- Opportunity to undertake and leverage active travel infrastructure and place-making interventions such as outdoor seating, Home Zones, Safe Routes to School, etc. through the increased funding availability.
- The significant proposals to enhance the public transport network through the delivery of major schemes such as BusConnects and MetroLink as well as road network proposals such as the R132 Connectivity Scheme, the Western Distributor Road, Fosterstown Link Road and the Forest Road upgrade will deliver substantial capacity to the transport network serving Swords but in particular those travelling external to Swords.
- Opportunity for a more compact development in what will be one of the most accessible town centres in Ireland by 2027.
- Opportunity for car-free and car-lite developments in line with recent policy.
- Estuary Park and Ride will be an option for those who live far from a metro station to complete part of their trip by public transport.
- Innovative parking management practices like Mobility Hubs offer opportunities to park-at-a-distance for those that only need a car occasionally, freeing up valuable street space for other uses such as wider footpaths, cycle lanes, cycle parking, etc.
- Approximately 25% of work trips and 60% of school trips remain within Swords which could be served by walking, cycling and public transport.

Weaknesses

- Swords town centre is highly dominated by the car. No restrictions for through traffic, and the public realm is cluttered by car parking, signage, poles, and legacy of road engineering.
- Public realm is not universally accessible for all ages and abilities.
- Impact on quality of life and health through car-based emissions.
- Lack of direct rail connectivity to Dublin, Airport and other destinations.
- Little dedicated cycle infrastructure.
- Quality of pedestrian environment and crossings variable across the town centre.
- Lack of public toilets.
- Lack of lighting along Ward River.
- East-west mobility is hampered by the historic layout of Swords Village, with Main Street, the R132 and the M1 bisecting the residential catchments to the west from the commercial and employment focused lands to the east.

Challenges

- The strategic vision for Swords to grow into a sustainable new city poses many social, cultural, economic, and environmental challenges from the provision of adequate housing, availability of public space and community facilities, transport options and so on.
- If opportunities to limit car parking in housing and employment developments in accordance with national and regional policy are not taken, the measures proposed by the Public Realm and Transport Strategy are likely to be undermined.
- Failure to reallocate road space from the private car to walking and cycling may lock-in car-dependency and undermine the vision and objectives of Sustainable Swords.
- Potential changes in the political climate and government programmes could lead to a de-prioritisation of investment in public transport and active travel.
- A change in the economic cycle that delays Metrolink and other key transport infrastructure.
- Growth of online retail and changing consumer patterns may impact upon viability of town centre retail leading to vacancy.
- External factors such as the Covid pandemic and Brexit may have negative impacts on the economy.

4. Establishing the Context

4.1 Overview

To understand the context for which the Public Realm & Transport Strategy will be based upon, in line with the ABTA methodology guidelines, the following was reviewed:

- National, regional and local policy context.
- Future transport proposals for Swords.
- International case studies.



4.2 National Policy Context

The future Sustainable Swords development will be informed by the strategic framework established by national, regional, and local plans, policies and guidelines. The most relevant are summarized below.

Project Ireland 2040 National Planning Framework 2040 and National Development Plan 2021-2030

Project Ireland 2040 is the Government’s overarching policy initiative for the country, and it is made up of the National Planning Framework (NPF) to 2040, and the National Development Plan (NDP) that was recently updated covering the period 2021-2030.

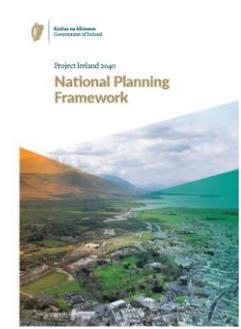
Swords is projected to grow significantly as an Emerging City over the coming years. It is envisioned that the population will grow to approximately 100,000 in the future. The key National Strategic Objectives (NSOs) and critical transport growth enablers identified by the NPF and NDP relevant to the development of the Sustainable Swords Transport and Place-Making Strategy include:

NSO 1 Compact Growth:

- Ensure transition to more sustainable modes of travel (walking, cycling, public transport) and energy consumption within an urban context.
- Building on existing assets and capacity to create critical mass and scale for regional growth.
- Improve accessibility to and between centres of mass and scale and better integration with their surrounding areas.
- Improve 'liveability' and quality of life, enabling greater densities of development to be achieved.

NSO 4 Sustainable Mobility:

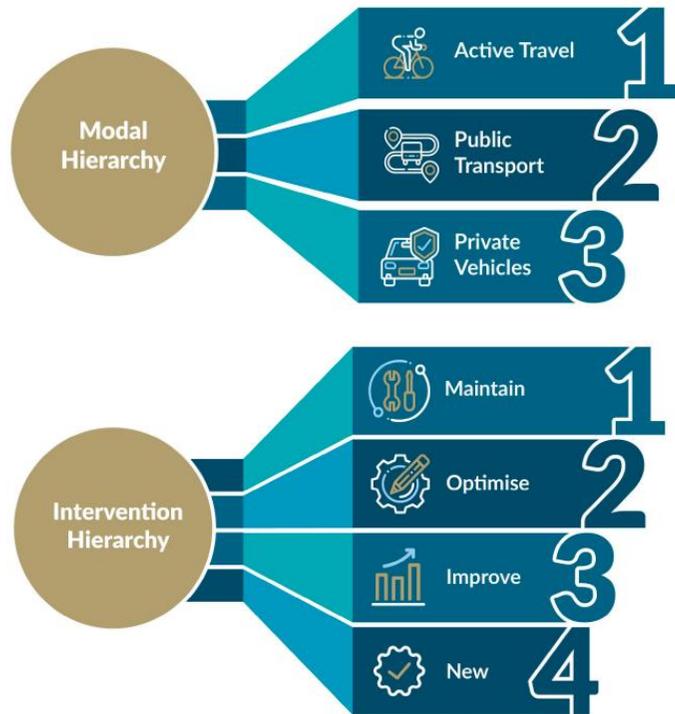
- Deliver the key public transport objectives of the Transport Strategy for the Greater Dublin Area by investing in projects such as MetroLink, DART Expansion Programme, BusConnects Dublin.



- Develop a comprehensive network of safe cycling routes in metropolitan areas to address travel needs and to provide similar facilities in towns and villages where appropriate.

National Investment Framework for Transport in Ireland

The National Investment Framework for Transport in Ireland (NIFTI) is the strategic framework for future investment decision making in land transport. It will guide transport investment in the years ahead to enable the NPF, support the Climate Action Plan, and promote positive social, environmental, and economic outcomes throughout Ireland. NIFTI translates the NPF’s NSOs to a transport-specific investment context.



New transport investments will have to demonstrate their alignment with NIFTI. By extension, this will ensure that investment is aligned with the NPF, resulting in a

consistent approach to investment across Government, with transport supporting our growth and development goals. NIFTI sets out a Modal Hierarchy and Intervention regarding how investment decisions will be guided in the coming years.

National Sustainable Mobility Policy

The National Sustainable Mobility Policy sets out a strategic framework for 2030 for active travel and public transport journeys to help Ireland meet its climate obligations. It is accompanied by an action plan up to 2025 which contains actions to improve and expand sustainable mobility options across the country by providing safe, green, accessible, and efficient alternatives to car journeys. It also includes demand management and behavioral change measures to manage daily travel demand more efficiently and reduce journeys taken by private car.

The Policy aims to deliver at least 500,000 additional daily active travel and public transport journeys by 2030 and a 10% reduction in the number of kilometres driven by fossil fueled cars.

The Policy is guided by three key principles which are underpinned by 10 high-level goals:

- Safe and Green Mobility.
- People Focused Mobility.
- Better Integrated Mobility.

The Sustainable Swords Public Realm and Transport Strategy is being prepared in accordance with the Policy’s Core Action 77 to prepare and commence implementation of local transport plans for regional growth centres and key towns having regard to the Area Based Transport Assessment Guidance Note and will help to achieve a plethora of other Core Actions.

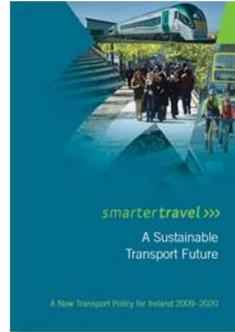
Smarter Travel – A Sustainable Transport Future

The policy acknowledges that continued growth in demand for road transport is not sustainable due to the impact on congestion, local air pollution, contribution to global warming and promotion of increasingly sedentary lifestyles. The following five key goals form the basis of the Smarter Travel policy:

- Improve quality of life and accessibility to transport for all and, in particular, for people with reduced mobility and those who may experience isolation due to lack of transport;

- Improve economic competitiveness through maximising the efficiency of the transport system and alleviating congestion and infrastructural bottlenecks;
- Minimise the negative impacts of transport on the environment through reducing air pollutants and greenhouse gas emissions;
- Reduce overall travel demand and commuting distances travelled by the private car; and
- Improve security of energy supply by reducing dependency on imported fossil fuels.

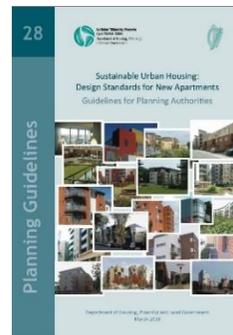
Smarter Travel outlines a key target to reduce work-related commuting by car from a current modal share of 65% to 45%, with commuting by alternative sustainable modes rising to 55% by 2020.



Sustainable Urban Housing: Design Standards for New Apartments

The updated standards contain several transport-related issues relevant to the development of the ABTA including:

- A default policy for car parking provision to be minimised, substantially reduced or wholly eliminated in highly accessible areas such as in or adjoining city cores or at a confluence of public transport systems such as rail and bus stations located in close proximity. Typically, these locations are within 15-minutes walking of city centres or within 10-minutes walking distance of commuter rail or bus stops or within 5-minutes walking distance of high frequency bus services;
- A reduced overall parking standard and application of a maximum car parking standard for housing schemes with more than 45 dwellings per hectare net in suburban/urban locations served by public transport or close to town centres or employment areas;
- A requirement that cycling is fully integrated into the design and operation of all new apartment schemes; and
- A significant uplift in the quantity and quality of cycle parking provision is expected in relation to the location, quantity, design, and management of bicycle storage areas.



Climate Action Plan 2021

The Climate Action Plan sets out a major programme for change in response to reducing Ireland's greenhouse gas emissions. The proposals outlined in the Plan are aimed at achieving a net zero carbon energy system within Ireland and it is envisaged that these proposals will also have associated positive economic and societal benefits, including cleaner air, warmer homes, and a more sustainable economy in the longer term.



Ireland's transport system plays a critical role in realising the ambitious targets of the Climate Action Plan. Consequently, to make growth less transport intensive a number of key policies are identified, including the expansion of walking, cycling and public transport to promote modal shift. The measures to deliver on the transport related targets cover: Sustainable Mobility; System Efficiency and Demand Management; Fleet Electrification; Renewable and Alternative Transport Fuels; Green Hydrogen; and Emerging Technologies.

Other International and National Policy and Guidance

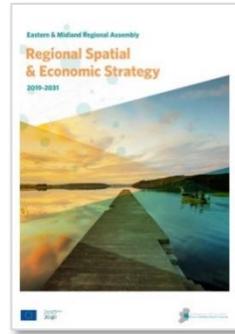
Other guidance that was considered in the preparation of the Sustainable Swords Public Realm & Transport Strategy include:

- European Green Deal and EU Sustainable and Smart Mobility Strategy.
- Design Manual Urban and Roads Manual.
- NTA National Cycle Manual.
- Ready, Steady, Play! A National Play Policy.
- Road Safety Authority Road Safety Strategy.
- Spatial Planning and National Roads Guidelines.
- NTA Permeability Best Practice Guide.
- Healthy Ireland: A Framework for Improved Health and Well-being.
- Well-Being Framework.
- Healthy Streets for London.

4.3 Regional and Metropolitan Level Policy Context

Eastern and Midlands Regional Spatial and Economic Strategy incorporating the Dublin Metropolitan Area Strategy Plan

The Eastern and Midlands Regional Assembly (EMRA) RSES - incorporating the Dublin Metropolitan Area Strategic Plan (MASP) supports continued population and economic growth in Dublin City and suburbs.



The three overarching Key Principles of the RSES are:

- **Healthy Placemaking:** To promote people's quality of life through the creation of healthy and attractive places to live, work, visit, invest and study in.
- **Climate Action:** The need to enhance climate resilience and to accelerate a transition to a low carbon society recognising the role of natural capital and ecosystem services in achieving this.
- **Economic Opportunity:** To create the right conditions and opportunities for the Region to realise sustainable economic growth and quality jobs that ensure a good living standard for all.

The RSES recognises the strategic location of Swords, in proximity to Dublin City, Dublin Airport, the national road network and planned MetroLink and it is specifically identified as one of three 'Key Towns' in the MASP area.

These Key Metropolitan Towns have the capacity and future potential to accommodate above average growth in the Region with the requisite investment in employment creation, services, amenities and sustainable transport. Specific Regional Policy Objectives (RPOs) are outlined for Swords:

- **RPO 4.28:** Support the continued development of Swords as a vibrant Key Town with a thriving economy; an integrated public transport network; an attractive and highly accessible built environment with the highest standards of housing, employment, services, recreational amenities and community facilities.
- **ROP 4.29:** Support the regeneration of underused town centre lands along with the planned sequential infill opportunities to provide for high density and people intensive used in accessible locations that are accessible to high quality transport, existing and planned.

- **RPO 4.30:** Facilitate the strategic regeneration of Swords to build on the resilience of the local economy and provide for an enhanced urban environment with a particular focus on the development of Swords Civic Centre and Cultural Centre, the delivery of the conservation plan for Swords Castle, and the delivery of an enhanced public realm in the town centre and to promote recreational and amenity uses in accordance with a healthy placemaking strategy.
- **RPO 4.31:** Support Swords – Dublin Airport as a key location for airport related economic development and employment provision linked to the protection and enhancement of access to Dublin Airport including the delivery of MetroLink.
- **RPO 4.32:** Encourage transition towards sustainable and low carbon transport modes in Swords through the provision of high-quality walking and cycling permeability offering direct routes to local destination and public transport hubs.

Draft Greater Dublin Area Transport Strategy 2022-2042

The GDA Transport Strategy was formerly adopted in 2016, with an updated draft recently published for consultation for the period 2022-2042.

The purpose of the Draft Strategy is 'to contribute to the economic, social and cultural progress of the Greater Dublin Area by providing for the efficient, effective and sustainable movement of people and goods.

Within the Draft Strategy, significant investment is planned for Swords and the corridor connecting Fingal and Dublin City Centre, including:

- MetroLink;
- DART Expansion Programme, which proposed the provision of high frequency DART services on the existing Northern rail line.
- Two Core Bus Corridors, one linking Swords and the Airport to Dublin City Centre and the other from Clongriffin via Malahide Road.
- Construction of a Western Distributor Road.
- Improvement in cycling infrastructure.
- Development of strategic Park and Ride.



4.4 Local Level Policy Context

Draft Fingal Development Plan 2023-2029

Fingal County Council recently published the Draft Fingal Development Plan 2023-2029 for public consultation.



Swords is identified as a Key Town within the Fingal Settlement Hierarchy, which are areas considered to be large economically active service and/or county towns that provide employment for their surrounding areas and with high-quality transport links and the capacity to act as growth drivers to complement the Regional Growth Centres.

The following Draft Objectives are relevant to the Public Realm & Transport Strategy:

- **Policy CSP29:** Swords as a Vibrant Key Town.
- **Policy CSP28:** Promote and Facilitate MetroLink.
- **Objective CSO34 Swords Main Street:** Retain the Main Street as the core of the town centre, protect and enhance its character and ensure that any future new commercial and retail development reinforces its role by promoting the development of active ground floor uses.
- **Objective CSO35 Sustainable Swords Project:** Support and promote the implementation of key recommendations arising from the Sustainable Swords' project including the implementation of the Swords Cultural Quarter.
- **Objective CSO38 Enhanced Urban Environment:** Facilitate the strategic regeneration of Swords to build on the resilience of the local economy and provide for an enhanced urban environment with a particular focus on the development of Swords Civic Centre and Cultural Centre, the delivery of the conservation plan for Swords Castle, and the delivery of an enhanced public realm in the town centre and to promote recreational and amenity uses in accordance with a healthy placemaking strategy.

Fingal Development Plan 2017-2023

The Fingal Development Plan 2017-2023 sets out policies and objectives for sustainable development in the County up to 2023. The Plan seeks to "promote and facilitate the long-term consolidation and growth of the County town of Swords".

Key Development Plan Objectives for Swords, the administrative capital of the County, include:

- **Objective Swords 5:** Actively promote and support the early development of the indicative route for new Metro North linking Swords with Dublin Airport and Dublin City Centre.
- **Objective Swords 7:** Promote the development of Swords as a multi-modal transportation hub.
- **Objective Swords 10:** Promote the early development of a town wide bus service linking residential areas to each other, to Metro, town centre and to the industrial/employment areas.
- **Objective Swords 11:** Provide for a comprehensive network of pedestrian and cycle ways, linking housing to the town centre, commercial areas, Metro stops and linking green and blue corridors.
- **Objective Swords 22:** Facilitate development of a short-term Park and Ride facility on lands in close proximity to the proposed Fosterstown Metro Stop.

Draft Active Travel Strategy for Fingal

Fingal County Council recently published a Draft Active Travel Strategy for Fingal which details the Council's ambitions to increase the number of people choosing active travel for everyday short journeys and sets out a wide array of infrastructure and initiatives designed to support that goal. The draft Strategy Outcomes include:

- Increasing the number of journeys to work and college by foot and bike.
- Delivering additional protected cycle routes.
- Providing more secure cycle parking spaces.
- Expanding and electrifying local bike share schemes.
- Initiating safety schemes at schools and in Towns and Villages.
- Ensuring that all new developments include measures to support active travel.



Figure 8: Active Travel Strategy for Fingal User Hierarchy.

Your Swords an Emerging City: Strategic Vision 2035

The Swords Strategic Vision 2035 sets out a blueprint for the sustainable development of Swords.

It notes that the transport network in Swords is under significant pressure, largely as a result of the dispersed development pattern and the high dependency on employment outside of the Town, exacerbating outward commuting.

It states that the Vision for Swords is: To promote and facilitate the sustainable development of Swords Town as a vibrant consolidated major town with a thriving economy; an attractive and highly accessible built environment with the highest standards of housing, employment, services, recreational amenities and community facilities.

The Strategic Vision ensures that Swords will incorporate and be synonymous with:

- A **Green City** in terms of the physical landscape and sustainable environmental objectives.
- An **Integrated Transport Strategy** comprising significant public transport services and strategically important road infrastructure.
- A **Vibrant Economy** with flag ship retailing and a unique and attractive Town Centre.
- An **Improved Employment** base striving to provide a sustainable level of employment.
- **Quality of Life**, whether for its residents, business community, employees, or visitors.

South Fingal Transport Strategy

The main objective of the South Fingal Transport Strategy (SFTS) was to carry out a comprehensive feasibility study of South Fingal to produce a strategic 'vision' and overall strategy for the proper planning and sustainable development of the Study Area, based on a sustainable transport and smarter travel approach, planning for all transport modes and needs.

The SFTS contains a Swords Transport Assessment which groups Swords into four main sectors. The assessment analyses travel patterns, land-use forecasts, population, and employment growth projections which are informed by the County Development Plan and Local Area Plans to address issues from this analysis.

The SFTS sets out a comprehensive suite of recommendations for Swords based on its analysis with some of its key proposals illustrated in Figure 9, and listed as follows:

- Road space on Main Street should be rebalanced away from car parking and towards cycle lanes and bus lanes.
- The GDA Cycle Network Plan should be implemented, prioritising routes from the west on Rathbeale Road, Brackenstown Road, Glenn Ellen Road and Forest Road.
- The R132 Swords Road should be reconfigured with more active frontages and with junctions reconfigured to provide a safe environment at grade for non-car users.

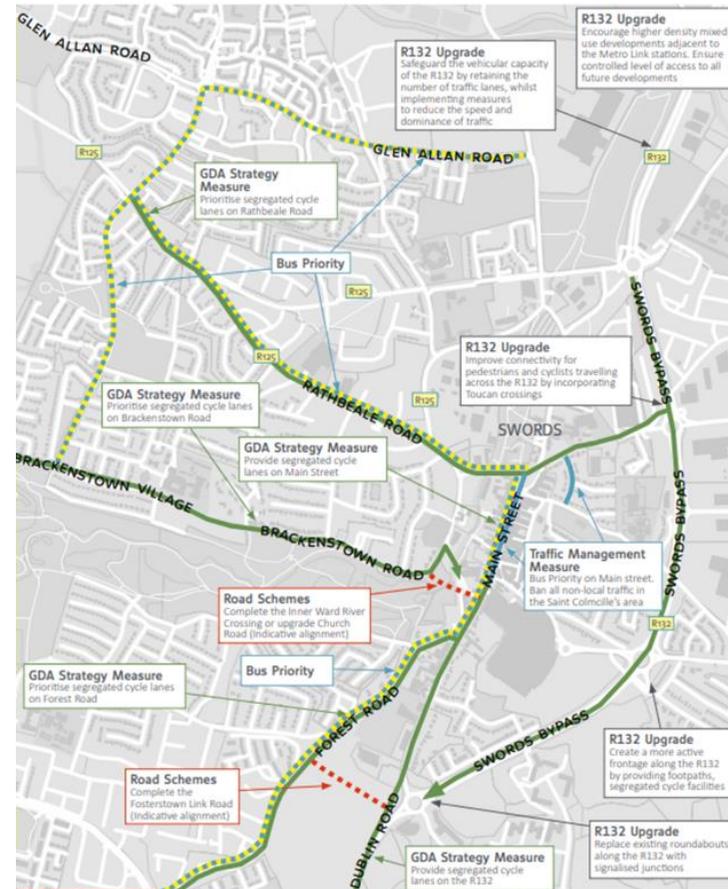


Figure 9: Key Proposals for Swords. Source: South Fingal Transport Strategy.

Swords Castle Cultural Quarter Master Plan

The SCCQ Master Plan seeks to energise the layout potential of the existing town centre - focusing on the castle environs as a new cultural hub. The Plan is a road map for further improvements and opportunities for strategic physical improvements to take advantage of existing natural resources of the town's lands, infrastructure and heritage to create sustainable civic and cultural spaces. The plan aims to instill and foster a sense of place and civic pride and act as a counterpoint to the shopping and business areas of the town.

Fingal Age-Friendly Strategy 2018-2023

The Vision of the Fingal Age-Friendly Strategy 2018-2023 is to make Fingal a great place for senior citizens to live, where they can continue to enjoy living within their communities with dignity and respect. The Fingal Age Friendly Alliance is committed to enhancing the quality of life of older people in Fingal. Outdoor Environments and Transport and Mobility are two of the eight thematic areas identified by the World Health Organisation.



Outdoor Environment Strategic Goals:

- To promote the need to cater for older citizens in the design and maintenance of buildings and the outdoor environment.
- To ensure that older citizen's experiences of the outdoor environment in Fingal informs policy.
- To promote the Age Friendly Town.

Transport Strategic Goals:

- To collaborate with key partners in working towards a coordinated transport solution which meets the needs of older people in Fingal.
- To promote awareness of road safety measures relevant to senior citizens.
- To promote the importance of incorporating age friendly design concepts and best practice in designing transport related spaces.

4.5 Policy Summary

In summary, there are many long-standing plans and policy objectives in relation to the provision of healthy places, land-use and transport planning at all levels that support sustainable development and transport for Swords.

National level policy takes the lead in providing a robust framework for sustainable development and mobility, reflecting the international step-change toward creating more liveable cities and tackling climate change. These objectives are translated at a regional and local level to further promote closer integration of land use and transport planning, compact growth and enhanced accessibility and connectivity for walking, cycling and public transport.

It is evident from a comprehensive review of these policies that there is a strong impetus for the development of Sustainable Swords and what the Public Realm & Transport Strategy aims to achieve.

4.6 Future Transport Proposals

The delivery of major transport infrastructure projects in Swords and the wider region is anticipated over the coming years, with some at advanced stages of planning and implementation. Investment has been secured in some cases under the National Development Plan and the NTA Investment Grant Allocations.

These projects include:

- BusConnects Dublin.
- MetroLink.
- GDA Cycle Network.
- DART Expansion.
- R132 Connectivity Scheme.
- Swords Western Distributor Road.

BusConnects Dublin

BusConnects Dublin is the NTA's programme to significantly improve the bus network in Dublin and is a key objective of the National Planning Framework 2040, National Development Plan 2021-2030, Regional Spatial and Economic Strategy for the Eastern and Midlands Region, and the Greater Dublin Area Transport Strategy 2022-2042.

The BusConnects programme comprises a complete overhaul of the existing bus system, with two main elements being the Network Redesign and the Core Bus Corridors priority infrastructure.

The revised bus network proposals indicate that the Swords area will be well served by a number of interconnecting city bound and local routes further supplemented by Core Bus Corridor (CBC) infrastructure enabling a reliable, high frequency service to the City Centre.

Figure 10 illustrates the BusConnects Network that will serve Swords. Swords Main Street is an important corridor for the A Spine, with a number of services including the X84, L82, L81, 197, and L89.

It is understood that the BusConnects is presently being rolled out on a phased basis.

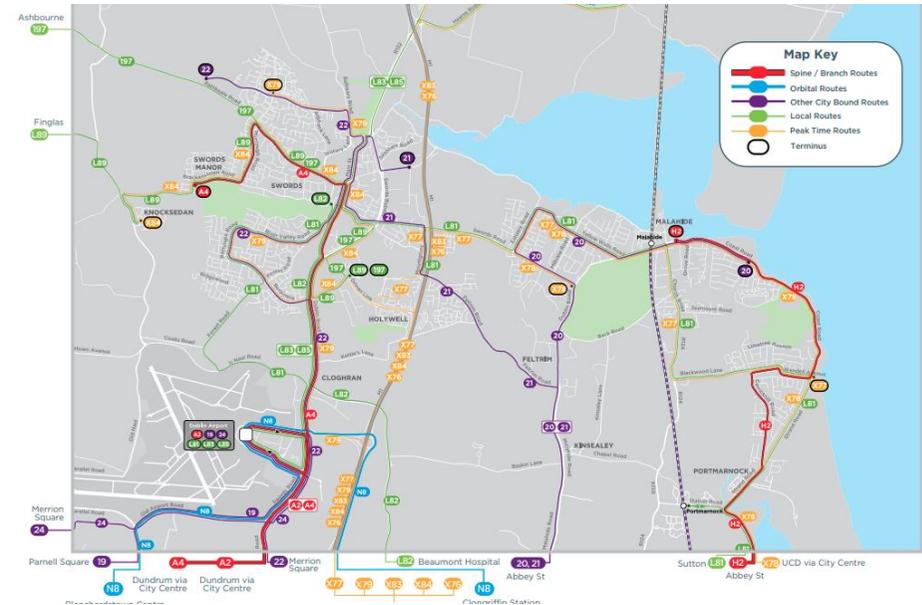


Figure 10: BusConnects Network for Swords. Source: NTA.

MetroLink

MetroLink will consist of a 19km north-south, carbon-neutral railway service. This new link will form a key spine of the overall integrated public transport system for Dublin, alongside BusConnects and DART+, and facilitate compact, transport-led development at key locations. It will run between Swords and Dublin City Centre, connecting key destinations including Dublin Airport, serving 15 stations in total as illustrated in Figure 11.

The end-to-end journey time is expected to be 25 minutes, with 30 trains per hour, catering for 20,000 passengers per direction per hour. The key sections of the MetroLink preferred route relevant to the extents of Swords extend from the northernmost point of the route at Estuary Station (including a Park and Ride facility for 3,000 vehicles), through to Seatown Station, Swords Central Station and Fosterstown Station.

The delivery of MetroLink is an objective of the National Development Plan, the Regional Spatial and Economic Strategy for the Eastern and Midland Region, and the Greater Dublin Area Transport Strategy.

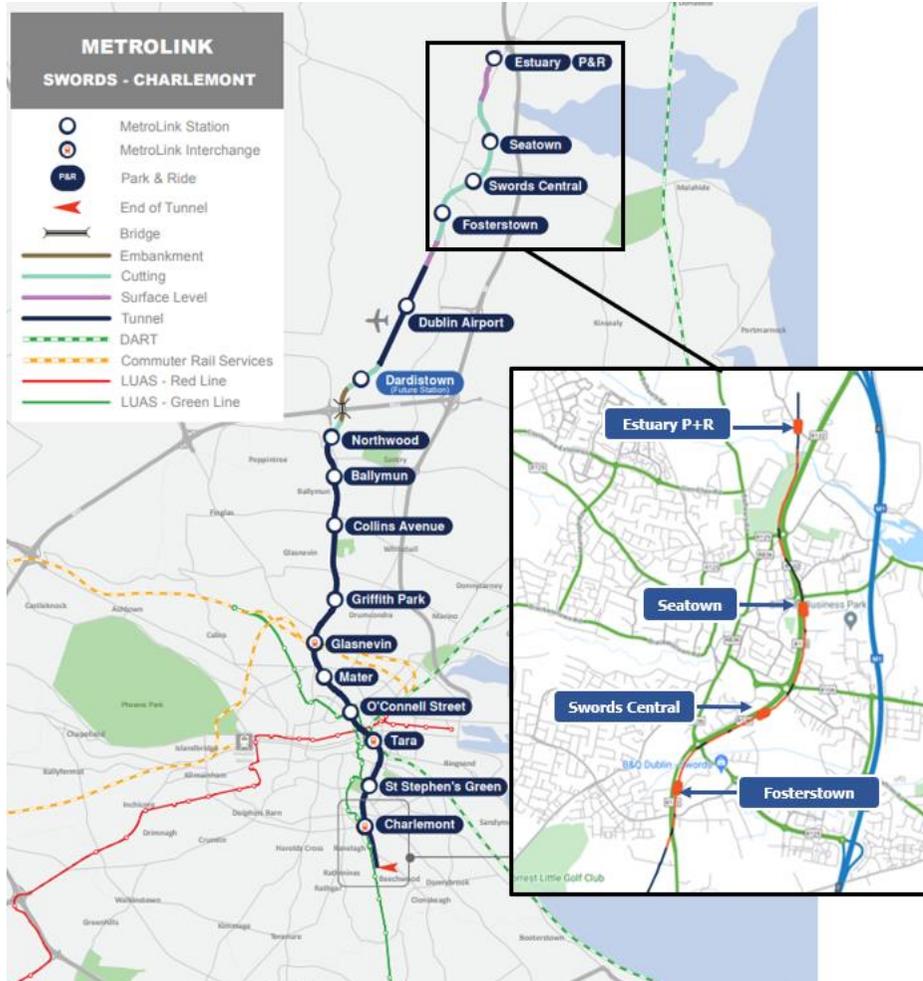


Figure 11: Proposed MetroLink Network. Source: MetroLink.

GDA Cycle Network Plan

The draft Cycle Network Plan, recently published for consultation, outlines the present situation of the existing cycle network and its relatively low usage in parts, with limited cycling facilities in parts of Fingal.

The GDA Cycle Network Plan for Swords and the surrounding area is illustrated in Figure 12.

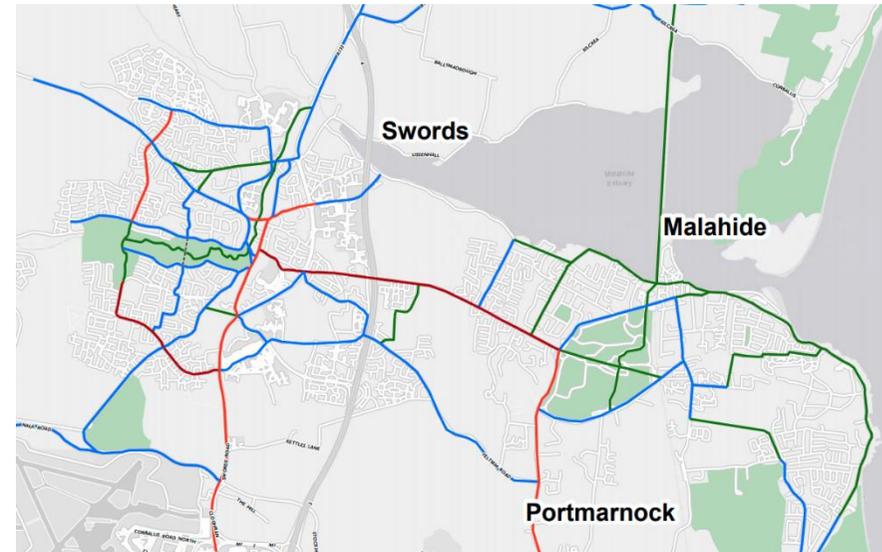


Figure 12: GDA Cycle Network Plan for Swords and Surrounding Area. Source: GDA Cycle Network Plan.

The Plan proposes a Primary Radial Route along Bridge Street, Seatown Road, Main Street and Dublin Road. Malahide Road is a proposed Primary Orbital Route, connecting Swords Main Street and Malahide.

There is a proposed network of Secondary and Greenway routes throughout the Study Area including North Street, Watery Lane, Rathbeale Road, Brackenstown Road and Forest Road.

Design guidance on infrastructure type, however, has not been provided in the Plan.

DART Expansion

Though located outside the Study Area, the DART Expansion Programme will provide a core, high-capacity transit system for the region and deliver a very substantial increase in peak-hour capacity on all lines from Drogheda, Maynooth, Celbridge/ Hazelhatch and Greystones.

The capacity increase of the Drogheda line will provide enhanced connectivity from the Study Area across the Eastern region from the nearby Malahide DART station on the R106.

R132 Connectivity Project

The R132 was a former eastern bypass of Swords Town Centre as part of the Dublin-Belfast corridor. With the construction of the M1 Motorway and the growth of Swords, the functionality of the R132 has changed overtime, serving as a more local distributor route to the many business parks, industrial and residential estates accesses off its four roundabout junctions.

While vehicular traffic benefits from a high-capacity road, cyclists and pedestrians suffer the lack of facilities. Footpaths are not continuous, and cycling infrastructure is most notable by its almost complete absence.



Figure 13: Photomontage of Proposed R132. Source: FCC's Part 8 Materials.

The R132 is under a process of transformation to facilitate enhanced pedestrian and cycle movements. Fingal County Council (FCC) recently secured planning

permission for the delivery of the R132 Connectivity Project, consisting of the upgrade of three junctions from: Estuary Roundabout, Seatown Roundabout and Malahide Roundabout. Furthermore, the links between these junctions will experience a reallocation of general traffic lanes for new and improved pedestrian and cycle facilities, including new signal-controlled crossing points.

This Project will enhance accessibility between Swords town centre, future MetroLink stations and employment areas to the east.

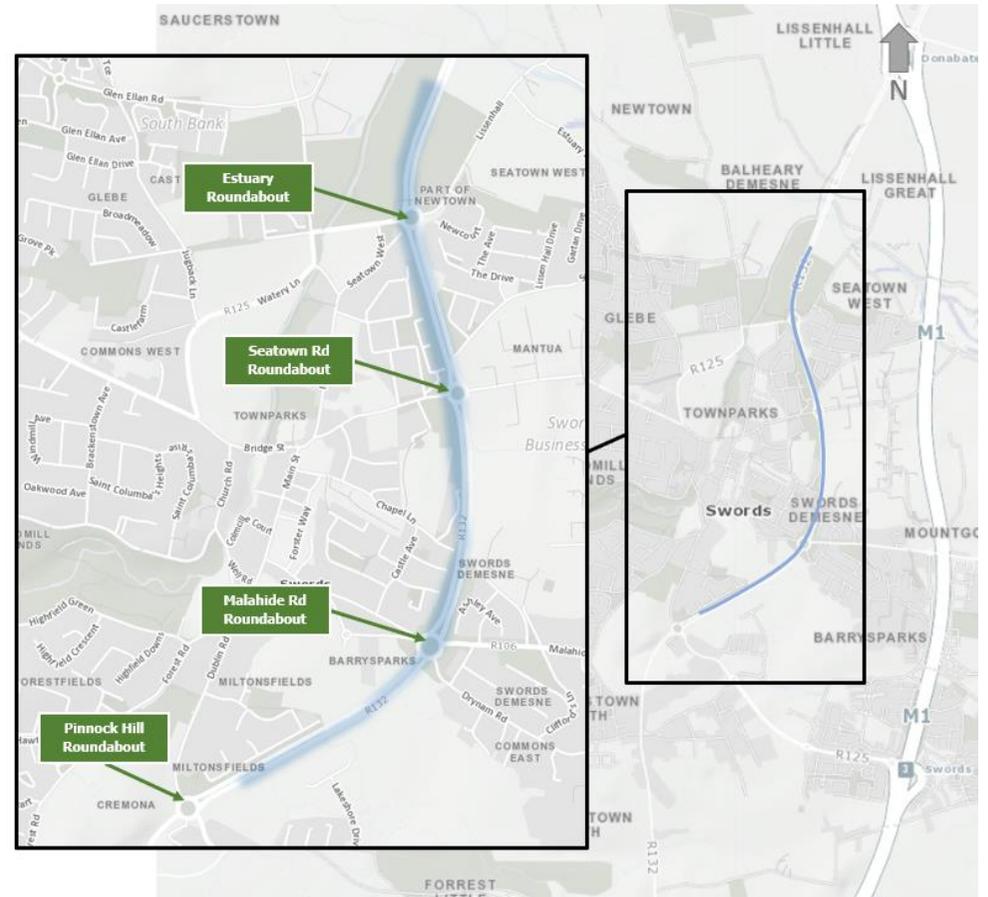


Figure 14: R132 Junction Improvements.

Swords Western Distributor Road (SWDR)

The prioritisation of the early construction of the Swords Western Distributor Road (SWDR) is an objective (Objective SWORDS 6) of the current Fingal Development Plan 2017-2023.

It is considered that this road will act as a relief road giving access to the north and south of Swords, improving the local road network and removing traffic from Main Street, R132 and M1. This strategy considers the the road will facilitate multi-modal travel and will require dedicated footpaths and cycle paths. The SWDR will facilitate the creation of a traffic cell with the R132, removing through traffic in central areas (as with the case studies in the next section) and supporting the reallocation of road space to support significantly greater levels of active travel.

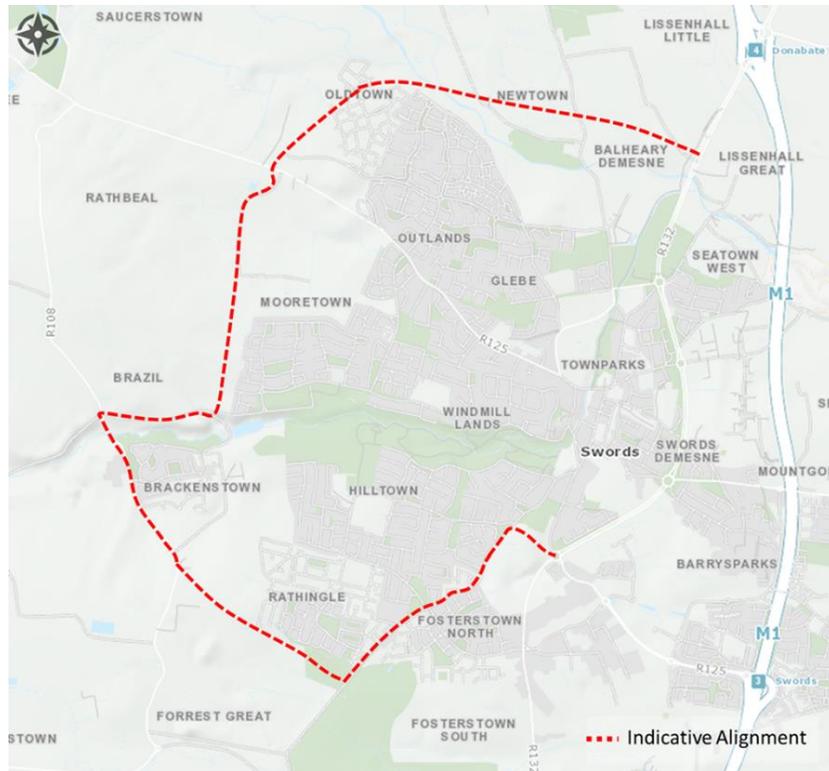


Figure 15: Indicative Alignment of Proposed Swords Western Distributor Road.

Summary of Future Transport Proposals

The combined delivery of MetroLink, BusConnects, Park and Ride facilities, road network improvements and the strategic cycle network are crucial for the future sustainable development of Swords.

There is significant potential to transition towards zero/low carbon transport modes through the provision of integrated sustainable travel infrastructure and services, high-quality public realm, and filtered permeability offering direct routes to local destinations and public transportation hubs.

4.7 International Case Studies

As part of establishing the context upon which the Sustainable Swords transport proposals is based, a series of case studies were identified and reviewed.

The case study comparators were chosen based on their relevancy to Swords as a fast-growing urban settlement with significant planned public investment in its public transport and a desire to offer alternatives to the private car.

The case studies included the following:

- Houten, Utrecht (Netherlands)
- Zwolle (Netherlands)
- Leuven (Belgium)
- Aspern-Seestadt, Vienna (Austria)
- Vauban, Freiburg (Germany)
- Pondevedra (Spain)
- Blackrock, Dublin (Ireland)

To summarise this review, the key lessons learned from the principles applied by these case studies:

- Pedestrian and cycle movement is prioritised in the urban core.
- Shared streets in the urban core with public realm-led bus priority and cycle lane facilities to not detract from the existing streetscape character and heritage.
- Ring road system in place with a traffic calmed urban core (maximum 30km/h speed limit). Local access is maintained, but through movement for vehicular traffic is not possible (Houten, Leuven).
- Consolidation of car parking on the periphery, on the approach to the ring road system, connected to key destinations by high-quality public transport, walking and cycling networks.
- Transit Orientated Development (TOD).



Figure 16: Ring Road System in Houten, Utrecht.

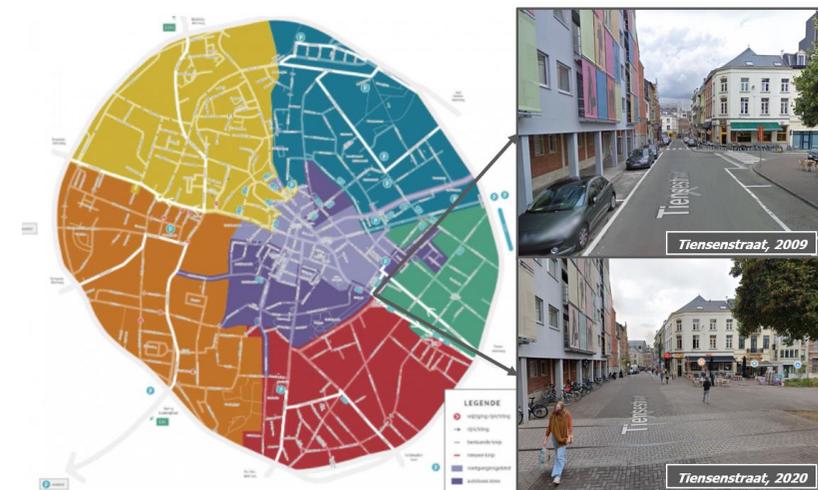


Figure 17: Sectoral System in Leuven.



Figure 18: An Innovative Pedestrian Network Map in Pontevedra, highlighting the walkability of the city centre.



Image 25: Awarded and recognised for its outstanding urbanism measures, that removed traffic from the historic centre and gave back the city the human scale it was once built for; Pontevedra is today one of the most attractive cities in Galicia.

5. Transport Options Development and Assessment

5.1 Overview

A key stage of the ABTA process is the Option Development and Assessment stage, followed by the Optimisation and Refinement stage.

A series of transport scheme options were developed; informed by the policy review, strategic vision, transport objectives and lessons learned from case studies analysed during the Baseline and Context stages.

Options were then assessed against objectives, a robust Multi-Criteria Analysis and subsequently sense-checked using the Sustainable Swords modelling framework.

This section sets out a summary of this process.

5.2 Strategy Objectives

Based on the information gathered in the baseline assessment and context stages, a set of six objectives for the Public Realm & Transport Strategy were devised.

These were developed collaboratively with the wider Sustainable Swords Project Team and informed by the public consultation feedback.

These objectives were employed to assess transport options and proposals for Swords to ensure they aligned with the strategic vision and what Sustainable Swords is trying to achieve overall.

Options that did not meet these objectives were sifted out early in the process, with successful options being brought forward for a more rigorous assessment against a Multi-Criteria Assessment framework. This process is described in more detail below.



Objective 1: Enhance the vibrancy, accessibility and liveability of Swords Town Centre and its immediate environs through a better balance of public space.



Objective 2: Provide a multi-modal transport strategy in accordance with the road user hierarchy set out in DMURS to prioritise sustainable and low carbon transport modes.



Objective 3: Improve the air quality and noise levels of Main Street and its environs through utilising a Healthy Streets approach.



Objective 4: Maximise the integration, interchange, and connectivity of the investment in Dublin BusConnects and the MetroLink to support the shift to more sustainable transport, particularly for longer trips.



Objective 5: Maximise and enhance connectivity and permeability by addressing north-south and east-west severance and barriers to movement.



Objective 6: Identify opportunities to ensure that more children can travel safely to school by walking and cycling.

5.3 Preliminary Movement Strategy and Street Hierarchy

A Preliminary Movement Strategy for Swords was devised at the outset of this project to understand at a high-level, how Sustainable Swords envisaged movement in and around the town centre and its environs.

The Swords Movement Strategy at its heart is based around a people-orientated, traffic-calmed urban core; where the street network is designed and configured to prioritise people walking, wheeling, and using public transport, while facilitating connectivity by all modes where necessary and appropriate.

The movement strategy and street hierarchy for Sustainable Swords as envisaged in the long-term is illustrated in Figure 19. Section 8 outlines specific public realm and transport proposals for each of these streets.

The Design Manual for Urban Roads and Streets (DMURS) categorises the street hierarchy based on the different movement function of a given street, as described in the context of Swords below.

Arterial Streets

Arterial Streets are major multi-modal routes via which major nodes are connected. The R132 is the main Arterial Street in the Study Area.

The R132 is under a process of transformation. Fingal County Council recently secured planning permission for the delivery of the R132 Connectivity Project, consisting of the upgrade of three roundabout junctions to signal-controlled crossings, namely Estuary Roundabout, Seatown Roundabout and Malahide Roundabout. Road space will be reallocated for new and improved pedestrian and cycle facilities.

The R132 will play an important function in creating a traffic cell with the Western Distributor Road, helping to remove vehicular traffic from the town centre. See Section 4.6 Future Transport Proposals for further details.

Main Street has traditionally fulfilled many of the movement functions associated with an arterial street. However, the Strategy recognises its role as the beating heart of Swords and the need to transform its look and feel. Main Street is therefore afforded a higher place value within a traffic-calmed urban core.

Link Streets

Link Streets provide links to Arterial Streets, or in between neighbourhoods and/or suburbs. In Swords, these are the main radial routes into the Town Centre, such as Dublin Road, Malahide Road and Forest Road.

Local Streets

Local Streets provide access within neighbourhoods and onward to Arterial and Link Streets. The majority of the integrated street network within Swords consists of Local Streets. Local Streets linking the town centre would become Quietways facilitating local access only and prioritising movement of people walking and cycling, supported by public realm improvements, as well as BusConnects.

The Strategy aims to reduce traffic movement on these streets to create a calmer, more attractive environment for people walking and cycling, and to support bus reliability. This will be supported by:

- Public realm-led enhancements that sympathise with the character of the streetscape.
- Gateway and Transition Zones on the approach to the Town Centre, where the speed limit is reduced to a maximum of 30kph.
- A future traffic cell created by the R132 and the proposed Western Distributor Road that enable the restriction of vehicular through-traffic.

Quietways

Quietways are walking and cycling routes that have been identified where vehicular traffic is generally quieter and calmer or not present at all.

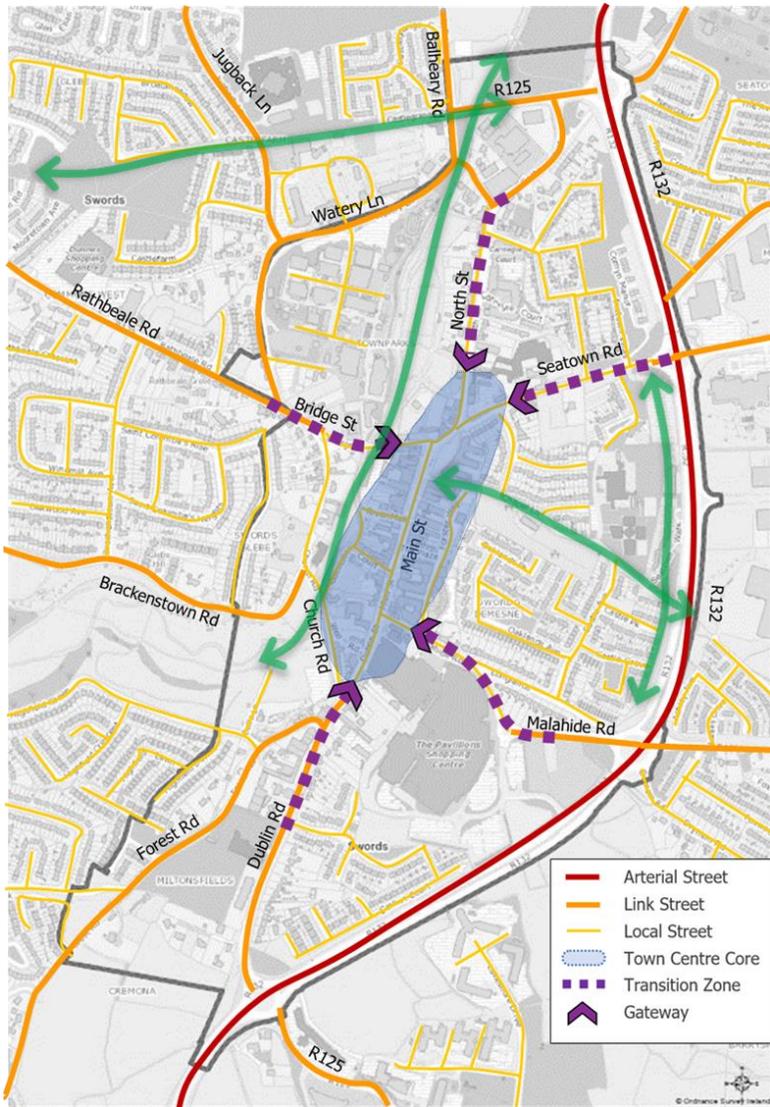


Figure 19: Preliminary Movement Strategy and DMURS Street Hierarchy.

For all streets the minimum footway widths advocated by DMURS should be adhered to:

To encourage more sustainable travel patterns and safer streets, designers must place pedestrians at the top of the user hierarchy.

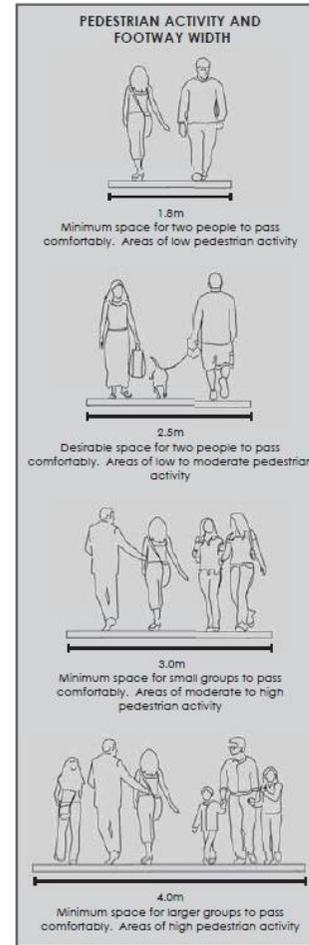


Figure 20: Amount of Space Needed for Pedestrians to Pass Each-Other in Relation to Activity Levels.

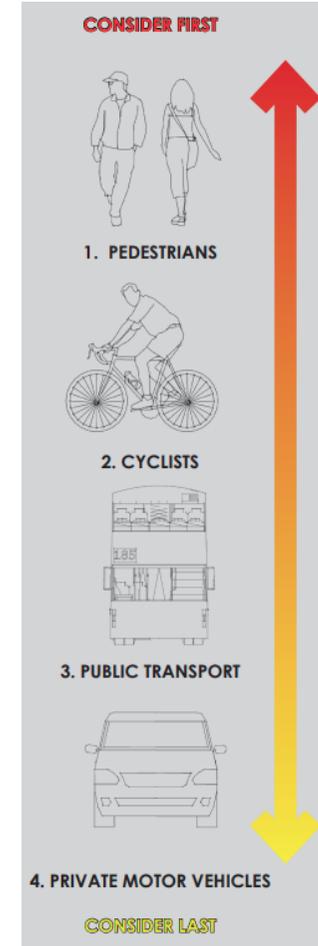


Figure 21: User hierarchy that promotes and prioritises sustainable forms of transportation.

5.4 Option Development and Assessment

Option Development Methodology

A list of key schemes/routes in Swords were identified, that will enhance north-south and east-west connectivity, including:

- Rathbeale to Balheary Quietway.
- North Street.
- Main Street.
- St. Colmcille's Quietway.
- Bridge Street.
- Seatown Road.
- Dublin Road.
- Malahide Road.
- Forest Road.

These schemes form the foundation building blocks for the overall Strategy, however more recommendations have been made on other linkages, improvements and supporting measures.

A series of options were developed for each scheme and subsequently assessed. A comprehensive two-step optioneering process was undertaken to identify a Preferred Strategy Option:

- 1) An initial sift against the Strategy Objectives.
- 2) A Multi-Criteria Analysis based on the Common Appraisal Framework criteria.

Multi-Criteria Analysis Appraisal Framework

The process for assessment of options was guided by the Common Appraisal Framework (CAF) for Transport Projects and Programmes, which requires transport projects to be appraised under six general themes. Sub-criteria under each theme were developed to assess options thoroughly as set out in Table 2. A five-point ranking system was then applied against each criterion, as in Table 1.

Significant Disadvantages	
Some Disadvantages	
Neutral	
Some Advantages	
Significant Advantages	

Table 1: MCA Ranking System.

CAF Criteria	Assessment Sub-Criteria
Economy	Capital Cost
	Constructability
	Town Centre Vitality
Integration	Pedestrian Integration
	Cycle Integration
	PT Integration
	Traffic Integration
Safety	Pedestrian Safety
	Cycle Safety
	Road Safety
	Safety at Night
Environment	Air Quality and Climate
	Noise
	Public Realm
	Landscape and Visual
	Hydrology and Geology
	Flora and Fauna
Accessibility & Social Inclusion	Deprived Geographical Areas
	Local Education and Employment
Physical Activity	Walking/Cycling to Education and Employment
	Absenteeism

Table 2: Option Assessment Criteria.

5.5 Refinement of Options / Modelling Approach

In order to validate and sense-check the Emerging Preferred Options for the overall Strategy, a multi-tiered hierarchical modelling framework was employed as illustrated in Figure 22 to quantitatively as well as qualitatively assess and appraise the transport environment impacts and changes resulting from the proposed options within this Strategy.

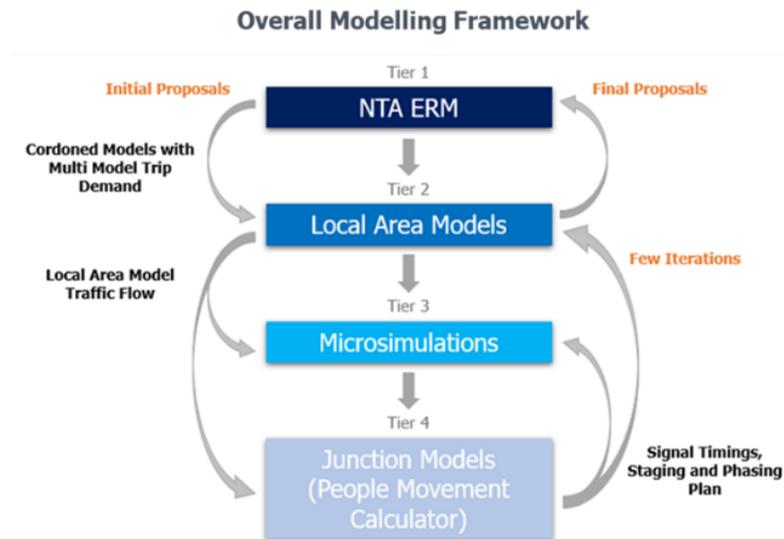


Figure 22: Sustainable Swords Modelling Framework

The NTA's **Eastern Regional Model (ERM)** was the primary modelling tool and provided the overarching information on forecast travel demand for each mode of transport. The ERM was supported by other modelling tools to provide more granular level traffic information which allowed for a more detailed and refined modelling assessment of the local network including key junctions. For this purpose, a cordoned road (motor vehicle only) based **Local Area Model (LAM)** of the immediate area around Swords was used in combination with a multi-modal **Microsimulation Model** of the core study area of Swords Town Centre and **Local Junction Models** which all worked in tandem with the NTA's strategic Eastern Regional Model (ERM). The extent of these modelling assessment is illustrated in Figure 23.

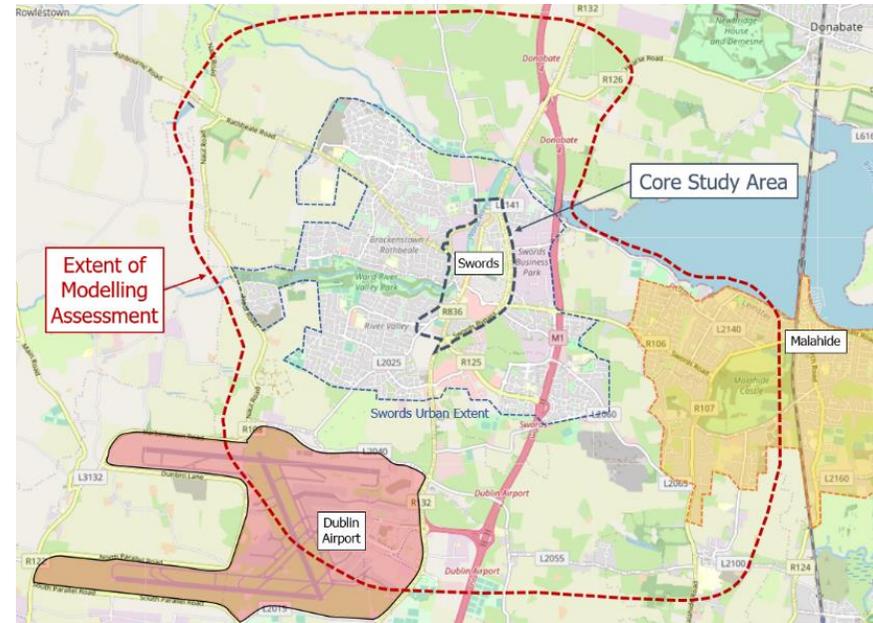


Figure 23: Modelling Assessment Extent

The traffic and transport impact assessment for Sustainable Swords Strategy was undertaken in accordance with latest guidance including:

- NTA's and TII's Area Based Transport Assessment (ABTAs) Guidance Notes.
- 'Guidelines on the Information to be contained in Environmental Impact Assessment Reports' (EPA 2017).
- 'Traffic and Transport Assessment Guidelines' (TII 2014).
- National Cycle Manual (NTA 2011).
- Project Appraisal Guidelines (TII 2016).

The assessment took account of means of travel and objectives of the Sustainable Swords Strategy. As such, the following modes of transport were considered as part of the modelling:

- Public Transport including MetroLink, inter-urban rail, suburban rail, DART, light rail (Luas), and buses.
- Parking including Park and Ride / Mobility Hubs facilities.
- Pedestrians.
- Cyclists.
- General traffic.

The traffic and transport assessments assumed the following scenarios:

- **Existing Baseline Conditions (2018) (Pre-COVID-19):** The existing baseline scenario was developed based on conditions existing in January/February 2018. It was used for the non-modelling-based metrics which rely on qualitative or provision-based assessments.
- **Future 'Do Minimum' Scenarios** which are future year models developed without the Strategy's proposals in addition includes and assumes 'likely receiving infrastructure' proposals. Typically, a 'Do Minimum' model includes any known permanent improvements or changes to the road or public transport network that have taken place, been approved, or are planned for implementation. These models are important to form the reference case by which to compare the 'Do Something'.
- **Future 'DoSomething' Scenarios** ('likely receiving environment with Strategy'); these are future year models developed with the Strategy's proposals on top of the 'Do Minimum' conditions.

The assessment years were 2018 (Base Year), 2028 to align with the South Fingal Transport Study and 2043 to align with the Draft GDA Transport Strategy.



5.6 Key Modelling Findings

The modelling assessment found that the implementation of the Strategy's proposed transport infrastructure interventions would have the following impacts:



- 1) Swords town centre core would become a more traffic calmed area as general vehicular traffic would be displaced to arterial routes and through-traffic movement would be reduced. For instance, **vehicular traffic along Main Street would decrease by more than 80%** with the reallocation of the southbound lane for bus priority only. In the longer term, with MetroLink and the Swords Western Distributor Road in place through traffic would reduce even more significantly.
- 2) This reduction in vehicular traffic would enable the town core to become a more pedestrian and cyclist friendly environment. **Safety and the risk of collisions with vehicles would decrease and the overall environmental quality would improve with a reduction in noise, vibration and pollutants** which supports the Strategy's Objectives.
- 3) With the southbound lane on Main Street converted to a bus priority lane, **general traffic was shown to be displaced to Forster Way**. This was shown to also increase traffic on the surrounding streets of Seatown Road, St. Columille's Drive and Forster Way.
- 4) Many link streets such as **North Street, Dublin Street, Forest Road and Malahide Road were shown to experience a reduction in traffic**, complementing their function as transition zones and gateways into Swords.
- 5) Regarding the Study's Area's mode share, when compared to the Do Minimum scenario, the Sustainable Swords Strategy Do Something scenario **enables a shift to active modes and public transport in both the Swords town core and the wider Swords urban area**. Likewise, the Strategy encourages use of Mobility Hubs and Park and Ride facilities.
- 6) Car mode share would decrease from 61% in 2018 to 55% in 2043 in the town core, and from 69% to 63% in the Swords suburbs. Moreover, when the **impact of working from home is considered, the mode share for cars was shown to decrease further to 49% and 57% respectively in the town core and the suburbs in 2043**.
- 7) The assessment reaffirms a justification for the delivery of MetroLink and the multi-modal Swords Western Distributor Road. It was found that both

schemes are important infrastructural projects that would have a positive impact on mode share for walking, cycling and public transport use.

- 8) Investigating **origin trip patterns from the Study Area, the level of trips by sustainable modes increases, particularly active modes.** While vehicular trips do decrease to all destinations, **car dependency is notable for trips going elsewhere in Fingal outside of Swords where there are fewer or no sustainable travel connections available.**
- 9) From a review of the Study Area’s local network performance, it was found that the overall reduction in traffic levels **would positively impact on bus performance indicators, with total journey time delays reduced and average speeds increased.** Similarly for general vehicular traffic, total delays decrease, and junction capacities improve. Average speeds for general traffic improve even with the new 30 km/h speed limit as traffic reductions allows.

5.7 Recommended Mitigation Measures

The Strategy recommends a number of measures to mitigate some of the potential impacts shown by the traffic and transport assessment. These are set out below.

Modelling Assessment Finding	Suggested Mitigation Measure
The assessment showed that the Strategy’s proposed transport infrastructural measures would affect a modal share decrease for the car from 61% in 2018 to 49% in 2043.	To help support a lower car more share and climate action targets, complementary behavioural change measures to promote a shift toward sustainable mobility should be implemented such as Green Schools, Workplace Travel Planning, car-free days, information campaigns, etc.
With the southbound lane on Main Street converted to a bus priority lane, general traffic was shown to be displaced to Forster Way and other surrounding streets.	In order to reduce the impact of potential vehicular traffic redistributed from Main Street, it is recommended that traffic management measures are implemented on Forster Way and St. Columcille’s Drive.
Trips originating from Swords travelling to other parts of Fingal, such as Dublin Airport, Malahide, Balbriggan, etc., account for a large proportion of the number of overall trips. The car mode share for these external trips was shown to be approximately 83% with the Sustainable Swords Strategy in place.	While high-quality transport connections from Swords to Dublin Airport and Dublin City are planned to be delivered in the coming years, connectivity with other settlements in Fingal such as Blanchardstown, Malahide, Balbriggan, Dublin Northern Fringe, and northern towns need further consideration and planning. Behavioural change measures are also recommended to support a shift to sustainable modes.
The modelling assessment demonstrated that the Pavilions Shopping Centre would remain a dominant trip attractor within the Core Study Area, and that even with the Strategy proposals in place, trips by car would still remain quite high.	A robust Mobility Management Plan for the Pavilions Shopping Centre is encouraged, as recommended by the Five Cities Demand Management Study’s Measure BC04. Accessibility improvements are envisaged by high quality walking, cycling and public transport.

6. Public Realm Strategy Development

6.1 Overview

The strategy for upgrading the public realm of Swords town centre responds to the Strategic Vision as set out in 'Your Swords' for creating a sustainable new city. It is also a direct outcome of the plan-led development strategy for Swords as contained in Chapter 4 of the current Development Plan, which seeks to create a distinct urban identity for Sustainable Swords and a destination for citizens and visitors. The public realm is recognised as having a key role to play in this process by meeting the following objectives:

- Enhancing the identity of the town centre through the development of Swords Civic Centre and Cultural Centre.
- Delivering an improved accessible child-friendly public realm that includes new public nodes in Swords Town Centre.
- Facilitating the creation of a new street /pedestrian walkway fronting the river walk to the west of Main Street opening up these 'backlands' and supporting co-ordinated infill development on key strategic sites along Main Street and North Street.
- Promoting core recreational and amenity spaces, utilising in particular the Ward River Valley Park, Swords Cultural Quarter including Town Park, Ward River Walk west of Main Street area.

The 'Your Swords' strategy identifies three key nodes of attraction in Swords, providing the focus for enhancing the identity of the town centre and for ensuring the vibrancy and activity of Main Street. It is intended that these nodes would build on the existing character areas of the Town through the strengthening and development of links between the Main Street, the Pavilions Shopping Centre and the Crowcastle/Barrysparks site.

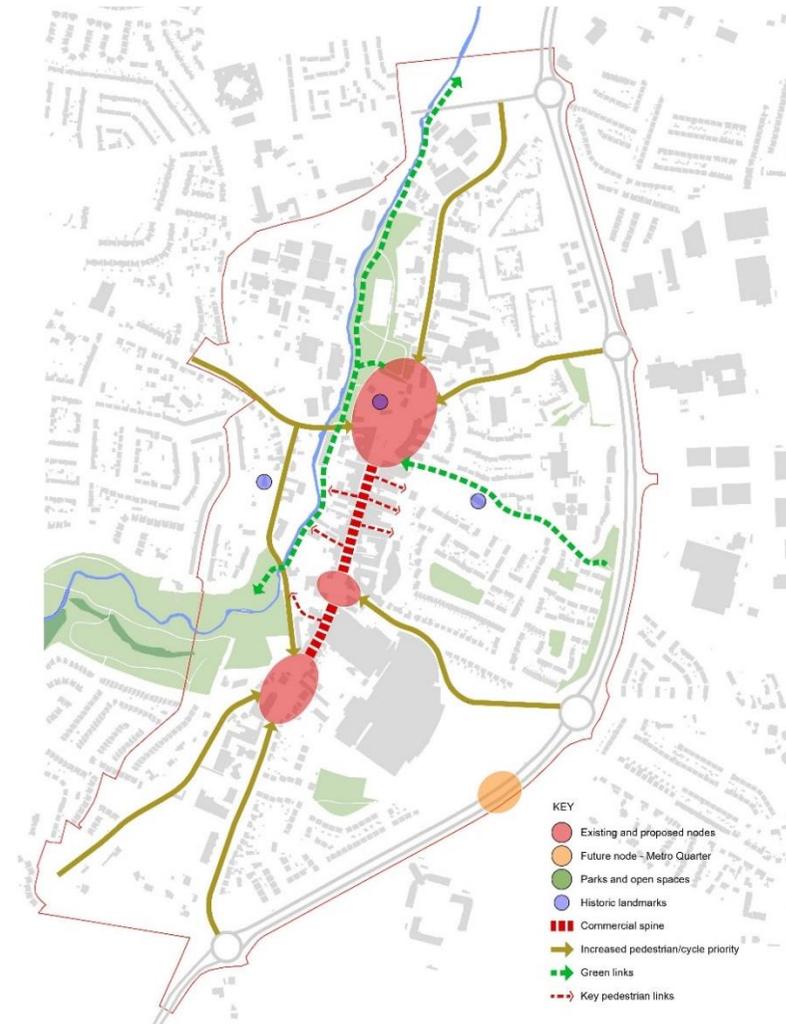


Figure 24: Sustainable Swords Public Realm Strategy Plan.

6.3 Town Centre Nodes

The main requirements for the strategic Town Centre Nodes which are illustrated in Figure 24, are:

1. Cultural Quarter

To build on the evolving civic core uses at the junction of Main Street / North Street, comprising the Council Offices, the Courthouse, and the Castle, thereby strengthening the attraction of the northern end of Main Street and acting as a counterbalance to the retail draw of the Pavilions at the southern end of the street.

A public realm strategy has since been developed as an intrinsic part of the Swords Cultural Quarter development, as illustrated below, the main elements of which are taken forward as part of the Sustainable Swords Public Realm and Transport Strategy.



Figure 25: Swords Cultural Quarter, Public Realm Strategy. Source: Dermot Foley (Landscape Architects) / O'Donnell + Twomey (Architects)

2. Commercial Quarter

To serve as the southern terminus of Main Street, addressing the current deficiency in cultural attractions and complementing the Civic Quarter at the northern end. Culturally related uses, such as a town library, theatre, galleries, and arts centre would predominate, and direct pedestrian connections created through the Pavilions site to the Metro Quarter and into the Ward River Valley Park. A public square would become the central focus and setting to the cultural buildings, of a scale capable of supporting outdoor performance, outdoor dining, and major meeting/seating spaces.

3. Metro Quarter

To serve Swords town centre by a Metro North stop located centrally on the R132 in proximity to the Pavilions Shopping Centre and Crowcastle/Barrysparks site. The stop will be distinguished from the other Metro North stops by various elements, including a high-quality well designed public realm plaza above the Metro line.

General Public Realm Principles

It is recognized that realisation of the aspirations for these strategic town centre nodes will be over a considerable timeframe and subject to many different factors, not least the transport planning elements of the Sustainable Swords strategy. A series of short-term and medium-term placemaking projects are therefore envisaged, based on the Street Hierarchy of the transport strategy, which can build on each other to incrementally achieve the 'Your Swords' vision and the placemaking objectives and Public Realm & Transport strategy (refer Section 5.3).

Although Main Street is the focus of public realm improvements, where the greatest transformation of the public realm can be delivered in both the short and medium terms, upgrading of the Link Streets, Local Streets and laneways are also of importance for achieving a well-connected pedestrian-friendly town centre.

As Main Street is the principal spine linking the key nodes of the Civic and Cultural quarters, its upgrade will be the most influential in changing the character of the town centre. While limited vehicle access will continue to be necessary along Main Street, particularly for service delivery and emergency access, it is recognised that a greater balance between users is required with the emphasis on an improved pedestrian environment.

As described earlier in this Report, the street needs to become a more social space, accessible to everyone and reinforcing the image of Swords Town Centre as an easy-going, enjoyable place to be in.

The approach adopted for developing the Public Realm Strategy for Swords is centred on creating a coherent, high quality and welcoming place, thereby reinforcing the vitality, vibrancy and viability of the area with resulting increased benefits for livability and the local economy. This is achieved through the following principles:

- Developing a public realm that has a balance between the needs of pedestrians, cyclists and other vehicles.
- Creating spaces that are legible and compliment the urban form.
- Retaining items of local history and through simple design allow the varied character of the town to be expressed and appreciated.
- Creating a safe environment by the careful consideration of designing-out crime and anti-social behaviour from the outset.
- Utilising a consistent, simple public realm through the reduction of unnecessary street clutter, both visual (paving) and physical (barriers and furniture).
- Minimising the number of footway materials used to a simple complementary palette implemented consistently across the town centre to create clarity.
- Reducing the variety of street furniture to a coordinated palette of simple functional items and carefully consider their placement.
- Introducing opportunities for public art where this strengthens the local townscape character.

Shared priority surfaces (an example shown in Image 26) are proposed wherever appropriate (and removal of kerbs where possible), thereby enhancing permeability for all users and increasing the amount of usable civic space for special events (e.g., markets, performances, gatherings), while providing for car parking and essential vehicle requirements as necessary. This entails:

- Defining the different areas of use/activity in terms of vehicle access requirements, shared surface and pedestrian use.
- Developing a fully inclusive scheme that caters for the very young, the youth, the old, the mobility impaired, the socially disadvantaged, the cyclist and pedestrian.
- Ensuring that all spaces are easily accessible by foot from surrounding areas, while catering for essential emergency and service vehicle access.



Image 26: New Road, Brighton - Shared Priority Street.

7. Project Proposals

It is anticipated that Sustainable Swords will be delivered in a phased manner over time, with a series of short, medium, and long-term projects. These will incrementally build on each other to achieve the overarching objectives of the Public Realm & Transport Strategy.

Timeframes

Short Term: 1-3 years
 Medium Term: 4-7 years
 Long Term: 7-10 years

The key Public Realm & Transport projects identified for best meeting the project objectives within these identified timeframes comprise:

PROJECT 1: Main Street

PROJECT 2: Liveable Laneways

Well Road
 St. Colmcille's Court
 River Mall
 Chapel Lane
 Mainscourt
 Cock Tavern Lane
 The Plaza

PROJECT 3: Key Street Enhancements

Church Road
 Bridge Street
 Seatown Road
 North Street

PROJECT 4: Quietways & Homezones

St. Colmcille's Quietway
 Residential Homezones

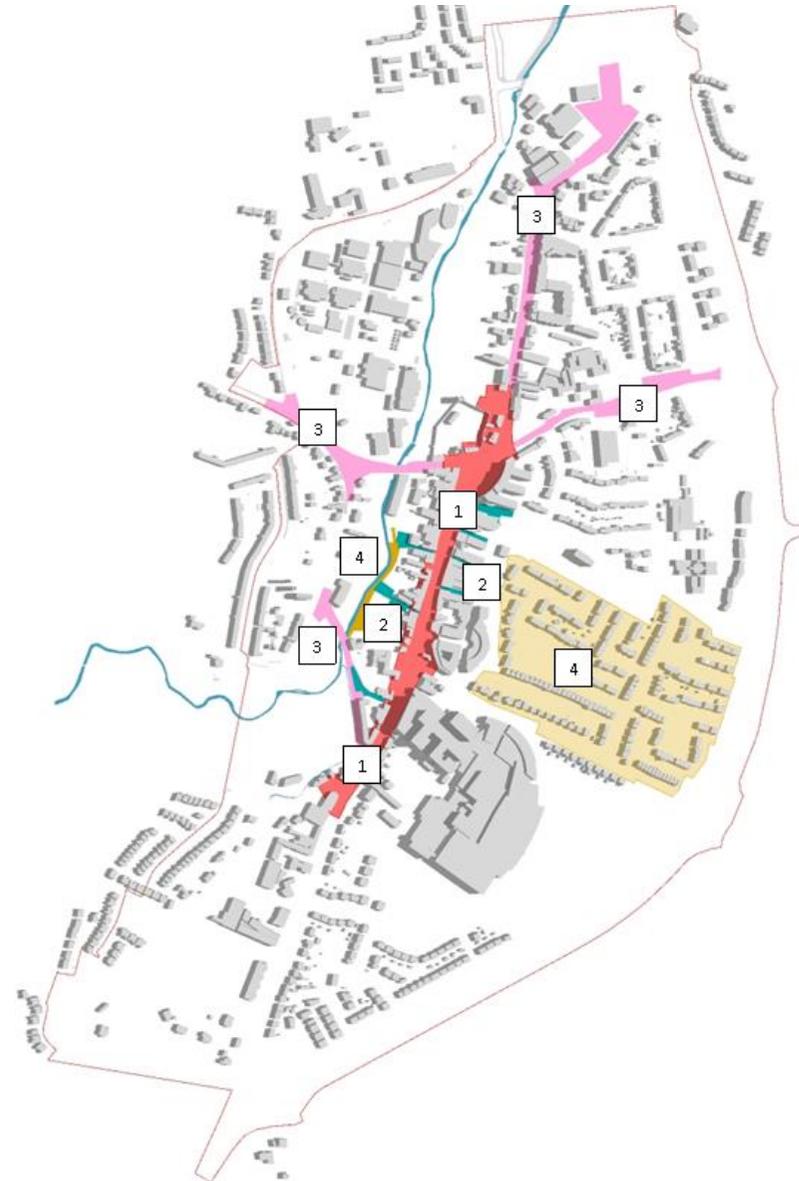
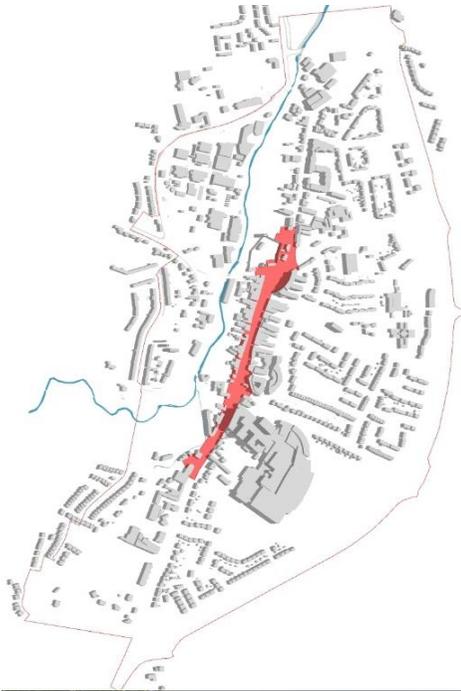


Figure 22: Key Project Locations





7.1 Project 1: Main Street

Project Summary	Key to the success of Sustainable Swords will be the consolidation and strengthening of the role of Main Street, facilitating the integration of Town Centre expansion, and providing a high-quality public realm for living, working and visiting.
Project Lead	Fingal County Council
Project Support	TBD
Indicative Cost	€15 - €20m for all stages
Funding Options	Urban Regeneration Development Fund (URDF) Town & Village Renewal (T&VR)
Timeframe	Short to Medium Term



Image 27: Main Street (north)



Image 28: Main Street (south)

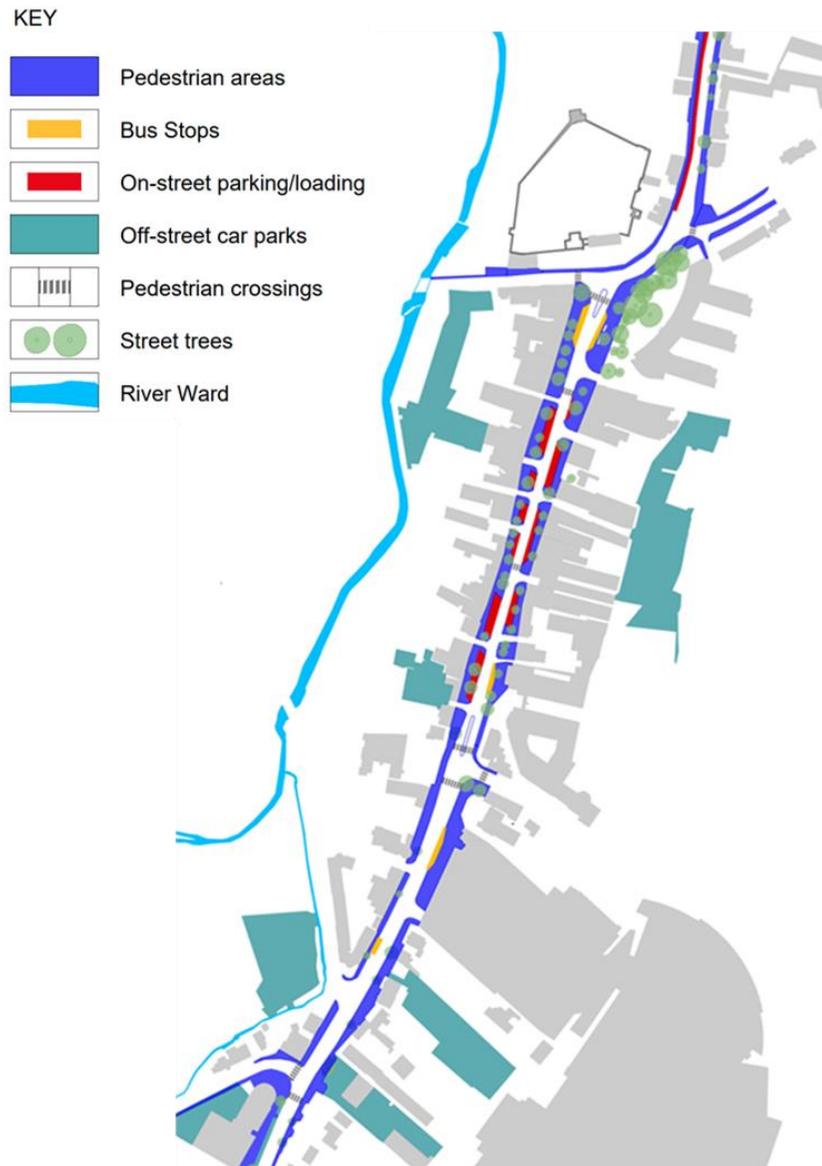


Figure 26: Project 1 Existing Conditions

Main Street as Existing

Key Characteristics

- Swords Main Street is the principal spine of the town centre.
- It is a busy thoroughfare with a mix of specialist shops, pubs, cafés, convenience outlets, small offices (mostly at first floor levels).
- Large scale comparison and convenience retail is provided by the Pavilions Shopping Centre at the south-east end of the street.
- The evening economy is currently limited in its variety and extent.
- The built form varies considerably along the length and each side of the street - western edge mostly low-rise with several historic narrow frontage 2-storey terraced buildings providing a largely continuous building line of townscape interest; eastern edge is more loosely defined by numerous recent infill buildings, on larger amalgamated plots and with building heights increasing to 3-5 storeys, creating a denser built form, particularly at the northern and southern ends.
- Junction of Main Street and North Street forms the core of the town centre, containing the civic uses of the Courthouse, Fingal County Council offices, and the historic administrative centre of Swords Castle.
- The mixture of uses ensures a vibrant but congested area, with heavy traffic flows and on-street parking dominating the public realm.
- Associated clutter from vehicle requirements detracts from the townscape character and form barriers to safe and accessible pedestrian (and cycle) movement.
- There are several off-street car parks in close proximity and easy walking distance.
- The existing pedestrian and cycle infrastructure in the vicinity of the site is limited.
- Mature street trees are a distinctive feature of the street but beginning to cause problems with canopy spread and root upheaval of footways.
- West of Main Street, the Ward River provides an underutilised green spine, linking into the Town Park and ultimately to the Broadmeadow Estuary.
- The Ward River Valley Park extends westwards to form an important open space resource in close proximity to the Town Centre.





Figure 27: Strategy Proposals Plan.

Main Street Strategy Proposals

Key Features:

- Completion of Swords Cultural Quarter public realm
- Creation of new public space outside The Old Borough, linked to Garda Station public space as new Market Quarter
- Southern gateway with traffic calming and enhanced pedestrian and cycle facilities, and to facilitate a future new town centre Quarter as envisaged by 'Your Swords, Strategic Vision 2035'
- Extended footways and enhanced pedestrian crossings
- Creation of pedestrian amenity zones with coordinated street furniture, activity elements and rain gardens
- Cycles lanes both sides of road, integrated with the public realm
- Replacement street trees, with linked root cells where possible (SUDS)
- Continuous southbound and northbound bus routes
- Northbound general traffic
- Bus stops rationalised and up graded
- Raised tables at junctions with Bridge Street, Malahide Road and Forest Road/Church Road, for traffic calming and place making
- On-street parking relocated and loading rationalised
- Enhanced pedestrian links to public car parks and the riverside
- Essential service/emergency vehicle access only retained
- Laneway enhancements as Project 2



Figure 28: At certain times, or permanently in the longer term, the street can be closed to all traffic to become a vibrant pedestrian spine connecting the Quarters at each end of the Town Centre.



Figure 29: Main Street central public realm as proposed, with shared priority street, bus and cycle lanes, pedestrian amenity zones, rain gardens and new street trees



Figure 30: Main Street southern gateway as proposed, with traffic calming, enhanced pedestrian/cycle facilities and high-quality surfacing, street furniture and planting

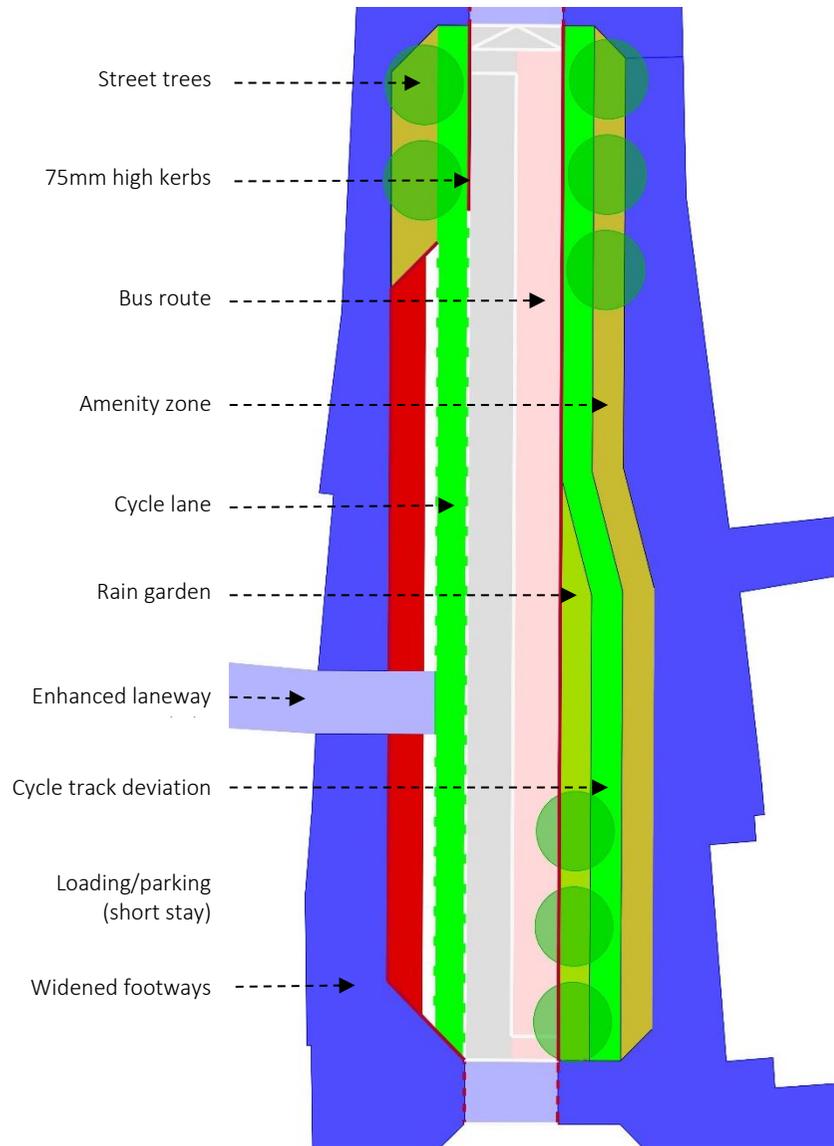


Figure 31: Typical Plan of Main Street Components

Main Street Typical Components



Widened footways (safe pedestrian space), cycle lane, mixed amenity zone



Extra wide footway, rain garden, amenity zone with play and smart furniture

Main Street Precedent Streetscape Images

Widened footways



Pedestrian Amenity Zone



Rain Gardens & Street Trees



Cycles



Vehicles



7.2 Project 2: Liveable Laneways

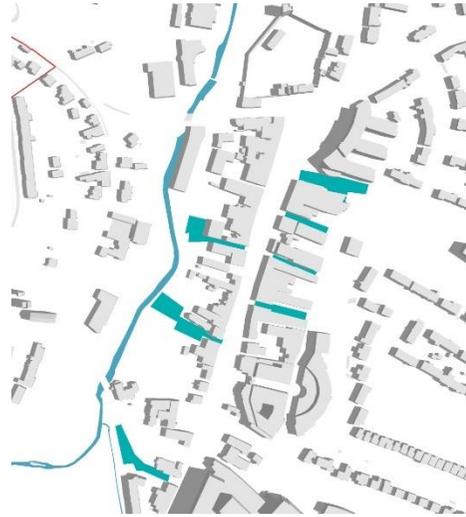
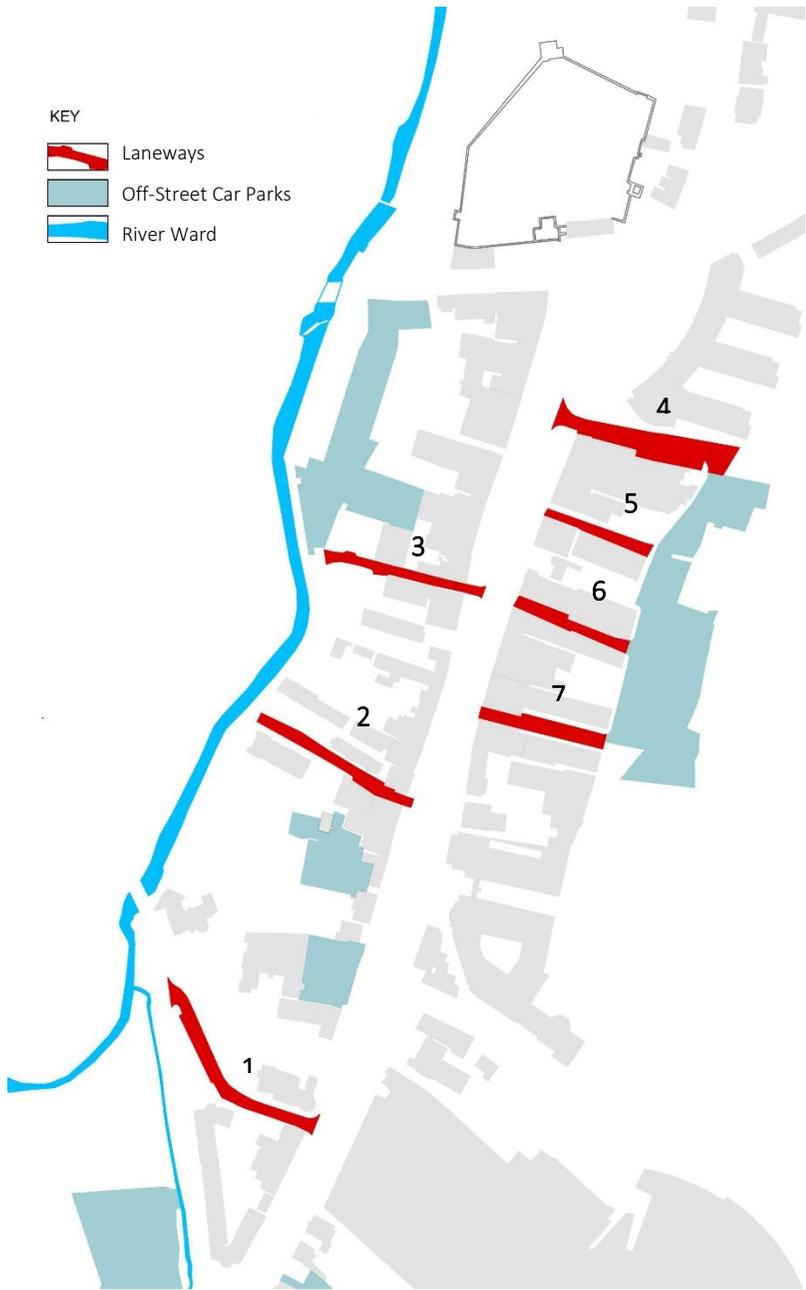


Image 29: Existing Laneway off Main Street, Swords.

Project Summary	The purpose of the Liveable Laneways project is to provide accessible, convenient, and desirable pedestrian access in order to facilitate greater footfall, vibrancy, activity and investment in the Town Centre. Related benefits include enhancing the perception of safety, making them more welcoming and attractive for all, and developing a strengthened sense of community.
Project Lead	Fingal County Council
Project Support	TBD
Indicative Cost	€150k - €500k per laneway
Funding Options	Urban Regeneration Development Fund (URDF) Town & Village Renewal (T&VR)
Timeframe	Short to Medium



1. Well Road

Narrow one-way road eastwards connecting Main Street to Church Road. Small grotto, village pump and popular triangular green space at western end. Provides access to Cooldriona Court but otherwise used as a vehicle short-cut.



2. St. Colmcille's Court

Predominantly vehicle route serving small car park and infill housing. Featureless gable ends at entry from Main Street. Large opportunity site at western end over-looking the river.



3. River Mall

Mixed-use route serving small retail/office outlets and associated parking areas. Corner opportunity site at western end over-looking the river.



4. Chapel Lane

Busy two-way road between Main Street and Forster Way, providing access to large car parks, loading and taxis. Defined by County Offices to north side and vacant commercial premises to south.



5. Mainscourt

Pedestrian link to Forster Way parking and with adjoining vehicle link to parking at rear of Bank of Ireland (separated by wall/railings). Senior Citizens Club at Forster Way end.



6. Cock Tavern Lane

Pedestrian route signified by the Cock Tavern at the Main Street end and new mixed-use development on Forster Way.



7. The Plaza

Recent development of small retail units with roadway through the centre and part-covered roof structure.

Other Opportunities:



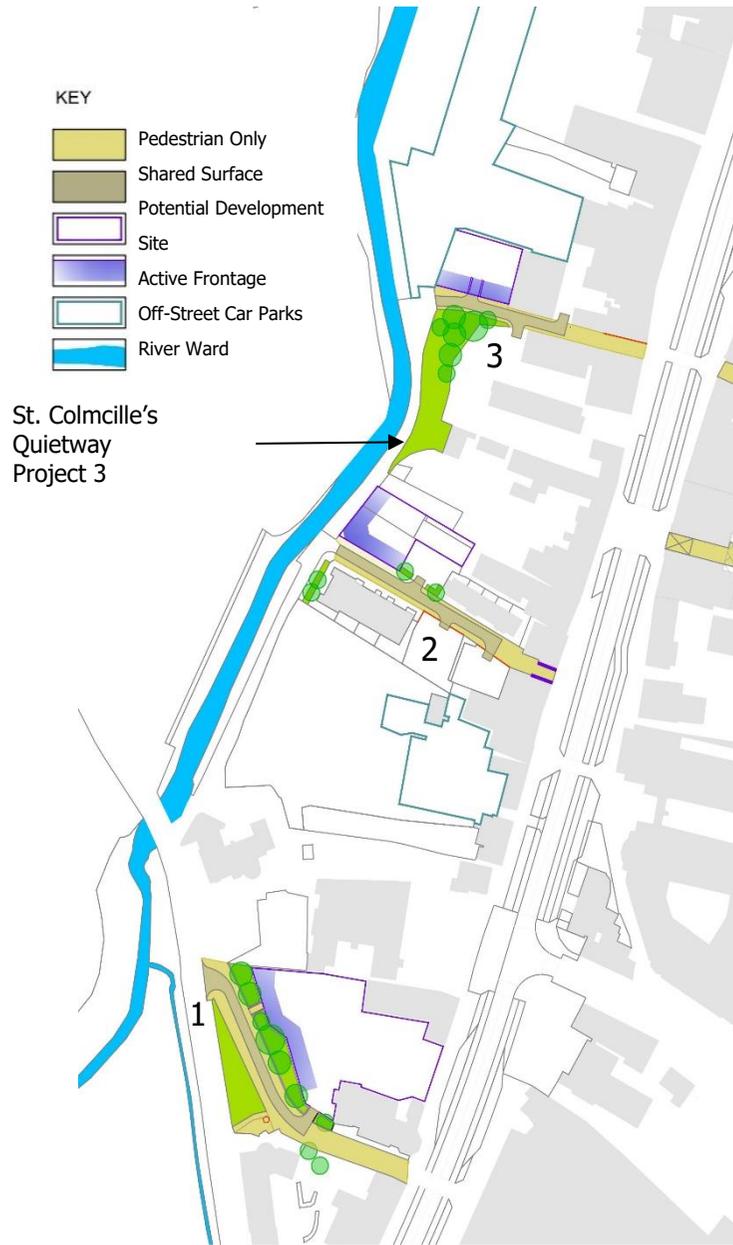
Creation of 'Green Links'



Contemporary Housing Infill



Encouraging Active Uses



Outline Proposals: Eastern Laneways

1. Well Road

- Resident's vehicle access only from Church Road.
- Good quality pedestrian and shared priority surfaces (pc concrete)
- Potential mixed-use development with housing overlooking the road.
- Existing trees retained.
- Public green space upgraded.

2. St. Colmcille's Court

- Resident's vehicle and car park access only from Church Road.
- Opportunity to animate entry from Main Street with window openings in side walls and/or archway feature.
- High quality pedestrian and shared priority surfaces (granite setts), street lighting.
- Potential housing development overlooking the road and river.
- Boundary improvements to existing parking areas.

3. River Mall

- Residents/business vehicles and car park access only from Church Road.
- Opportunity to animate entry from Main Street with mural to blank gable end.
- High quality pedestrian and shared priority surfaces (granite setts), wall-mounted lighting.
- Potential housing development overlooking the road.
- Public green space upgraded.



St. Colmcille's Court as Proposed



Encouraging active uses to 'turn the corner', spill-out space and innovative lighting effects



Cock Tavern Lane as Proposed



Outline Proposals: Western Laneways

4. Chapel Lane

- Change to pedestrian only.
- Creation of civic space as extension and enhancing access to SCQ plaza.
- High quality surfaces (granite slabs + setts).
- Potential retail development to animate corner at Forster Way.
- Formal trees, street furniture and feature lighting.

5. Mainscourt

- Pedestrian only.
- Explore removal of Bank of Ireland division railing to enhance public realm.
- High quality surfaces (granite setts) and street lighting.
- Improved pedestrian crossing to Senior Citizens Club.

6. Cock Tavern Lane

- Pedestrian only.
- Encourage the Tavern to extend outdoor refreshment around corner - improved awning and removal of high boundary wall.
- High quality surfaces (granite setts) and wall-mounted lighting to western end and catenary lighting to eastern end.

7. The Plaza, Swords Town Centre

- Pedestrian only.
- Feature lighting to archway.
- High quality surfaces (granite slabs + setts).
- Interlapping coloured canvas canopy to existing structure with lighting effects.
- Linear rain gardens and exotic vegetation (e.g., 'palm house').

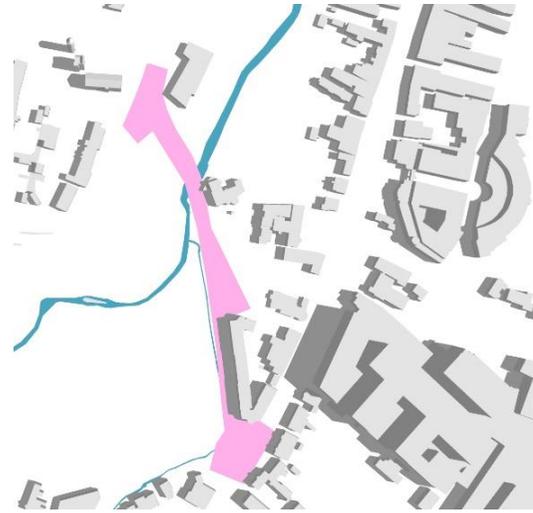


Image 30: Church Road (north). Source: Google Maps.

7.3 Project 3: Key Street Enhancements

Church Road

Project Summary	Church Road is an important route for all users, linking the southern end of the Town Centre to the Ward River Valley and adjoining established residential areas. Improved provision for pedestrians and cyclists is proposed, together with traffic calming and a possible cantilevered structure to the existing river bridge.
Project Lead	Fingal County Council
Project Support	TBD
Indicative Cost	€1-1.25m
Funding Options	Urban Regeneration Development Fund (URDF) Town & Village Renewal (T&VR)
Timeframe	Short to Medium

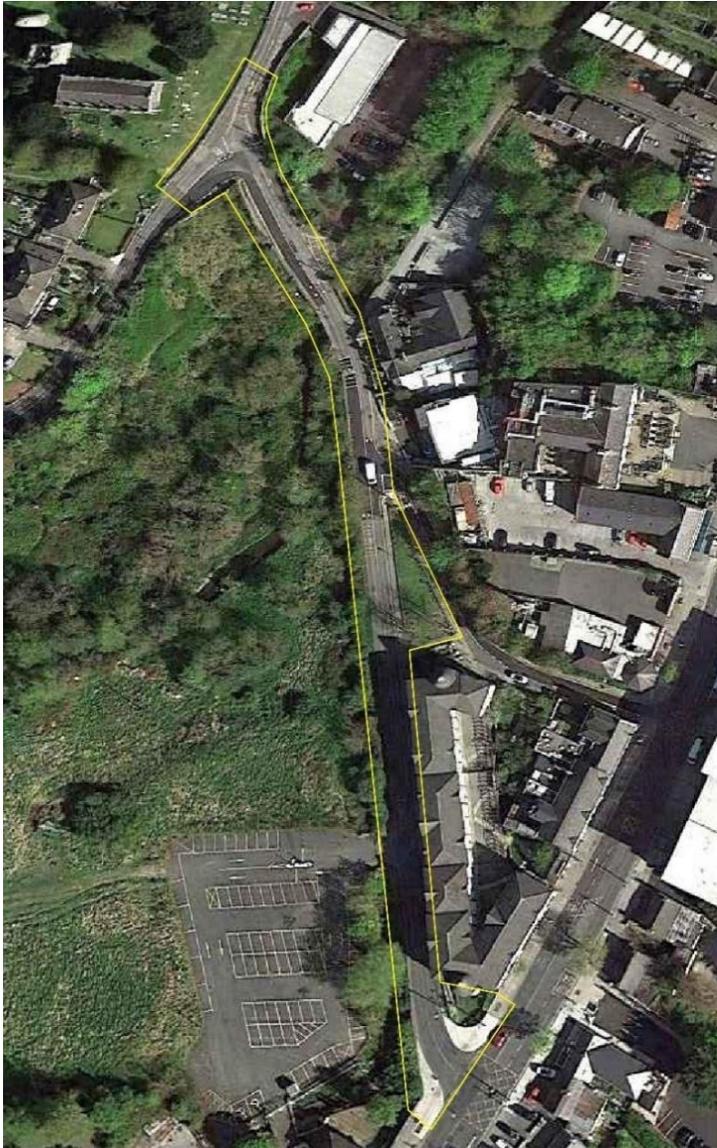


Image 31: Aerial View of Church Road. Source: Google Maps.

Church Road: Main Features

Church Road is a short (approx. 250m), narrow two-way vehicle route linking the southern end of Main Street to Brackenstown Road and the western residential areas of St. Columba's Rise. The Ward River Valley Park extends westwards, and the road retains a distinctly rural character. Close to the Ward River crossing point, The Old Schoolhouse (Protected Structure) provides a noteworthy feature, and the recently developed Chalk Venue contributes to the vitality of the middle section of the road. Northwards there are impressive views of St. Columba's Church and Round Tower.

The Swords Masterplan 2009 identifies the southern end of Church Road, at the junction with Main Street, as the major focus for a new Cultural Quarter, fully integrated with the existing Town Centre and the proposed Town Centre expansion areas and addressing the Ward River Valley Park. The associated design of the public realm is required to be in keeping with the new Quarter's status as a major cultural space on a regional level and as one of the three major activity nodes within the Town Centre Masterplan.

A 'Culture Square' is intended to integrate with the Pavilions development and linkage to the Ward River Valley Park. It will provide a central focus and setting to cultural buildings and a scale of public space capable of supporting predominantly cultural uses including outdoor performance, outdoor dining, performance art, promenade, markets as well as meeting/seating spaces. The building and public realm concepts are further developed in the 'Your Swords, Strategic Vision 2035'.



Image 32: Church Road South. Source: Google Maps.

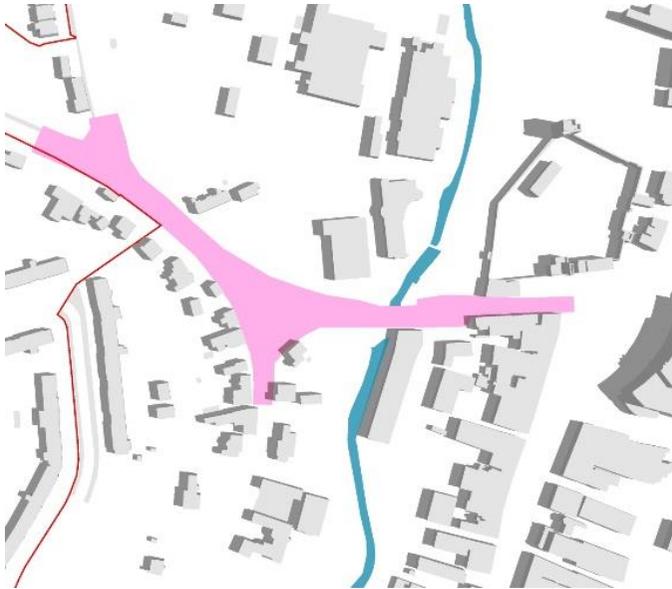


Church Road: Outline Proposals

Key short to medium term proposals for Church Road include:

1. A new pedestrian and cycle path on the western side of the road, between the junctions with Main Street and Brackenstown Road, including a possible cantilever structure to the west of the existing bridge for a shared pedestrian and cycle path.
2. Upgrade of the existing footpath on west side of bridge - the width of the roadway could be reduced to 5.5m if two-way bus movements are not required.
3. Upgrade of Main Street/Church Road and Brackenstown Road/Church Road junctions.
4. A raised table for traffic calming and increased pedestrian/cycle accessibility at the junction with St. Colmille's Quietway (as Project 3).
5. Enhance existing permeability between St. Columba's Rise and Church Road by widening and opening up the path and providing street lighting.
6. Open space improvements as per the FCC Ward River Masterplan.

Longer term considerations include the creation of a Quietway along the northern section of Church Road by implementing filtered permeability at the Brackenstown Road/Church Road Junction for pedestrians, cyclists, and local vehicular (access) traffic only. This is likely to be part of a phased approach and potentially after the completion of the proposed Western Distributor Road.



Project 3: Key Street Enhancements

Bridge Street

Project Summary	Bridge Street links the residential areas to the west of the Town Centre to Swords Cultural Quarter. It is a busy movement corridor, narrow in parts, and also serving BusConnects routes. Proposals include footway widening where possible, increased pedestrian crossings and a shared pedestrian and cycle path to the north of existing bridge.
Project Lead	Fingal County Council
Project Support	TBD
Indicative Cost	€0.5-0.75m
Funding Options	Urban Regeneration Development Fund (URDF) Town & Village Renewal (T&VR)
Timeframe	Short to Medium



Image 33: Bridge Street (looking eastward). Source: Nicholas de Jong Associates.

Bridge Street: Outline Proposals

Bridge Street is a busy two-way road extending between the Cultural Quarter at the junction with Main Street to the R125 Rathbeale Road. To the east of the Ward River bridge, footways are narrow and given the Castle grounds and Town Park to the north side of the street there is limited opportunity for increasing widths or for the provision of dedicated cycle or bus facilities. West of the bridge the road corridor widens and there is an existing outbound cycle lane and expansive pedestrian space at the junction with Church Street and the Care Choice Nursing Home. There are no pedestrian crossings in a north-south direction across the street.

Bridge Street forms part of BusConnects routes (Spine A4, 82, 196, 197, 280, 384). The GDA Cycle Network Plan for Swords and the surrounding area proposes a Primary Radial Route along Bridge Street, Seatown Road, Main Street and Dublin Road.

Short to medium term proposals for Church Road include:

1. Reduction in carriageway width to 6m where possible and utilising remaining space to widen footpaths on southern side of street.
2. Shared space at eastern end of the Street between Main Street and the Town Park to integrate with the SCQ area.
3. Consideration of a shared pedestrian and cycle path to the north of existing bridge to reduce conflict.
4. Provision of a Toucan crossings near Care Choice Nursing Home, connecting with the green open space, and at the entry to the Town Park (in line with St. Colmcille's Quietway).

Longer term proposals include:

- Consideration of restricting through (private) traffic along the street and introducing bus priority, subject to the completion of the Western Distributor Road. Access arrangements for the redevelopment of the Castle SC lands would also need to be factored into the decision.
- Toucan crossing at the Swords Castle Shopping Centre entrance to align with long-term Section 3 of St. Colmcille's Quietway.
- Removal of the chain barrier at the Town Park entrance on Bridge Street to facilitate crossing on desire lines.

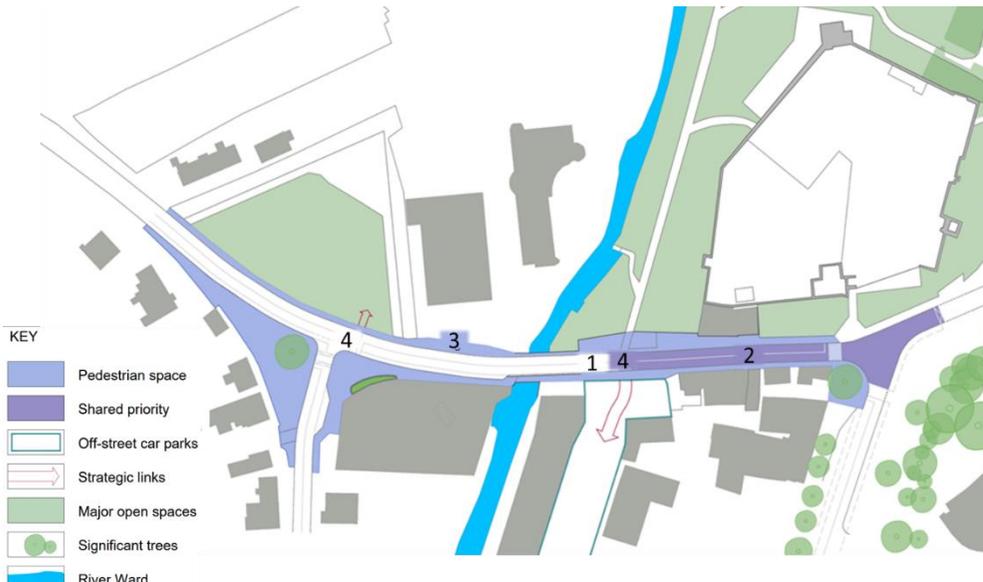
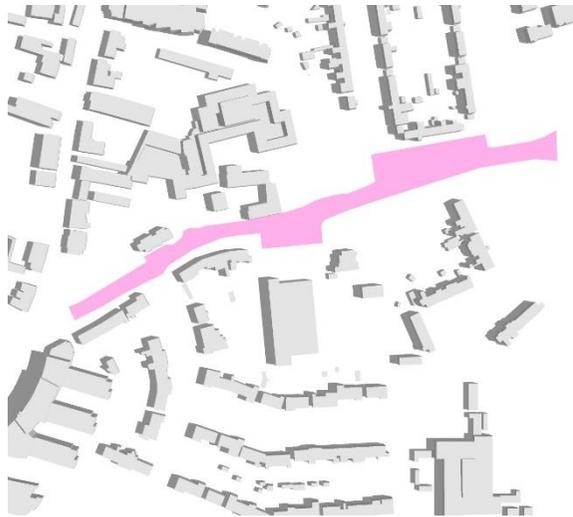


Image 34: Bridge Street / Church Street Junction. Source: NdJ.



Project 3: Key Street Enhancements

Seatown Road	
Project Summary	Seatown Road provides direct access to Swords Cultural Quarter from the R132 and the M1 motorway and has the potential to become an attractive pedestrian route between the Town Centre and the proposed Seatown Metro Stop. Proposals include traffic calming measures and improved facilities for cyclists.
Project Lead	Fingal County Council
Project Support	TBD
Indicative Cost	€0.50-1.0m
Funding Options	Urban Regeneration Development Fund (URDF) Town & Village Renewal (T&VR)
Timeframe	Short to Medium



Image 35: Seatown Road (looking eastward)

Seatown Road: Outline Proposals

Seatown Road provides direct access eastwards from Swords Cultural Quarter to the R132 and the M1 and has the potential to become an attractive pedestrian route between the Town Centre and the proposed Seatown Metro Station. The existing uses of Swords Castle, Fingal County Council and Courthouse at the junction of Seatown Road, North Street and Main Street currently provide a strong civic presence, while Fingal Community College and 'Fingal Prosper' further contribute to the vibrancy of Seatown Road, together with residential properties.

The proposed Metro North station will increase pedestrian flows along the Seatown Road and reinforce its role in the development of a pedestrian friendly urban centre. The Draft GDA Cycle Network Plan for Swords proposes a Primary Radial Route along Seatown Road to Bridge Street and Main Street. Opportunities for enhancing the public realm along the street need to be explored in order to improve the pedestrian/cyclist experience, as well as the potential to introduce additional green space and street tree planting as part of new development.

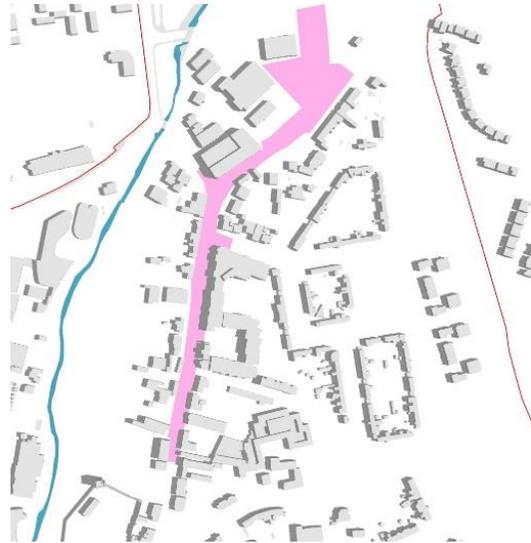
Short to medium term proposals for Seatown Road include:

- Key access point to Seatown Metro – retain as two-way access to SCQ and Main Street initially.
- Cycle tracks from Seatown Road Roundabout (tie-in with R132 Connectivity Project).
- Shared space (as per SCQ) as far as entrance to Fingal Community College.
- Reduce speed limit to 30kph and Gateway and Transition Zone treatment.

Longer term consideration could be given to either a shuttle system, or a short one-way section to limit through vehicular traffic and accommodate wider footpaths. This may be contingent on full completion of 'ring road' system and access requirements to the Aldi and residential properties at St. Columille's Drive.

A complementary measure would be to provide north-south filtered permeability for pedestrians and cyclists only between Seatown Road and Castle Grove to provide safe access to Metrolink and St Colmcille's Girls NS.





Project 3: Key Street Enhancements

North Street	
Project Summary	North Street extends from Swords Cultural Quarter northwards to the R125 and Estuary Roundabout. It forms a continuation of Main Street as the principal thoroughfare and commercial area of Swords Town Centre. Proposals include widened footways where possible, traffic calming and defined on-street parking, additional street trees and improved cycle facilities and pedestrian links to Swords Town Park.
Project Lead	Fingal County Council
Project Support	TBD
Indicative Cost	€1.0-1.50m
Funding Options	Urban Regeneration Development Fund (URDF) Town & Village Renewal (T&VR)
Timeframe	Short to Medium



Image 36: Recent Redevelopment at Northern End of Street.



Image 37: Distinctive Terraced Housing on North Street.

Existing Situation

North Street forms a continuation of Main Street as the primary thoroughfare of the Town Centre and has a variety of offices and small-scale retail outlets interspersed with a mix of terraced housing, public houses, apartments, and a hotel. Medium size offices are increasingly attracted to locate here. The Civic Core of Swords Town Centre is located at the junction of Main Street and North Street, and contains the dominant uses of the Courthouse, Fingal County Council offices, and the historic administrative centre of Swords Castle. North Street East forms the key direct north-south route through Swords and will be a direct route to the proposed Estuary Metro Stop. The street serves existing BusConnects routes (82, 382, 283, 285)

The building edge along the eastern side of the street is reasonably continuous and well-defined by mostly 3-storey properties with many active frontages.

The western edge is less coherent and has a wide mixture of building types and heights. Further westwards, and adjoining the backlands of North Street, the Ward River Valley Park forms an important open space resource and green spine, although currently underutilised, linking northwards to the Broadmeadow Estuary.

A number of heritage buildings along North Street contribute to its character and to local interest, such as the Carnegie Free Library (1908), now accommodating the Swords Historical Society and Museum and acting as an important town centre heritage amenity alongside Swords Castle; the late-19th century former New Borough Female Schools, now used by Swords Youth Reach; and the distinctive Swords Courthouse (1843), to be incorporated within the SQC development. Other buildings of note include Fingal Community College (c.1960s/70s); a fine late-19th century housing terrace; and some interesting although much altered 19th century single-storey cottages.

As identified in the Town Centre Health Check, vehicle dominance along the length of North Street increases to around 60% of the area (compared to 55% of the total area of Main Street) and, along certain parts of the street. Pedestrian footways and the quality of the public realm are generally poor. While those on the eastern side of the street are currently adequate in width, footways to the west can be narrow and discontinuous, especially in the vicinity of Swords Community Park and at the junction with Main Street. There is only one controlled pedestrian crossing on the street, located close to Carnegie Court Hotel.

Surface finishes are mostly in-situ concrete and asphalt, with some small unit concrete setts around the narrow footpath to the south side of the castle.

There is limited soft landscape along the western edge, although there are several mature and semi-mature street trees on the eastern side of North Street, of low to moderate quality. Swords Town Park provides an important amenity area, but pedestrian access is currently limited from the street. To the east of North Street, directly north of the Carnegie Court Hotel block, there are a number of high walls that present inactive frontages to the public realm.

KEY

	Pedestrian Space
	Shared Priority
	On-Street Parking Bays
	Ramp up to Raised Table
	Strategic Links
	Major Open Space
	New Street Trees
	Significant Existing Trees
	River Ward

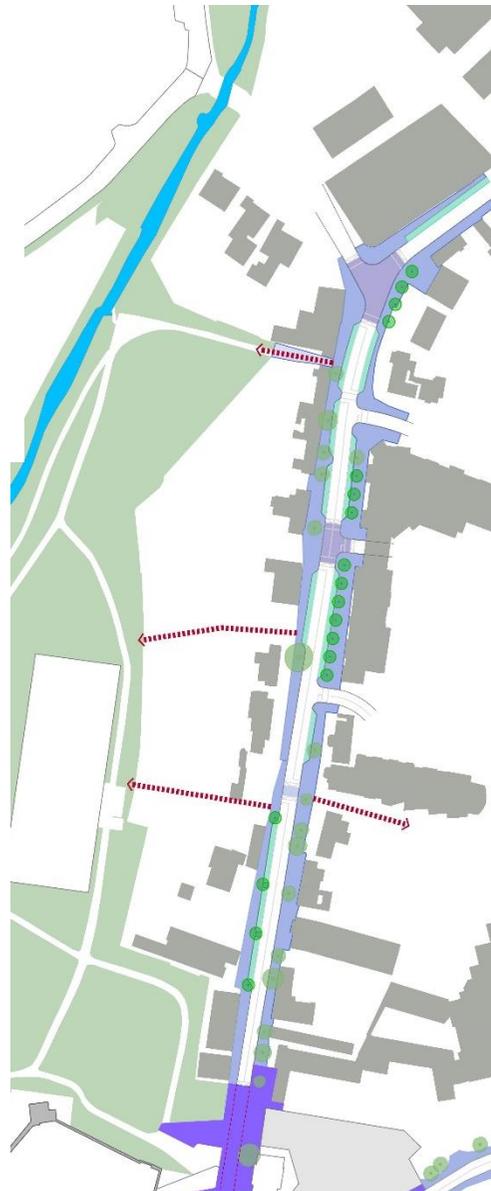


Image 38: The Former Carnegie Free Library.

North Street: Outline Proposals

The public realm of North Street needs to be improved for the benefit of pedestrians and cyclists in order to reinforce its role as part of the main commercial spine of the Town Centre. Whereas on-street parking is required along most of the street, given the lack of convenient off-street car parks, it is mostly ill-defined, and illegal parking on footways is common. The potential for additional public parking needs to be explored as part of new developments, and existing on-street parking bays should be more clearly defined and interspersed with additional street trees. New development proposals along the western edge of North Street should also be encouraged to strengthen the urban form and to create new public spaces and pedestrian routes linked to Swords Town Park.

Short to medium term proposals:

- It will be necessary to retain two-way vehicle movement, and traffic calming measures should be undertaken to reduce the dominance of traffic.
- On-street parking to be rationalised and more clearly defined.
- Cycle lanes to be incorporated on both sides of the street to the junction with the R125.
- Shared space is proposed at the southern end of the street to integrate with the Swords Cultural Quarter (SCQ) area.
- Side street junctions to have reduced radii and improved pedestrian crossings.
- The Town Park access at northern end near The Estuary Public House to be enhanced.
- Street lighting and signage to be up-graded, particularly for enhancing the presence of heritage and amenity assets.
- Junction with Balheary Road to be enhanced in line with DMURS (e.g., reduced corner radii, raised table, removal of guard railing and clearly defined pedestrian crossings).
- Provision for closure of all or part of the street for special occasions and events.

In the longer term there will be a need to tie in eastbound cycle movement from North Street to the R125/Estuary Roundabout as part of the R132 Connectivity project. Consideration should also be given to creating a filtered (point closure) at the southern end of the North Street to restrict vehicular access through the SCQ plaza.



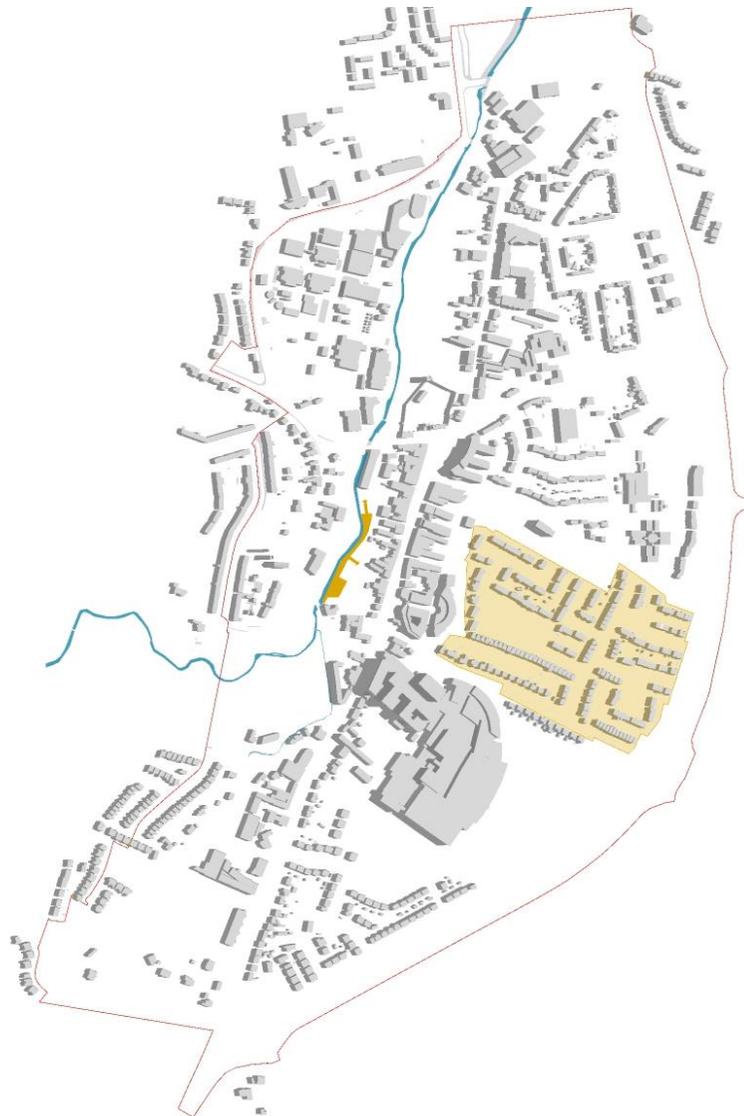


Figure 35: Chapel Lane Quietway and Homezone.

7.4 Project 4: Quietways & Homezones

The Sustainable Swords Public Realm and Transport Strategy recommends a series of Quietways as a means for improving permeability for people walking and cycling, which together with public realm and junction upgrades, will also help create Safer Routes to Schools. The proposed Quietways have been identified where vehicular traffic is generally quieter and calmer, primarily using lightly trafficked residential streets and laneways, through parks and alongside waterways. They are designed to appeal particularly to new and inexperienced cyclists.



Safety, legibility and accessibility considerations are key to the success of these Quietways including lighting, sightlights, and signage where appropriate.

The following links, as illustrated in Figure 41, have been identified as Quietways:

- N-S St. Colmcille's Quietway (as part of the Ward River Valley Greenway).
- E-W Rathbeale to Balheary Quietway (formalisation of existing filtered permeability/desire lines. To be tied in with the Ward River Valley Greenway).
- N-S Jugback Quietway which ties in with the Balheary Quietway, providing a Safe Route to School (St. Finian's College).
- N-S Between Seatown Road and Malahide Road via Seatown Terrace and Castle Avenue.

The Quietways also provide the framework for introducing traffic calming and shared priority measures to entire residential neighbourhoods. The concept of Home Zones has developed where people and vehicles share the whole of the street space safely, and on equal terms, and where the quality of life takes precedence over the ease of traffic movement. The concept has been used for both new developments and for converting traditional streets.

The projects further developed as an integral part of the Public Realm and Transport Strategy are:

- St. Colmcille's Quietway (north-south link forming part of the Ward River Valley Greenway).
- Chapel Lane Quietway and Homezone.

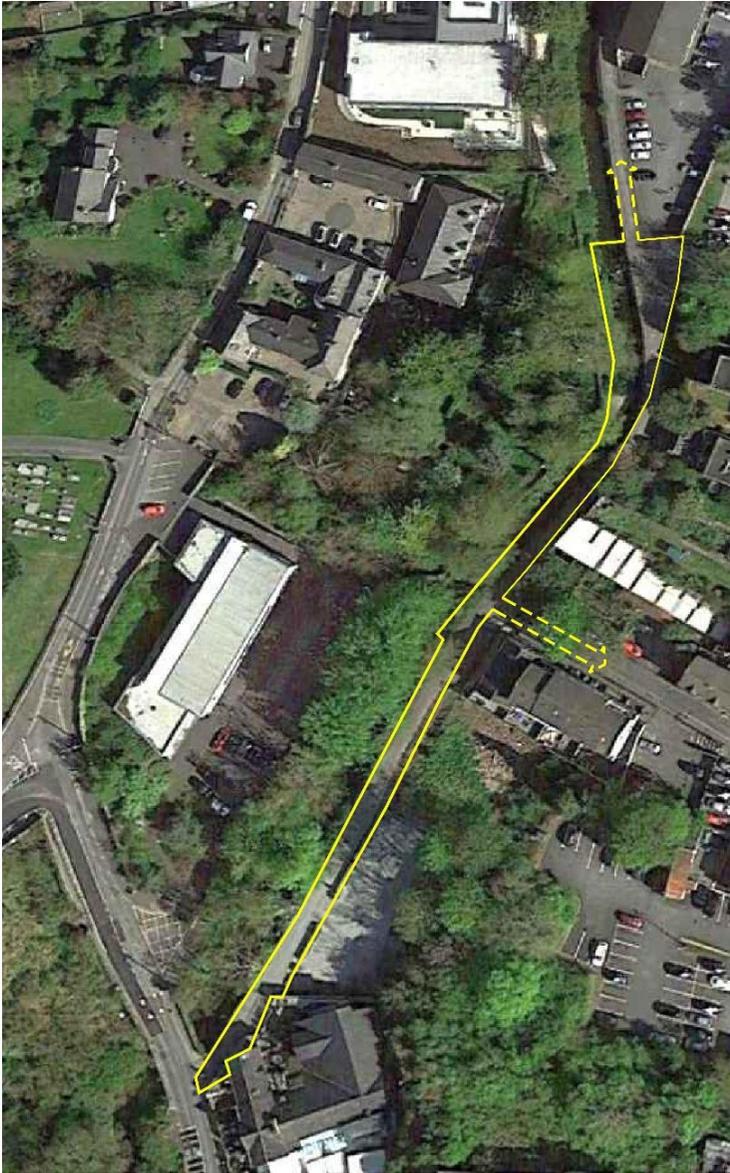


Figure 36: Aerial View of St. Colmcille's Quietway.

St. Colmcille's Quietway

Project Summary	Upgrading of narrow laneway bordering the River Ward as a shared route with pedestrian and cycle priority, acting as a sustainable access link from west Swords to the town centre, south to Ward Valley Park and north to the Town park and Broadmeadow Greenway.
Project Lead	Fingal County Council
Project Support	TBD
Indicative Cost	€500-750k
Funding Options	Developer Contributions Town & Village Renewal (T&VR)
Timeframe	Short



Figure 37: The Laneway as Existing

Existing Situation

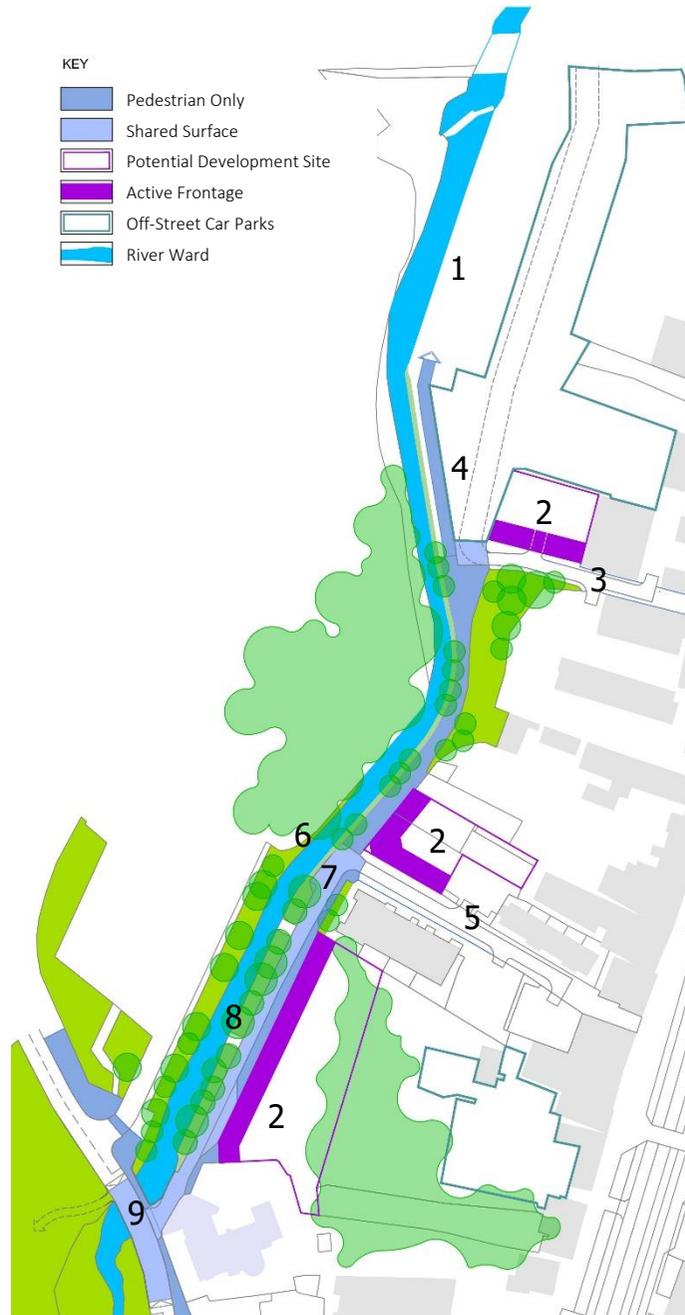
The Ward River Valley forms an attractive green belt to the south of Brackentown Road, linking into the Town Park at the northern end beyond Bridge Street, close to the Civic Core, and ultimately terminating in the Broadmeadow Estuary. The narrow laneway borders the river from Church Road to St. Colmcilles Court and continues as a footway to River Mall, which both provide convenient links to Main Street, and thereon through a parking area to Bridge Street. There are numerous mature trees in the vicinity of the route and within many of the backlands between Main Street and the river. The Old Schoolhouse (Protected Structure) provides a noteworthy entry feature at the southern end. A prominent development site lies just to the north of the Schoolhouse on the eastern side, as well as two other vacant sites further along the laneway.

Although of high amenity value, the laneway is currently underutilised and has a neglected appearance that detracts from its potential as a recreational spine to Swords Town Centre and the Ward Valley Greenway.

Quietways are walking and cycling routes that have been identified where vehicular traffic is generally quieter and calmer. St. Colmcille's would remain as a single lane continuous shared surface route, with vehicle passing bays at each end, in order to access existing and potential future properties to the rear of Main Street. A raised table at the junction with Church Road is proposed for traffic calming and to signify the entry to the laneway.

Other proposals include a robust and functional public realm to the riverside comprising natural aggregate/bound gravel surfacing or high-quality granite setts; low level lighting to achieve safe standards while minimising disturbance to wildlife; a potential cross-river pedestrian and cycle access by a new bridge linking northwards towards the school; and the creation of occasional access points to the water edge with small decks for birdwatching and 'dipping'.

Adjoining opportunity sites should preferably be promoted for high quality townhouses fronting onto and providing passive surveillance of the Quietway.

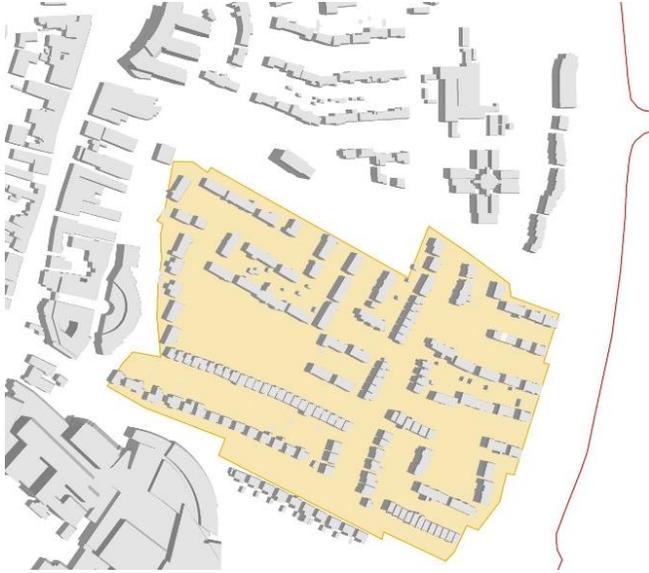


St. Colmille's Quietway: Outline Proposals

1. Continuation of pedestrian/cycle route to Bridge Street and the Town Park.
2. Development opportunities for family terraced houses overlooking the route
3. Upgrading of River Mall to strengthen pedestrian links to Main Street, as Project 2.
4. Pedestrian/cycle only section.
5. Upgrading of St. Colmille's Court to strengthen pedestrian links to Main Street, as Project 2.
6. Possible footbridge across river to school.
7. Good quality surface finishes to reinforce pedestrian and cycle character of the route.
8. Possible viewing platform to river.
9. Raised table outside the Old Schoolhouse to signify entry to the Quietway and for traffic calming on Church Road (refer Project 3).



Figure 38: St. Colmille's Quietway as Proposed.



Chapel Lane Quietway and Homezones

Project Summary	Development of a Quietway along Chapel Lane, linking residential areas and St. Colmcille's Girls NCS to the Town Centre, and promoting a Home Zone to the south of Chapel Lane.
Project Lead	Fingal County Council
Project Support	Residents Association
Indicative Cost	€250-750k
Funding Options	Developer Contributions Town & Village Renewal (T&VR)
Timeframe	Short-Term



Image 40: Example of Filtered Permeability as Part of Quietway at Ballybrack Valley Pedestrian and Cycle Route, Cork.



Image 39: Typical Quietway in London.





Figure 39: Chapel Lane Quietway and Homezone.

Chapel Lane Quietway

This proposed route provides an east-west link between Main Street and the R132/Metro stop (to be combined with new at-grade crossing on R132), and is one of five of such routes proposed by Sustainable Swords to further promote movement by alternative means to the private car.

Chapel Lane is one of Key streets linking the town centre to an established residential area and to St. Colmcille's Girls NCS. It would connect with the new civic space proposed at the eastern end of Chapel Lane extending to Main Street. The Quietway will facilitate local access only and prioritise movement by walking and cycling, supported by public realm improvements. As traffic volumes and speeds are relatively low, it is anticipated that cyclists will generally share the roadway with vehicles. There is adequate width along the roadway to widen the currently narrow footpaths.

The Chapel Lane Quietway could serve as a pilot scheme for the other potential routes identified for Sustainable Swords.



Image 41: Chapel Lane as Existing.



Image 42: Typical Homezone.

Homezone

The established residential area to the east of the Town Centre, around Castle Avenue and Oaklands Avenue, adjoins the proposed Chapel Lane Quietway and is mostly within 5-10 minutes walking distance of Main Street. Traffic volumes are generally low and restricted to local vehicles.

As with most residential areas, the streets were primarily designed for the purposes of vehicle access and circulation, but as car ownership has increased, they have now become less safe for pedestrians and children playing in the street has all but ceased. Most residential streets become predominantly car parks. Over the last twenty years this approach has been changing and more recognition given to pedestrians and cyclists. In parallel, the concept of Home Zones has developed where people and vehicles share the whole of the street space safely, and on equal terms, and where the quality of life takes precedence over the ease of traffic movement. The concept has been used for both new developments and for converting traditional streets.

The layout of the streets needs to emphasise this change of use, so that motorists perceive that they should give equal priority to others. Combined with good quality public realm, the street pattern can be re-engineered so that the space around people's homes can be safely used for social and leisure activities. Improvements may include shared surfaces, indirect traffic routes, areas of planting, and features to encourage the use of the street, such as seating and informal play spaces. Traffic speeds should be low enough that walking in the middle of the street is not unsafe. Clear indications are needed at the entry and exit from an area that is fundamentally different from normal road space in its design, layout, and use.

As well as addressing the traffic aspects, Home Zone schemes can develop a greater pride and responsibility in residents for the care and wellbeing of their surroundings, particularly where this has been achieved by the active involvement of residents in the planning and design process.

The proposed Castle Avenue/Oaklands Avenue Homezone could also serve as a pilot scheme for similar initiatives within residential areas around the Town Centre, such as the neighbourhoods of Applewood, Rathbeale and Brackenstown to the north of the Ward River and Knocksedan, River Valley, Rathingle, Highfields, and Boromhe to the south side of the river. As well as Seatown, Lissenhall, Holywell and Drynam which lie to the east of the town core

7.5 Swords Active Travel Network

Walking and cycling are the most sustainable forms of travel. Though often undervalued, walking links all modes of transport; all journeys begin and end by walking irrespective of other modes used and is therefore critical to the overall network.

Compared to other users, pedestrians cover less ground in the same amount of time and are the most engaged with the street and their surroundings. The pedestrian environment must therefore be safe, inclusive, permeable, interesting, and attractive for people of all ages and abilities. By prioritising design for pedestrians first in line with the DMURS user hierarchy, the number of short journeys taken by car can be greatly reduced. A well-designed public realm that is legible and accessible to all users will assist in enabling walking journeys and improve the overall experience.

At present, 17% of Swords' population walk for all trips, while only 3% cycle. Sustainable Swords aspires to increase the number of people walking and cycling for all trip purposes, especially for short trips, and to improve the pedestrian and cycle environment overall.

The terms 'pedestrian' and 'walking' in this Strategy is inclusive of people using wheelchairs and mobility aids as well as those using buggies.

Sustainable Swords Cycle Network

The recently published Draft Greater Dublin Area Transport Strategy 2022-2042 includes an updated Cycle Network Plan for the region, including the Swords area as illustrated in Figure 40.

SS 1: Swords Cycle Network

It is recommended that the proposed routes for Swords under the GDA Cycle Network Plan are delivered, prioritising the following 6 radial routes in the short-term:

- Forest Road.
- Rathbeale Road.
- Brackenstown Road.
- Chapel Lane.
- Malahide Road.
- Swords to Airport Cycle Link (via Dublin Rd).

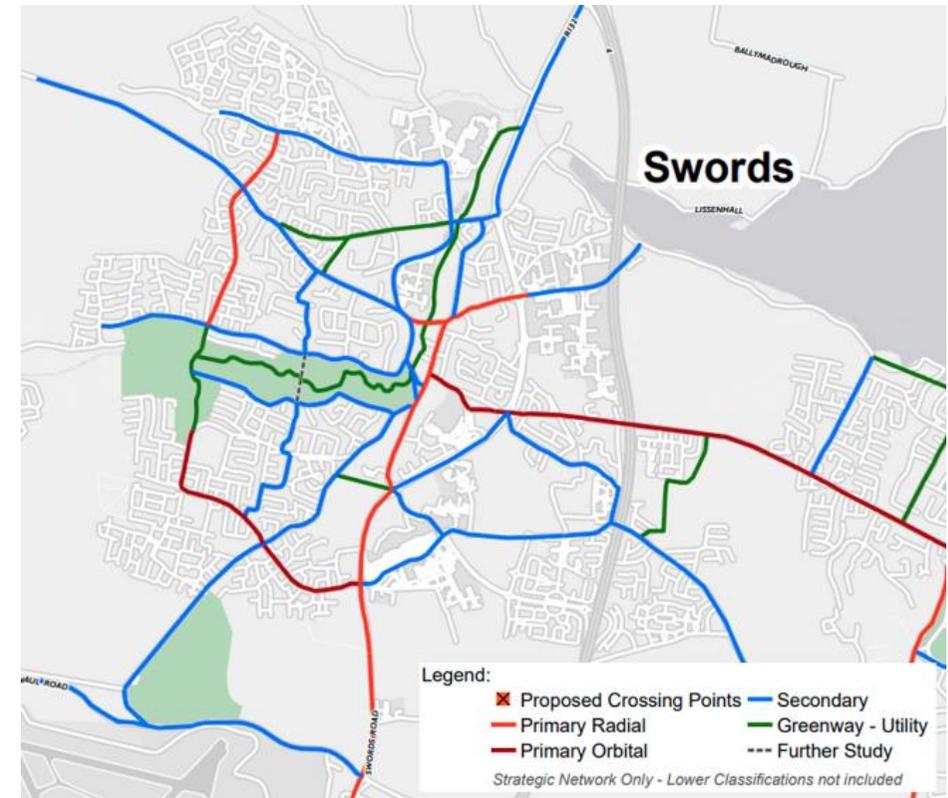


Figure 40: GDA Cycle Network: Swords.

The Public Realm and Transport Strategy has identified additional measures, including these routes, to improve Swords' cycling and walking network, as illustrated in Figure 41, including:

- Dedicated cycle lanes.
- Quietways and Filtered Permeability.
- Traffic-calmed urban core (30km/h speed limit).
- Gateways and Transition Zones.
- Junction upgrades.

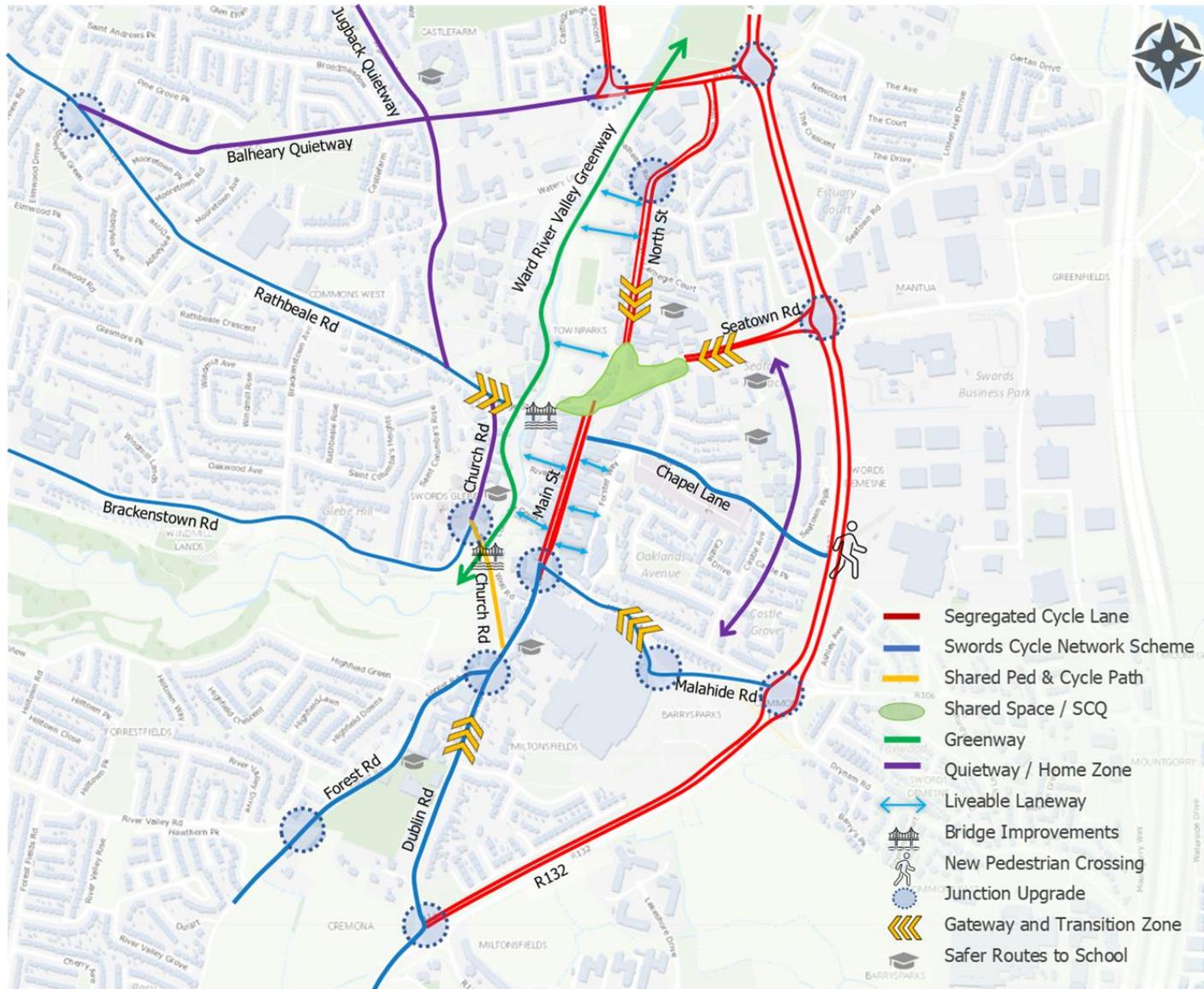


Figure 41: Overview of Active Travel Recommendations.

7.6 Swords Public Transport Network

There are a number of transformational public transport proposals for Swords over the coming years that will significantly enhance connectivity within, to and from Swords.

These proposals are further detailed in Section 4.6 Future Transport Proposals. This section provides some recommendations to support these projects.

Dublin BusConnects

BusConnects is the NTA's programme to significantly improve the bus network in Dublin and its delivery is a key objective of Project Ireland 2040, Regional Spatial and Economic Strategy for the Eastern and Midlands Region, and the Greater Dublin Area Transport Strategy 2022-2042.

The revised BusConnects Network Redesign proposals indicate that the Swords area will be well served by a number of interconnecting city-bound and local routes further supplemented by Core Bus Corridor (CBC) infrastructure enabling a reliable, high frequency service to the City Centre. It is understood that the BusConnects is presently being rolled out on a phased basis.

Swords Main Street is an important corridor for the proposed A Spine, with a number of services including the X84, L82, L81, 197, and L89.

SS 2: Dublin BusConnects

It is recommended the following measures to complement the implementation of BusConnects in Swords:

- Implement a south-bound bus priority lane in the short-term, making Main Street one-way northbound for general traffic and two-way for bus. In the long-term, it is envisaged that both lanes will have bus priority, with vehicular access only possible for delivery and emergency services.
- A public realm-led approach to be taken regarding bus priority lanes on Main Street in terms of materials, signage, etc.
- Enhance the interchange environment for bus users on Main Street.
- Segregated cycle lanes on Main Street should be accommodated around bus stops, i.e., bus islands.
- Rationalisation of existing bus stops.

MetroLink

MetroLink will consist of a 19km north-south railway line, forming a key spine of the overall integrated public transport system for Dublin, alongside BusConnects and DART+, and facilitate compact, transport-led development at key locations. It will run between Swords and Dublin City Centre, connecting key destinations including Dublin Airport, serving 15 stations in total.

The key sections of the MetroLink preferred route relevant to the extents of Swords extend from the northernmost point of the route at Estuary Station (including a Park and Ride facility for 3,000 vehicles), through to Seatown Station, Swords Central Station and Fosterstown Station.

SS 3: MetroLink

It is recommended that east-west connectivity needs to be strengthened between the proposed MetroLink stops and the town centre and surrounding residential areas. The following links are considered the most important:

- Seatown Road.
- Malahide Road.
- Chapel Lane via the proposed at-grade pedestrian crossing on the R132.

DART

While Swords is not served directly by the DART, nor by the proposed DART Expansion programme, the nearby town of Malahide is. It is understood that it is a short-term objective to provide cycle connectivity between the two towns via the R106, with additional BusConnects routes also proposed.

SS 4: Connectivity to the DART

To capitalise on this enhanced rail connection and open up more public transport accessibility opportunities for those living and working in Swords, it is recommended that FCC engage with the NTA to provide improved active travel and public transport connectivity between Swords and the Malahide DART station in the short-term.

7.7 Swords Junction Upgrades

As was highlighted by the Sustainable Swords Town Health Check, Green Schools Audit and Strategic Conversations during the Sustainable Swords consultation processes, junctions throughout the Study Area are a major barrier to safe and direct movement for pedestrians and cyclists due to a lack of crossing or dropped kerbs, staggered crossings and wide splays, for example.

Figure 43 identifies locations where junction improvements are recommended to address these issues; these include both local junctions at the entrance to development, and more strategic junctions in the study area.

SS 5: Junction Improvements

It is recommended that the junctions identified in Figure 43 in the Study Area are reviewed and upgraded to be compliant with DMURS design standards including:

- Reduce kerb radii/splays, thereby reducing crossing distances for pedestrians and slowing turning vehicles.
- Omit left turn slips, which generally provide little extra effective vehicular capacity but are highly disruptive and hostile for pedestrians and cyclists.
- Omit staggered crossings in favour of direct/single phase crossings.
- Build out crossings/footpaths.

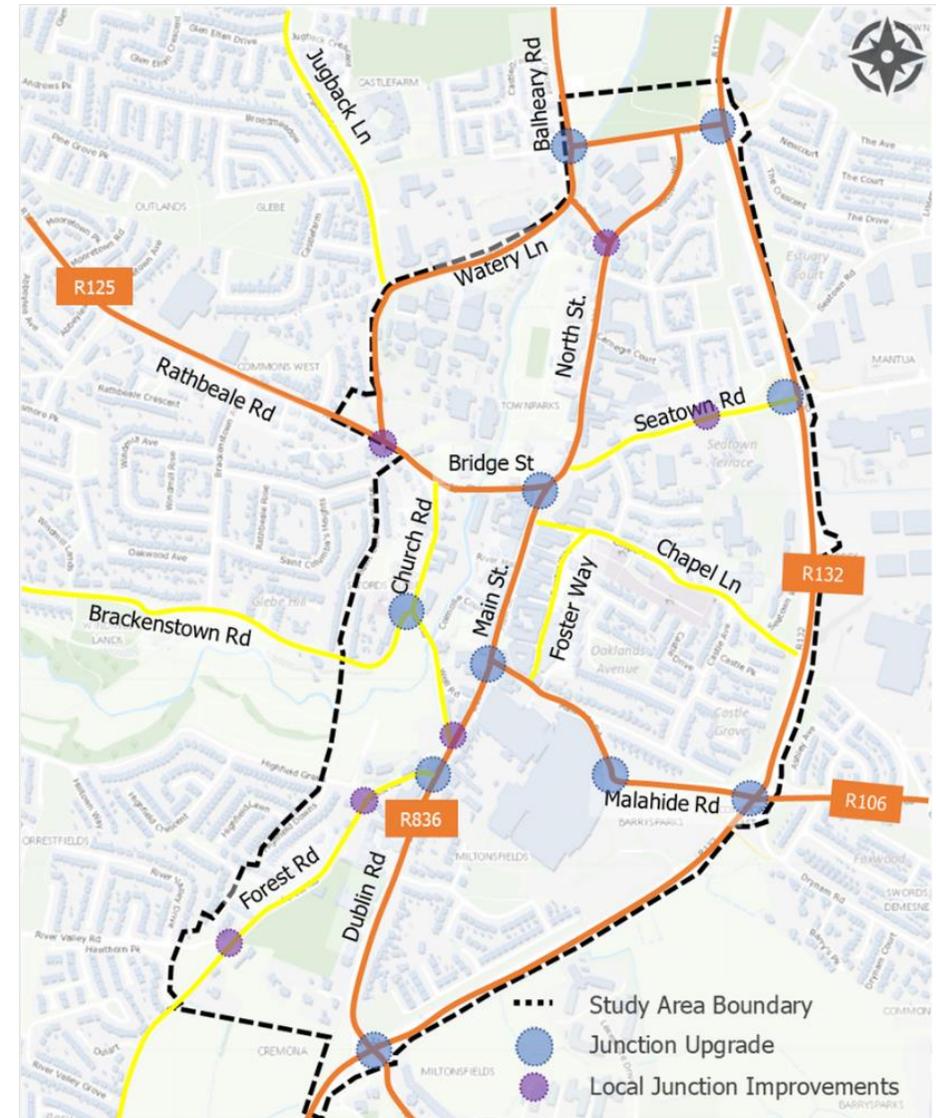


Figure 43: It is recommended that junctions across the Study Area are reviewed and upgraded to improve safety for pedestrians and cyclists.

7.8 Parking Management

Overview

There is a long-established relationship between the location, availability and price of parking and its impact on travel behaviour. Controlling the availability and cost of parking is one of the most widely used demand management measures and therefore, is a key component of any strategy that aims to affect a modal shift toward sustainable travel and reduce car dependency.

There is a significant amount of both privately and publicly available car-parking areas throughout the Study Area – most notably within the immediate vicinity of Main Street. Whilst it is anticipated that many of the surface car-parking areas are likely to be redeveloped for residential and mixed-use over the lifetime of the Strategy, prudent management of car parking availability will be needed to achieve a step-change in travel behaviour – particularly for short journeys. This includes maximum parking standards provision for residential developments (origin parking) and destination parking – at places of employment, study, cultural and leisure facilities etc.

At present, there are many competing demands for public space in Swords. A significant proportion of land across the Study Area is given over to the private car. Analysis undertaken by DBFL in the early stages of the Study, estimated that up to 75% of the available public space on Main Street alone is typically allocated to either the movement of vehicles or storage of the private car – a significant contributor to its perception as a noisy place with poor air quality and difficult to cross. This is considered an inefficient use of space that is in high demand when it is estimated that the average car is parked at home 80% of the time, parked elsewhere for about 16% of the time and only in active use the remaining 3 or 4% (Department of Transport, 2021).

The reallocation of space currently used for on-street parking will be required across Swords to provide a better balance of space in line with the DMURS User Hierarchy, and facilitate the delivery of the Strategy's public realm and transport proposals including footpath extensions, cycle lanes, street furniture, etc. Parking provision instead should be consolidated in off-street parking facilities where necessary.

Parking Management Policy

There has been a step-change in thinking regarding parking provision in recent years globally. This is reflected within recent Irish policy directives at national, regional, and local level where there has been a move towards more compact forms of development, highly walkable and cycleable town centres and accessibility to high-quality public transport (Transit Oriented Development).

These policy and guidance documents which provide an impetus for Sustainable Swords to better manage parking provision include:

- National Planning Framework 2040.
- Five Cities Demand Management Study 2021.
- Sustainable Urban Housing: Design Standards for New Apartments.
- Regional Spatial and Economic Strategy for the Eastern and Midlands Region 2019-2031.
- Draft Fingal County Development Plan 2022-2028.

Project Ireland 2040: National Planning Framework

The National Planning Framework's (NPF) National Policy Objective (NPO) 13 recommends that in urban areas, planning and related standards, in particular car parking, will be based on performance criteria that seek to achieve well-designed high-quality outcomes in order to achieve targeted growth and sustainable mobility, with a preference for no-car and low-car developments.

Sustainable Urban Housing: Design Standards for New Apartments

In 2018, Section 28 ministerial guidelines Sustainable Urban Housing: Design Standards for New Apartments was published. It explicitly directs the application of low-car or car-free development in highly accessible areas such as Swords, as follows:

- A default policy for car parking provision to be minimised, substantially reduced or wholly eliminated in highly accessible areas such as in or adjoining city cores or at a confluence of public transport systems such as rail and bus stations located in close proximity. Typically, these locations are within 15-minutes walking of city centres or within 10-minutes walking distance of commuter rail or bus stops or within 5-minutes walking distance of high-frequency bus services. This policy aligns with the 10-Minute City concept.
- Reduced overall parking standard and maximum car parking standard for housing schemes with more than 45 dwellings per hectare in suburban/urban areas served by public transport or close to town centres or employment areas.

Five Cities Demand Management Study

The Five Cities Demand Management Study published by the Department of Transport in 2021 sets out a framework of measures to reduce transport-related greenhouse gas emissions and address the rising concerns in relation to air quality. Parking controls as a demand management measure feature prominently throughout the Study.

PTM04 On-Street Parking Controls and Pricing suggests the following measures:

- Targeted removal of on-street public parking.
- Reduced on-street residential parking permit entitlements.
- Tiered rates of parking charges, set to proactively manage demand.
- Restrictions on the permitted duration of parking.
- Longer hours of operation of parking controls.
- Proactive enforcement to reduce incidents of illegal parking in order to safeguard road space for vulnerable and active travel users.
- Integration of EV charging strategies with parking policy.
- Consideration of emissions-based parking charging, in particular as a targeted measure to improve Air Quality.

Regional Spatial and Economic Strategy for the Eastern and Midlands Region 2019-2031

The Regional Spatial and Economic Strategy (RSES) sets out a number of guiding principles under the Regional Policy Objective (RPO) 8.1 Integration of Transport and Land Use Planning in relation to parking management:

- All non-residential development proposals should be subject to maximum parking standards.
- In locations where the highest intensity of development occurs, an approach that caps car parking on an area-wide basis should be applied.
- The management of space in town and village centres should deliver a high level of priority and permeability for walking, cycling and public transport modes to create accessible, attractive, vibrant, and safe, places to work, live, shop and engage in community life. Accessibility by car does need to be provided for, but in a manner, which complements the alternative available modes. Local traffic management and the location / management of destination car parking should be carefully provided.

Draft Fingal County Development Plan 2023-2029

The Draft Fingal County Development Plan includes comprehensive car parking policies and advocates for maximum parking standards as a tool to decarbonize transport, reduce car dependency and manage demand. The Plan promotes accessible car parking, car-share schemes and electrical vehicle charging points.

Sustainable Swords Approach to Parking

In line with the above policy objectives and national guidance, Sustainable Swords recommends a step-change in the current approach to car parking provision, reallocating on-street car parking space to support transformative public realm improvements, and restraining its use in areas within easy walking and cycling distance of planned public transport. The measures proposed by the Strategy, including segregated cycle lanes, plazas, footpath buildouts, SuDS, etc., will necessitate the re-use of some public space that is currently used by on-street car parking.

Where provided, on-street parking will be rationalised in a more space efficient manner and prioritised for those that need it most such as disabled parking and short-stay to support business needs. Long-stay parking will largely take the form of consolidated off-street car parking on the periphery of places of high pedestrian activity to curtail movement of unproductive vehicular through traffic and elimination of search traffic movements.

The following section discusses the following types of car parking in the context of Sustainable Swords:

- Strategic Park and Ride Facilities.
- Local Multi-Purpose Mobility Hubs.
- Mobility Points.
- On-Street Parking.
- Virtual Loading Bay Systems.

Strategic Park and Ride Facilities

Park and Rides are the provision of high capacity, car parking facilities at designated public transport interchanges to provide onward access to key destinations, including the town centre, employment hubs and so on via high frequency public transport, walking or cycling.

Park and Ride facilities should be located on the periphery of the town, ideally outside of the ring road system made up of the R132 and the future Western Distributor Road, to capture external demand from trips originating from outside of the Study Area. Park and Rides are typically delivered in tandem with the removal of on-street car parking in more central locations to encourage their use.

As part of MetroLink, a 3,000 space Park and Ride is proposed at Estuary, approximately 1.5km north of the Swords town centre. Connections to this facility by high-frequency public transport and safe space for cycling will be critical.

Mobility Hubs

Mobility hubs are an increasing feature as part of best practice regeneration-led proposals across European cities. The basic premise is that mobility hubs are typically located in areas of high public transport accessibility and walking and cycling networks and comprise of high-capacity cycle parking, substantial car clubs bases, EV charge points and (low) car parking provision that enables the cost of apartments to be decoupled from that of parking. The purpose of the Hub is to help transform a neighbourhood over time, pioneering new ways of getting around and encouraging people to choose greener and healthier transport options.

Mobility hubs support the 'parking at distance' principle which prioritises sustainable transport options whilst maintaining access to private car parking for those that really need it. In this way, they can support low-car or car-lite residential developments and neighbourhoods. In many cases, mobility hubs are multi-storey car parks that are wrapped around by higher value active land uses such as apartment blocks, workplaces or retail uses. Some examples in cities such as Copenhagen and London, enable active uses such as rooftop playgrounds (see Figure 44) and creative workplaces. Typically, active uses front pedestrian areas whereas vehicle access points are located to the rear in lower place value roads.

Mobility Hubs typically include features such as:

- Sheltered, secure bike parking including that for adaptive and cargo bikes.
- Bike repair station.
- Public toilets.
- Bus stop, shelter, and Real Time Passenger Information.
- EV charge points for bikes, scooters, and vehicles.
- Consolidated waste collection.
- Parcel collections points providing an alternative to last-mile delivery.

Mobility Hubs can potentially be instigated by a Local Authority or as part of a Public Private Partnership with a landowner and/or car park operator. Mobility hubs should be located in areas that are:

- Within an approximate 10-minute walk from Swords Town Centre / Swords Cultural Quarter.
- Served by frequent public transport services.
- Quality walking and cycling links.

Further assessment is required to determine the feasibility of Mobility Hubs in Swords, in terms of number of hubs, car parking capacity per hub, operations, management, funding, complementary uses and facilities, etc. Mobility Hubs will be considered by Fingal County Council in future development and forward planning, including existing masterplan areas in Swords. They may also be retrofitted (for

example in existing multi-storey or surface car parking areas) with a view to consolidating car parking areas, minimising land use and reducing car dependency.



Figure 44: Park n' Play at Nordhavn, Copenhagen. Source: ArchDaily.

It is an objective (Policy CMP22) of the Draft Fingal Development Plan 2023-2029 to "support the development of mobility hubs at key public transport locations and local mobility hubs in tandem with new developments to include shared and personal mobility initiatives". The following general areas may be appropriate for the location of a Mobility Hub:

- North Street (northern end).
- Rathbeale Road.
- Malahide Road / Pavilions S.C.
- Fostertown Masterplan (BusConnects & MetroLink connections).

Mobility Points

Mobility Points differ from Mobility Hubs in that they are smaller scale, typically on-street interventions entailing the co-location of sustainable transport measures near public transport stops. At a minimum, Mobility Points include bus stops, cycle parking and car club spaces but can be expanded to include E.V. Charge Points, shared bike schemes and seating. It is important that Mobility Points, however, do not create street clutter or obstacles.

Mobility Points should be visible and accessible to residents and visitors, but care must be taken to ensure that they are not sited in areas of high-pedestrian movement. Some suitable locations for Mobility Points could include side streets off of North Street, Main Street and Dublin Road that are easily accessible but would not form barriers to pedestrians or future cycleways.



Figure 45: Mobility Point at Main Street, Blanchardstown.

SS 7: Mobility Points

It is recommended that there is further engagement with Fingal's Active Travel Team to determine suitable locations for on-street mobility points. Some initial locations to be assessed include sites near the following:

- Fosters Way.

- North Street.
- Dublin Road.
- Rathbeale Road.
- Potentially accessible private car parking areas through planning agreements.

Town Centre Parking (On-Street)

The provision of a carefully managed on-street parking system can support the economic functions of an urban centre, as well as support accessibility for those with disabilities. However, on-street parking can also lead to large amounts of traffic circulating looking for a parking space, contributing to congestion and pollution. Furthermore, on-street parking takes away valuable public space that could be used to widen footpaths, provide cycle lanes, plant street trees or accommodate street furniture or play areas. The proposed public realm and transport measures for Swords will necessitate the reallocation of existing on-street parking spaces.

Where retained or re-provided, on-street parking should be allocated to support a **hierarchy of parking need**, prioritising the needs of disabled users, short-stay business users and discouraging long-stay commuters. Long-stay general parking will be redirected to more accessible dedicated off-street spaces on the periphery of the urban core, closer to the arterial and link road network.

More people travelling by sustainable modes (walking, cycling and public transport), however, will lead to an overall reduced parking demand and therefore may not be a need to replace any displaced parking on a one-for-one basis.

The implementation of a 'Smart Parking' system could be considered in the context of reduced parking provision in the urban core. Smart Parking and Variable Messaging Systems can communicate the availability of parking and reduce the negative impacts of "search traffic" including traffic congestion and air pollution, and instead direct motorists to Park and Ride facilities.

SS 8: Intelligent Parking Management Systems

It is recommended that consideration is given to an intelligent parking management system giving information on available parking to discourage aimless driving (using smart detectors and advanced forms of disseminating parking availability to the public) as per TC08 of the Five Cities Demand Management Study.

Delivery and Servicing

Delivery and servicing are often neglected elements of transport planning, that if not carefully provided for and managed, can have a number of unintended consequences such as illegal parking on footpaths, cycle and bus lanes and collisions caused by blocking of pedestrian, cyclist, and motorist sightlines. A number of commercial premises will require regular access to deliveries and waste management services particularly as vehicular traffic movements are reduced in areas such as Main Street.

There is significant scope to re-time delivery patterns to reduce travel movements at busy times and identifying suitable areas for loading bays in detailed design stage of public realm projects. There have been recent technological advances to facilitate low emission and 'quiet' vehicles to facilitate night-time servicing.



Image 43: Example from Walworth Road, London, where a loading bay provided within a verge, can revert to pedestrian space when not used. Source: DMURS.

Some cities in Europe have begun trialing Virtual Loading Bay (VLB) Systems to support a more efficient use of kerbside space. These are often combined with 'last mile delivery' and zero emission strategies to reduce amenity impact on businesses and residents (see SS 23 Last-Mile Deliveries). VLB Systems allow users to find and book available spaces through an app. This reduces congestion by eliminating the need to search for available spaces and in effect, acts as a demand management technique. VLB systems allow kerb space to be utilised in areas where other traffic restrictions are in place, typically off-peak times where impact on congestion is less pronounced and search traffic and emissions are reduced.

In 2019, Dublin City Council signed up with Grid Smarter Cities to roll out its Kerb app which allows drivers to book a loading bay on previously restricted kerb space.

SS 9: Swords Delivery and Servicing Strategy

It is recommended that the implementation of a Swords Town Centre Delivery & Servicing Strategy is considered by Fingal County Council in collaboration with key stakeholders such as the Fingal Chamber. At a minimum this will include:

- Assessment of existing delivery and servicing arrangements.
- Examination of re-timing trips to enable off-peak deliveries.
- Using the development management process to require on-site delivery and servicing areas for larger developments.
- Identifying suitable areas for shared on-street deliveries for smaller premises.
- Consider the feasibility of Virtual Loading Bay system to efficiently manage demand for loading bays in the town centre.

7.9 Supporting Measures: Urban Realm and Active Travel

Sustainable Swords Steering Committee

The ambition for Sustainable Swords is to form a coordinating device that will establish a package of measures and projects that are prioritised, programmed, and impactful, and that critically will enable the coordination of investment (e.g., Fingal Development Plan, URDF, NTA funding, development contributions, etc.) and decision-making across multiple stakeholders, maximising private sector engagement and identifying synergies and opportunities.

There are many examples of similar initiatives such as Dublin's Business Improvement Districts (BIDS) and Cork City Council's CORE partnership of business groups, Gardai, and representatives from cultural and hospital sector. The successful implementation of Sustainable Swords will therefore require collaborative input from a wide range of stakeholders, such as through the establishment of a Steering Committee to oversee this process and guide its implementation.

SS 10: Sustainable Swords Steering Committee

It is recommended that a Steering Committee be established; the terms of which are to be determined. Membership of the Steering Committee could be drawn from:

- Residents and local community groups.
- Business groups.
- Fingal County Council management and officers.
- Elected Representatives.
- Advocacy groups for those with disabilities, sustainable transport, environmental agencies etc.

Swords Town Architect / Urban Designer

A designated Town Architect / Urban Designer for the delivery of Sustainable Swords would ensure a consistency, coherence and legibility of all the projects throughout the town and that design standards are upheld.

SS 11: Swords Town Architect / Urban Designer

It is recommended that the appointment of a dedicated Swords Town Architect / Urban Designer is considered to coordinate the design of all Sustainable Swords projects to ensure cohesion and consistency with overarching objectives

Swords Town Centre Laneways Strategy

Main Street and North Street are connecting to the areas on their east and west by a series of laneways. Whilst these laneways help in making Swords a permeable town centre, these spaces are also dominated by cars leaving either narrow or no footpath for pedestrians, poor surface quality, poor lighting and sightlines.

SS 12: Swords Town Centre Laneways Strategy

It is recommended that a Swords Town Centre Laneways Strategy which takes a coherent approach to enhance these laneways. A key consideration of a Laneways Strategy should be to improve the pedestrian environment and the perception of safety in these areas to make them more welcoming and attractive for all.

- Remove doglegs from laneway to ensure clear sightlines.
- Improve lighting – ensuring that lighting does not create downward shadows.
- Widen paths where possible.
- Promote active frontage and uses that encourage activity and footfall (passive surveillance).

Swords Right Tree, Right Place Policy

Urban street trees provide a number of benefits in terms of improved air quality, biodiversity, public realm, physical and mental health and well-being. Certain trees are excellent filters for urban pollutants and fine particulates. They can also be an effective tool in reducing the urban heat island effect and can provide shade and shelter on the street. The placement of trees can also frame a vista or landmark, such as the view of Swords Castle along Main Street.

Some of the existing trees in Swords Town Centre are nearing the end of their lifetime, while the roots of others have damaged the integrity of the pavements. Where trees are required to be replaced due to damage or disease, there will be a net gain in replacement with native trees. Consideration should also be given to identifying species with known air quality benefits particularly near schools and areas of high footfall.

SS 13: Swords Right Tree, Right Place Policy

It is recommended that as part of a Swords Right Tree, Right Place Policy, that a review of street trees is undertaken, with any trees lost replaced on at least a one-for-one basis with more appropriate species.

SuDS / Nature Based Solutions

SuDS, or Sustainable Urban Drainage Systems, are a range of water management methods designed to naturally mitigate storm surge overflows and surface run-off in urban environments where urbanisation and development have reduced the availability of permeable, green areas.

SuDS elements such as rain gardens, living walls and swales have a multitude of benefits and functions in terms of greening the urban environment, which enhances and softens the public realm, adds visual interest, promotes biodiversity, helps improve local air quality, and can support public health and wellbeing.

Outside of the blue and green corridors along the Ward River, SuDS elements will be integrated into the design of Sustainable Swords active travel schemes where possible, such as that pictured in Image 44 where the rain garden provides a buffer between the pedestrian/cycle path and the road carriageway. It is an objective of the emerging Draft Fingal Development Plan 2023-2028 to ensure that "new walking and cycling routes are designed to function as links in the County's Green Infrastructure network and that adequate replacement and additional planting of native species and pollinators is provided and that SuDS approaches are used to treat surface water run-off".

SS 14: SuDS / Nature Based Solutions

It is recommended that appropriate SuDS elements are incorporated into Sustainable Swords public realm and active travel scheme designs. Other opportunities to integrate nature based solutions into the urban realm exist on public infrastructure such as bus shelters and blank gable walls.



Image 44: Example of SuDS Rain Garden adjacent to ped/cycle path.

Swords Wayfinding Strategy

Wayfinding, or legibility, relates to how people can find their way around an area. For pedestrians and cyclists this is of particular importance. Wayfinding does not always rely solely on mapping information or signs on the street; there are many tools that designers can use to provide a series of cues by which people can orientate themselves. For example, landmark features, focal points, changes in building height and form, and materials and finishes can help a person navigate a space.

Lack of awareness of routes and distances to destinations can be a barrier to walking and cycling, not only for tourists or visitors, but also for those with intellectual or cognitive disabilities.

Swords lacks a consistent wayfinding scheme that directs visitors to places of interest. Many key places of tourist interest have no direction signage at all. The existing signage is not consistent in design and is sometimes located where it's not seen immediately. Secondly, some parts of town lack distinctive character in the public realm that can help visitors navigate easily. Creating unique experience using paving material, vegetation, street furniture leading up to landmarks would help create a visual experience journey through the town.

Consideration should be given to providing estimated walking and cycling times to key destinations and taking every opportunity to minimise street clutter through the use of gable walls and left-over spaces (see Image 45 for an example from Shoreditch, London and Image 46 for an example from Walthamstow, UK). Legible London is an example of a high-quality wayfinding system that maximises legibility at public transport stops and provides clear and legible routes to key destinations.

SS 15: Swords Wayfinding Strategy

It is recommended that an overarching, consistent town-wide Sustainable Swords Wayfinding Strategy is developed to improve legibility.



Image 45: Example of the use of public art to aid wayfinding to the Old Street underground station, London. Source: DBFL.



Image 46: Example from Walthamstow, UK of use of gable wall for wayfinding, to minimise street clutter and add visual interest to the street. Source: DBFL.



Image 47: Example of pavement mural to activate a laneway and aid legibility of the street.

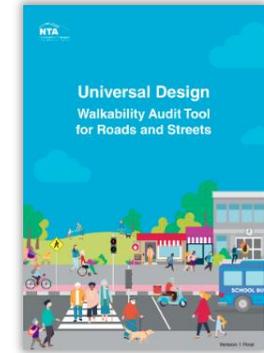


Image 48: Van Gogh Walk, London.

Accessible Streets

The accessibility of the public realm for all individuals, regardless of age or disability (e.g., mobility, visual, cognitive, intellectual), is essential.

Transport is aimed at serving all sectors of society and people's access to opportunities to work, get an education or partake in other activities should not be compromised by the design of the transport environment. The 8 to 80 cities concept is centred around the idea that if our streets and places can be used safely and enjoyed by people from 8 to 80 years old, then it will benefit everyone, from an 8-year-old cycling to their local park to an 80-year-old walking to their local shop.



The features of universal design in the built environment are all encompassing and can include high-quality footpaths, tactile paving, dropped kerbs, sufficient provision of places to rest, public toilets, a reduction in street clutter, shade and shelter, a reduction in conflict between modes, etc. The principles of Universal Design will be followed in the implementation of public realm and streetscape improvements throughout Swords.

The idea of accessibility in public space also broadens to include people who are neurodiverse, such as those with autism, or have a cognitive impairment, such as dementia. Aspects of public realm design that should be considered to make it more accessible to all include clear wayfinding, legible and permeable street networks, clear sightlines, contrasting pavement materials, good quality lighting, soft landscaping, and/or calm and quiet place to pause such as a sensory garden.

SS 16: Accessible Streets

It is recommended that all Sustainable Swords public realm and transport schemes are fully accessible for all. The following documents contain best practice guidance on design for all:

- Design Manual for Urban Roads and Streets.
- National Disability Authority's Centre for Excellence in Universal Design.
- Age-Friendly Ireland.
- Safe Routes to School.
- Child Friendly Cities and Communities Handbook.

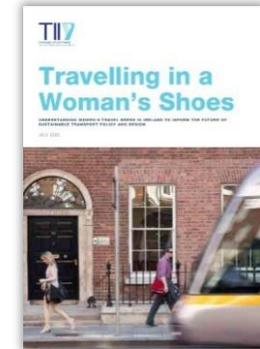


Image 49: Alfred Place Gardens – a new linear pocket park in central London along a road that was used mainly for parking and deliveries. It has been reimagined with landscaping, seating, play areas, lighting, and attractive paving. One-way access for deliveries and servicing is maintained on a timed basis. Source: DBFL.

It is also important that our public spaces and transport networks are designed in such a way as that they are inclusive and welcoming of all individuals, regardless of their age, gender, sexuality or ability.

There are many initiatives and policies promoted nationally such as:

- Travelling in a Woman's Shoes.
- Healthy Streets Approach.
- Age-Friendly Ireland.
- United National Child-Friendly Cities.



Our public realm and transport network is not neutral and is often a contested space. For example, women and men have different mobility realities. Global research by organisations such as the UN, show that women tend to have more complex patterns of mobility characterised by trip chaining (making numerous small trips as part of a larger journey such as running errands and buying groceries on the way to work) and caregiving duties. Globally, personal safety is the most widespread concern for women when travelling. Women worry about their safety when travelling alone, at night, waiting in or moving through empty or isolated locations and in poorly lit or overcrowded transport spaces.

Transport Infrastructure Ireland (TII) recently published research on Travelling in a Woman's Shoes in 2020 which highlighted these realities for women in an Irish context. It included a call to action to consider women's needs in the formation of Ireland's future transport policy and infrastructure provision.

These following aspects of design should be considered in the context of existing and new public realm and transport schemes:

- **Good Quality Lighting:** Dark or poorly lit spaces, including poor lighting such as high, overhead lighting that casts downward shadows on streets and the faces of passers-by, amplifies the perception of a space being unsafe.
- **Active Ground Floor Frontage:** Vacancy and dereliction, blank walls, fencing and a general lack of active frontage reduces passive surveillance of public spaces or "eyes on the street". This can create feelings of isolation and loneliness, especially at night time.
- **Clear Sightlines:** Perceptions of safety increase markedly if people can see ahead and around them, and if other people are visible to them. This should be considered particularly as part of the Swords Laneway Strategy and the design of paths through the Ward River Valley Greenway.
- **Legibility and Wayfinding:** Legible design enhances safety because it allows people to orientate themselves and gives them greater control over their environment. Feelings of apprehension and insecurity increase when people do



not have a clear understanding of the physical layout of the area that they are in.

- **Citizen Engagement, Participation and Co-Creation:** Engaging all members of the community in the design of public spaces ensures a wide range of views and perspectives can influence the design process and fosters a sense of ownership and pride in the space which ultimately leads to greater design solutions and buy-in.

SS 17: Safety and the Perceptions of Safety in Public Space

Sustainable Swords recommends that the design of all public realm and transport schemes consider the following elements to improve the safety of public space and ensure that all members of the community feel safe:

- Good quality lighting.
- Active ground floor frontage.
- Legibility and wayfinding (provide clear sightlines through a space).
- Citizen engagement and participation in the design process.

7.10 Supporting Measures: Behavioural Change

Behavioural change, as it applies to transport, is about making people aware of the range of travel choices available for the variety of trips which they make on a daily basis and encouraging the use of more sustainable modes where feasible, as alternatives to single occupancy private car use.

They can be implemented at various locations and at varying scales, e.g., workplaces, schools and neighbourhoods. They comprise a highly personalised approach aimed at engaging a group of people, making them think about their travel choices, providing them with full information, and encouraging and incentivising the use of alternatives.

There are a number of existing behavioural change initiatives in Fingal County Council supported by the NTA that this Strategy strongly supports the continuation and expansion of, including:

- Smarter Travel Workplaces
- Smarter Travel Campuses
- Green Schools Travel Module

Safe Routes to School

Traffic at the front of school during drop-off and pick-up times presents a safety hazard for school children and impacts on air quality in the vicinity of the school gates. Congestion and parked cars can reduce visibility of children crossing the road. In addition, parking on footpaths can block access as well as reduce available footpath width, leading to overcrowding on footpaths or forcing children to walk on the road. Idling cars also increases air pollution levels.

The Safe Routes to School programme was set up to address these issues. The programme is operated nationally and is designed to encourage as many students as possible in to walk and cycle. It has three aims:

- 1) To accelerate the delivery of walking/scooting and cycling infrastructure on key access routes to schools.
- 2) To provide Front of School treatments which will enhance access to school grounds.
- 3) To expand the amount of bike parking available at schools.

Sustainable Swords recommends a series of Quietways, improved permeability for people walking and cycling, and junction upgrades that will help create Safer Routes to School.

Sustainable Swords also recommends Green Schools Audits (as below) to inform ongoing improvements.



Image 50: Example of Safe Routes to School Measure in Dublin. Source: Safe Routes to School Design Guide.

Green Schools Audits

A number of Green Schools Audits were carried out as part of Sustainable Swords. Due to Covid-19 government guidelines, however, not all schools could participate.

SS 18: Green Schools Audits

It is recommended that Green Schools Audits are undertaken of all schools within the Study Area on an ongoing basis to inform the detailed design of projects. At a minimum, this should include:

- Front of School Audits.

- Gap analysis of existing infrastructure on-site e.g., sheltered and secure cycle or scooter parking a minimum, this should include an assessment of the following:
 - Key walking and cycling conditions in the vicinity of the school and initial improvement measures.
 - Air quality in the immediate vicinity of the school.

Workplace Travel Plans

Workplace Travel Plans, also known as Mobility Management Plans, comprise a package of measures to promote / support sustainable travel patterns. The Smarter Travel Workplaces Programme, managed by the NTA, engages with larger employers in the development and implementation of Workplace Travel Plans.

The draft Fingal County Development Plan 2023-2029 requires Travel Plans for new developments. Workplace travel planning provides the opportunity to communicate the implementation of the Sustainable Swords Public Realm & Transport Strategy and to promote the benefits of the Strategy directly with a large number of commuters.

SS 19: Workplace Travel/ Mobility Management Plans

It is recommended that the continuation and expansion of workplace travel planning in the Swords area is progressed by Fingal County Council and the National Transport Authority.

A suggested list of initial workplaces to be covered/updated include key employers such as:

- Fingal County Council.
- The Pavillions Shopping Centre.
- The Castle Shopping Centre.
- Fingal Community College.
- North Street Business Park.
- SK Biotech.

7.11 Supporting Measures: Micromobility & Shared Schemes

Parking Facilities for Bicycles & Other Micromobility

Provision of secure cycle parking is essential for supporting the uptake of cycling as a convenient and practical mode of travel. A lack of appropriate cycle parking facilities is a barrier to cycling and cycle ownership and could undermine investment in the overall cycle network infrastructure. High quality, secure cycle parking at both origin (e.g., residential developments) and destinations (e.g., workplaces, community and recreational facilities, retail, town centre) is therefore a key consideration.

Different types of cycle parking solutions are required to cater for different types of users depending on the location and trip purpose such as short- and long-stay parking. The typology of the cycle parking should also make appropriate provision for different types of bicycles and other forms of micromobility such as cargo bikes, adaptative bikes, scooters, etc. in line with Objective CMO9 of the Draft Development Plan 2023-2029 to provide publicly accessible high-quality cycle parking spaces, both standard bicycle spaces and non-standard for adapted and cargo bikes.

Short-stay bicycle parking is designed for ease of use by the general public and visitors. Such cycle parking spaces should be located in areas that are:

- Highly visible with good levels of natural surveillance.
- In close proximity to the main entry points where appropriate, i.e., no further than 15m away.
- Easy to access.
- Well-lit.

Whereas long-stay is usually for residents of private developments, or commuters. Individual bike lockers, cycle hubs and shared on-street hangars like Dublin City Council's BikeBunkers, offer security to cyclists and provide an innovative solution to cycle parking requirements for longer periods of time, particularly where internal storage space is limited, e.g., older buildings. Another innovative solution from cities like Utrecht is the use – either meanwhile or permanent – of vacant buildings, public buildings or existing multi-storey car parks in the town centre for indoor supervised bike parking.

SS 20: Swords Cycle Parking

It is recommended that Fingal County Council support an uplift in both high-quality short-stay and long-stay cycle parking throughout Swords Town Centre and key destinations such as Ward River Valley Park, Swords Cultural Quarter and major employment hubs in line with the Draft Fingal Development Plan 2023-2029.

It is recommended that the Council consider innovative practices such as on-street bike hangars and the use of indoor spaces for dedicated public off-street bike parking hubs that are secure, sheltered and easily accessed.



Figure 46: Bike hangars on space previously used for parking for nearby apartment block. Source: DBFL.



Figure 47: On-street bike hangar used by nearby businesses and upper floor apartments.
Source: DBFL.

Shared Bike Schemes & Micromobility

More recent innovations to the city mobility toolkit include E-bikes and other forms of micromobility including scooters and e-scooters. These are increasingly popular but to date, remain largely in private ownership.

However, given recent changes to legislation, both are highly likely that these will become increasingly part of the shared mobility systems network usually referred to as Mobility as a Service (MaaS).

BleeperBike is a dockless bike sharing scheme that has been growing rapidly across Fingal County towns in recent years. It is now possible to cycle from Swords and leave Bleeper bikes at Malahide, Portmarnock, Howth, Blanchardstown and a range of destinations across inner and south Dublin City.

These bikes can be picked up and left anywhere that a traditional bike is permitted to park. This type of bike sharing scheme offers transport flexibility and convenience and the scheme's visibility can help promote a culture of cycling. Bleeper additionally offer private e-bike schemes for organisations. The scheme

includes e-bikes, e-cargo bikes and standard bikes, bike maintenance and liability insurance for a monthly fee. It is understood that Bleeper (among a number of other companies) are in the process of applying to enter the shared e-scooter market once legislation permits shared use systems.

E-bikes can significantly widen the catchment area for commuting and often require less end-of-trip facilities in terms of showers and lockers. Similarly, E-scooters are likely to become an increasing popular part of the mobility mix both for personal and shared use. E-scooters can facilitate linked trips with public transport where walking distances and conditions may be prohibitive.

Fingal County Council is likely to play a lead role both in terms of legislating for their use in public schemes across the County and in facilitating their storage - both through the development management process and on public space.

It is important that a proactive approach is taken to determining suitable locations for public parking that are accessible but does not impact on pedestrian movement. In most cases, these could be delivered through on-carriageway mobility points or off-street areas such as near park entrances.

SS 21: Shared Bikes Systems & Micromobility

It is recommended that Fingal County Council work with the NTA and other stakeholders to:

- Establish the feasibility of extending the BleeperBike scheme to include cycle network areas in the Knockseadan, Rathbeale Road and Broadmeadow areas initially with a longer-term ambition to cover key employment areas such as Dublin Airport.
- Examine the feasibility of establishing a dedicated Fingal County Council membership for a Bleeper Bike scheme for staff to include e-bikes and e-cargo bikes.
- Establish an e-scooter pilot scheme(s) once legislation permits; and
- Proactively ensure careful siting of dedicated e-bike and e-scooter parking areas at key destinations such as the town centre and Swords Cultural Quarter area that do not inhibit pedestrian movement.



Figure 48: Designated space for shared e-scooters. Source: DBFL.

Car Clubs/Car Sharing Schemes

Public car sharing is a model of car rental where people rent cars for short periods of time, often by the hour. They are important in urban areas in facilitating car-free or low-car developments. They are particularly attractive to customers who make only occasional use of a vehicle.

Car sharing schemes can reduce the number of cars on the road and free up land traditionally used for parking spaces. By supporting people who choose not to own a car, car sharing can encourage public transport use, walking and cycling. Membership of such a scheme can often be more cost effective than owning a private car. Research carried out by the car club charity CoMoUK estimates that a car club typically removes at least 10 private cars. Vehicles provided by car clubs are often greener and more environmentally friendly than private cars.

There are two GoCar bases in Swords at Main Street and The Pavillions. Given the likelihood of further high-density and low-car and car-free developments in the Swords area, there is significant scope to expand car clubs in residential and

commercial areas to reduce the need for private car ownership. Expansion is possible through the development management process or as part of a partnership arrangements with operators.

There is a number of recent innovations in the car-club market including 'floating' and EV-based models where the car user does not necessarily need to bring the car back-to-base as per the 'traditional' model.

SS 22: Car Clubs/Car Sharing Schemes

It is recommended that Fingal County Council work with GoCar and other car club companies in the Greater Dublin Area such as Yoko to expand the availability of car club facilities throughout Swords.

Over the lifetime of the Plan, this is likely to include consideration of:

- New models of car club operators.
- Arrangements as part of car-free or car-capped developments.
- Innovations such as 'floating' models.
- EV-based shared cars and vans.
- Colocation with other sustainable transport in mobility hubs and points.



Figure 49: GoCar is currently operating in Swords. Source: GoCar Ireland.

7.12 Additional Supporting Measures

Last Mile Deliveries

With online shopping on the rise, further accelerated by the Covid-19 pandemic, there is an increased demand for delivery and servicing. The 'last-mile' of deliveries often cause the most problems in our urban areas, with HGVs and LGVs being significant contributors to congestion, blocked footpaths and poor air quality.

In many European cities such as Utrecht, London and Gothenburg, cargo bikes are fast becoming a critical solution to reducing the impact of last-mile deliveries and reducing the impact of HGVs in urban areas. By limiting HGVs and LGVs from the urban area, cargo bikes also reduce air and noise pollution, congestion and create safer street environments for pedestrians and cyclists.

According to EU-funded project Cyclelogistics, up to 50% of motorised trips transporting goods in European cities could be shifted to cargo bikes or e-cargo bikes. The study found that motorized delivery vehicles vastly underutilised their storage capacity, and that bikes are better equipped to tackle denser urban road networks. In particular, the study found that e-cargo bikes are best for trips under 7km, with a focus on everyday food supplies and other household essentials.

UPS and DHL are two examples of private delivery companies who operate cargo bikes globally. In addition to this, many smaller companies around Ireland are choosing to deliver by cargo bike. UPS recently launched a pilot scheme in conjunction with Dublin City Council where zero-emission Fernhay eWalkers and eQuads are used to distribute goods from urban package eco-hubs. The eco-hubs act as break-bulk facilities/micro-consolidation centres by taking in larger consignments of deliveries and redistribute them to walkers and cyclists using removable cube containers.

The wider Fingal County area is synonymous with food (particularly fresh produce like fruit and vegetables) production and distribution. It is noted that the draft County Development Plan 2022-2028 contains an objective to for a Food Industry Park near Dublin Airport. This offers the possibility to trial a low emission, last mile strategy from food distribution centres to Fingal's County Towns such as Swords.



Image 51: Delivery Cargo Bikes. Source: DBFL.

SS 23: Last-Mile Deliveries

It is recommended that consideration should be given to:

- Promoting the use of cargo bikes by businesses within the town centre.
- Examine the feasibility of a low-emission, last mile strategy in Swords in conjunction with a future Food Industry Park at Dublin Airport.
- Examining the case for urban or micro-consolidation centres adjacent to Swords as a transfer point between HGVs/LGVs to cargo bikes to reduce the number of last-mile trips being made by vehicles in the urban core.
- Minimising empty return trips by taking inspiration from innovative practices such as Gothenburg's Stadleveransen or Utrecht's Cargohopper.

8. Materials & Maintenance

8.1 General Approach to Public Realm Materials

The layout of streets in the town centre, and choice of materials and street furniture, needs to be design-led and follow the principles of DMURS, avoiding unnecessary clutter, complicated layouts and overdesign.

The selection of materials should be made according to:

- Ensuring robust surfaces (such as natural stone or concrete blocks) to highlight the importance of place, calm traffic and to alert drivers of higher levels of pedestrian activity.
- The use of robust surfaces and/or changes in texture/colour, and high-quality street furniture, at key locations (such as Nodes) to alert drivers of changing driving conditions and to enhance the pedestrian experience.
- Street furniture should be rationalised and coordinated so as not to impede pedestrian movement.
- Material selection should promote a contemporary image for Swords, while avoiding time-limited design trends.
- The selection of materials should respond to the street hierarchy and/or importance of place in order to assist legibility and wayfinding.
- Higher quality materials should be used where they are most needed and appreciated.
- Surface materials and furniture should always be suited to purpose, and capable of being maintained efficiently.

Quality of both materials and workmanship, and subsequent maintenance, are particularly important to developing good streetscape and public spaces and to encourage more walking and cycling throughout the town centre.

When selecting materials for the public realm it is also necessary to:

- Comply with current Standards, Regulations and best practice Guidelines.
- Comply with all environmental legislative and regulatory requirements in the procurement of products, contract works and services.
- Demonstrate ethical trading transparency.
- Adhere to the requirements of BS EN 1343:2012 in relation to natural stone material declared performances for the characteristics relevant for the intended use.

- Promote environmental awareness among suppliers and contractors and to encourage them to offer less environmentally damaging products and services at competitive price.
- Source materials responsibly through active protection of natural resources and safeguarding the built heritage.

The following palettes are proposed for the Sustainable Swords public realm:

- Paving
- Street furniture
- Signage
- Lighting
- Public Art
- Soft landscaping

The palettes are intended to encourage consistency of design, and to inform the local authority and private developers on the general type of materials that could be considered suitable for the public realm of Swords, to be developed in further detail as specific projects are progressed.

The public realm works will generally include:

- Natural stone and precast aggregate surface paving, kerbs and steps.
- Distinctive street lighting, feature lighting and accent lighting associated with street furniture and soft landscaping.
- Seating, litter bins, cycle stands, bollards and miscellaneous items such as water-bottle refill points and power supply units.
- Semi-mature trees, with linked root cells where practicable, rain gardens and raised planters with seating.
- Undergrounding of all overhead utility cables, with draw-through service ducts and covered chambers for future-proofing data/communications cable provision.
- SUDS measures and rainwater drainage outlets and pipework as required.
- Hydraulically operated stainless steel bollards to provide for controlled vehicular access and deliveries to pedestrian areas.
- Detailed site investigations to accommodate the finished design and the detailed works and to provide for safe works management during construction.

8.2 Public Realm Areas

As there are distinct differences in the character and use of streets and spaces in the town centre, different material palettes are arranged as follows:

- Primary Street and Spaces.
- Key Link Streets.
- Laneways and Quietways.

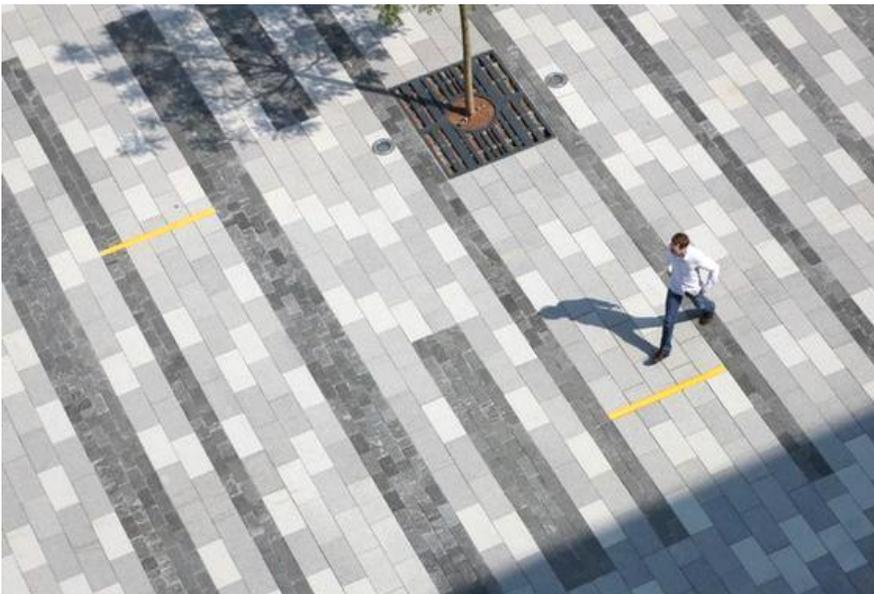


Image 52: High-Quality Public Realm Materials Contribute Significantly to Placemaking.

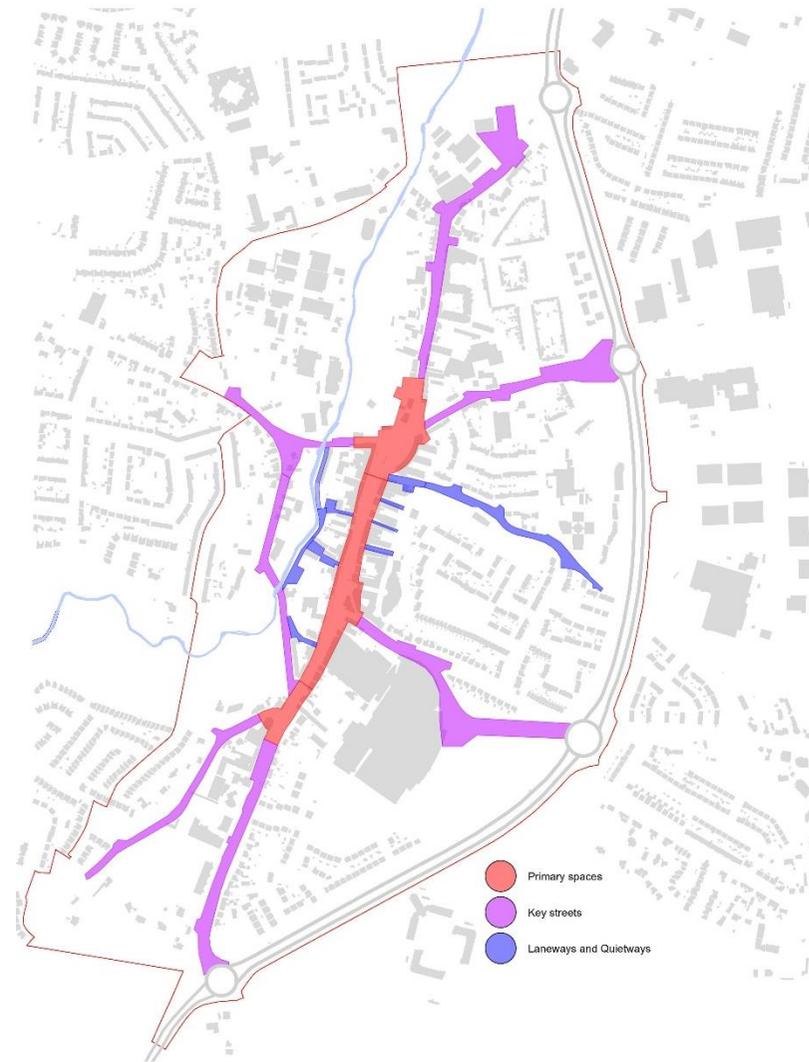


Figure 50: Public Realm Town Centre Area.

8.3 Paving

The type and condition of surface materials currently used within the town centre is varied, subject to when they were installed, the construction techniques employed, the amount of use and subsequent maintenance. The opportunity exists to enhance the overall appearance through a more consistent range of materials that respond to the intended use of the areas.

Clear design of paving is essential to give a simple uncluttered appearance to the streetscape and, to help achieve this, the surface material palette is limited to a few complimentary choices to be laid out in a coordinated manner.

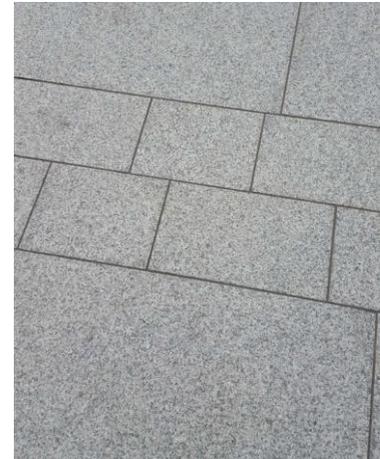
The palette can be used to select particular materials within different character areas, to define space, calm traffic and improve legibility, sometimes reducing the need for barriers, signage and line marking in favour of texture and colour.

For Main Street and associated civic/cultural spaces, surface materials should be natural stone, either locally sourced (e.g., Leinster Granite, if all performance criteria can be demonstrated), or of Portuguese or similar origin. Silver-grey granite slabs should be used for general footway areas and larger open spaces and contrasting mixed colour setts for shared surfaces and cycleways. The footways of key streets and connecting with the commercial spine can be surfaced in good quality precast concrete aggregate slabs, with an asphalt road surface.

Generally, the laneways and St. Colmcille's Quietway would benefit from small unit granite setts, of mixed sizes and colours that respond to the smaller scale and pedestrian/cycle emphasis of the routes.

Kerbs in all areas should be granite, including dropped, quadrant and other special unit types.

Raised tables should be used to form courtesy crossings at main junctions with key local access routes. Elsewhere, dropped kerbs should be provided at all pedestrian crossing points and along desire lines. Loading bays should be integrated with footways wherever possible to maximise useable pavement widths.



Silver-Grey Granite Slabs



Mixed Granite Setts



Mixed Granite Setts (tumbled)



PCC Aggregate Slabs



Stone Edges and Tactile Paving



Example of Etched Granite Paving

8.4 Street Furniture

There is a wide range of street furniture types in Swords town centre, in variable condition and sometimes lacking both quality and purpose. The main items include bollards, signage, litter bins, cycle stands, hanging basket posts, pay-and-display machines, planters and railings. There tends to be limited seating opportunities within all areas.

All new street furniture should be of a high quality and consistent design, with detailed consideration given to its function and location. It should be simple, contemporary and constructed from natural materials where possible. Serviceability and durability should be key to material selection and design. Street furniture should also be kept to a minimum, and opportunities sought for decluttering the streets and open spaces of all superfluous items. Generally, along Main Street it is proposed that essential furniture is concentrated within defined 'Amenity Zones', combined with soft landscape treatments, thereby leaving the footways unobstructed for ease of pedestrian movement.

Seating is a valued component of the public realm, providing users with a place to rest or stay longer and contribute to a livelier town centre. A range of seating options can create opportunities for pause, in either individual groups or on larger capacity benches.

Whereas bollards should generally be avoided in order to reduce street clutter, in shared surface areas they may be necessary subject to driver behaviour and should then be installed in sockets for easy removal.

The following general principles apply:

- Street furniture needs to be as integral to the streetscape as possible in terms of its position, layout, and design.
- Furniture should be chosen to relate to its location and local distinctiveness and reinforce a sense of place.
- Different items of street furniture should relate to each other in terms of design, siting and colour.
- Causing clutter should be avoided.
- 'Defensive' street furniture such as railings and bollards should be reduced to a minimum.
- Distinctive historic elements of street furniture should be retained and refurbished where possible and suitable.
- Smart Benches with WiFi capabilities should be considered.



Typical Street Furniture Amenity Zone



Smart Litter Bin



Seating with Planting



Chairs



Water Refill



Bollards



Cycle Stands

8.5 Signage

Signage is an important component of the public realm for enhancing legibility and can also provide a key link with the history of the area, e.g., through place names. Whereas street and directional signage is necessary to assist both motorists and pedestrians in finding their way around and through the town centre, current provision is varied, lacking in overall clarity and consistency, particularly for pedestrians. An over-provision of signage can also negatively impact upon the general character of the heritage context.

As with street furniture generally, signage needs to be rationalised and a thorough audit of existing provision carried out in order to reduce all unnecessary clutter. Existing features of historic value which promote local character should be clearly identified and retained as part of the up-graded public realm.

Wayfinding opportunities should include public art, street furniture and lighting as key indicators for leading pedestrians around the town, together with enhancing existing landmark buildings to improve legibility. Smart technology should also be utilized wherever possible as part of an overall strategy for improved interpretation of Swords Town Centre's heritage and attractions.

The provision of signage is guided by the following principles:

- Reducing the number of signs to a minimum.
- Using fingerposts and maps sparingly, concentrating them at defined nodal points.
- Road name plates should be consistent in style and location.
- Avoid new posts where new signs can be fixed to existing posts, lamp columns and walls or boundaries.
- Paint posts to match colour of local street furniture.
- Avoid obstructing pedestrians.
- Avoid detracting from sensitive settings, which may include protected structures, important views and riverside locations.
- Use double sided signs where possible.



Wayfinding



Information Board



Signage without Signs

8.6 Lighting

Suitable levels of street lighting within the town centre are essential for ensuring an environment that feels safe and welcoming by day and night. Lighting can play an important role in reducing actual crime and the perception of crime, it prolongs the active period of space, is vital for night shift workers and helps to support a nighttime economy. Lighting can also be used to create focus and highlight features, such as heritage buildings, public art, and mature street trees.

The existing streetlights are either pole or wall mounted and lacking in a consistent style. There is considerable potential for enhancing the lighting effects throughout the area, utilizing the latest technology, and exploring opportunities for developing a wider range of distinctive lighting effects, both direct (e.g., colour-washing of key buildings/artefacts) and indirect (e.g. recessed ground/wall marker lights, site fixtures and special effects in laneways), that are sensitive to the context and help to support the night-time economy.

The general principle for street lighting strategy is to be discrete, ensuring a better integration with the scale of surrounding buildings and character of the area. The design should aim to:

- Create safer places and assist in crime prevention by providing sufficient illumination for the public.
- Use LED (soft white) light as opposed to yellow sodium light, to improve visibility and overall aesthetic quality.
- Ensure light columns and fixtures are consistent and appropriate to both the natural and built heritage context.
- Use wall-mounted or catenary lighting systems in confined spaces, such as the laneways and narrowest streets, removing the need for columns that add to clutter at the ground level.
- Incorporate lighting fixtures, fittings and columns where practicable into existing or proposed columns, street furniture and features.
- Use lighting to support the legibility and visual coherence of public spaces.
- Ensure that lighting does not interfere with CCTV systems.
- Avoid light pollution as much as possible.
- Strengthened columns where additional loading capacity is needed, e.g., for CCTV cameras, banners or larger signs.



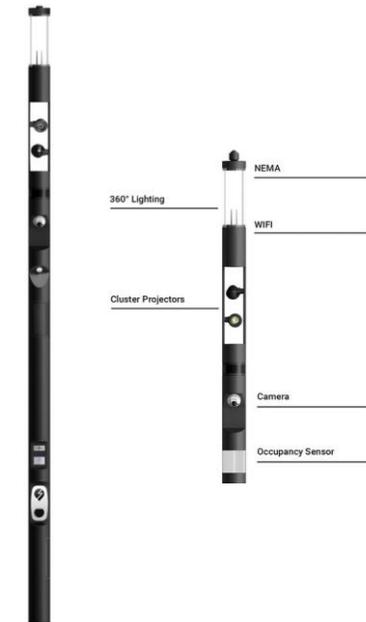
Twin Head Street Light (vehicle and pedestrian)



Incidental Lighting



Floodlighting Heritage Structures



Smart Feature Light and Information



Laneway Lighting Effects

8.7 Public Artwork

Public art stimulates community involvement and can often be used to enhance the functions of the town centre and its visitor appeal, creating character and identity and reinforcing a sense of place. It can be informative and thought provoking or offer a pleasing distraction from reality.

Public art can be incorporated in many different ways to enliven the town centre, including wayfinding, but needs to be related intrinsically to its context and fully integrated into the design of the public realm so as not to appear an afterthought.

A changing programme of temporary artworks can include exhibitions by local artists and designers and including school children as part of an environmental awareness programme.

An artwork strategy for Swords town centre should be formulated that takes account of:

- Public art can be used for highlighting the significance of a building or space, act as a focal point or signify a gateway.
- Strategically sited, public art can allow users to identify places and help to improve the legibility of the streetscape.
- Public art can also be integral to other elements of the public realm, such as bespoke tree guards, railings, lighting, signage or street furniture.
- Interactive visual arts using light and sound can further engage interest and add life to public spaces.
- Flags and banners can be used to provide vivid splashes of colour and movement within the town centre, promoting civic events, exhibitions or attractions.
- Murals can be commissioned to enliven blank facades and highlight entrances to laneways.



Sculptural Pieces



Etched Pavement



Creative Street Intervention



Pavement Art



Clonmel Mural



8.8 Soft Landscape

Trees and soft landscape form a fundamental part of the town centre's public realm, particularly in proximity to the river and opposite the Castle, enhancing sense of place and local identity, offering seasonal character, providing habitats and creating valuable summer shade for the public as well as for adjacent buildings.

A wide range of planting effects need to be considered for both enhanced placemaking and as important Sustainable Drainage System (SuDS) features, such as:

- Planting new trees of suitable species, size and form, consistently spread along length of Main Street.
- Incorporating tee pit design that ensures long term health while protecting integrity of pavements and existing/new utilities.
- Introducing continuous root cells wherever possible, for ensuring the long-term health of trees and for SuDS benefits.
- Creating linear Rain Gardens to help improve surface water management whilst performing a range of other functions such as amenity, reduced pollution and improved biodiversity.
- Encouraging selection of species for seasonal interest and in support of the 'All Ireland Pollinator Programme'.
- Giving preference to native trees, although some introduced species may be more suited to the artificial street conditions.
- Including raised planting beds with integral seating, particularly in areas where it is necessary to incorporate underground services.
- Considering Green Walls where screening of unsightly structures or spaces is required.
- Incorporating hanging baskets, on streetlights and/or shop fronts where suitable, for colourful season display.



**Turning Road Space into Green Space
– Alfred Place, London**



Green Wall



Continuous Root Cells



Rain Garden



Linear Planting and Paving



Street Trees

8.9 Public Realm Delivery

Ensuring Quality

Public realm works are complex and can represent significant investment in urban areas. As effective placemaking relies on community engagement, consultation with local interest groups is essential at an early stage to ensure project buy-in and to engender local pride in the proposals. The detailed design, materials, elements, general arrangement, implementation of schemes and ongoing maintenance are also essential for ensuring that the public realm remains attractive, durable and comfortable for all users.

Key considerations for achieving successful outcomes include:

- Quality materials, workmanship and detailing, together with a stringent maintenance and management regime.
- Public engagement throughout the design and construction stages to help build and improve the community's sense of ownership, civic pride and respect for the public realm.
- Adhering to current design standards and guidelines, particularly in relation to accessibility for all users and prioritising the needs of pedestrians and cyclists.
- Coordination with utility companies at the outset of a project to help determine existing and future requirements and to identify any clashes, enabling or diversionary works that may need to be undertaken as part of the project.
- Appointment of a competent contractor with prior experience of similar work and confirmation that suitably trained and experienced staff and operatives will be used throughout implementation.
- Developing suitable working methods that help minimise disruption during construction.
- Establishing a clear communications strategy between contractor and stakeholders for the duration of the construction works.
- Skilled and experienced Resident Engineer supervision throughout the construction period.
- Reducing potential damage occurring to newly installed paved areas, particularly from vehicle over-run and parking, together with developing robust details and using durable materials.
- Ensuring specified products are to current standards and applied according to manufacturer's requirements.

Maintenance

High quality public realm surfaces need to be adequately maintained in order to safeguard the considerable investment made, and to ensure the continued safety of all users.

A street maintenance regime needs to be put in place which ensures the performance of the project by:

- Providing regular cleansing of all street pavements.
- Regularly removing stubborn stains and chewing gum to prevent the paving becoming permanently stained.
- Taking into account the construction of surfaces including sub-bases, bedding layers, materials and joint types.
- Requiring statutory undertakers to reinstate any disturbed areas of paving with matching materials and equal construction methods.
- Ensuring repair times are minimised to limit disruption.

The long-term management and maintenance of public realm improvements should be clear ahead of any investment, and adequate annual budgeting put in place. It is likely that some projects may be delivered by the private sector and should therefore be maintained in accordance with minimum requirements determined by the council.

A whole life costing approach should be adopted, which considers up-front and ongoing investment to understand the total cost of ownership when evaluating public realm projects for Swords town centre. This ensures that long-term value is taken into account and enables evaluation of maintenance options over a period of time alongside capital and operations costs. The use of good quality materials, for example, may result in higher initial costs but can deliver savings in the long term through prolonged durability and reduced maintenance.