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# 1 Introduction



The town of Balbriggan is set to be transformed over the coming years. Shaped by its citizens, the Our Balbriggan Rejuvenation Plan sets out an ambitious vision for the town which aims to build on its rich heritage and its diverse and growing talent base to harness an inclusive, healthy, and prosperous community with an excellent quality of life for all.

The total investment by Fingal County Council for infrastructure projects related to the Our Balbriggan Rejuvenation Plan up to 2030 is likely to be in the range of €50million upwards, a significant part of this investment package will be through the Urban Regeneration Development Fund (URDF).

DBFL Consulting Engineers Ltd. (DBFL) have been commissioned by Fingal County Council to prepare an Active Travel Strategy to underpin the implementation of the town-centre regeneration focussed 'Our Balbriggan' project. The Strategy is scalable however, and can be adapted for a wider spatial boundary as per Sheet 4 Zoning Map to fulfil the Fingal County Development Plan 2023-2029's Objective CM04 to prepare a Local Transport Plan for Balbriggan.

The Active Travel Strategy will underpin the future development of Balbriggan in a way that places an emphasis on a high-quality public realm and transport network that supports sustainability, accessibility, good public health, and a vibrant town-socially, environmentally and economically.

The Strategy will enable a shift to sustainable modes of travel in accordance with European, National, Regional, and Local policy objectives and targets (e.g. National Planning Framework 2040, Climate Action Plan, National Sustainable Mobility Policy, Regional Spatial and Economic Strategy, the Fingal Development Plan 2023-2029) and will set a framework for investment in transport infrastructure within the town to support this.

# 1.1 Strategy Approach & Methodology

The Strategy has been developed to complement the Our Balbriggan Rejuvenation Plan, and takes its lead from many existing policies for Balbriggan including the Greater Dublin Area Transport Strategy and the Fingal County Development Plan 2023-2029.

It broadly follows the NTA and TII's Area Based Transport Assessment (ABTA) methodology. Various tools, analysis methods and datasets were utilised as an evidence base for the Balbriggan Active Travel Strategy throughout the process, including traffic surveys, air quality monitoring, infrastructure audits, Healthy Streets Check assessment, and Census POWSCAR data.

The ABTA methodology was broadly utilised to enable a future scaling up of wider spatial boundary to be consistent with the boundary as defined by Fingal County Development Plan 2023-2029.



# BASELINE ASSESSMENT & POLICY CONTEXT

The project began with a comprehensive review of the existing transport network in the Study Area, including services, infrastructure, travel demand, movement patterns and air quality. Relevant land use and transport policy was also reviewed.

These assessments were informed by site visits, travel surveys, junction counts, air quality surveys, parking surveys, face-to-face interveiws, histoics traffic counts, GIS analysis tools and a Healthy Streets Check. This stage is critical to form an evidence-base for the Strategy.



#### ESTABLISH CONTEXT

This stage sets out a high-level framework for the Strategy in terms of its overarching principles and approach to developing proposals for Balbriggan.

Research into Irish and international case studies of towns with similar characteristics was carried out to identify common key principles that were applied to improve their sustainable transport network

Transport Objectives were the main outputs of this stage.



# OPTION DEVELOPMENT & OPTION ASSESSMENT

Using the Transport Objectives and the weakness and opportunities identifed in the Baseline as a basis, a long-list of options for some of the key streets in Balbriggan were developed and assessed using a Multi-Criteria Analysis, guided by the Common Appraisal Framework criteria.

This was an iterative process and involved collaboration with the wider Our Balbriggan Project Team.



#### REFINEMENT & SENSE-CHECK OF PROPOSALS

A multi-tiered hierarchical modelling framework is being developed for the Strategy utilising the Eastern Regional Model and a Local Area Model.

Once a Preferred Strategy is agreed by Fingal County Council, the proposals will be sense-checked utilising these models. The role of the model is to quantitatively as well as qualitatively assess and appraise the transport environment impacts and changes resulting from the proposed options within the Strategy.



# PREPARATION OF DRAFT PLAN & FINALISATION OF PLAN

This report, the Balbriggan Active Trave Strategy sets out to summarise all of this work that has been undertaken.

The Strategy document presents the proposed framework for Balbriggan's transport network over the short, medium- and long-term to support the realisation of Fingal County Council's ambitious Our Balbriggan Rejuventation Plan

# 1.2 Overriding Status of the Strategy

Implementing this Strategy will involve Fingal County Council helping to facilitate, promote, support and coordinate stakeholders in their activities in a way that is consistent with existing and emerging plans setting out public policy for sustainable development, environmental protection and environmental management.

This Strategy is situated alongside this hierarchy of statutory documents that has been subject to environmental assessment/screening environmental for assessment, as appropriate, and forms the decision-making and consent-granting framework. The Strategy does not provide consent or establish a framework for granting consent and will not be binding on any decisions relating to the granting of consent.

The Strategy fully aligns with the provisions of the existing National Planning Framework, the National Climate Action Plan 2024, the Regional Spatial and Economic Strategy, the Transport Strategy for the Greater Dublin Area (including associated cycle network) and the current Development Plan, all of which have been subject to legislative requirements relating to public consultation and environmental assessment/screening for environmental assessment. As such, the Strategy is wholly subject to the requirements of the provisions

set out in these documents, including provisions relating to sustainable development, environmental protection and environmental management that have been integrated into these documents, including through SEA and AA processes.

In order to be realised, examples of projects identified in this Strategy (in a similar way to other projects from any other sectors) will have to comply, as relevant, with various legislation, policies, plans and programmes (including requirements for lower-tier Appropriate Assessment, Environmental **Impact** Assessment and other licencing requirements as appropriate) that form the statutory decision-making and consent-granting framework. It is a specific provision of this Strategy to ensure that all of the provisions from the existing Development Plan and Transport Strategy for the Greater Dublin Area identified in the accompanying Screening for SEA Report shall be complied with throughout the implementation of this Strategy.

# 1.3 Supporting Documentation

As part of the evidence base for this Strategy, a number of supporting documents were prepared to document the process. These can be founded in the following Appendices:

- Appendix A: Baseline Assessment Report, including the following technical notes:
  - o Baseline Traffic Survey Report.
  - o Collision Data Analysis.
  - o Catchment Analysis.
- Appendix B: Context Report.
- Appendix C: Options Development & Assessment Report.
- Appendix D: Modelling & Assessment Report.

# 1.4 Report Structure

This Report is set out in such a way as to summarise the background analysis and evidence-base for the Strategy, as well as the key proposals and recommendations. The Report is structured in three parts:

- Part A: Background.
- Part B: Strategy Measures.
- Part C: Implementation & Strategy Outcomes.



Figure 1-1: Map of Active Travel Strategy Study Area & Road/Street Network.

# Part A | Background



# 2 Balbriggan Today

## Overview

Preparing the Strategy began with a comprehensive review of the existing transport network (infrastructure and services), as well as current travel demand and movement patterns to establish a solid foundation in the understanding of Balbriggan' existing transport network.

The Baseline Assessment was informed by travel surveys, junction counts, air quality

> surveys, parking surveys, face-to-face interviews, historic traffic counts, GIS analysis tools. several field surveys by the project team.

This Chapter presents a summary of this work, which is detailed further detail in supporting reports in Appendix A.





# Geographic Context

Balbriggan is a fast-growing seaside town located in Fingal, Co. Dublin. The town lies just 34km north of Dublin City Centre and 23km from Dublin International Airport. The nearby town of Skerries can be found 7km away along the coast while Swords lies 19km to the south.

Balbriggan is fortunate to have a long stretch of coastline providing wildlife habitat, beautiful scenic views and attractive walks that are greatly enjoyed by locals and visitors alike. An especially interesting feature of this landscape is the diversity of character areas.

First built in the 1760s, Balbriggan Harbour, while no longer used as intensively as it was in the past, is still home to a small fishing fleet and other vessels, some of which are permanently moored. The Harbour's stone piers and sea walls provide shelter and an attractive sense of enclosure, with the recently restored lighthouse an appealing destination at the Harbour's mouth, and the recently granted Part 8 Quay Street & Fnyirons scheme set to transform this area of Balbriggan.

# 2.3 Demographic Profile

Balbriggan is one of the fastest growing, youngest, and most culturally diverse towns in Ireland, with a population of 24,322 (Census, 2022). The Fingal Development Plan 2023-2029 projects the population of Balbriggan to increase to 27,492 by 2029. As the youngest large town in Ireland, 30% of the population are aged between 0-14 years, and 75% 44 years of age or younger, with an average age of 30.8. This compares to average age nationally being 37.

Figure 2-1 illustrates the population per Census Small Area in Balbriggan as per the 2022 Census. Areas to the west/north-west and the south of the Town Centre have the highest numbers of residents per Census Small Area. The town centre itself and Small Areas immediately south of it have lower populations.

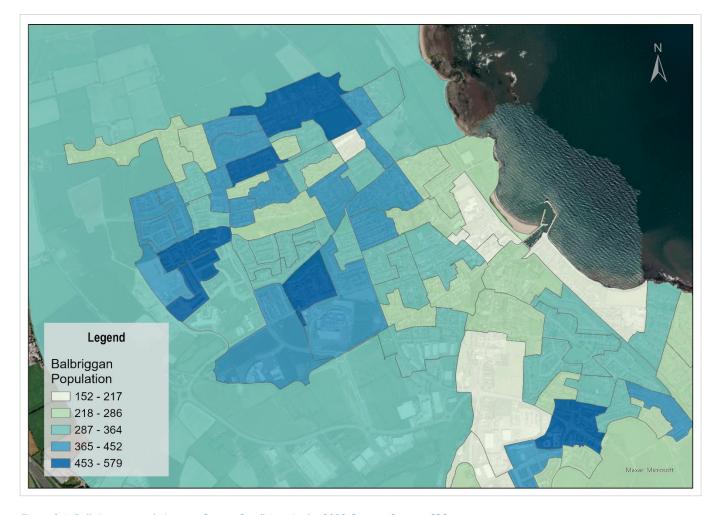


Figure 2-1: Balbriggan population per Census Small Area in the 2022 Census. Source: CSO.

Figure 2-2 illustrates Balbriggan in the context of Ireland's Pobal's Deprivation Index; an index which is based on a wide breadth of factors including demographic profile, social class composition and labour market situation.

The majority of Small Areas in Balbriggan Town Centre and within its immediate vicinity range from Disadvantaged to Marginally Above Average. Two Small Areas – Bremore to the north and Castlelands to the south – are considered to be Very Disadvantage.

Equity in transport is an important consideration for the Strategy, and will focus on providing equitable (i.e., sustainable, affordable, reliable and safe) mobility options particularly for areas identified as below Average by the Pobal Deprivation Index. Balbriggan's transport network is used to access opportunities to work, get an education, visit friends, partake in community life and other activities.

In this way, our transport network plays a key role in ensuring an equitable and just society. For many, the cost of owning and maintaining a private vehicle is prohibitive – and with 1 in 6 households in Balbriggan not owning a car (CSO, 2022), the importance of providing alternatives such as high-quality, safe and attractive walking, cycling and public transport networks cannot be overstated.

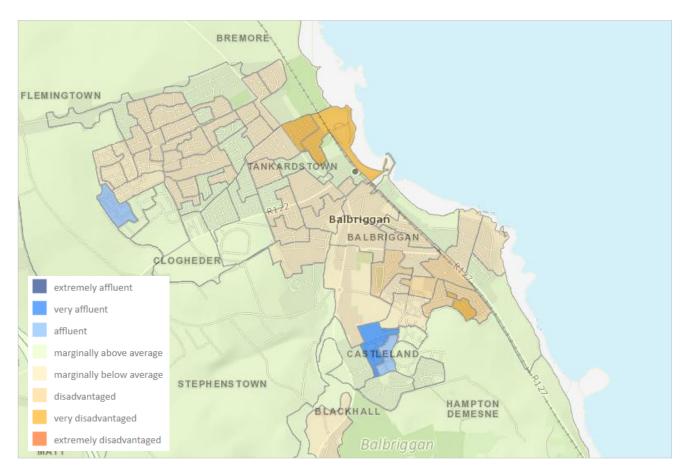


Figure 2-2: Deprivation Index, as per the 2022 Census. Source: Pobal Deprivation Index.

# According to the Census...

1 in 6 households in Balbriggan do not own / have access to a car. This highlights the importance of providing transport alternatives to ensure mobility equity and accessibility for all.

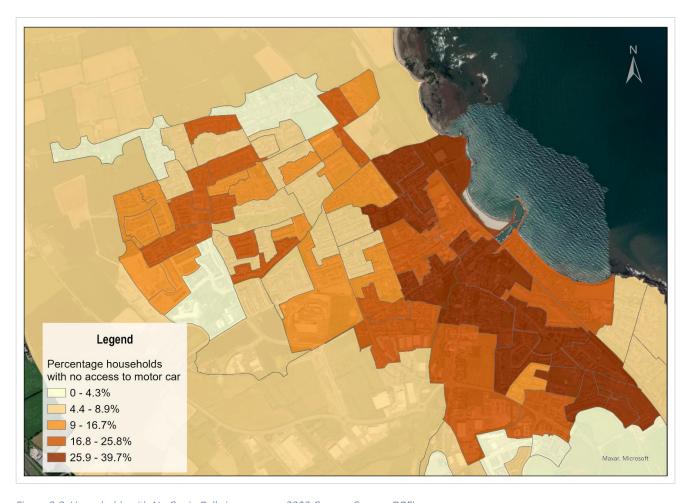


Figure 2-3: Households with No Car in Balbriggan as per 2022 Census. Source: DBFL.

# 2.4 Places of Employment

The Fingal Development Plan 2023-2029 identifies Balbriggan as a Self-Sustaining Town. These are settlements that have high levels of population growth but a weak employment base and require targeted catch-up investment to become more self-sustaining. The availability of zoned lands for high technology and general industrial development, together with good quality external connectivity and the planned infrastructural and environmental improvements offer considerable potential for future employment opportunities in the town.

Outside of Balbriggan's Town Centre, key employment areas are highlighted in Figure 2-4. These include:

- Millfield Shopping Centre (to the west)
- Fingal Bay Business Park (to the south)
- Stephenstown Industrial Park (to the south)
- Balbriggan Retail Park (to the south east)

## 2.5 Places of Education

Figure 2-4. identifies the location of the primary and secondary schools in Balbriggan. A key element of the Strategy will be to improve facilities so that more students feel safer to walk, wheel, scoot and cycle to school independently.



Figure 2-4: Location Map of Key Employment and Education Areas in Balbriggan.

# 2.6 Existing Transport Network

#### Pedestrian Network

Overall, Balbriggan's existing pedestrian environment is of mixed quality. Footpaths are provided along the majority of streets, however many important routes such as Quay Street, the R132, and the area around the train station are relatively car dominated, and have narrow, cluttered and sometimes discontinuous footpaths that are at certain points inaccessible and unsafe especially for people with mobility or visual impairments.

A lack of dropped kerbs, tactile paving, and formal crossings on some streets makes it difficult for people with mobility or visual impairments, buggies or young children, for example, to navigate the space.



Image 2-1: Lack of footpaths and safe crossings at High Street / Quay Street junction.



Image 2-2: "Kissing gates" between Bridge Street and Vauxhall Street / Mill Pond Park hinders accessibility for people with wheelchairs, aids, buggies, bikes, etc.



Image 2-3: No safe crossing provided on arm of roundabout.

Another barrier and point of severance to east-west movement between the town and the beach / coastline is the presence of the rail line. Although there are a number of arches that enable people to walk or cycle through, due to their location can feel isolated and due to their design, i.e. poor lighting, reduced sightlines due to blind corners and narrow tunnels result in a poor perception of safety for some.





Image 2-4: Railway Arches between Lambeecher and Balbriggan FC (left) and Convent Lane and Balbriggan Beach (right). Source: DBFL.

A Pedestrian Accessibility Review & Analysis was carried out of Balbriggan to highlight barriers faced by pedestrians as they travel between key destinations such as schools, shops, healthcare facilities and transport interchanges. This enabled an assessment of the 15-Minute Town concept to help identify interventions to support make this concept a reality.

Four points across the Study Area were chosen for the purposes of the Accessibility Review, namely:

- Balbriggan Train Station.
- Balbriggan Educate Together Secondary School.
- Clonard Roundabout.
- Castleland Roundabout.

ArcGIS analysis tools and the NTA's Permeability Best Practice Guide were used to carry-out this exercise. It is important to note that the proportion of the local population served by the existing network has been calculated using 2016 Census data and has likely changed as a result of population growth and new developments realised since then. Moreover, this analysis only accounted for the permeability of the network, not the accessibility of the physical infrastructure.

Overall, the level of connectivity for pedestrians was found to be generally good, with over three quarters of the population able to access these points on foot – or 86% in the case of Balbriggan Educate Together Secondary School.

Several recommendations emerged from the Accessibility Review's catchment analysis. These include:

- Create pedestrian and cycle permeability through closed off green spaces/ recreational spaces such as Glebe North Football Club.
- Rerouting the current bus lines should be considered to increase the catchment and provide public transport connectivity to recently developed or planned areas such as Taylor's Hill and Castlelands.
- Residential development should provide a design and accessibility layout that maximises permeability and safe access to public transport stops as articulated in the Design Manual for Urban Roads and Streets (DMURS).

## Healthy Streets Check

A Healthy Streets™ Check was carried out to inform the Baseline Assessment for the Balbriggan Active Travel Strategy. 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.



Figure 2-5: Healthy Streets Approach Indicators. Source: Lucy Saunders.

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 2-5.

A Healthy Streets™ Check was undertaken by several 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 were captured. The Check focused on Main Street, and Quay Street and its environs.

Both places scored very low with no indicators identified as being of excellent quality. Full details of the methodology used and results of the Healthy Streets™ Check can be found in the supporting Baseline Conditions and Policy Context Report in Appendix A.

## Cycle Network

Throughout Balbriggan, there is a general lack of dedicated, continuous and connected cycle facilities throughout with cyclists having to share space with vehicular traffic on the majority of roads, as demonstrated in Figure 2-6.



Image 2-5: Shared pedestrian and cycle paths on both sides of Hamilton Road. Source: DBFL.

Where cycle lanes are provided, they typically lack continuity and coherence. The northern section of Drogheda Street for example, has a two-way cycle track that whilst segregated from vehicular traffic, is quite narrow and comes to an abrupt end at a junction that lacks a toucan

crossing. Narrow footpaths also result in pedestrians often walking in cycle facilities which creates conflict between the modes. The eastern side of the street lacks dedicated provision despite the presence of schools and Lambeecher housing estate.

Other streets with segregated cycle facilities include Hamlet Lane and Brega Street. However, cycle facilities on these streets are often unavailable due to cars parking illegally on the cycle lanes.



Image 2-6: Existing shared pedestrian and bi-directional cycle path on Drogheda Road. Source: DBFL.

Fingal County Council successfully gained permission for the Harry Reynolds Road Pedestrian and Cycle Scheme in 2021 where work commenced early in 2023. The Scheme will provide an active travel link between Drogheda Street and Hamilton Road, serving 3 school campuses at Ardgillan Community College, St. Mologas and Balbriggan Educate Together National School, as well as offering a safe cycling and walking route to shops, childcare facilities and community amenities including Millpond Park and Flemington Community Centre.



Figure 2-6: Existing Cycle Facilities.

#### Bus Network

Balbriggan is relatively well served by bus with frequent connections available to Dublin City Centre, Drogheda, Dublin Airport and Swords. Dublin Bus, Go Ahead Ireland, Bus Éireann and Local Link all operate routes through and within the Town.

Routes 33, 33a, 101 and 101X all provide interurban services with Dublin City. Routes LL192, LL195 and 1474 all provide services to nearby towns and villages such as Stamullen, Ashbourne and Ballyboughal.

Route B1 provides a local service through the Town Centre, connecting Millfield Shopping Centre, Harry Reynolds Road, and the train station. However, there are large areas of new residential development such as Taylor's Hill, Bremore Cottages/Flemington Lane and Seapoint Road/The Bower that are not well served by this service as demonstrated by a catchment analysis of existing bus stops in Figure 2-7. The Strategy will aim to address this through permeability links and/or enhance local bus services.

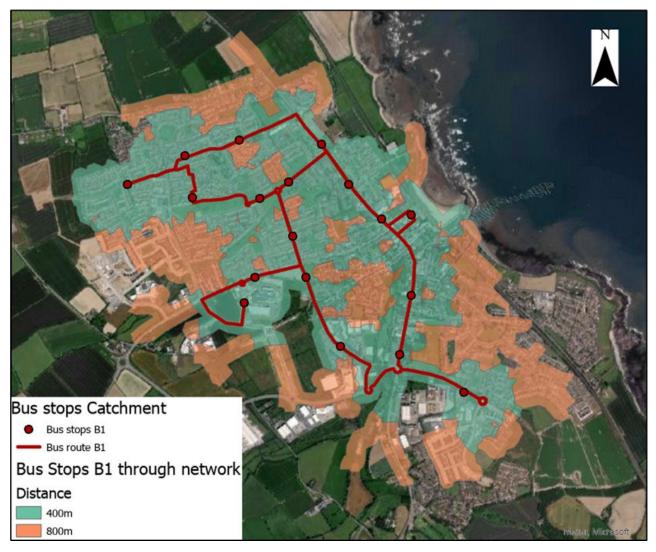


Figure 2-7: Catchment Analysis of Route B1 Bus Stops.

#### Rail Station & Network

The Our Balbriggan Rejuvenation Plan has identified the Rail Station, Street & Plaza as a key project which will be brought forward in the coming years.

Balbriggan benefits from a centrally located rail station, with many rail connections. Balbriggan is served by commuter trains running daily from Drogheda/Dundalk to Dublin City Centre, with further onward connections to places such as Belfast available at Drogheda Station.

Balbriggan railway station is the northern most station within the short hop zone along the Belfast-Dublin corridor. This allows travellers to benefit from discounted fares when using a Leap Card, but has created issues for people travelling to/from nearby towns Laytown and Gormanstown who are subject to much higher fares. Moreover, Balbriggan is excluded from the TFI 90 Minute fare.

Whilst Balbriggan's railway station provides many facilities such as bicycle parking (Sheffield stands and lockers), GoCar and electric vehicle charging points, the physical layout and configuration of the Station Yard is car dominated, and difficult to navigate for people walking and cycling. The legibility of the Station in relation to the Town Centre is also not obvious at first, with poor signage.



Figure 2-8: High-Level Analysis of Balbriggan Train Station.



Balbriggan train station is relatively well connected to local amenities including SuperValu, schools, leisure centres, healthcare facilities and bus routes 104, B1 and Local Link. Permeability in the area is

limited by private closed-off spaces belonging to Balbriggan Community College and Loreto Secondary School as well as green spaces on Clonard Street and residential communities on Old Market Green. The existing network serves 88% of the surrounding population.

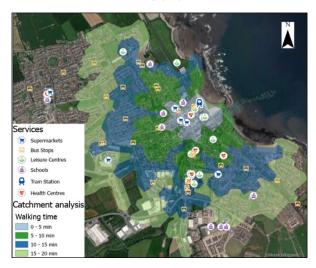


Figure 2-9: Accessibility to Local Amenities from Balbriggan Train Station.



Figure 2-10: Catchment from Balbriggan Train Station. As the Crow Flies vs. Existing Transport Network.

#### Road and Street Network

Balbriggan's road and street network is defined by the R132, the main spine corridor running through the centre of the town in a predominately north-south direction. The road was once the primary route connecting Dublin and Belfast before the M1 motorway was constructed to the west of the town. Due to its legacy as a National Primary route, sections of the R132 still have leftover highway engineering such as wide carriageways and junctions that emphasise and prioritise the fast through movement of vehicular traffic. This design is not compatible with the creation of a more people-friendly Balbriggan.

Other regional roads in Balbriggan include the R127 that links to Skerries and the R122 (in part Chapel Street/Clonard Road) that implements an east-west connection to the M1 motorway and Naul village.

A one-way system is in place on many of the town's streets. Streets such as Convent Lane, George's Hill and Mill Street can only be used by traffic travelling west while Railway Street and Quay Street by those travelling eastbound.

#### Junctions

Many of the junctions throughout the Study Area are unsafe for pedestrians and cyclists, especially those considered as vulnerable pedestrians such as those with disabilities or impairments. Wide junction splays and corner radii, a lack of dropped kerbs and tactile paving and a lack of crossings at desire lines make it difficult and hazardous for people walking and cycling to cross safely.



Image 2-7: On-street parking on Clonard Street including loading bays and disabled bays. Source: DBFL.

## Vehicular Speeds

As part of the traffic surveys carried out during the baseline assessment, it found that while most of the vehicular traffic remained within the posted speed limit, several vehicles were recorded as reaching well over the speed limit at all study locations, the most concerning being on the R132 Drogheda Street and Chapel Street within the town centre core area.

#### Collisions Analysis

A Collision Analysis was carried out using the Road Safety Authority (RSA) website, wherein data is available for the year 2005-2016. An overview is illustrated in Figure 11. The complete analysis is set out in the accompanying Collision Data Analysis Report in Appendix A.

There were 42 collisions recorded involving pedestrians; 36 of which were minor collisions, 5 serious collisions and 1 fatal collision. Clusters of pedestrian collisions were recorded along the R132 and Hamlet Lane. The area surrounding Main Street was found to have a particularly high concentration of pedestrian collisions with 16 of the 42 incidents occurring here. The most common time for a collision to occur was between 10:00-16:00.

The first incident involving a cyclist in the Study Area wasn't recorded until 2014. All 6 collisions were classified as minor. However, 4 out of the 6 occurred in areas where there are cycle lanes. There was no time pattern or clusters identifiable for collisions involving cyclists, but they all occurred on roads where the speed limit was above 50 km/h.

There were 67 collisions involving cars recorded during this period. Most incidents, 65, were minor with 1 incident recorded as serious and 1 incident recorded as fatal. The most common time for a collision involving a car was during the evening peak, from 16:00-19:00. Almost all car collisions, 94%, occurred on sections of road where the speed limit was above 50 km/h.

The Analysis concluded with a recommendation that an evidence-based approach should be taken to road safety, including reconfiguring the public realm to reduce speeds in line with the Design Manual for Urban Roads and Streets (DMURS), prioritising the safe and direct movement of pedestrians and cyclists over the private car.

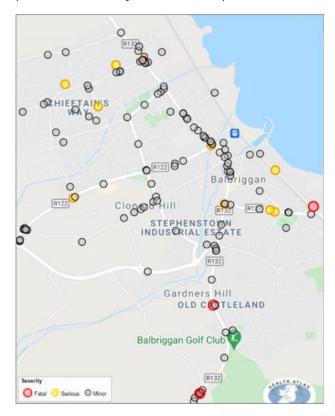


Figure 2-11: Collisions in Balbriggan from 2005 to 2016. Source: Road Safety Authority.

#### Car Parking

Many of the streets within Balbriggan, especially those close to the town centre are lined with on-street parking.

Off-street parking is available at Mill Street, Quay Street, the train station, at SuperValu on the R132, Lidl on the R127, on the southern approach to the town off of Dublin Street.

As part of the Baseline Assessment, a Parking Survey was carried out of key parking areas in the town. It was found that parking is generally underutilised in Balbriggan with a large amount of reserve capacity. For example, the average occupancy of Dublin Street car park during the week is 38%, and along Drogheda/Bridge Street is 41%.



Image 2-8: Surface car parking at Quay Street, Balbriggan.

Apart from the car park at the Railway Station and a limited number of long-stays in Quay Street, all locations showed characteristics of short duration of stay (less than one hour) for both weekday and weekend periods. Further information on these survey results can be found in the Baseline Traffic Survey Summary Report in Appendix A.



Image 2-9: Illegal parking on the footpath by an HGV on Main Street.

# Parking Surveys undertaken...

during the course of this Study, revealed that car parking spaces are generally underutilised in Balbriggan with a large amount of reserve capacity. For example, the average occupancy of Dublin Street car park during the week is 38%, and along Drogheda/Bridge Street is 41%.



## 2.7 Current Travel Patterns

17%

of households do not own a car, meaning 1 in 6 households depend on walking, cycling and public transport to get around Balbriggan. This highlights the importance of sustainable transport equity to ensure all can safely and conveniently access work, education, retail and partake in community life.

00

45%

of journeys to school are done by active modes, walking and cycling, with significant potential to further increase this number with Safe Routes to School interventions.

39%

of all commuter journeys are by sustainable modes.

Most of these trips to work, school or college are short, with over half of people stating that their daily commute takes less than half an hour.

9%

of journeys to work are by walking and cycling, and a further 15% by public transport.

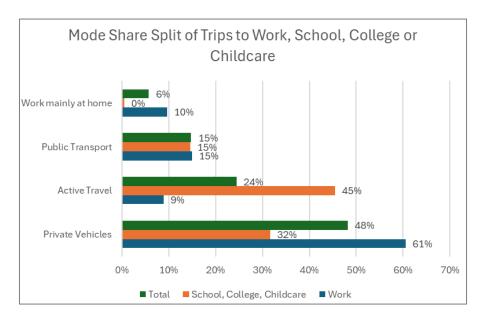


Figure 2-12: Existing Mode Share for Balbriggan. Source: CSO, 2016.

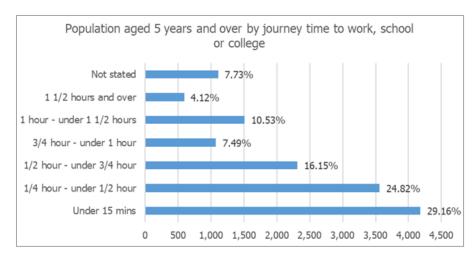


Figure 2-13: Existing Journey Times to Places of Work, School, or College in Balbriggan. Source: CSO.

# 2.8 Strengths, Weaknesses, Opportunities & Challenges (S.W.O.C.) Analysis

#### **Strengths**

- Balbriggan is recognised by the RSES as part of a strong network of county and market towns
  that have capacity for commensurate growth to become more self-sustaining and attract high
  quality employment, that serve not just their resident populations but a wider catchment area.
- The Our Balbriggan Rejuvenation Plan provides a strong foundation for the Active Travel to build on in terms of the overarching aspirations for the town and buy-in from local residents, businesses and community groups.
- Strong policy mandate at a national, regional and local level for the prioritisation of active transport and compact growth.
- Provisional URDF funding secured for the delivery of Our Balbriggan Rejuvenation Plan.
- Rich in natural and built heritage assets including the Harbour, Mill Pond Park, Architectural Conversation Area in the town centre.
- Direct rail connectivity to Dublin, with a centrally located rail station.
- Strategically located on the Dublin-Belfast Economic Corridor.

#### **Opportunities**

- The routing of Fingal Coastal Way would provide a valuable amenity and active travel spine through Balbriggan, as well as rejuvenate the Harbour front.
- Many of the issues identified such as local junction improvements, footpath upgrades, etc. are considerably quick wins but will have a significant impact to improving the transport environment for people walking and cycling throughout Balbriggan.
- Potential to realign/extend the existing B1 route, and/or introduce a second local town bus route that would serve areas such as Taylor's Hill, Castlelands, Millfield Shopping Centre, etc. to increase the sustainable transport offering to more people accessing employment, education, and recreational facilities.
- 45% of journeys to school are currently by walking and cycling, indicating potential to further increase active travel mode share with targeted Safe Routes to School improvements.
- Baseline Surveys identified that there is capacity in Balbriggan's existing car parking areas, which presents an opportunity to consolidate these areas and on-street parking to enable the reallocation of public space for other high value uses such as sustainable transport infrastructure, play areas, green infrastructure, etc.
- Significant opportunities to significant transform Balbriggan's public realm to make a more attractive, vibrant and livable town centre.
- In June 2020, Balbriggan was chosen as Ireland's first town to be a Smart District in a move that will put it at the cutting edge of smart projects that could include Mobility as a Service and dynamic parking apps.

#### Weaknesses

- Poor integration between the B1 bus stop on Railway Street and the railway station for people walking and wheeling due to lack of a safe crossing point.
- While the railway station does offer cycle parking, electric vehicular charging facilities, disabled parking, and so on, the entrance and plaza area are poor quality and not fully accessible or legible.
- Some key residential, employment, and education areas are not well served by the existing B1 bus service, including Taylor's Hill, Castlelands, Millfield S.C.
- Car dominated town centre and street clutter detract from the attractiveness and accessibility of Balbriggan.
- Overall poor-quality environment for pedestrians throughout the Study Area.
- Lack of continuous high-quality cycle infrastructure that supports end-to-end journeys.
- Poor wayfinding and legibility between different areas of the town.

#### **Challenges**

- A 'Business as Usual' approach to land use, transport planning, sustainable transport provision and parking policy.
- Limited public space and many conflicting demands for use of this space.
- A desire to retain on-street parking in certain locations may limit ability to deliver improved connectivity for pedestrians and cyclists or enhanced public realm.
- A change in the economic outlook and political climate leading to uncertainty about required capital infrastructure funding and private investment.
- High car dependency and usage.
- If opportunities to better manage parking provision are not taken, issues around congestion and car dependency are likely to worsen, and most critically – undermine investment in and efforts to promote sustainable transport.
- Sloping topography in some areas which may be challenging to provide fully accessible transport infrastructure, e.g. Bridge Street, Mill Pond Park.

# 3 Policy Context

#### 3.1 Introduction

The Balbriggan Active Travel Strategy is a nonstatutory local plan and sits within a broader policy framework – under National, Regional and existing Local policy.

A comprehensive review of existing land use and transport planning policies and guidance ensured that the Strategy aligns with these. A detailed review of these can be found in the Baseline Conditions and Policy Context Report in Appendix A. A synopsis of the Local policy is outlined in the following pages.

National, Regional and Local policy all include a strong mandate to support compact growth and a shift away from the private car to sustainable modes walking, cycling and public transport. Most notably, key strategic objectives are set out in the National Planning Framework 2040 and the Climate Action Plan.

A number of design guides were also reviewed including DMURS and National Cycle Manual which has recently been superseded by the Cycle Design Manual.

# **National Policy & Guidance**



# **Regional Policy**



# **Local Policy & Guidance**



# 3.2 Local Policy

## Fingal Development Plan 2023-2029

Balbriggan is identified as a 'Self-Sustaining Town' in the Settlement Hierarchy by the Fingal Development Plan 2023-2029 and a 'Major Town Centre' in the County's Retail Hierarchy.

"One of the key strategic objectives of [the] Plan is to strengthen the integration of land-use and transport planning with a priority focus on increased provision of walking, cycling and public transport infrastructure. This Plan promotes an integrated and sustainable transport network that is inclusive and accessible for all. Alongside this, the creation of attractive public realms and healthy placemaking will ensure that communities are connected in a sustainable and efficient way. Easy access to and from residential developments, workplaces, schools and services and reliable commercial deliveries and servicing will be dependent on an increasingly efficient system of transport given the projected increases in demand for travel. This Plan also promotes the continued management of traffic, the protection and enhancement of strategic transport corridors and the efficient movement of freight."

The following objectives are particularly relevant to Balbriggan and the preparation of this Strategy:

- Objective SPQHO7: Support for the objectives arising from the Our Balbriggan project.
- Objective Policy CMP4: Promote and encourage the use of ABTAs for Local Area Plans, Local Transport Plans, and other large-scale studies and plans as appropriate.
- Objective CMO4: Prepare a Local Transport Plan for Balbriggan, in consultation with the NTA and other relevant stakeholders.
- Objective GINHO78: Plan and develop the Fingal Coastal Way from north of Balbriggan to Kilbarrack.
- Objective CMO2: Transition to Sustainable Modes: Work with the NTA, TII and other transport agencies in facilitating the integrated set of transport objectives for the County as set out in this Plan, in line with National and Regional policy to encourage modal shift towards more sustainable modes of transport and patterns of commuting to reduce reliance on the private car.
- **Objective EEO9:** Support economic growth within the Core Area through

strengthening and promoting the importance of Balbriggan as the major urban centre and having regard to its strategic location on the Dublin–Belfast Economic Corridor.

 Policy CMP3 - Integrated Land-Use and Transport Approach.

The Zoning Objectives for Balbriggan are illustrated in Figure 3-1.

Key points of note include:

- Greenfield land zone for residential development including a strip of land to the north of Flemington Lane, land between the existing western urban edge of the built-up area and Clonard Cross, and Castlelands to the south.
- Land to the east of the Millfield Shopping Centre is zoned for Major Town Centre.
- Lands between Clonard Street and the Naul Road are zoned for High Technology and Rural Business uses.

Three of the Plan's Transportation Schemes under Objective CMO41 relate to the Study Area, as follows:

- Castlelands Link to R127.
- Balbriggan Ring Road R122 to R132.
- Naul Road Upgrade (M1 Junction 6 exit to the roundabout on the R122).

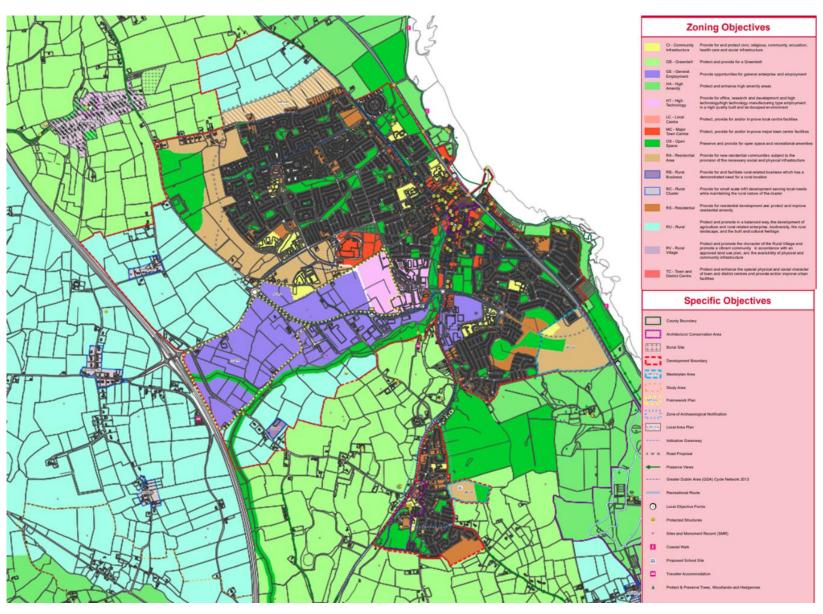
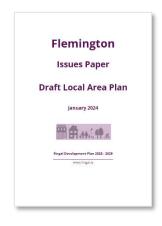


Figure 3-1: Land Use Zoning Objectives for Balbriggan and surrounding area. Source: Fingal County Development Plan 2023-2029.

## Flemington Issues Paper

Fingal County Council are in the early stages of preparing a Local Area Plan for Flemington, which is located just north of the Strategy's Study Area. A pre-draft consultation process on the Issues Paper concluded in March 2024.



The Local Area Plan will set out a land use strategy for the proper planning and sustainable development of the area and guidance as to how development can be achieved.

The undeveloped Residential Areas (RA) zoned lands have the potential to provide for an additional c.650 no. residential units.

The existing transport infrastructure serving these lands along Bremore Cottages / Flemington Lane is substandard, especially if it is to cater for the projected growth under the Development Plan and imminent Local Area Plan. At present, there is a continuous footpath on the southern side of the road, where most of the existing houses are located, with limited provision on the northern side. There are some attractive planting areas that provide a buffer

between the footpath and the carriageway where there is a speed limit of 50kph. No crossing points are provided, and there is a complete lack of dedicated cycling infrastructure.





Image 3-1: Examples of cross-section of Bremore Cottages / Flemington Lane at present. Source: Google Maps, 2023.

In order to ensure that sustainable mobility behaviours are enabled and facilitated from the outset of any development of these lands, improved active travel infrastructure is a critical enabler for this – both along Flemington Lane but to connect to wider active travel network on R132 and Fingal Coastal Way, for example. Permeability via residential areas to the south

will also be important to provide Quietway routes, and to access the existing B1 bus service that currently stops at Brega and Hamlet Lane.

Given the lands are located approximately 1km from the Balbriggan rail station, for example, reliable bus services serving Flemington will be critical to provide a realistic alternative to the private car.



Figure 3-2: Fingal's Transport Network User Hierarchy. Source: Draft Active Travel Strategy.

## Active Travel Strategy for Fingal

Fingal County Council recently published an 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.

There are six pillars within the Active Travel Strategy which reflect the key priorities within the Strategy.

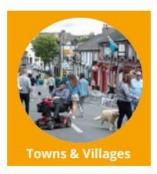
Protected Cycleways is principally focussed on infrastructure, whilst Strategic Planning is mainly about processes. The other pillars include a blend of hard measures (new or modified infrastructure such as traffic calming or cycle parking) and soft measures (revenue funded items such as cycle training, road safety campaigns and marketing promotions). Research has shown that both approaches are required for successful active travel outcomes.

#### The 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.
- Expansion and electrification of bike shares.
- Initiating safety schemes at schools and in Towns and Villages.
- Ensuring that all new developments include measures to support active travel.













# **4Existing Transport Projects & Proposals**

#### 4.1 Overview

Balbriggan is in the midst of an exciting time in its development, with much investment and activity earmarked for transport projects and land use development proposals.

While National, Regional, and Local Policy objectives were discussed in Chapter 3, this chapter highlights specific transport and land use projects as the Strategy aims to complement and build on these existing plans and proposals.

# 4.2 Our Balbriggan Rejuvenation Plan

Fingal County Council in collaboration with the people of Balbriggan launched the Our Balbriggan Rejuvenation Plan in 2019 to create

positive change and build a prosperous, vibrant, inclusive town that is united and ambitious.

Balbriggan has witnessed rapid expansion of new housing areas and a retail centre outside the traditional town core during the 2000s.



There is a need for a sustained focus on rejuvenating the original town centre and main street and how they relate to the expanded town, with a view to creating a more attractive, connected place that people want to live and spend time in for work, shopping or recreational purposes.

The main themes for the Plan are:

- Public Realm.
- Grow the Local Economy.
- Community Affairs & Integration.
- Education, Training & Employment.
- Safe Balbriggan.

The key projects for the Town Rejuvenation are illustrated in Figure 4-1. The Balbriggan Active Travel Strategy has integrated the relevant projects into its recommendations.



Figure 4-1: Town Rejuvenation Map. Source: Our Balbriggan Rejuvenation Plan 2019-2025, Fingal County Council.

# 4.3 Draft Balbriggan Public Realm Strategy

The Balbriggan Public Realm Strategy is being developed in parallel with the Active Travel Strategy and both will play a complementary role in each other's implementation.

When complete, it will set in place evidence-based objectives, concepts and guidance for Balbriggan's public realm and street enhancement projects.

The development of the Strategy is being led by engagement with residents and businesses of Balbriggan. To date this has consisted of an online survey which has had strong participation and a series of focus group workshops. The key issues identified through this engagement is informing the preparation and implementation of the Public Realm Strategy.



# 4.4 GDA Cycle Network Plan

The National Transport Authority (NTA), in 2023 as part of the Greater Dublin Area (GDA) Transport Strategy 2022-2042, adopted the GDA Cycle Network Plan.

The Plan seeks to provide a framework for the delivery of an inclusive cycling environment that is safe for all cycling abilities and ages with strong functional and recreational connectivity between homes and key destinations.

It identified a Cycle Network for Balbriggan, as illustrated in Figure 4-2, which has been updated since the previous iteration, with an overall simplification of routes, including:

- Three Primary Routes which combined create north-south and east-west spines, namely the Harry Reynold's Road, Clonard Street and Mill Street
- Secondary Routes including the R132, and Flemington Lane.
- Greenway Routes including the Fingal Coastal Way which connects the Study Area to areas north and south, including Skerries, Balrothery, and Bremore.

The NTA's GDA Cycle Network Plan will form the basis for active travel proposals for this Strategy, and will be refined following further in depth analysis.

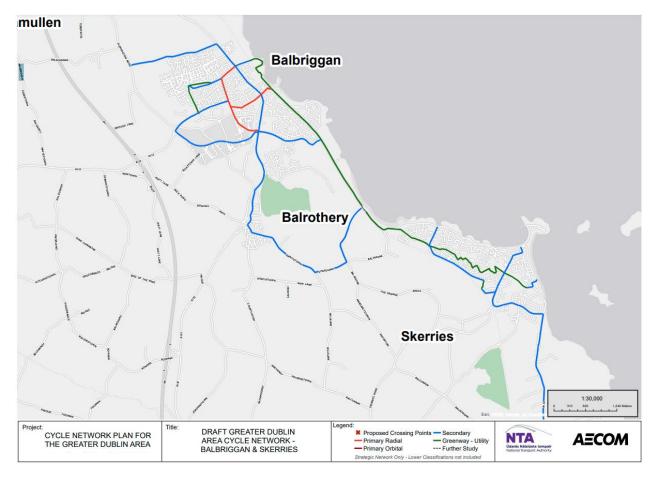


Figure 4-2: Cycle Network Proposed for Balbriggan Town and surrounding area. Source: Greater Dublin Area Transport Strategy, National Transport Authority

# 4.5 Harry Reynolds Road

In 2020, Fingal County Council granted permission for the Harry Reynolds Road Pedestrian and Cycle Route in Balbriggan, a significant active travel scheme in the Study Area. The scheme will provide an active travel corridor between Drogheda Street and Hamilton Road. The route will directly serve 3 school campuses at Ardgillan Community College, St. Molaga's and Balbriggan Educate Together National School, as well as offering a safe route to shops, childcare facilities and community amenities including Millpond Park and Flemington Community Centre.

Construction commenced in Q3 2023.



Figure 4-3: Route of the Harry Reynolds Road Pedestrian and Cycle Scheme. Source: Fingal County Council.

# 4.6 Fingal Coastal Way

The Fingal Coastal Way is a proposed Greenway extending from Newbridge Demesne in Donabate to the Fingal County boundary, north of Balbriggan. The overall length of the scheme will be approximately 32km, depending on the final route selected.

This route seeks to improve connectivity between the urban centres of Balbriggan, Rush, Skerries, and Donabate, as well as key leisure and tourism attractions. Within Balbriggan, it is envisaged that the route will connect areas along the coast such as the Harbour, railway station, and Bremore.

The project is being progressed by Fingal County Council and is currently at the Options Development and Assessment stage, following a series of public consultations.



Image 4-1: Aerial view of the Fingal Coastal Way project area.

# 4.7 Castlelands Masterplan

Fingal County Council prepared a Framework Masterplan for Castlelands, a site located approximately 1km south of Balbriggan Town Centre and comprises of 24.2 hectares of greenfield, undulating lands. They're bounded to the east by the railway line, to the north and west by existing residential development, and greenfield land to the south.

Figure 4-4 illustrates the planned walking and cycling routes, whilst Figure 4-5 illustrates a concept design for the Castlelands Link Road which is planned to connect from the roundabout at Hamilton Road / Castlelands Park Avenue to the Skerries Road (R127). This route is the final stage of linking the Balbriggan Inner Relief Road with the R127 which is intended to provide for traffic movement from the R132 to the R127.



Figure 4-4: Indicative Walking and Cycling Routes for the Castlelands Masterplan Area. Source: Castlelands Masterplan, Fingal County Council, 2021.



Figure 4-5: Concept Design for the Castlelands Link Road developed by Fingal County Council. Source: Castlelands Framework Masterplan, Fingal County Council, 2021.

The Land Development Agency is proposing a Strategic Housing Development located at Castlelands. The application site consists of 817 no. residential units, 2.16 ha of Public Open Space, 1 no. creche, and 1 retail unit and office.



Figure 4-6: Site Location for the Proposed SHD. Source: Land Development Agency.

# 5 Case Studies

#### 5.1 Overview

In order to establish a context for the Strategy, the project team considered comparator towns of relevance to Balbriggan in terms of their size, transport characteristics and aspirations such as its maritime heritage, railway line, proposed greenway, etc.

The concepts and overarching principles of what makes these places successful in terms of active travel and sustainable mobility were uncovered to inform the development of the Balbriggan Active Travel Strategy.



Figure 5-1: Houten has over 129km of cycle tracks, many of which are fully separated from traffic. Source: Eltis ITDP.

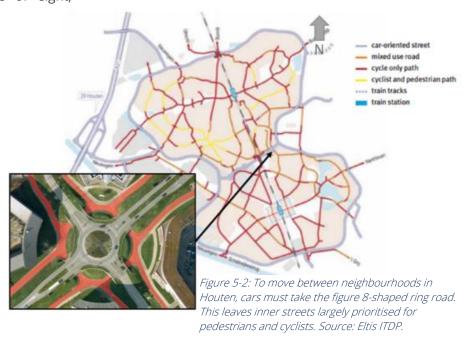
# 5.2 Houten, Utrecht, Netherlands

Houten, the Netherlands Cycling City of 2008, is a planned commuter town, located approximately 9km south-east of Utrecht. The town has a population of approximately 50,000 and is internationally renowned for its innovative approach to urban design, cycling design, and traffic management.

Houten's distinctive spatial feature is its two Ring Roads which form a figure of eight,

encircling the settlement, shown in Figure 5-2. The Ring Road enables vehicular traffic to move around Houten, however, it is compartmentalized, with throughtraffic prevented by filtered permeability measures. The maximum speed along most of the Ring Road is 70kph. Local vehicular access is facilitated via a series of low trafficked streets, typically with a speed limit of 30km/h.

Houten is a Transit Orientated Development (TOD) with all residential development located within 2km of one of Houten's two railway stations. Extensive bicycle parking and bike rental schemes are provided at each station. These encourage and enable residents and visitors to use a bike when travelling to and from the station. More than 70% of local trips in are made by sustainable modes. This includes trips to education, for shopping, visiting friends and connecting to public transport. 60% of those commuting out of the town by train use a bicycle to travel to the train station.



The town continues to stick to its principles of 'slow modes first. It has over 129km of bicycle lanes as well as a comprehensive network of pedestrian routes. Both are separated to the greatest extent possible from vehicular traffic, particularly at junctions. For example, 'double-decker roundabouts' are designed to allow cyclists and pedestrians to move through, segregated from motor traffic.



Figure 5-3: East-west spine through Houten, connecting library with City Hall.

Houten also utilises a series of filtered permeability measures that permit full accessibility for pedestrian and cyclists between neighbourhoods, the city centre, schools and the two train stations. In common with other urban areas in the Netherlands, the principle of 'woonerfs' or 'living streets', enable extensive landscaping and green infrastructure to be applied as innovative traffic calming measure to slow drivers when accessing private properties.

In addition to infrastructure, Houten employs a number of supporting measures to increase sustainable travel including car sharing schemes and educational programmes on cycling from an early age.



Figure 5-4: On residential streets in Houten, bikes share space with cars, but as the sign indicates, drivers must give cyclists right-of-way. Source; Eltis.



Figure 5-5: A woonerf is a residential street in the Netherlands and Belgium, in which pedestrians share the road with vehicles, while vehicles should follow the pedestrians' pace. Source: urbanmobilitycourses.

# 5.3 Deinze, Belgium

The city of Deinze is located on the banks of the Leie river in the East Flanders Region of Belgium. The once small rural town now has a population of 43,582. Deinze is an example of a city that consciously decided to redesign its streets to give priority to people walking and cycling over motorised traffic.

Cars can access the city centre, but their movements are restricted by one-way systems and speed limits of 30km/h. Wide, well surfaced cycle lanes and footpaths can be found in both directions on most streets.



Figure 5-6: Belgian traffic regulation defines the woonerf and its traffic sign. The word, of Dutch origin, literally translates as 'living yard' and is centred on the idea of creating liveable streets for people where residents can play, spend time and socialise safely. In Belgium, motorised traffic is restricted to 20kph on a woonerf, and the Netherlands it is walking pace.



Figure 5-7: Local businesses spill out onto the footpath and former on-street car parking spaces to create a more vibrant and pleasant experience for people walking through and lingering in the central area of the town. Source: DBFL.

On-street parking in Deinze city centre has been reduced which has provided the opportunity for local businesses to request from the local authority to have a small bench and bicycle parking placed in a parking spot adjacent to their premises. This reallocation of space improves the vibrancy and attractiveness of the street for people walking and cycling around Deinze.

Deinze has shown that it is possible for cars, pedestrians, and cyclists to share streets safely when all groups are provided for and understand what behaviour is expected of them. This is achieved through design, visual cues, and educational campaigns.

# 5.4 Dungarvan, Ireland

Dungarvan is a maritime town on the southern coast of Ireland, with a population of 9,277. In recent years, Dungarvan has built a reputation for being an active and vibrant place, attracting many tourists to cycle the Waterford Greenway.

Despite being such a compact town, Dungarvan struggled for many years with congested roads and high levels of traffic. Limited public transport and poor cycling and pedestrian facilities meant people had to rely on the private car for convenience and safety. This began to shift after 2012, when investment in cycle facilities, public realm and community engagement came under the Smarter Travel Areas initiative.

Physical infrastructure improvements in Dungarvan included the development of a Greenway along a disused railway line, the redevelopment of the main square to create a shared space for people and cars and the roll out of on-road cycling infrastructure.

In more recent times, spurs connecting to the Waterford Greenway have been implemented

to connect to schools - providing an attractive, safe route for schoolchildren. This is an approach that could be easily applied in the context of Balbriggan along the Fingal Coastal Way to schools such as Loreto Secondary School and St. Molaga's, and further west via green links.



Figure 5-8: Shared Space signage on Dungarvan's main street and central square. Source: DBFL.

These physical changes were combined with cycle training in schools and widespread marketing campaigns. As a result of these measures, walking and cycling in the town increased, with success in increasing active travel for journeys to places of education.

## 5.5 Summary of Key Concepts

Each town presents its own unique opportunities and challenges from its physical characteristics, political leadership, funding availability to cultural behaviours. It is not always appropriate to replicate exactly what is done elsewhere successfully. Instead, learning from them and applying principles and ideas in a local context, in this case Balbriggan, can offer valuable insights and lessons on some of the key ingredients for success and innovate solutions for local issues.

The key principles from the case studies that may be appropriate for the Balbriggan Active Travel Strategy, include:

- Low Traffic Neighbourhoods (LTNs).
- Healthy Streets Approach (public realmled street design).
- Filtered Permeability.
- Woonerfs / Home Zones.
- High-capacity bike parking.
- Reallocation of carriageway space.
- High-quality interchange facilities.
- Safe access to schools.
- Behavioural change / education.



Figure 5-9; Alfred Place Gardens, London where a street formerly used for rat-running was transformed into a community garden and linear pocket park. Source: DBFL.



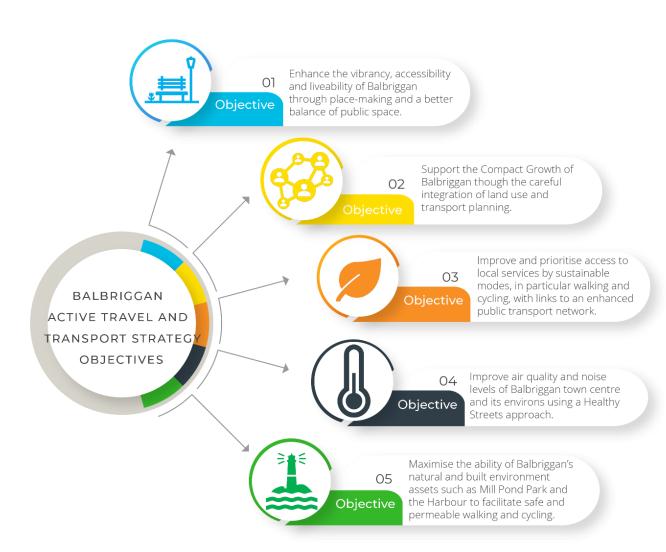
Figure 5-10: Mini-Hollands aim to create a more pedestrian and cycle friendly environment. This may involve junction redesigns, segregated cycle lanes, traffic calming or the reduction of through-traffic.

## 6 Balbriggan Transport Objectives

To guide the development of the Strategy, five Transport Objectives were developed in collaboration with Fingal County Council and other key stakeholders.

These Transport Objectives are aligned with the prevailing national and regional policy objectives including National Planning Framework 2040, Town Centre First Policy Approach, Climate Action Plan, National Sustainable Mobility Policy, and others as identified in Section 3. The objectives have also been developed to address the weaknesses and capitalise on the opportunities identified during the Baseline Assessment (see Section 2.8 and Appendix A).

The local community were asked for their view on these during a public consultation in March 2022 on the Draft Balbriggan Public Realm Strategy. The majority of respondents rated all as Very Important, most notably maximising Balbriggan's natural and built environment assets for active travel.



## 7 Option Development & Assessment

### 7.1 Overview

This Chapter summarises the Option Development and Assessment process, where a long-list of options were developed to address the weaknesses and build on the opportunities identified in the Baseline Assessment. Options were developed in line with the draft Transport Objectives and Preliminary Movement Strategy as set out above.

Existing plans, policies, and proposals such as the Greater Dublin Area Cycle Network Plan, and the Our Balbriggan Rejuvenation Plan formed the basis for many of the options to align with existing short to medium-term investment priorities for Balbriggan. These proposals were analysed and integrated with more localised improvements identified by site visits and feedback from a wide range of FCC departments.

A two-step optioneering process was undertaken to identify an Emerging Preferred Option:

- 1) An initial sift against Strategy Objectives.
- 2) A Multi-Criteria Analysis based on the Common Appraisal Framework criteria: Economy; Integration; Safety; Environment; and, Accessibility & Social Inclusion.

## 7.2 Appraisal Framework

The process for assessing these options was undertaken in line with the Common Appraisal Framework (CAF). The CAF requires transport projects to be appraised under general themes. To bolster these, project specific sub-criteria under each theme were developed to assess options thoroughly and ensure relevance to Balbriggan, as set out in Table 7-2. A five-point ranking system was applied, as in Table 7-1.

Once an Emerging Preferred Strategy was identified, analysis using transport modelling tools was carried out to measure the impact and outcomes of the Strategy compared to a Do-Nothing scenario.

This work is set out in the Balbriggan Options Development and Assessment Report, and Transport Modelling & Assessment Report in Appendices C and D, respectively.

Table 7-1: MCA Ranking Code.

Significant Disadvantages	
Some Disadvantages	
Neutral	
Some Advantages	
Significant Advantages	

Table 7-2: Criteria and Sub-Criteria.

	Capital Cost
	Constructability
	Town Centre Vitality
	Pedestrian Integration
	Cycle Integration
	PT Integration
	Traffic Integration
	Pedestrian Safety
	Cycle Safety
	Road Safety
	Air Quality & Climate
	Noise
	Public Realm & Biodiversity
	Hydrology & Geology
	Deprived Geographical Areas
	Local Education & Employment

## 7.3 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 Figure

7-1 into quantitatively as well as qualitatively assess and appraise the transport environment impacts and changes resulting from the proposed options within this Strategy.

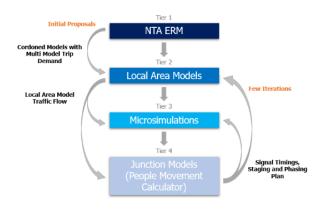


Figure 7-1: Multi-tiered Modelling Framework

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 Balbriggan was used in combination with a multi-modal Microsimulation Model of the core study area of Balbriggan 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 7-2.



Figure 7-2: Modelling Assessment Extent

The traffic and transport impact assessment for Balbriggan Active Travel Strategy was undertaken in accordance with latest guidance including:

- NTA's and TII's Area Based Transport Assessment (ABTA) Guidance Notes.
- 'Guidelines on the Information to be contained in Environmental Impact Assessment Reports' (EPA 2017).

- Traffic and Transport Assessment Guidelines' (TII 2014).
- Cycle Design Manual (NTA 2023).
- Project Appraisal Guidelines (TII 2016).



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

- Public Transport including inter-urban rail, suburban rail, DART, 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: The existing baseline scenario was

- developed based on conditions existing in March/April 2022.
- Future 'Do Minimum' Scenarios which are future year models developed without the Active Travel 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 Active Travel Strategy'); these are future year models developed with the Strategy's proposals on top of the 'Do Minimum' conditions.

The assessment years were 2022 (Base Year), 2027 to align with the Our Balbriggan Rejuvenation Plan and 2043 to align with the GDA Transport Strategy.

Lastly, to adequately assess and validate the Active Travel Strategy a modelling assessment framework was established as shown in Figure 7-3. The overall transport assessment framework was undertaken with Key Performance Indicators (KPIs) metrics being assessed at each tier of the transport modelling framework.

A comprehensive analysis of the modelling process is provided in the accompanying Transport Modelling and Assessment Report in Appendix C. A synopsis of some of the key outcomes is provided in Part C of this Report.

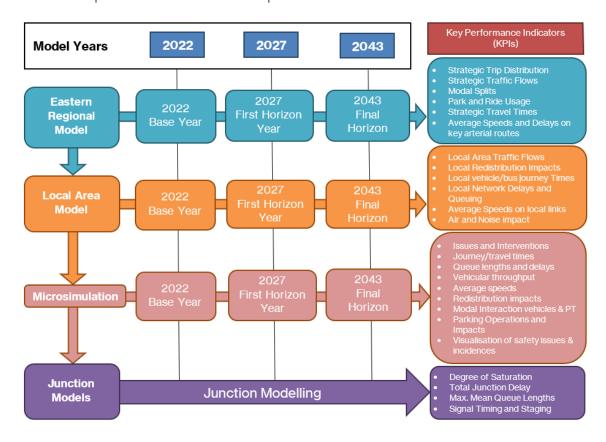


Figure 7-3: Transport Modelling Assessment Framework.



# Part B | The Strategy



## 8 Active Travel Strategy Overview

## 8.1 Introduction

Part B of this document summarises the recommendations of the Strategy that have been informed by the analysis summarised in Part A and supporting documents in Appendix A-D.

Figure 8-1 illustrates a high-level Movement Strategy for Balbriggan that is conceptual in nature, helping to define the movement function of streets and roads in Balbriggan in accordance with DMURS. The Strategy generally aims to:

- Maximise the accessibility and permeability for people walking, wheeling and cycling throughout Balbriggan.
- Discourage unnecessary vehicular through-traffic in the central urban core, by promoting the consolidation of offstreet car parking areas in accessible areas such as Bremore, Dublin Street and Bath Road car parks.
- Reallocate public space throughout to help realise the measures outlined in Fingal County County's ambitious Our Balbriggan Rejuvenation Plan.



Figure 8-1: DMURS Street Hierarchy & Concept Movement Strategy.

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## 8.2 Street Hierarchy

A Street Hierarchy is a conceptual hierarchical arrangement of streets according to their function, from multi-modal roads that cater for higher volumes of vehicular traffic, to more minor streets that primarily serve local access.

Setting out a clear Street Hierarchy for Balbriggan is critical to understand the movement function of each street.

The Design Manual for Urban Roads and Streets (DMURS) defines three main categories of this hierarchy as Arterial Streets, Link Streets, and Local Streets. Streets and roads within the Study Area will be required to have a multimodal function, prioritising sustainable modes in line with DMURS user hierarchy.

#### ARTERIAL STREETS

These are the major routes via which major centres/nodes are connected. In the context of Balbriggan, Harry Reynolds Road is the main Arterial Street and will perform a multi-modal function.

#### LINK STREETS

These provide the links to Arterial streets, or between neighbourhoods, and/or suburbs.

#### LOCAL STREETS

These are the streets that provide access within communities and to Arterial and Link streets. Most of the integrated street network within Balbriggan consists of Local Streets.

Greenway links will also be an important feature of Balbriggan's active travel network, providing attractive, safe pedestrian and cycle routes along Balbriggan's green spaces and water courses, including the Fingal Coastal Way, Mill Pond Park, and Clonard Brook Greenway.

The redevelopment of Mill Pond Park and the opening of the Park's entrance onto Bridge Street should be frontloaded to enhance permeability through the Town and access to green space.

The Strategy also proposes **Quietways**. These are walking and cycling routes that have been identified where vehicular traffic is generally quieter or not present at all.

The Strategy identifies the need for safe pedestrian and cycle connectivity on arterial and link roads. This includes making the case for segregated cycle facilities on hitherto shared roads and creating footways in areas that are currently lacking provision.

## 8.3 Transition Zone & Gateways

The Street Hierarchy is further supported by Gateways and Transition Zones:

- Gateway: Signal a change in context through materials, narrowing of the carriageway, or landmark features.
- Transition Zones: Area used for slowing vehicles when entering an urban area from a faster moving road.

Transition Zones and Gateways are used to demarcate a point of arrival. They are important placemaking tools as they form the 'first impression' of a place, as well as an trafficcalming tool as they inform drivers of a change in context ahead.

## 8.4 A People-Centre Town Centre Core

The Preliminary Movement Strategy aims to remove non-essential through-traffic from the town centre core to make it a calmer, more attractive people-friendly place to be. This will be achieved by directing vehicle movement around the Harry Reynolds Road and other routes, supported by filtered permeability and traffic calming techniques.

Within the core area, traffic calming measures are proposed with an emphasis on placeshaping and public realm led street design that prioritises people of all ages and ability to safely walk and cycle. Placemaking is the process of creating quality places that people want to live, work, invest and spend time in. It is based on a simple principle that if you plan for people and places, you get people and places. With and iudicious plan-making sensitive placemaking, increased traffic and congestion is not an inevitable result of growth. This will be bolstered by the wider Our Balbriggan Public Realm Strategy.

## 9Active Travel Network



## Did you know?

Walking and cycling improves our health and saves the HSE €29.2m every year - equivalent to 530,000 GP appointments.

Source: 2021 Walking and Cycling Index., Sustrans & the NTA.

### 9.1 Introduction

The following chapter sets out the Strategy's proposals for Balbriggan's active travel network in the short-, medium-, and long-term.

Active travel, i.e., walking, wheeling, cycling and scooting, is the most sustainable form of mobility, and can benefit both you as an individual, as well as the environment in so many different ways.

Land use planning and the design of the built environment are key determinants of someone choosing to walk, wheel or cycle. The advent of the private car changed the way in which our urban areas function. Whilst car ownership was a symbol of freedom, wealth and independence, our streets became increasingly dominated by cars as a result and were designed in a manner that prioritised their movement and storage. This has led to many negative

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. This shift in focus is in line with recognition of the impacts that congestion and emissions have on the environment and people's quality of life.

### 9.2 Pedestrian Network

## Every journey begins with a walk.

Though often undervalued, walking links all modes of transport; for most people, journeys begin and end by walking and wheeling irrespective of other modes used and is therefore critical to the overall network. The terms 'pedestrian' and 'walking' in this Strategy are inclusive of all people using wheelchairs, mobility aids and buggies.

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 Design Manual for Urban Roads and Streets (DMURS) user hierarchy, the number of short journeys taken by car can be reduced. Well-designed facilities that follow desire lines and are legible to all users will assist in enabling walking journeys and improve the overall experience.

There have been a number of improvements to Balbriggan's public realm in recent years, however, there remains a range a of barriers to

walking across Balbriggan at present including insufficient footpath widths, street clutter, a lack of pedestrian priority at local junctions and a dominance of car traffic.

Balbriggan's compact urban form and its rich natural and built environment including the Mill Pond Park, Clonard Brook, and the Harbour lends itself to having significant potential to improve the pedestrian experience.

The public realm is a complex and dynamic place due to the many conflicting demands for the space. As a result, improving the pedestrian environment is multi-faceted and involves many elements. In this way however, small scale, inexpensive changes are of great value to pedestrians, including well maintained footways; dropped curbs; narrowed junctions; crossing places; reduced waiting times at signal crossings; and wayfinding and signs.

Barriers such as an absence of or narrow footpaths, lack of pedestrian priority at junctions, and car-dominated streets can discourage people from choosing to walk and wheel for the entire length of their journey, and instead encourage the use of the private car.

The inappropriate siting of car parking, street furniture and general visual clutter can create barriers to movement for people walking and wheeling and can create a generally unattractive environment. This includes bollards, pedestrian guardrails, signage and light poles which are now generally considered unnecessary to a high-quality public realm and town centre environment.

The Strategy sets out recommended measures to improve Permeability, Balbriggan's Active Travel Network, Junction Improvements, Traffic Management, and a suite of Supporting Measures which are all critical elements of transforming the pedestrian experience. Supporting Measures recommendations are set out in Section 16, and include taking a Healthy Streets approach, developing a wayfinding strategy, green infrastructure, universal design, and gender sensitive design - concepts that ensure our built environment and transport network are inclusive of all people regardless of age, ability, gender, etc. These are discussed in later chapters and should be read in conjunction with Active Travel Network.

Moreover, the Our Balbriggan Public Realm Strategy, a complementary document, will provide a framework and design guide for the delivery of public realm improvement schemes.

### Measure ATI

### Pedestrian Network

Fingal County Council will work with relevant stakeholders including Age Friendly Ireland, disability groups, and Green Schools, to improve the safety, accessibility, and attractiveness of the pedestrian environment of Balbriggan by implementing the following principles:

- Design all transport and public realm projects in line with the DMURS and Fingal Active Travel Strategy's User Hierarchy and design standards.
- Ensure that all projects concerning the public realm align with the principles set out in the Balbriggan Public Realm Strategy.

### Measure AT2

## Street Clutter Audit

Fingal County Council will work with relevant stakeholders to undertake a Street Clutter Audit with the aim of implementing a programme to remove unnecessary signage, poles and other obstacles which clutter the public realm and impede pedestrian movement.

## 9.3 Public Realm & Accessibility

The design of our streets and public spaces should be accessible to people of all ages and abilities. The following sections outlines some critical design considerations to support a safe and inclusive environment for people walking and wheeling.

Other aspects of urban design and placemaking in the public realm are outlined in **Chapter 16: Supporting Measures.** 

## Universal & Inclusive Design

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.

The features of universal design in the built environment are all encompassing and can include wide footpaths, tactile paving, dropped kerbs, places to rest, public toilets, a reduction in street clutter, shade and shelter, a reduction in conflict between modes, etc.

Universal Design is the design of an environment so that it can be accessed, understood and used to the greatest extent possible by all people regardless of their age, size, ability or disability, including physical, cognitive and sensory. Fingal County Council will ensure that the principles of Universal Design are followed and embedded within the design and delivery of public realm and streetscape improvements throughout Balbriggan.

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 places to pause such as a sensory garden.

Improvements to the public realm and pedestrian environment throughout Balbriggan will be supplemented by regular Walkability Audits, undertaken with a variety of stakeholders to ensure the design considers all perspectives.

National guidance documents such as DMURS, the National Disability Authority's (NDA) Centre for Excellence in Universal Design will be used by Fingal County Council to ensure that active travel and public realm schemes in Balbriggan are fully accessible for all.





Image 9-1: Example of a Sensory Garden in Gorey, that has been designed to appeal to the 5 senses, and offers visitors a calm place to connect with nature. These spaces can be particularly beneficial for people who have sensory processing issues, are neurodiverse or those with a cognitive impairment, and could be developed in Mill Pond Park or Bremore Regional Park.

## Measure AT3

## Universal Design & Accessibility

Fingal County Council will ensure that active travel and public realm schemes are fully accessible for all through the following actions:

- Creation of a stakeholder group with members of Age-Friendly Ireland, disability groups, youth groups, Green Schools and other stakeholder groups to improve the safety, accessibility, and attractiveness of the pedestrian environment of Balbriggan.
- Design all active travel and public realm projects in line with the DMURS and other national guidance documents.

It is also important for our public spaces and transport networks to be 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 including *Travelling in a Woman's Shoes*, the Healthy Streets Approach, Age-Friendly Ireland, and the Child-Friendly Cities Initiative.



Image 9-2: Example of a well-lit accessible taxi rank with seating for those waiting. Source: Centre for Excellence in Universal Design.

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.

Travelling in a Woman's Shoes was produced by Transport Infrastructure Ireland (TII) in 2020 and highlighted these realities for women in an Irish context.

75%
of women in Ireland jog or walk faster as a safety precature at night. Nearly 50% take a different route or will even walk longer distances in order to feel safer.

Source: Plan International Ireland (2018), Safer Cities Report.

It included a call to action to

consider women's needs in the formation of Ireland's future transport policy and infrastructure provision. The 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. This will be an important design element for Mill Pond Park, the Harbour and Bremore Regional Park, for example. Consideration needs to also be given to the ecological impact of any lighting, particularly in these areas.

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.

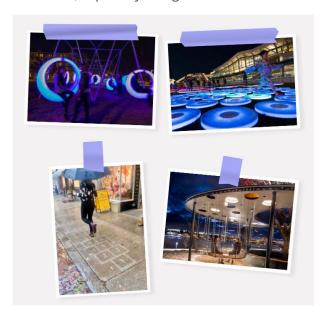


Image 9-3: Reference projects co-designed by girls, such as 'Swing Time', 'Cosmons:2020', 'Rainworks', and 'Frizon'. Source: What makes a girl-friendly city?, A Level Playing Field.

**Clear Sightlines:** Perceptions of safety increase markedly if people can see ahead and around them, and if other people are visible to them. The arches associated with the railway line running through Balbriggan have poor sightlines, and have been cited by the local community as a safety concern.

**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.

## 80%

of public spaces can be dominated by boys from the age of 8.

## 93%

of girls age 14-15 in Ireland are not meeting recommended physical activity levels.

### Measure AT4

## Safety & Inclusion in Public Spaces

Fingal County Council will ensure that all streetscape and public realm improvements follow the principles of Universal Design.

Fingal County Council will also strive to ensure that public realm and transport schemes consider the safety and perception of safety of public space, as well as inclusive design to ensure that all members of the community feel welcome and safe.

## 9.4 Cycle Network

Balbriggan is well-suited to making cycling the mode of choice; its topography (for the most part), its compact form, and green and blue corridors are ideal for unlocking this potential.

However, there is a lack of dedicated, segregated cycle facilities that are safe and attractive for people of all ages and abilities.

Figure 9-2 illustrates the locations of existing infrastructure, which is concentrated along the Inner Relief Road at Stephenstown, Hamilton Road, Drogheda Street and Hamlet Lane. This effectively shows the piecemeal nature of the existing cycle network. Upcoming projects which are being actively progressed such as the Harry

Reynolds Road, Quay Street, 'Main Street' and the Fingal Coastal Way will contribute significantly to the creation of a more joined-up comprehensive network that caters for end-to-end journeys. Connectivity to the Railway Station will be an important link in this regard, to facilitate multimodal trips, particularly those commuting to nearby towns and Dublin City Centre.



Figure 9-1: Existing Cycle Facilities in Balbriggan.

The Balbriggan Active Travel Strategy recognises the Cycle Network proposed for Balbriggan under the Greater Dublin Area Cycle Network Plan, as illustrated in Figure 9-2.

Under the GDA Cycle Network Plan, the Primary Routes identified, Harry Reynolds Road, Clonard Street and Mill Street together provide a northsouth, east-west spine through Balbriggan. Fingal County Council successfully gained permission for the Harry Reynolds Road Pedestrian and Cycle Scheme in 2021 where work commenced early in 2023. The Scheme will provide an active travel link between Drogheda Street and Hamilton Road, serving 3 school campuses at Ardgillan Community College, St. Mologa's and Balbriggan Educate Together National School, as well as offering a safe cycling and walking route to shops, childcare facilities and community amenities including Millpond Park and Flemington Community Centre. This Primary spine will be supported by a series of Secondary, Greenway and Quietway routes.



Figure 9-2: Balbriggan Cycle Network Plan. Source: Greater Dublin Area Transport Strategy 2022-2042.

## 9.5 Overall Active Travel Network

Figure 9-3 illustrates the overall Active Travel Network for Balbriggan. It is informed by the GDA's Cycle Network with a number of amendments based on a review of land use objectives, further analysis, and other measures.

Table 9-1 sets out some high-level recommendations / considerations for each route.

The Balbriggan Active Travel Strategy also proposes a series of supporting measures for walking, wheeling and cycling in Balbriggan such as wayfinding, high-quality parking, and the expansion and piloting of micromobility public sharing schemes. These are discussed further in Section 9.8 and 9.9, as well as Chapter 16.

## Measure AT5

## Balbriggan Active Travel Network

Fingal County Council will work in collaboration with the NTA and other stakeholders to deliver the Balbriggan Active Travel Network by 2034. High level recommendations are outlined in Table 9-1.

Each scheme will be subject to a separate individual feasibility assessment and design process to determine the type of facility and additional infrastructure requirements.



Figure 9-3: Balbriggan Active Travel Network Plan.

Table 9-1: Summary of Active Travel Network Recommendations for Balbriggan.

I.D.	Street / Road	Category	Recommended Measures
BAT1	Harry Reynolds Road	Primary	<ul> <li>Designated a Primary Cycle Route under the GDA Cycle Network Plan.</li> <li>Implement upgrade of local junctions and roundabouts to support pedestrian and cycle priority at Chapel Street</li> <li>Formal pedestrian crossing at junction/desire line with Clonard Rise etc.</li> <li>Provide integration with Clonard Brook Greenway</li> <li>Part 8 Approval for a Pedestrian and Cycle Scheme. Construction commenced in Q2 2023.</li> </ul>
BAT2	R132 (between Flemington Lane/Bremore and Lambeecher/Brecan Close)	Primary	<ul> <li>Transition Zone Treatment from Bremore Cottages/Cardy Rock Road to give visual cues that one is entering/leaving the Balbriggan urban area.</li> <li>Upgrade existing segregated cycle lanes on both sides and continue up until the proposed Gateway at Lambeecher Road / Brecan Close junction.</li> <li>Upgrade and widen toucan crossings</li> <li>Provide additional crossings to cater for desire lines, e.g. Bremore Castle &amp; Regional Park, St. Molaga's National School.</li> <li>Upgrade local junctions in accordance with DMURS to provide for pedestrian and cyclist safety and priority.</li> <li>Reduce general traffic lane widths to c. 3m each to accommodate bus movement, and enable widening of ped / cycle facilities.</li> </ul>
ват3	Drogheda Street / Bridge Street / Dublin Street	Primary	<ul> <li>Designated a Secondary Cycle Route under GDA Cycle Network Plan, however seen as an important active travel route for both pedestrians and cyclists.</li> <li>Traffic calming and speed limit reduction are recommended, at a minimum between Lambeecher and Old Market Green, reinforced by Gateway Treatments.</li> <li>High place value along Balbriggan's Main Street, therefore public realm led design and reallocation of space from carriageway and on-street parking will be required to improve pedestrian and cycle environment.</li> <li>Additional high-quality short-stay and long-stay cycle parking required where space allows.</li> </ul>
BAT6	Chapel Street / Clonard Road	Primary	<ul> <li>See Priority Projects for Chapel Street Low Traffic Neighbourhood / Filtered Permeability Project in Section 15.</li> <li>Create a Safe Route to School around Pine Ridge - Saints Peter and Paul NS and Balbriggan Community College.</li> <li>Upgrade local junctions tightening in line with DMURS, in particular, Chapel Crescent, Chapel Ct and Fullam Street.</li> <li>Upgrade R122 / Castle Link Road / Naul Road junction in line with DMURS to provide a safer environment for pedestrians and cyclists (adjacent to St. George's National School).</li> </ul>

ВАТ7	Castlemill Links Road	Primary	<ul> <li>Designated Greenway Route under GDA Cycle Network Plan, however the Strategy has suggested to upgrade to Primary due to the proximity to St. George's National School, Coláiste Ghlór na Mara, Balbriggan Educate Together National School, Flemington Community Centre, Castle Mill Shopping Centre, and many residential areas.</li> <li>Existing shared pedestrian and cycle path on both sides between junction with Clonard Road and Moylaragh Road.</li> <li>Recommended that this is extended northward to junction with Hamlet Lane/The Rise.</li> <li>Improve local junctions for pedestrians and cyclists, e.g., R122/Castlemill Link Road, Clonard Road, including build-outs, tightened junction corner radii, removal of staggered crossings/slip lanes and guardrails in line with DMURS.</li> <li>Improve the look and feel of the road including perception of safety, addressing inactive frontage/poor permeability to residential estates due to continuous blank walls and fences.</li> </ul>
ВАТ8	Hamilton Road	Primary	<ul> <li>Designated Secondary Route in the GDA Cycle Network Plan, however the Strategy has suggested to upgrade to Primary due to proximity to the Education Campus of Bracken Educate Together, Gaelscoil Baile Brigin, and Argillen College, as well as Balbriggan Retail Park and future Castlelands Masterplan area.</li> <li>Existing shared pedestrian and cycle path on both sides.</li> <li>Recommended at least one crossing along route, e.g. an informal raised toucan crossing by Hyde Park FC.</li> </ul>
BAT4	Quay Street	Secondary	<ul> <li>Additional route to the GDA Cycle Network Plan.</li> <li>Important link between Mill Pond Park, Bridge Street and the Fingal Coastal Way.</li> <li>Traffic calmed one-way street with a contra-flow cycle lane.</li> <li>Wayfinding from Mill Pond Park &gt; Bridge Street &gt; Quay Street &gt; Harbour/Fingal Coastal Way.</li> <li>In part being delivered through the Quay St &amp; Environs Part 8 Scheme.</li> </ul>
BAT5	Railway Street	Secondary	<ul> <li>Reverse direction of vehicular movement, i.e., one-way westbound, to form a clockwise system with Convent Lane.</li> <li>Reallocate some on-street car parking on southern side of street to provide a contra-flow cycle lane.</li> <li>Provide a safe crossing between Balbriggan Train Station and Railway Street.</li> <li>Improve vista to station &amp; Funeral Home building on Drogheda St.</li> </ul>
ВАТ9	Hamlet Lane	Secondary	<ul> <li>Upgrade and extend existing cycle facilities in place.</li> <li>Upgrade local junctions in accordance with DMURS to provide for pedestrian and cyclist safety and priority.</li> <li>Provide informal toucan crossings.</li> <li>Take the O'Dwyers GAA masterplan into consideration – provide safe, high-quality ped/cycle access.</li> </ul>
BAT10	Flemington Lane / Bremore Cottages	Secondary	<ul> <li>Secondary Cycle Route under GDA Cycle Network Plan.</li> <li>Provide pedestrian and cycle facilities where space allows to improve connectivity to existing and zoned residential areas.</li> <li>Upgrade local junctions in accordance with DMURS to provide for pedestrian and cyclist safety and priority.</li> </ul>

BAT11	Clonard Blvd Rd / Inner Relief Rd	Secondary	<ul> <li>Designated a Secondary Cycle Route under GDA Cycle Network Plan.</li> <li>Existing shared pedestrian and cycle path in place.</li> </ul>
BAT12	R127 Old Market Green	Secondary	<ul> <li>Additional route to the GDA Cycle Network Plan.</li> <li>Connects the R127 Skerries Road / Fancourt Road with the R132 / Main Street.</li> <li>Connects to LIDL, large residential area, and to St. Teresa's Catholic Primary School.</li> </ul>
BAT13	Castlelands Link to R127	Secondary	<ul> <li>Objective of the Fingal Development Plan 2023-2028 and Castleland Masterplan.</li> <li>Ensure provision is made at the future design stage of this road for multi-modal travel, i.e., high-quality pedestrian and cycle facilities, and that it is designed in accordance with DMURS.</li> </ul>
BAT14	R132 (south of HRR roundabout)	Secondary	<ul> <li>Designated Secondary Route by the GDA Cycle Network Plan.</li> <li>Existing bi-directional cycle track in place as far as Balbriggan Retail Park.</li> </ul>
BAT15	Mill Pond Park	Greenway	<ul> <li>Public Park to be delivered as part of the Heart of Balbriggan project (see Section 15).</li> <li>See Priority Projects for further details.</li> <li>Green Corridor between Mill Pond Park and Fingal Coastal Way – raised table at Bridge Street / Quay Street junction.</li> <li>New park entrance at Bridge Street / Quay Street – The Heart of Main Street – Green Corridor' project. This will also involve the removal of derelict properties on Bridge St. and a boardwalk structure to connect to the existing Mill Pond Park.</li> <li>Existing paths do not always follow desire lines/circuitous. Create safer, more legible connections between Main Street and Mill Pond Park via Vauxhall Street, St. Paul's Crescent, and the Dublin Street carpark. Pedestrian priority/entry treatment through to Mill Pond Park by widening path for pedestrians and cyclists, improved lighting, visibility, and wayfinding (e.g., using gable wall on Clonard Street for mural/living wall to give a visual cue). Consider additional permeability opportunities.</li> <li>Improved cycle surfacing through the Park – either through separate cycle lanes and/or wider shared paths.</li> </ul>
BAT16	Clonard Brook	Greenway	See next section for details.
BAT17	Chieftain Drive	Greenway	<ul> <li>Part designated Greenway Route by the GDA Cycle Network.</li> <li>Green route connecting residential areas with Balbriggan Educate Together NS, Flemington Community Centre to the west, and Main St., Bremore Regional Park, and St. Molaga's to the east.</li> </ul>
BAT18	Fingal Coastal Way	Greenway	<ul> <li>Greenway Route under GDA Cycle Network Plan extending from Donabate to north of Balbriggan.</li> <li>FCC is currently in the process of undertaking the route selection process.</li> </ul>

## 9.6 Clonard Brook Greenway

The Clonard Brook runs in a southwestnortheast direction via green space between estates and culverted under roadways, before reaching the sea. The potential for the Clonard Brook Greenway was first initiated by the Taylor Hill Residents Association and has promoted it as part of a vision for an orbital active travel trail via residential and industrial estates, Bremore Castle, Mill Pond Park, Town Centre, the Railway Station, and the Harbour. This project has significant potential to connect many key origins and destinations, largely via attractive, off-road facilities - boasting the potential for a myriad of benefits, including the creation of a blue and green corridor for people's wellbeing, biodiversity, placemaking, stewardship, etc.



While informal paths and connections along the route exist, formal implementation of the greenway and accompanying placemaking measures would positively impact the area's character and permeability, with additional opportunities to "daylight" the Brook.



## Measure AT6

## Clonard Brook Greenway

Fingal County Council will work in collaboration with the NTA, Taylors Hill Residents Association, and other stakeholders to investigate the feasibility of delivering the Clonard Brook Greenway.



## 9.7 Safe Routes to School

Traffic at the front of school during drop-off and pickup times presents



a safety hazard for school children and impacts significantly on local air quality. Congestion and parked cars can reduce visibility of children crossing the road, particularly those parking on footpaths which can further block access and reduce available footpath width, leading to overcrowding on footpaths or forcing children to walk on the road.

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.

The provision of Safe Routes to School is a key objective of the Fingal Active Travel Strategy, as well as the Fingal Development Plan 2023-2029 (CMO21).

The Strategy recommends a series of suggested proposals that will encourage people to walk and cycle to school, such as junction improvements and filtered permeability. The NTA's own Safe Routes to School Design Guide and Appendices provide case study examples from schools across Ireland as well as material specifications and visualisations.

Table 9-2: Indicative Recommendations for SRTS Initiatives. Further assessment is required for each individual scheme.

School	Strategy Indicative Recommendations
Loreto Secondary School Balbriggan	<ul> <li>Improve pedestrian environment on Brick Lane.</li> <li>Potential filtered permeability opportunity from Convent Lane/ Railway Station.</li> </ul>
St. Molaga's	<ul><li>Fingal Coastal Way.</li><li>Park and Stride at Bremore.</li></ul>
Saints Peter and Paul Primary School	<ul> <li>Create a Low Traffic Neighbourhood on Chapel St.</li> <li>Improve pedestrian environment on Pine Ridge.</li> <li>Filtered permeability from Drogheda Street/Main St.</li> </ul>
Balbriggan Community College	<ul> <li>Potential Park and Stride adjacent to Harry Reynolds Road/Millfield Shopping Centre in tandem with improved link between Clonard Rise and S.C</li> </ul>
Coláiste Ghlór na Mara	<ul> <li>Improve junction at Clonard Rd/Castlemill Link Road.for pedestrian and cyclists in accordance with DMURS.</li> </ul>
St. George's N.S.	<ul> <li>Provide filtered permeability from the residential areas around Taylor Hill Way to the schools.</li> </ul>
Scoil Chormac CNS	<ul> <li>Provide pedestrian crossings adjacent to the bus stop/entrance to the school.</li> </ul>
Bremore Education Together	<ul> <li>Improve junction at Clonard Rd/Castlemill Link Road.for pedestrian and cyclists in accordance with DMURS.</li> </ul>
Bremore Education Together N.S.	<ul> <li>Improve filtered permeability between surrounding residential areas such as Brackenwood Avenue, Martello View, Taylor Hill Green and the school to increase walking and cycling catchments.</li> </ul>

## **Benefits of SRTS**

The introduction of a School Streets Zone in Fingal resulted in a 20% reduction in air pollution in the immediate area of the Zone.

## Measure AT7

#### Safe Routes to School

Fingal County Council in collaboration with the NTA Safe Routes to School programme will support schools in the delivery of Safe Routes to School initiatives across Balbriggan. It is recommended that Green School Front of School and Walkability Audits are undertaken by all schools within Balbriggan to inform optimal solutions for each individual school's needs.

Another key element that is often undervalued to improving active travel to schools, is around behavioural change and education. Initiatives

such as Fresh Air Fridays, cycle training courses, or the Green Schools Travel modules can promote parents and schoolchildren to try out more sustainable modes of travel to school occasionally which may in turn lead to modal shift.

The images to the right present some examples of initiatives

that have been delivered in recent years funded by the SRTS programme. These images have been taken from the NTA's own Design Guide and Annual Report 2022.

The introduction of a School Streets Zone in Malahide resulted in a 43% modal shift from car travel to walking and cycling.

#### **Quick-Build School Zone**

- Carriageway narrowed to 6m; coloured surfacing applied within School Zone (buff colour HFS shown).
- Raised platform at Gateway.Gateway totem on each side of
- School Zone Banner.
- Raised courtesy/school warden crossing.
- 6 Mobile planter boxes.
- Potential micro-art.
- Seating.



Figure 9-4: Illustration of an Example Quick Build School Zone.



Image 9-4: School Street at An Mhodhscoil, Roden Street, Limerick City and Sheltered Cycle Parking funded by Safe Routes to School Programme.



Image 9-5: Micro Art as part of a School Zone at Rushbrooke, Co. Cork.

## 9.8 Cycle Parking & Micromobility

Provision of secure, accessible parking is essential to support the development of cycling, scooting and other forms of micromobility as a practical transport choice. A lack of appropriate parking facilities is often cited as a barrier to cycling and cycle ownership and could be a constraint on the future growth and undermine investment in Balbriggan's overall cycle network.

Ample high quality secure parking for all types of micromobility therefore, is a key element of any strategy and is just as important as other forms of infrastructure.

Different types of cycle parking solutions are required to cater for different types of users

Did you know?

Cycle parking delivers 5x the retail spend per square metre than the same area of car parking.

Source: Raje & Saffrey, 2016

depending on the location and trip purpose such as short- and long-stay parking.

Cycle parking should also make appropriate provision for different designs of bicycles and other forms of micromobility such as cargo bikes, adaptative bikes, scooters, etc. in line with Objective CMO9 of the 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). Providing more secure cycle parking is a Key Outcome for Fingal's Active Travel Strategy.



Image 9-6: Parking area for cargo bikes.

The Strategy recommends a significant uplift in the quantity, quality, and variety of parking in Balbriggan for personal and shared micromobility.

Cycle parking needs to be a key consideration for any new development. Through the planning

process, high quality cycle parking should be regarded as an integral part of a scheme, an essential part of the attraction of a development – never just an add-on to meet minimum policy requirements.

In general, cycle parking should be:



**Fit for purpose**: meeting identified current and future demand, with an appropriate balance of short-stay and longer-stay provision and accommodating all types of cycle.



**Secure**: stands in visible, well-lit places that have high levels of natural surveillance.



**Well-located**: convenient, accessible, as close as possible to the destination, and sheltered from the elements.



## Short-Stay Parking

Short-stay bicycle parking are designed for ease of use by the public and visitors to a development. Such bicycle parking spaces should be located in highly visible areas with good passive surveillance, which are easy to access and well lit. They should ideally be situated no further than 15m from main entry points.

Increased short-stay cycle parking provision is recommended at the following locations:

- Town Centre.
- Castlemill Shopping Centre.
- Millfield Shopping Centre.
- Mill Pond Park.
- Bremore Regional Park.
- Fingal Coastal Way.

## Long-Stay Parking

Long-stay bicycle parking is designed generally 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.

Increased provision is recommended at the following locations:

- Town Centre.
- Balbriggan Railway Station.
- Industrial estates such as Stephenstown, and Fingal Business Park.

### On-Street Cycle Parking

An emphasis is needed on not obstructing pedestrian desire lines and movement, or access for deliveries from shops and other premises. Care should also be taken to allow for car doors to open, if there is parking at the kerbside, and to avoid obstructing access or egress onto buses. Provision also needs to be made for visually impaired people to identify the potential obstruction that cycle parking stands on the footway represent.

In a street environment, cycle stands should be located in space taken from the carriageway wherever possible, inset or with island protection as necessary.

Where this is not possible, cycle parking on the footpath should be located in an identified zone adjacent to the carriageway, ensuring at least 1.8m is left available for pedestrians wherever possible (DMURS minimum).



Image 9-7: Bike hangar on space previously used for on-street parking. Hangars provide safe, secure, and sheltered parking for long-stay trips, such as residents of private development or commuters working in old town centre buildings with no space for bike parking. Source: DBFL.

## Cycle Hubs / Kiosks

Cycle hubs can offer high-capacity, secure and dry parking, typically for longer stays. Sometimes these hubs can also be equipped with other end-of-trip facilities such as storage, changing rooms, repair stations, etc.

Suggested locations where a Cycle bub / kiosk may be suitable in Balbriggan include:

- Railway station.
- Town Centre (see Use of Vacant Town Centre Buildings).
- Large employment areas such as Stephenstown Industrial Estate or Castlemill Education Centre.



Image 9-8: High-capacity bicycle parking kiosks/hubs.



Image 9-9: St. James' Hospital is a recent example of a large employer in Dublin that has provided a Central Cycle Hub, located close to the main staff entrance. BleeperBikes are also housed in this Hub and are available for staff for work related travel.

## Use of Vacant Town Centre Buildings

The use of vacant buildings for sheltered, secure bicycle parking is becoming increasingly common across Europe with numerous examples of different models in the Netherlands and the UK. Most are funded by the local authority, some operated by an external organisation, with others championed by the local business association.

The use of vacant buildings not only improves the vibrancy of the streetscape, but also supports the local economy.

In The Hague, a local business association took a lease out on a vacant shop to provide free cycle parking. The facility is centrally located and is open 7 days a week, from 7:30am to 1:30am.



Image 9-10: Use of vacant building for cycle parking hub and repair station in Carnaby, London.

Another example from Utrecht allows people to subscribe annually and have access 24/7 with an electronic key.



Image 9-11: Cycle parking hub in a previously vacant building in Den Haag.

The Strategy recommends that Fingal County Council and other organisations such as the Balbriggan Chamber of Commerce investigate the potential "meanwhile use" of vacant buildings in the Town Centre for an indoor parking hub.

### Measure AT8

### Balbriggan Cycle Parking Facilities

Fingal County Council will:

- Support an uplift in both high-quality short-stay and long-stay public cycle parking throughout Balbriggan Town Centre and key destinations such as Mill Pond Park, Quay Street, the future Bremore Regional Park and Railway Station which is envisaged to play a significant role in multi-modal interchange.
- Through Safe Routes to School Programme and Smarter Travel Workplaces, existing schools and employment hubs should be encouraged to increase and improve cycle parking facilities where required.
- Ensure the provision of off-street, accessible cycle parking facilities as part of any significant new development.
- Adopt innovative practices such as onstreet bike hangars and the use of indoor vacant spaces for dedicated public off-street bike parking hubs that are secure, sheltered and easily accessed.

## 9.9 Shared Micromobility Schemes

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 Balbriggan and leave BleeperBikes at Swords, 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 do 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.



The Strategy recommends the continued monitoring of the participation in this Scheme, with a view to its expansion as improvements to the walking and cycling network are realised at:

- Fingal Coastal Way.
- Bremore Regional Park.
- Railway Station.

## Measure AT9

## Shared Bike Systems & Micromobility

Fingal County Council will work with the NTA and other stakeholders to:

- Continue to monitor the use of shared schemes and improve scheme accordingly.
- Establish the feasibility of extending the BleeperBike and/or TIER scheme.
- Establish an e-scooter pilot scheme(s) once legislation permits.
- Proactively ensure careful siting of dedicated e-bike and e-scooter parking areas at key destinations such as the Town Centre, Mill Pond Park, Castlemill Shopping Centre, and Quay Street area that do not inhibit pedestrian movement.

## 10 Permeability



Image 10-1: Filtered Permeability in Bishopstown, Cork. Source: DBFL.

## Street networks should...

be designed to maximise connectivity between destinations to promote higher levels of permeability and legibility for all users, in particular more sustainable forms of transport.

Design Manual for Urban Roads and Streets

## 10.1 What is Permeability?

Permeability describes the extent to which an urban area allows the movement of people by either walking or by cycling. Filtered permeability is not concerned with motor vehicles but rather it focuses on providing a competitive advantage to pedestrians and cyclists over the use of cars – a key component of any transport network that aims to promote a modal shift and create more walkable environments.

Filtered permeability measures aim to shorten people's journey by walking or wheeling, reduce people's exposure to motor traffic and its associated noise and air pollution, and generally create a more people-friendly environment that is safe and attractive. Filtered permeability techniques can include:

- Closure of existing streets to vehicular traffic using planting, bollards, etc.
- Providing a link for pedestrians and cyclists only via existing cul-de-sacs or through fences/blank walls.
- Providing a link for pedestrians and cyclists via green areas or along water courses.

The Strategy identifies a series of filtered permeability opportunities across Balbriggan to maximise connectivity and accessibility for people walking and cycling.

The street design of many of Balbriggan's newer residential developments acts as a disincentive to walking, wheeling, cycling or taking public transport. These developments are often built with one connection to a main road, a high number of dead ends and cul-de-sacs, and intersections that are far from each other. This pattern of street layouts, or *Disconnected Street Development*, is common throughout the country.

Permeability connections will also offer opportunities for placemaking, providing neighbourhoods with places to gather and allowing children to play in or close to the street (see Playful Streets in Section 16.2).

## 10.2 New Connections to Create / Enhance Permeability

The Strategy has identified a series of filtered permeability opportunities across

Balbriggan to maximise connectivity for people walking and cycling.

Some of these exist in an informal sense but are often illegible, are not fully accessible for all ages and abilities, perceived to be unsafe and are of limited value in inclement



weather. These are highlighted in Figure 10-1 and summarised in Table 10-1.



Image 10-2: Filtered Permeability in a Residential Area to the Ballybrack Greenway. Source: DBFL.

## Measure PYI Permeability

It is an objective of Fingal County Council to create a fully permeable environment for pedestrians and cyclists across Balbriggan by working with relevant stakeholders such as land owners, the National Transport Authority and Irish Rail.

Fingal County Council will ensure that filtered permeability is secured in all new residential areas from the outset such as Flemington Lands and Castlelands, and commercial developments to provide an advantage over the private car.



Figure 10-1: Map of Permeability Opportunities in Balbriggan.

Table 10-1: New Connections to Create / Enhance Permeability in Balbriggan.

Green space between Chieftain's Drive and Moylaragh Road	<ul> <li>A green space bounded by Chieftain's Drive and Moylaragh Road presents an opportunity for a pleasant route for pedestrians and cyclists to travel between the surrounding residential estates, and the nearby Flemington Community Centre, Balbriggan Educate Together National School and Castle Mill Shopping Centre, for example. While there is a partial tree-lined path already in-situ, it is recommended that this path is extended to connect east-west and north-south following desire lines.</li> <li>Crossing points should also be provided for on the surrounding streets.</li> </ul>
Newhaven Rise to Dún Saithne Park	<ul> <li>Located to the northwest of the town centre, two neighbouring residential areas Newhaven Rise and Dún Saithne Park are disconnected by boundary walls / cul-de-sacs. It is recommended that filtered permeability for people walking and cycling is implemented here to improve connectivity.</li> </ul>
Westbrook Lawn and Prospect Naul to R122	• A number of new connections have been made to make it easier to walk or cycle between residential estates north of the R122 and the rest of Balbriggan. Two more connections (No. 3 and 4) could be made here to further improve permeability between residential areas and Millfield Shopping Centre, schools and the centre of Balbriggan.
Colaiste Ghlor na Mara/St George's National School to Harry Reynolds Rd	<ul> <li>An informal route exists here, but a dedicated tree-lined W-NE pedestrian and cycle link between the Castlemills Link Road (near Hampton Gardens Dr) to the Harry Reynolds Road would improve accessibility to schools.</li> </ul>
Temple Ville, Chapel Grove, Chapel Close and Chapel Gate to Harry Reynolds Rd	<ul> <li>A number of connection points along Harry Reynolds Road offer shorter journeys for pedestrians and cyclists, making walking and cycling more attractive transport options.</li> </ul>
Hamilton Road to Old Market Green	<ul> <li>A legible N-S connection between the Hamilton Road and Old Market Green would facilitate access to the Balbriggan Primary Care Centre, Glebe North FC, Montessori, Curran Park residential area and Lidl improving on the existing dog-leg path.</li> </ul>
Drogheda St. to Balbriggan Community College/Pine Ridge	<ul> <li>A safe link from Drogheda St. to Balbriggan Community College and Saints Peter and Paul JNS Catholic Primary School would help improve access for schoolchildren walking and cycling. A new link is needed between Drogheda Street and Balbriggan Community College. A connection exists between Balbriggan Community College, Pine Ridge and Saints Peter and Paul JNS Catholic Primary School, but the connection could be improved to ensure pedestrian and cyclist comfort and safety.</li> </ul>
Mill Park Pond Route	A route through Mill Park Pond Park for pedestrians and cyclists offers an alternate route away from motor traffic emissions and noise.
Flemington Park to Hastings	<ul> <li>Potential to connect Flemington Park and Hastings Avenue residential areas via a pedestrian and cycle path to improve connectivity for residents to destinations such as Castle Mill Shopping Centre, Flemington Community Centre and Balbriggan Education Together National School.</li> </ul>
Hampton Woods to Ashfield Rise	<ul> <li>Increases neighbourhood permeability and offers a quieter route for pedestrians and cyclists.</li> </ul>
Church Street to Seapoint Lane	• Improvement of the existing underpass would improve user security and create another high-quality connection point between the town centre and the coat.



Image 10-3: Filtered permeability Hackney incorporating street trees. Removable bollards allow access for emergency vehicles when required.



Image 10-4: Example of a modal filter. Removal bollard allows easy access for emergency and other vehicles when required. The modal filter is enhanced using planting, a change in materials, and street trees.



Image 10-5: Creative use of lighting within an archway to promote safety as well as promoting an interesting and attractive streetscape.



Image 10-6: Existing filtered pemeability in Balbriggan between Covetown and Bremore Court. School children are seen to be using it, possible from the nearby primary schools. Source: Google Streetview, 2023.



Image 10-7: Existing filtered permeability in Balbriggan in Bremore Castle. Source: Google Streetview, 2023.



Image 10-8: Filtered permeability between residential areas and the Ballybrack Greenway, Cork. Source: DBFL.

## 11 Public Transport Network



### 11.1 Overview

Balbriggan is relatively well served by public transport, with a centrally located railway station, a local urban bus route and several regional and Local Link services. However more public transport capacity and coverage will be needed in future years to overcome existing gaps in coverage and to address a lack of public transport options to key commuter destinations within the County and wider Greater Dublin Area, as identified in such key policy as the Greater Dublin Area Transport Strategy 2022-2042.

Public transport is anticipated to play an important role in Balbriggan to support new developments which have been recently realised or permitted on the outer fringes such as Taylor's Hill, the Castlelands Strategic Housing Development, and Flemington Lands. Moreover, accessibility to the Train Station by public transport and active travel modes and onward connectivity to surrounding areas will be a key consideration.

This chapter sets out a number of relevant recommendations to address and enhance Balbriggan's public transport offering.

## 11.2 Multi-Modal Interchange Hub

The *All Island Strategic Rail Review 2023* identified Balbriggan rail station as one of the busiest in the country with around 1.3 million passengers a year at the time. At present, the Station is served by the Dublin – Dundalk Commuter, and DART and Dublin Commuter routes.

The Station is well-located in the heart of Balbriggan's Town Centre, and passengers enjoy a scenic arrival and departure along the coastline and Harbour area.



Image 11-1: Balbriggan Train Station.

The transformation of Balbriggan's Railway Station and nearby Railway Street is identified by the Our Balbriggan Rejuvenation Plan. This Strategy supports this project, and envisages the regeneration of Balbriggan's Railway Station as a first-class multi-modal interchange hub and focal point for local and regional sustainable mobility.

The Baseline Assessment identified a number of issues with the Railway Station as it is currently, predominantly the design, accessibility and legibility of the Station Yard and the poor connectivity between the Station and the Town Centre.

Proposals for the Railway Station, Railway Street and the Station Yard to address these issues are set out in further detail in Chapter 15.

## Measure PTI

## Multi-Modal Interchange Hub

Fingal County Council will liaise with Irish Rail, the National Transport Authority, and other stakeholders to reconfigure and redevelop Balbriggan Railway Station as a high-quality multi-modal interchange hub. See Chapter 14 for further details.

## 11.3 Balbriggan's Bus Network

## Regional and Local Bus Services

A number of regional and local bus services currently operate via Balbriggan connecting it to nearby villages, towns, Dublin International Airport, and Dublin City Centre, including:

- 101 Dublin City to Drogheda Bus Éireann
- 33 Lower Abbey St. to Balbriggan –
   Dublin Bus
- 192 Local Link Louth Meath Fingal
- 191 Stamullen to Balbriggan to Balrothery to Dublin City– Balbriggan Express Bus Service
- 195 Ashbourne to Balbriggan

However, the modelling process for this Strategy identified a need for more local **orbital bus services** to serve key commuter and education centres across Fingal including Dublin Airport, Blanchardstown and Swords. Fingal County Council will therefore continue to work closely with the NTA Service Planning Team and other stakeholders to expand the range of local services throughout the lifetime of this Strategy.

Balbriggan, with East Meath and Skerries, is identified by the GDA Transport Strategy as one of the seven Regional Core Bus Corridors (the M1, via Dublin Port Tunnel) to tie in with the proposed Dublin BusConnects corridor programme that will improve connectivity with

other key destinations across the Dublin Metropolitan Area by enhancing levels of bus priority.

Moreover, the Connecting Ireland Rural Mobility Plan, an NTA programme which promotes



sustainable travel and addresses gaps in connections to local and regional centres in rural Ireland anticipates a number of improvements to the Local Link services that operate in Balbriggan.

## Measure PT2

## Regional and Local Bus Services

Fingal County Council will liaise with the NTA Service Planning Team, Irish Rail, and FCC Planning Dept., and other stakeholders to:

- Support the delivery of relevant BusConnects Dublin and Connecting Ireland proposals for Balbriggan.
- Expand orbital bus coverage to key employment destinations within Fingal including Dublin Airport and Swords.
- Improve bus accessibility to the Rail Station.
- Improve frequency and timetables to align with rail services and school times.

## Balbriggan Town Bus Service

At present, there is one town bus service that operates in Balbriggan, the B1, between the Rail Station and Millfield Centre. It is operated by Bus Éireann and has 8 stops:

- Millfield Shopping Centre.
- Harry Reynolds Road (westbrook drive)
- Harry Reynolds Road (Ashfield Green)
- Hastings Green Roundabout
- Brega
- Hamlet Lane
- Balbriggan (opp. Garda Station)
- Balbriggan (Bath Road)
- Balbriggan (Apache Pizza)
- Balbriggan (Rail Station)



The Accessibility Review of Balbriggan's current transport network, demonstrated in Figure 2-7, identified opportunities for improving the catchment of the current local bus service. B1.

The Review concluded that changes are required to the existing alignment or new, expanded bus routes are needed in order to increase the catchment and provide public transport connectivity to recently developed or planned areas under the Fingal County Development Plan 2023-2029 such as:

- Taylor's Hill.
- Castlelands SHD development being progressed by the Land Development Agency.
- Flemington Lands which are subject to an upcoming Local Area Plan.

Any new residential development should provide a design and accessibility layout that maximises permeability and safe access to public transport.

The following principles should be followed in any additional routes:

- Routes should be as direct as possible, in order to offer competitive journey times in comparison with the car.
- Services should operate at a minimum of a 30-minute frequency, every day.
- Services should operate to a memorable and marketable 'clock face' timetable throughout the day.
- Timetables should be designed to integrate with other public transport services where appropriate.

- Services should offer a standard town service fare and accept leap or appbased tickets.
- Services should be legible and easy to use for both residents and visitors.

## Measure PT3

## Balbriggan Town Bus Service

Fingal County Council will liaise with the NTA Service Planning Team, Irish Rail, Community Groups, Elected Members, FCC Planning Dept., and other key stakeholders with a view to:

- Realign the existing B1 route to increase its catchment and capture more new residential areas including at a minimum, Taylor's Hill, Flemington Lands, and Castlelands SHD.
- Ensure that any new residential development designs an accessible layout that maximises permeability and safe access to public transport.
- Improve bus accessibility to the Rail Station.
- Improve frequency and timetables to align with rail services and school times.
- Investigate the second local bus route if future demand warrants it.

## Bus Stops and Shelters

Most bus stops across Balbriggan comprise simply of a bus stop pole; there are very few sheltered bus stops and many bus stops do not have timetables regarding the available bus services and time information.

Bus shelters play a valuable role in delivering accessibility and a sense of safety for passengers. *Transport for London* recommends the following elements in designing a universally accessible bus stop:

- Security: Providing a covered shelter is important to protect people from the weather, and adequate lighting is needed to help them feel more secure. Passive supervision and clear lines of sight can also improve safety.
- Green Infrastructure (GI): Green Infrastructure – including street trees, woodlands and green walls – can deliver environmental, economic and social benefits.
- Key Information: Providing up-to-date information can make users feel more comfortable and secure. This includes Real Time Information (RTI) and maps.
- **Legibility:** The bus stop post, and signage are important aids of legibility.
- Crossings: It may be necessary to provide additional dropped kerbs and / or crossing facilities at a bus stop.

Seating: Seating needs to be provided to assist mobility impaired passengers that do not use wheelchairs, such as older passengers. Space should be left for wheelchair users to park alongside the bus stop.

The siting and placement of bus stops and permeability between stops and key services is also crucial in the success of both existing and any future bus services.

## Measure PT4

## Bus Stops & Shelters

Fingal County Council will work with the NTA to ensure that each bus shelter that accompanies the new Town Bus Service will be consistent and legible and will include the following:

- Real Time Information (RTI) at key stops.
- Standardised bus stop signage and information panel.
- Accessible Kerbing.
- Seating and Lighting.
- Green Infrastructure where applicable.

FCC will ensure that permeability is secured between all existing and proposed bus stops with residential areas, schools, and key attractors as per Chapter 10.



Image 11-2: Living Bus Shelter by WVTTK Architects in Findhoven. Source: Inhabitat.



Image 11-3: Example of new TFI bus stop on Bridge Street, Cork City, which provides age-friendly benches, clear signage and timetable information. It has been designed sympathetically on the street to not take away from adjacent heritage buildings, or obscure business frontages.

## 11.4 Fares & Ticketing

Balbriggan is the northern most station within the Short-Hop Zone along the Belfast-Dublin corridor, which allows travellers to benefit from discounted fares when using a Leap Card. However, there is a significant fare disparity between Balbriggan and the next station to the north, Laytown.



For example, an adult day return fare to Connolly from Laytown is €16.90 and from Balbriggan, which is only one stop (*six minutes*) away, it is €8.75. A child's fare from Laytown is €5.80, but from Balbriggan, it is just 65 cent.

The National Fares Strategy published in 2023 aims to provide more affordable options on fares and ticketing for commuters in both the Dublin City Zone and Dublin Commuter Zone. The implementation of the National Fares Strategy is expected to take place over the next several years, due to the significant scope of the scheme.

## Measure PT5

## Review of Short-Hop Zone

Fingal County Council will work with Irish Rail, the NTA, and the Department of Transport to extend the Short Hop Zone beyond Balbriggan.

## Measure PT6

## Extension TFI 90 Minute Fare

Fingal County Council will work with the NTA, Irish Rail, and the Department of Transport to extend the TFI 90 Minute Fare to Balbriggan to encourage multi-modal travel.



## 12 Junction Improvements

#### 12.1 Overview

Junction design is largely determined by volumes of traffic and activity, and the design of junctions in Balbriggan has traditionally prioritised the movement of motorised vehicles. However, the Design Manual for Urban Roads and Streets (DMURS), adopts a more sustainably balanced approach to the design of roads and streets, with junctions included in its efforts to maximise safe and efficient movement of pedestrians and cyclists, as well as all other road users. Junctions are key nodes in our transport network, where our streets intersect, but because of this can be points of conflict between road users, especially between vehicles and people walking, wheeling and cycling, when not designed correctly.

At present, many of the junctions in Balbriggan are substandard, with designs that make them inaccessible, unsafe and unattractive for pedestrian and cyclists attempting to navigate them. A lack of adequate pedestrian crossings, kerbs or tactile paving, and overly wide corner radii and junction splays make some junctions highly hazardous, especially for more vulnerable individuals such as the elderly and those with disabilities.

#### 12.2 Junction Design Principles

As set out in DMURS, designers must take a more balanced approach to junction design to ensure that they are safe for all road users, with a particular focus on ensuring that junctions are fully accessible and inclusive for people who are walking and cycling.

In line with DMURS, the design of any new or retrofitted junction improvements on Regional and Local roads within the Study Area should:

- Provide safe and accessible crossings on all arms.
- Reduce kerb radii, thereby reducing crossing distances for pedestrians and slowing turning vehicles.
- Omit left turn slips, which generally provide little extra effective vehicular capacity and are highly disruptive for pedestrians and cyclists.
- Omit staggered crossings. Instead provide direct and single phase crossings.
- Minimise waiting with pedestrian cycle times as much as possible at signalised junctions.
- Safeguard movement of buses.

Critically, the design should have regard to the 'Context' and 'Function' of the street.

Local junctions such as entrances to development or side roads should also be reviewed and improved in line with the DMURS and the Cycle Design Manual to include elements such as compact corner radii, tactile paving, raised tables and changes to kerb lines which calm traffic as well as assist pedestrian movement by reducing crossing distances and allowing them to cross at-grade.

#### Measure JN1

#### Junction Design Principles

To ensure safety, comfort, and accessibility for all road users at all junctions in Balbriggan, Fingal County Council will adhere to the design standards for junctions identified above, and in the Design Manual for Urban Roads and Streets and the Cycle Design Manual.

# 12.3 Proposed Junction Improvements

Over the lifetime of the Strategy, Fingal County Council will work to undertake a series of upgrades of existing junctions within the Study Area to ensure compliance with DMURS, the Cycle Design Manual, and TII Publications where applicable.

The Strategy has identified a number of junctions that require upgrades or improvements. The evidence-based for the prioritisation of these junction improvements was as follows:

- Analysis of historic collision data
- Key destinations served junctions near schools and key employment areas
- Junctions that form part of existing transport schemes and the Balbriggan Active Travel Network Plan

The need to improve many of Balbriggan's junctions also extends to minor, local junctions, such as those at the entrances to residential developments, or leading onto side-roads. Junctions such as these would benefit from such measures as:

- Tactile paving
- Footpath widening
- More compact corner radii
- Raised tables / continuous footpaths.

 Landscaping and other urban design/placemaking features.

Redesigning dangerous junctions will make walking, wheeling and cycling around Balbriggan safer, more inclusive and more comfortable for people, particularly those with mobility or visual impairments.

#### Measure JN2

#### Junction Improvements

The Strategy has identified a series of junctions across the Balbriggan that require an upgrade to their design to align with the standards set out in DMURS and Cycle Design Manual, as illustrated below and outlined in Table 12-1.

It is recommended that these junctions are reviewed by Fingal County Council in the short-term and upgraded in the short- to medium-term. These will be upgraded as part of individual projects such as Balbriggan's Active Travel Network, or as a standalone junction improvement package.

A number of junctions are considered a short-term priority based on existing schemes, proposals, and land use objectives:

- All junctions along Harry Reynolds Road.
- Bridge Street / Quay Street / Mill Pond Park.
- Hamilton Road / Castleland Park Avenue (pending delivery of Castlelands).
- Clonard Road / Castlemill Link Road.
- Drogheda Street / Brick Lane.
- R122 / Naul Road Roundabout.



Table 12-1: Recommended Junction Improvements.

R132 / Bremore Cottages / Flemington Lane	<ul> <li>Side entry treatment to Flemington Lane to improve safety and accessibility for active modes.</li> <li>Support the Fingal County Development Plan 2023-2029 objective to develop the Flemington Lands.</li> </ul>
R132 / Hamlet Lane	• Side entry treatment to Hamlet Lane improve safety and accessibility for active modes.
R132 / Harry Reynolds Road	• Fingal County Council scheme already in place – Harry Reynolds Road Pedestrian and Cycle Scheme.
Harry Reynolds Road / Hampton Woods Rndbt	Fingal County Council scheme already in place – Harry Reynolds Road Pedestrian and Cycle Scheme.
Harry Reynolds Road / Dublin Street / Hamilton Road Roundabout	Fingal County Council scheme already in place – Harry Reynolds Road Pedestrian and Cycle Scheme.
Harry Reynolds Road / Chapel Street	<ul> <li>Fingal County Council scheme already in place – Harry Reynolds Road Pedestrian and Cycle Scheme.</li> <li>Gateway into Balbriggan Town Centre.</li> </ul>
Harry Reynolds Road / Clonard Street	<ul> <li>Fingal County Council scheme already in place – Harry Reynolds Road Pedestrian and Cycle Scheme.</li> <li>Gateway into Balbriggan Town Centre.</li> </ul>
Moylaragh Road / Harry Reynolds Road Roundabout	<ul><li>Improve road safety and accessibility for all users in line with DMURS.</li><li>Improve facilities for active modes at roundabout.</li></ul>
The Rise / Hamlet Lane / The Park /	<ul> <li>Improve legibility and wayfinding at this junction to Castle Mill Shopping Centre, Flemington Community Centre, etc.</li> <li>Provide pedestrian crossings.</li> </ul>
Clonard Road / Castlemill Link Road	<ul> <li>Upgrade junction in line with the NCM and DMURS to be less hostile to active modes</li> <li>Tighten junction approach and radii in order to reduce speeds, and decrease crossing distances</li> <li>Remove pedestrian guard rails and turning lanes where not necessary</li> </ul>
R122 Chapel Street / Westbrook Park / Clonard Road	<ul> <li>Improve road safety and accessibility for all users in line with DMURS and NCM.</li> <li>Improve facilities for active modes at roundabout.</li> </ul>
R122 / Stephenstown Roundabout	<ul> <li>Objective of the Fingal County Development Plan to upgrade the Naul Road to the M1 Junction 6.</li> <li>The design of this scheme must comply with TII Publications where it interacts with the M1.</li> <li>Improve active mode facilities.</li> </ul>
Hamilton Road / Castleland Park Avenue	<ul> <li>Improve accessibility and safety for all road users, particularly for active modes.</li> </ul>
Fancourt Road / R127 Old Market Green	<ul> <li>Possibly constrained by presence of bridge over railway line.</li> <li>Improve road safety and accessibility for all users in line with DMURS.</li> </ul>
Fancourt Road / Seapoint / The Bower	<ul> <li>Fingal County Council scheme already in place – Fingal Coastal Way.</li> <li>Improve road safety and accessibility for all users in line with DMURS and NCM.</li> <li>Consider the addition of soft landscaping / biodiversity to reinforce 'Gateway' to / from Balbriggan Town.</li> </ul>
Dublin Street / Old Market Green	<ul> <li>Improve road safety and accessibility for all users in line with DMURS and NCM.</li> <li>Consider the addition of soft landscaping / biodiversity to reinforce 'Gateway' to / from Balbriggan Town Centre.</li> </ul>

Bridge Street / Quay Street / Mill Pond Park	<ul> <li>Important connection between the 'Millpond Park – Green Corridor' and 'Transform Quay Street, Harbour and its Environs' via 'The Heart of Main Street – Green Corridor' projects.</li> <li>Envisaged as a 'Green Corridor' under the Our Balbriggan Rejuvenation Plan.</li> <li>Consider a signalised raised toucan crossing to prioritise active modes.</li> </ul>
Bridge Street / Mill Street / Clonard Street	<ul> <li>Improve road safety and accessibility for all users in line with DMURS and NCM.</li> </ul>
Drogheda Street / George's Hill	Side-entry treatment onto George's Hill.
Drogheda Street / Railway Street	<ul> <li>Side-entry treatment onto Railway Street.</li> <li>Ensure access for buses is retained to link with train station.</li> </ul>
R122 Chapel Street / Drogheda Street	<ul> <li>Filtered permeability scheme identified on Chapel Street, which would restrict vehicular traffic onto Chapel Street from Drogheda Street.</li> <li>Reconfiguration of space to potentially accommodate relocation of loading bays from Main Street.</li> <li>Creation of public space, such as a pocket park or seating area.</li> </ul>
Drogheda Street / Brick Lane	<ul> <li>Side entry treatment along Brick Lane to slow down vehicular traffic and improve 'Front of School' environment for students and staff of</li> </ul>

#### Side road junction Hartstown, Fingal County Council

In Hartstown as part of a rapid build protected cycle track scheme, junction tightening and raised tables were provided. These kerb realignments slow traffic down and reduce crossing distances for pedestrians.

Interim measures involved hatching and bollards, and were followed by permanent buildouts and raised crossings.

Cost: €40,000 each



©Google Street View 2019



Phase 1 Hatching and Bollards @Google Street View Jun 2021



Phase 2 Concrete Build Out and Ramps @Google Street View Mar 2022

Figure 12-1: Example of Side Road Junction Improvement. Source: NTA Advice Note: Rapid Build Active Travel Facilities.

#### Railway St Roundabout, Navan, Meath County Council

Not a rapid build project but an example of a Cycle Friendly Roundabout on this key strategic route in Navan (Average Annual Daily Traffic of 15,000), rebalanced priority in favour of pedestrian and cyclists.

Cost: €1.4m



@Google Street View 2014



©Google Street View 2018

Figure 12-2: Example of a Pedestrian and Cycle-Friendly Junction Improvement. Source: NTA Advice Note: Rapid Build Active Travel Facilities.



Image 12-1: Side-Raised Entry Treatment. Source: TfL.



Figure 12-3: Build-Outs with SuDS & Planting. Source: NACTO.



Image 12-2: Example of a Side Entry Treatment along the Dunkettle to Carrigtwohil Pedestrian and Cycle Scheme, County Cork.

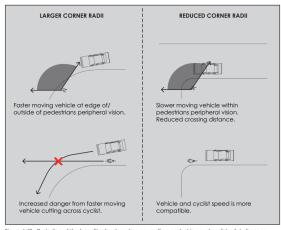


Figure 4.42: Illustration of the benefits of reduced corner radii on pedestrian and cyclist safety (images based on Figures 6.3 and 6.15 of the UK Manual for Streets (2007)).

Figure 12-4: DMURS Guidance on Corner Radii.



Figure 12-5: Indicative Layout of Protected Junction. Source: Dublin City Council.



Image 12-3: Example of a continuous footpath in Dún Laoghaire where the use of materials and at-grade indicates priority for pedestrians. A seating area is also included.

### 13 Road and Street Network

# Did you know? 72% of businesses in Blackrock viewed the reallocation of street space to pedestrians and cyclists as a positive addition to the Main Street.

#### 13.1 Overview

The Study Area has an existing network of Regional and Local roads and streets. The road network includes footpaths, cycleways, bridges, traffic signals, road markings and the carriageway itself.

The roads and streets within the Study Area enable access to employment and education, essential services, and the delivery of goods and services, locally and across the region, and between destinations within both Ireland and Northern Ireland.

Balbriggan's road and street network provides a dense network of local, regional and national connections and includes key roads such as:

- National Road Motorway M1 via Junction 6, running between Dublin Belfast, is located just outside of the Study Area to the east, but is an important road connection for Balbriggan, linking it to Dublin International Airport, Swords, Drogheda, and Dublin City Centre.
- Regional Roads such as the R132, R127 and R122 provide intra-connectivity within Balbriggan Town, as well as the

- surrounding settlements of Balrothery, Skerries, Lusk, Rush Stamullen and Gormanstown.
- Local urban roads and streets including Quay Street, Bridge Street, Dublin Street, Drogheda Street, Railway Street, Chapel Street, and so on.

The roads and streets of Balbriggan form a vital part of the public realm and provide placemaking opportunities to live, visit, shop and spend time in. Enhancements of the public realm offer the opportunity to restore vitality to the town centre, create meeting spaces and opportunities for biodiversity.

It is acknowledged also, that the existing road and street network is car-dominated and often hostile to pedestrians and cyclists. Many of the junctions prioritise the movement of vehicles over people.

This Strategy aligns itself with the Government's National Investment Framework for Transport in Ireland (NIFTI). NIFTI is a framework for prioritising future investment in land transport to support the National Planning Framework's National Strategic Outcomes, such as Compact Growth and Climate Action. NIFTI recognises that to cater for rising travel demand within the

context of these NSOs, we must protect our existing transport infrastructure, as well as realise a significant uplift in our sustainable mobility. NIFTI sets out two important Hierarchies for investment in transport projects – firstly the Intervention Hierarchy which places the maintenance of existing infrastructure at the top, followed by optimisation, improvement and lastly, new.



Figure 13-1: Intervention Hierarchy for Investment in Transport Scheme. Source: NIFTI.



Figure 13-2: Modal Hierarchy for Investment in Transport Schemes. Source: NIFTI.

Secondly, the Modal Hierarchy sets out the travel modes to be accommodated and

encouraged when investments and other interventions are made – with active travel and public transport schemes taking precedence.

Given the nature of existing travel patterns in Balbriggan and taking into account the wider policy and funding context, the Strategy has considered the existing road network and identified a number of measures relating to the flow of vehicular traffic, junction design, speed limits, and so on to improve safety for all road users, as well as rebalance the distribution of road space in a manner more aligned with DMURS.

While previous chapters have discussed proposals for Balbriggan's pedestrian, cycle and public transport network, as well as junctions and permeability, this chapter will focus on the remaining aspects of the road and street network, as well as traffic management arrangements to underpin the realisation of the Our Balbriggan Rejuvenation Plan.

#### Measure RS1

#### Balbriggan's Road and Street Network

Fingal County Council will work with the NTA, TII, and all relevant stakeholders to:

- Balance the needs of all road users in line with the Preliminary Movement Strategy so that the road and street network can effectively perform its movement function while promoting vibrancy, safety, accessibility and lower emissions.
- Optimise and reallocate road space in Balbriggan where appropriate to prioritise walking, wheeling, cycling and public transport in accordance with NIFTI, Climate Action Plan and DMURS.

# 13.2 Supporting Sustainable Mobility

According to DMURS, street networks should be designed to maximise connectivity between destinations to promote higher levels of permeability and legibility for all users, in particular more sustainable forms of transport.

As identified in the Baseline Assessment, there is significant potential to improve Balbriggan's urban road and street network to support more people to choose to walk, wheel and cycle.

However, to achieve this, change is required. Increased traffic and congestion is not the inevitable result of growth. It is the product of deliberate choices made to shape our communities to accommodate the private car. The Balbriggan Active Travel Strategy represents an opportunity to move away from this traditional approach to transport planning. Instead, the Strategy seeks to emphasise the 'place' function of Town Centre and residential streets.

This will involve the reallocation of street space in some instances to create more accessible, inclusive, attractive and sustainable spaces for all ages and abilities.

#### 13.3 National Road Network

Ireland's National Road network is operated and maintained by TII, with certain local elements managed by the Local Authority.

While not in the Study Area, the M1 Motorway, which is part of the Trans European Network (TEN-T) as well as the strategic Dublin-Belfast Economic Corridor (DBEC), is located just east of it – accessed via the R122 at Junction 6. The M1 links Ireland's two largest cities, Dublin and Belfast, with the largest towns, Drogheda and Dundalk at its centre. Balbriggan therefore enjoys high-quality national and regional connectivity to the National Road Network, as

well as the benefits of removing through-traffic from the Town Centre.

Maintaining the strategic function, safety, efficiency and capacity of the M1 is an objective of Fingal County Council under Policy CMP33 – Protection of the TEN-T Network and Objective CMO36 – Strategic Roads Network. Local access to this strategic network will continue to be managed and restricted through the Development Management process to protect the 'movement' function and discourage use by local traffic for short trips.

This approach will necessitate the restrictions of residential zoning close to the M1 and restricting the amount of access points— an approach supported by the Spatial Planning and National Roads Guidelines for Planning Authorities (2012).

Fingal County Development Plan 2023-2029 proposes an upgrade to the Naul Road, which connects to the Junction 6 exit. Fingal County Council will liaise with Transport Infrastructure Ireland to progress the design and delivery of this scheme in line with TII Publications during the lifetime of the Development Plan.

#### Measure RS2

#### Motorway & National Road Network

Fingal County Council will work with Transport Infrastructure Ireland and relevant stakeholders to:

- Protect the strategic function, safety, efficiency, and capacity of the M1 is protected.
- Restrict the zoning of residential and other uses adjacent in line with the Spatial Planning and National Roads Guidelines for Planning Authorities (2012).
- Progress the Naul Road Upgrade, ensuring any proposals that interact with the M1 and Junction 6 comply with TII Publications.

#### 13.4 Regional and Local Road Network

#### Castlelands Link to R127

A Masterplan is currently in place for Castlelands, an area of greenfield land to the south east of the Study Area, bounded to the east by the railway line, and to the west and north by existing developments such as Castleland Park Road and Pinewood Green Avenue. The Masterplan supports an objective

of the Fingal Development Plan 2023-2029 for the delivery of the Castlelands Link to R127 road.



Figure 13-3: Proposed development at the Castlelands site. Source: Castlelands SHD application by the Land Development Agency.

This infrastructure is required to facilitate the development of these lands being progressed by the Land Development Agency. The Masterplan sets out that high-quality footpaths and cycle tracks will be provided along this road, with connectivity to the R127 and the Fingal Coastal Way.

Provision should be made along this new road for public transport services to serve the masterplan lands. This may entail the rerouting of the existing B1 bus service or through an additional service. Ensuring high-quality, lit and safe permeability through the Castlelands site to bus stops, Bracken Educate Together and St. Teresa's schools and other

local services will form an integral part of the development.

## Naul Road Upgrade (M1 Junction 6 exit to the roundabout on the R122)

The Naul Road Upgrade (M1 Junction 6 exit to the roundabout on the R122) is proposed by the Fingal County Development Plan 2023-2029 under Objective CMO41. Fingal County Council will liaise with Transport Infrastructure Ireland to progress the design and delivery of this scheme in line with TII Publications during the lifetime of the Development Plan.

#### Balbriggan Ring Road R122 to R132

The Balbriggan Ring Road R122 to R132 has been an objective of Fingal County Council for a number of years and is proposed as a Transportation Scheme under the Fingal County Development Plan 2023-2029. Balbriggan's Zoning Map is illustrated in Section 3.2, showing the indicative alignment as per the Development Plan.

The road is proposed to open up residential zoned lands, including at Flemington. Any new road should form a boundary to the urban area, and not facilitate sprawl in line with Compact Growth targets as per the National Planning Framework. The scheme should be designed in accordance with DMURS, facilitate high-quality active and sustainable mobility, and should consider further road space reallocation to

sustainable mobility and public realm improvements within the built-up area.

#### Measure RS3

# Regional & Local Roads and Sustainable Transport

Fingal County Council will work with the NTA, TII, and all relevant stakeholders to:

- Implement the Active Travel Network in the short to medium term as outlined in Chapters 8 to 11 prioritising areas close to the town centre, schools and residential areas.
- Address accessibility and safety deficiencies at junctions identified in Chapter 12.
- Maximise opportunities to introduce Green Infrastructure (GI) including landscaping, rain gardens, swales and biodiversity and wildlife corridors.
- Progress the feasibility of the Transportation Schemes identified within the Fingal County Development Plan 2023-2029.

#### Flemington Lands

As discussed earlier in Section 3.2, Fingal County Council are in the process of preparing a Local Area Plan for lands at Flemington. The undeveloped Residential Areas (RA) zoned lands have the potential to provide for an

additional c.650 no. residential units, which the LAP will set out a land use strategy for.

The existing transport infrastructure along Bremore Cottages / Flemington Lane is substandard, especially if it is to cater for the projected growth. In order to ensure that sustainable mobility behaviours are embedded from the outset of any development of these lands, improved active travel infrastructure is a critical enabler – both along Flemington Lane but to connect to wider active travel network on R132 and Fingal Coastal Way, for example.

Permeability via residential areas to the south will also be important to provide Quietway

routes, and to access the existing B1 bus service that stops at Brega and Hamlet Lane.

Given the lands are located approximately 1km from the rail station, reliable bus services serving

Flemington will be critical to provide a realistic alternative to the private car.



Image 13-1: Example of 'woonerf' in the Netherlands.

The internal street network should also be given careful consideration to create a calm, safe, and healthy neighbourhood for future residents and visitors. It should be fully permeable for people walking and cycling and designed in accordance with the Design Manual for Urban Roads and Streets. Concepts such as Home Zones and 'woonerfs' should be considered to create attractive and self-regulating streets that support social cohesion, place-making, and active mobility.



Image 13-2: Example of Home Zone in Adamstown.

#### Measure RS4

#### Flemington Lands Street Network

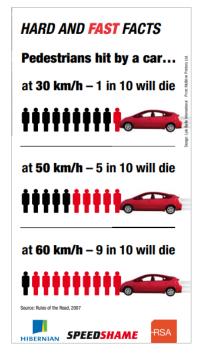
Fingal County Council will work with the relevant stakeholders in relation to the internal street network of the Flemington Lands:

- To prioritise pedestrian and cycle movement and connectivity, and access to public transport services.
- To ensure it is designed in accordance with DMURS, considering concepts such as Home Zones and 'woonerfs' to create safe, calm, and self-regulating streets for residents and visitors.
- To reduce the visual dominance of private car parking through careful design considerations.
- To ensure a fully permeable street network for people walking, wheeling and cycling.
- To maximise opportunities for placemaking, playful spaces, and Green Infrastructure (GI) including landscaping, rain gardens, and biodiversity and wildlife corridors. This is important for promoting social cohesion, wellbeing, and a sense of community.



#### 13.5 Speed Limit Review

Speed is a significant factor in road deaths in Ireland, as it both increases the likelihood of a collision occurring, and the severity of injuries sustained if a collision occurs. Moreover, speeding or perceived high speed can hinder the creation of a place that people want to spend time or linger in or make people who wish to walk or cycle feel unsafe.



Speed surveys carried out as part of the Baseline Assessment found that while most of the vehicular traffic remained within the posted speed limit, several vehicles were recorded as reaching well over the speed limit at all survey locations, the most concerning being on the R132 Drogheda Street and Chapel within the Street Centre Town core area.

In response to an increasing number of road fatalities, the Minister of State with Special Responsibility for Road Safety announced a Speed Limit Review in September 2023. The review proposed lower speed limits on many categories of roads. The Department of Transport is preparing guidance on speed limits that will be released to Local Authorities in early 2024 with the expectation they will revise speed limits within their functional authority.

Because lower speed limits enable active travel and reduce emissions, the Balbriggan Active Travel Strategy 2023-2034 recommends that Fingal County Council engages with the Department of Transport's review of speed limits at the earliest opportunity and introduces lower speed limits on the relevant roads and streets. Many residential estates already have a 30km/h speed limit, but a thorough review can ensure consistency. The Strategy also recommends the introduction of 30km/h speed zones within the Town Centre and outside of schools throughout Balbriggan.

Simply reducing speed limits is not sufficient to reduce the speed of motor vehicles. If the design speed remains above the posted speed limit, speed reductions may not occur. An engineering retrofitting programme is needed so that the design speed of the roads is also effectively lowered, including the use of Gateways and Transition Zones. Following a review of local speed limits, Fingal County Council will ensure that street design reinforces the posted speed limit.

#### Measure RS5

#### Speed Limit Review

Fingal County Council will undertake a review of speed limits within Balbriggan and seek to lower the speed limit where possible, prioritising the Town Centre, streets in front of schools and local streets for the delivery of 30km/h speed zones with complementary traffic calming measures on local streets.

# 13.6 Town Centre TrafficManagement

In order to realise the aspirations and projects identified by the Our Balbriggan Rejuvenation Plan, the Strategy recommends a number of changes to the Town Centre traffic management and streets, including the following:

- Introduction of a 30kph speed limit zone in the Town Centre.
- Reallocation of road space on 'Main Street' to improve conditions for people walking and cycling, e.g., wider footpaths and providing more crossing points on desire lines.
- Extend the one-way system eastbound on Quay Street, to allow space for public realm improvements and enhanced

- connectivity to the Harbour and Fingal Coastal Way.
- Restrict right-turn movements from Quay Street to High Street in order to improve the safety of the junction for people walking and wheeling.
- Reverse one-way direction of vehicular traffic on George's Hill to create a oneway system with Mill Street and provide alternative access points to the Harbour and pier for local access.
- Reverse the one-way system on Convent Lane and Railway Street, retaining access for local bus services to interchange with the Station. This area will be transformed as part of the Railway Street, Station & Plaza project.

These changes will complement the Our Balbriggan Public Realm Strategy by "free-ing up" space and reducing and slowing down through-traffic on some of these key streets.



Image 13-3: Build-outs incorporating attractive Age-Friendly seating and planting, that was previously on-street parking on Blackrock's Main Street. This gives back space to people and increases 'dwell' time on the street. Source: DBFL.

#### Measure RS6

# Town Traffic Management Measures

Fingal County Council will implement in coordination with relevant stakeholders the proposed traffic management measures for Balbriggan, key elements of which include:

- Consider the reduction of speed limit to 30kph in the town centre.
- Reverse one-way direction of vehicular traffic on George's Hill.
- Reverse one-way system on Convent Lane and Railway Street.
- Continue one-way system on Quay Street eastbound.
- Restrict right turning movements from Quay Street to High Street.
- Create a self-regulating publicrealm led pedestrian priority area around the Harbour and Seapoint Lane with restricted vehicular access for local residents, users of the active harbour, and emergency services.
- Reallocate street space where possible to provide a better balance for people walking, cycling and taking public transport.

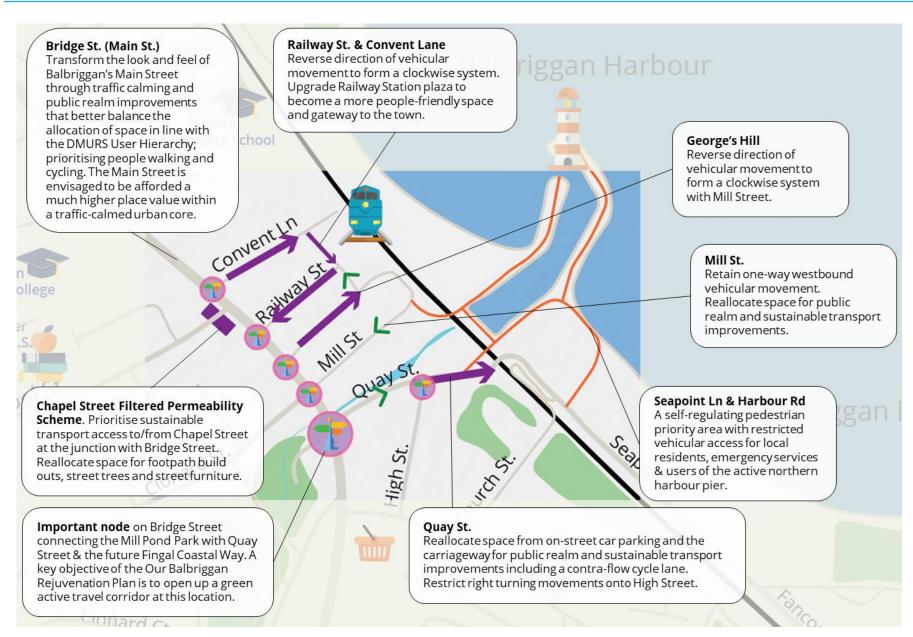


Figure 13-4: Emerging Proposed Traffic Management Measures for Balbriggan Town Centre.

## 14 Car Parking Management



#### 14.1 Overview

There has been a step-change in thinking regarding parking standards and overall parking provision in recent years. As urban centres begin to promote more walkable urban development and a type of city living that prioritises sustainable travel, they are also reforming their approach to car parking as seen in the European case studies reviewed during the Context Stage.

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 active and sustainable travel and reduce car dependency.

There is a significant amount of both privately and publicly available car-parking areas throughout Balbriggan, however Parking Surveys carried out in recent years demonstrated that much of this parking is significantly underutilised.

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.

The reallocation of some existing parking areas will be required to support Fingal County Council's ambition regeneration programme for Balbriggan and provide a better balance of space in line with DMURS and Town Centre First Policy. Where retained, on-street parking will be prioritised for those with disabilities, residents and short-stay business parking. Long-stay parking provision will be consolidated in off-street parking facilities and supported by a high-quality Active Travel and public transport network.

This chapter sets-out the shifts in parking provision and policy in Irish urban areas and outlines an appropriate car-parking strategy for Balbriggan.

# 14.2 Parking Management Policy

This step-change in global thinking 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 cyclable town centres and accessibility to high-quality public transport (Transit Oriented Development).

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

- National Planning Framework 2040.
- Five Cities Demand Management Study.
- Sustainable Urban Housing: Design Standards for New Apartments. (to be superseded by the Sustainable and Compact Settlement Guidelines Planning Authorities)
- Regional Spatial and Economic Strategy for the Eastern and Midlands Region 2019-2031.
- Fingal Development Plan 2023-2029.

#### National Planning Framework 2040

The National Planning Framework's (NPF) National Policy Objective (NPO) 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 nocar and low-car developments.

#### Sustainable Urban Housing: Design Standards for New Apartments

Section 28 ministerial guidelines for Sustainable Residential Development and Compact Settlement were published in January 2024. They require the provision of low-car or car-free development in accessible areas like Balbriggan through the following measures:

- New residential development in cities, metropolitan towns and large towns will provide graduated levels of car parking based on location and access to services by public transport, walking and cycling. In areas of high accessibility, car-parking provision should be minimised, substantially reduced or wholly eliminated, while in areas of medium accessibility, carparking provision should be substantially reduced.
- Car parking in new developments should be minimised in order to manage travel demand and to ensure that vehicular movement does not impede active modes of travel or dominate the public realm.
- Active travel should be prioritised through design measures that seek to calm traffic and create street networks. that feel safe and comfortable for pedestrians and cyclists.

#### Five Cities Demand Management Study

The Five Cities Demand Management Study published 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 demand а

prominently

Study.



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

- Targeted removal of on-street parking.
- Reduced on-street residential parking permit entitlements.
- Tiered rates of parking charges, set to proactively manage demand.
- Restrictions on the permitted duration.
- Longer hours 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.
- Emissions-based parking charging as a targeted measure to improve Air Quality.

#### Regional Spatial and Economic Strategy for the Eastern and Midlands Region

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 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.

#### Fingal Development Plan 2023-2029

The Fingal 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.

#### **Town Centre First Policy, 2022**

The dominance of vehicles within the public realm has contributed to the decline of many town centres, making them unattractive places in which to live or visit for extended periods.

# 14.3 Approach to Parking Management

Reflecting the above policy objectives and national guidance, this Strategy recommends a step-change in the current approach to car parking provision in Balbriggan.

Car parking can support the economic and social functions of a town, however when not carefully managed – as has traditionally been the case – it can lead to public space being dominated by private vehicles and result in

'search traffic', road safety issues, congestion, and air pollution. There are many competing demands for town centre space, however, there is an imbalance in how it is currently divided toward the movement and storage of the private car.

The Strategy's Parking Management Approach for Balbriggan include measures relating to the price and quantum of available parking, especially on-street parking, and the consolidation of parking in favourable locations which do not detract from the public realm or active travel.



Image 14-1: Footpath build-outs enable businesses to spill out onto the street, providing passive surveillance, and atmosphere. Use of the public realm by private businesses should be balanced with the provision of freely available space for everyone to access.

#### 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 and other mobility impairments. 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.

There are many competing demands for town centre space, and the proposed public realm and transport measures for Balbriggan will necessitate the reallocation of some existing on-street parking spaces for wider footpaths, cycle lanes, street trees, and 'spill out' areas for restaurants and cafés; contributing to a more vibrant, liveable Balbriggan.

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 off-street car parking facilities on the periphery of the town core.

#### Measure CP1

## Approach to Parking Management in Balbriggan

The management of car parking provision in Balbriggan Town Centre will be in accordance with the following broad principles:

- Implementation of reduced maximum parking standards for new development, in accordance with the Fingal Development Plan 2023-2029.
- Where provided, establish a hierarchy of parking need for on-street parking that prioritises the needs of disabled users, short-stay business users and discouraging long-stay commuters.
- Long-stay parking will largely take the form of consolidated off-street car parking on the periphery of places of high pedestrian activity, in order to curtail movement of unproductive vehicular through traffic and elimination of search traffic movements in Balbriggan Town Centre.
- Manage the availability and cost of public car parking in the town centre core to encourage higher turnover of spaces.
- Consolidate existing parking to the periphery of the town centre core at locations that are well connected by good quality walking, cycling and public transport networks.

#### **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.



Image 14-2: Mobility Point on Main Street, Blanchardstown. Source: Fingal County Council.

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

#### Measure CP2

#### On-Street Mobility Points

Fingal County Council's Active Travel Team will determine suitable locations for on-street mobility points. Some initial locations to be assessed include sites near the following:

- Chapel Street.
- Southern end of Dublin Street.
- Potentially accessible private car parking areas through planning agreements.

#### Delivery and Servicing Bays

There are many competing demands for valuable kerbside space in our town centres, the need to deliver and service businesses being one. 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.

There is significant scope to facilitate the retiming of delivery patterns to reduce travel movements at busy times and change their operating practices to consolidate their trips. In addition, there should be a focus on limiting the

visual intrusion that results when loading facilities are not incorporated into the streetscape.





Image 14-3: Example from Walworth Road, London, where a loading bay provided within a verge, can revert to pedestrian space when not used. Source: DMURS.

Image 14-3 and Image 14-4 depicts an example of how loading bays can be designed in such a way as having a dual function, e.g. loading bay in the early morning, and pedestrian space or a "spill out" area for restaurants and retail premises for the rest of the day.





Image 14-4: Example from Kilkenny City where a loading bay was upgraded (before on the left) by designing it at-grade with the footpath so it could revert to pedestrian and 'spillout' space for local businesses when not used (after on the right). Source: DBFL..



Image 14-5: Newly constructed dual-purpose loading bay on MacCurtain Street, Cork City. Photo: DBFL.

#### Measure CP3

#### Balbriggan Delivery & Servicing

Fingal County Council will prepare a
Balbriggan Delivery & Servicing Strategy in
collaboration with key stakeholders in order to
support a more efficient regime and mitigate
any conflicts and impacts on Balbriggan's
public realm and other road users. The
Strategy will consider:

- Engagement with all relevant stakeholders to assess existing delivery and servicing arrangements.
- Examination of re-timing delivery access to during off-peak times, e.g. 04:00-11:00.
- Identifying suitable areas for shared on-street deliveries for smaller premises.
- The feasibility of alternative 'last-mile' delivery solutions such as the use of micro-consolidation centres on the periphery of the town (e.g.: Park and Ride) and e-cargo bikes.
- The feasibility of a Virtual Loading Bay system (see Section 16.3)..

#### Off-Street Car Parking Areas

As part of the baseline assessment, a Parking Survey was carried out of key parking areas in the town. It demonstrated that car parking in Balbriggan is generally underutilised, with a large amount of reserve capacity available throughout the day, indicating that there is capacity within the existing carparks to cater for the relocation of on-street parking spaces.

Figure 14-1 illustrates the location of existing off-street surface car parks in Balbriggan, with a summary of parking provided by Fingal County Council in Table 14-1 and Table 14-2.

These are shown in the context of approximate walking times from the railway station as an example, with the majority of existing parking located within a typical 15-minute walk or a 5-minute cycle ride.

The majority of the 9 identified car parking areas are additionally accessible by the existing B1 (and other) bus routes. It is anticipated that further improvements to the public transport network will be delivered over the course of the Balbriggan Active Travel Strategy.

## Off-Street Parking and Sustainable Transport

Off-street car-parking areas similarly offer to possibility to co-locate sustainable transport infrastructure including bike hubs, car clubs, and e-scooter and e-bikes schemes as well as ancillary services including cafes and parcel collection services – see Mobility Hubs below.

It is envisaged that these off-street parking areas will be well-connected to the Active Travel and future public transport network. These include the following publicly accessible carparks:

- Dublin Street car parking areas accessible by bus and active travel through the 'Heart of Balbriggan Scheme' and future Dublin Street/ Bridge Street cycle improvements.
- Bremore Castle accessible by bus on Drogheda Street and future segregated cycle scheme.
- Town Centre car park pedestrian and cycle accessibility to Balbriggan train station and an improved pedestrian and cycle environment centred around the Quay Street Part 8 proposals.

Further details are presented in Table 14-1 and Table 14-2 below.



Figure 14-1: Map of Existing Surface Car Parks in Balbriggan.

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Table 14-1: Analysis of Public Operated Off-Street Car Parks in Balbriggan.

The recent Part 8 permission for the Bremore Regional Park proposes to reconfigure and formalise the parking provision at this location, with over <b>200</b> car parking spaces.
Improvement works to the R132 Drogheda Street to include segregated cycle lanes and widened footpaths, and the future completion of the Fingal Coastal Way, will strengthen the connection between Bremore and the town centre for people continuing their journey by foot or by bike. Furthermore, it is served by public transport connecting it from northern areas.
As part of the Bremore Regional Park redevelopment, the existing car park at Balbriggan FC will also be reconfigured to include <b>114</b> designated parking bays, as well as <b>50</b> 'overflow' spaces at Lambeecher. It is recommended to use 'grasscrete' and other soft landscaping to limit the visual intrusiveness of car parking on the landscape character of the Bremore Castle and Regional Park. Improvement works to the R132 to include segregated cycle lanes and widened footpaths, and the future completion of the Fingal Coastal Way, will strengthen the connection between Bremore and the town centre for people continuing their journey by foot or by bike. This will also serve the beach and northern areas.
As part of the recently submitted Part 8 Quay Street scheme, the existing surface car parks at Quay Street and Mill Street are to be reconfigured to enable transformative public realm improvements. This will involve the removal of Quay Street carpark, and the reduction of quantum of the Town Carpark (Mill Street).
Parking Surveys demonstrated that these parking areas are not fully utilized. In addition, there is capacity in areas such as the Dublin Street Car Park and Bremore – both within a 10-minute walk of this area.
The reduction in car parking spaces in this key public space will reduce the volume of vehicular traffic traversing the site which will positively contribute to a safer, cleaner, and more people-friendly space overall.
Dublin Street Car Park is an existing car park, containing a maximum of <b>258</b> car parking bays. The Parking Surveys demonstrated that this parking area is not fully utilized at present. The Dublin Street car park is well connected to the town centre and outer neighbourhoods by the Harry Reynolds Road and Mill Pond Park.



Image 14-6: 'Grasscrete' Car Parking.

Table 14-2: Private Operated Off-Street Car Parks.

Castlemill Shopping Centre provides approximately 200 car parking spaces for its customers.
Millfield Shopping Centre provides over 1,000 free car parking spaces for its customers.
LIDL provides over 100 free car parking spaces for its customers.
Super Valu provides over 100 free car parking spaces for its customers, both surface parking adjacent to the store as well as underground parking.
Balbriggan's railway station, operated by Irish Rail, has over 95 paid car parking spaces @ €3.50 per day, €9 per week, €30 per month, and €360 per annum.

#### Local Multi-Purpose 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 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:
- Sheltered, secure bike parking including that for adaptive and cargo bikes.
- Bike repair station.
- Public toilets.
- Bus stop, shelter, and RTPI.
- 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:

- Served by frequent public transport.
- Quality walking and cycling links.

In the context of Balbriggan, Mobility Hubs may be appropriate for any new residential/mixeduse developments such as the Castlelands SHD or Flemington Lands, or retrofitted within the redevelopment of existing off-street car parking areas to incorporate public transport stops, and a network of legible and safe walking and cycling routes. Further assessment is required to determine the feasibility of Mobility Hubs, 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.

## 15 Our Balbriggan Rejuvenation Plan Projects

A number of projects which have been borne from the Our Balbriggan Rejuvenation Plan form the building blocks to the overall Balbriggan Active Travel Strategy and are seen as pivotal to the overall transformation of the Town.

These projects will connect places most valued by Balbriggan's residents such as the town centre, the harbour, schools and recreational spaces, and be bolstered by wider localised improvements to junctions, footpaths and cycle facilities.

As illustrated in Figure 15-1, these include:

- Quay Street & Environs.
- Heart of Balbriggan: Main Street.
- Heart of Balbriggan: Mill Pond Park.
- Railway Street & Station Yard.
- Chapel Street Low Traffic Neighbourhood.
- Fingal Coastal Way Greenway.

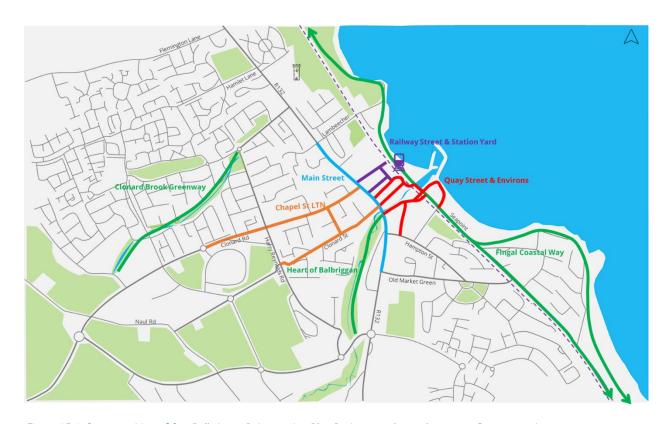


Figure 15-1: Summary Map of Our Balbriggan Rejuvenation Plan Projects, and complementary Strategy projects.

#### 15.1 Quay Street

The aspirations for the redevelopment and rejuvenation of Quay Street and Environs is the creation of a large pedestrian friendly event / market space of Quay Street focused around the arches of the Railway Viaduct and upgrade of the public realm in the carpark areas and green open space on both sides of the Bracken River to transform it into a highly accessible and citizenfriendly space which can facilitate events and promotes activity with appropriately located planting zones to encourage flora and fauna. This project received Part 8 approval in Q4 2022 and is being progressed. Fingal County Council **PKA Architects National Transport Authority** Urban Regeneration Development Fund (URDF) Short Term

Quay Street is the primary route between the town centre to the Harbour and coastline, however the legibility of this connection is poor. The view of the sea is blocked, the pedestrian and cycle facilities are poor, and the area is highly car dominated. The existing surface car parking, however, was shown to be consistently underutilised by Parking Surveys carried out in 2020-2022.

Quay Street received a low rating of 6/20 in the Our Balbriggan Healthy Streets Check. This assessment was carried out with a group of people made up of a variety of genders, ages, and backgrounds to provide a diverse range of viewpoints and individual experiences. Some of the reoccurring points raised during the Healthy Streets Check included:

- Car dominated space.
- Poor perceptions of safety, particularly at night; feelings of isolation and loneliness due to little active frontage, shutters and lack of activity.
- Playground and some benches around the viaduct offer places to sit and rest, however they are poorly maintained.
- Not a very vibrant or attractive place, not a "sticky" place.
- Poor connectivity and legibility between the train station, harbour, and Town Centre.













#### Approved Part 8 Proposals – Key Features

The following summarises the key proposals for Quay Street and its environs as per Fingal County Council's approved Part 8 Scheme:

- Redevelopment of the existing open space, playground, car parking areas and the River Bracken to form a reconfigured pedestrianised public open space / market space with green space and play areas. This reconfiguration facilitates public realm and sustainable transport improvements.
- Upgrade of street surfaces, pavements, and landscaping, including widening of footpaths, to improve pedestrian linkages to surrounding streets and the Harbour. This includes new granite paving beneath the railway viaduct.
- Modifications to traffic flow and parking on Quay Street, Mill Street, and Harbour Road (Seapoint Lane).
- One-way eastbound vehicular traffic movement on Quay Street, and a segregated bi-directional cycle lane.
- Restrict right turning movements from High Street onto Quay Street to reallocate road space for a footpath and safe crossing area.
- Reverse direction of vehicular movement on George's Hill (to oneway westbound) to form a clockwise system with Mill Street.
- The Harbour area in and around the Viaduct and Seapoint Lane will be a self-regulating, public realm-led pedestrian priority area with Shared Space design. Vehicular access will be limited to local access only for residents, users of the active harbour, and emergency services.
- Enhancement works to the Bracken River within the existing open space, including widening of the water course to encourage biodiversity, increase planting and improve flood resilience along the riverbank.
- Provision of cycle parking spaces, seating, integrated play equipment and improved public toilets.

#### 15.2 Heart of Balbriggan: 'Main Street'

A key objective of the Our Balbriggan is the rejuvenation of the Main Street to make it a more people-friendly place to spend time in and move through. This will involve the reallocation of space for wider footpaths, cycle facilities, street trees, benches, etc.
The junction of Bridge Street / Quay Street / Mill Pond Park is a pivotal part of the aspirations for the overall Heart of Balbriggan project. The upgrade of this junction will facilitate opening up of a green corridor, connecting Stephenstown to the Main Street via Mill Pond Park and following the Bracken River down through a revitalised Quay Street to reimagine the harbour and beach area that will also connect to the Fingal Coastal Way. This is discussed in more detail under 'Heart of Balbriggan: Mill Pond Park' on the following pages.
Fingal County Council
National Transport Authority
Urban Regeneration Development Fund (URDF) Sustainable Transport Measures Grant
Active Travel

Drogheda Street, Bridge Street, and Dublin Street, collectively known as Main Street, run in a north-south direction along the R132. Together they form the town's principal spine, a busy thoroughfare lined with continuous frontages of a mix of shops, cafés, pubs, convenience outlets, offices, etc.

The streets narrowness in parts, combined with two to three storey buildings and an undulating topography, give it an enclosed character and human-scale feel. However, Main Street is dominated by vehicular traffic, and associated clutter such as signage, empty poles, markings, etc. which detract from the overall townscape character and form barriers to safe and accessible pedestrian and cycle movement. An analysis of data from the Road Safety Authority highlighted that there have been a number of collisions involving motorists and pedestrians over the years, particularly at junctions.

The street received a low rating of 5/20 in the Our Balbriggan Healthy Streets Check with the speed and volume of vehicular traffic, narrow footpaths, few crossing points, and poor air quality commonly cited as concerns.

A key issue on Main Street is the lack of safe, and attractive places for people to stop, rest, linger, and socialise on the street. An important element of a healthy street – socially, culturally and economically – is people spending time on the street as opposed to moving quickly through. This will be a primary focus for the Main Street project to enhance its vibrancy and place function.

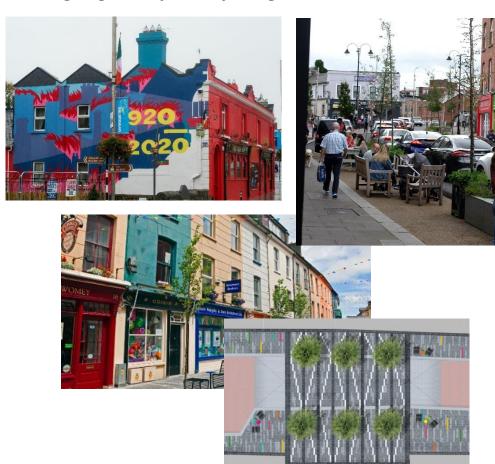
#### Strategy Measures – Key Features

The Strategy aims to transform the look and feel of Balbriggan's Main Street through public realm improvements and traffic calming that better balance the allocation of space in line with the DMURS User Hierarchy; prioritising people walking, cycling and scooting. Fingal County Council are in the process of progressing the feasibility and design of the Main Street scheme.

The Main Street is envisaged to be afforded a much higher place value within a traffic-calmed urban core. The interventions proposed seek to address many of the issues raised by the public, including:

- Reduce speed limit to 30kph from 50kph in the urban core (at a minimum between the junction at Dublin Street/Old Market Green and Drogheda Street/Lambeecher). Apply Gateway and Transition Zone treatment.
- Reallocate road space and on-street parking where possible for extended footways, crossings, trees, seating, and "spill out" zones for businesses.
- As Main Street is identified as a **Secondary Cycle Route** in the GDA Cycle Network Plan, the provision of dedicated cycle facilities will be considered in the form of segregated cycle lanes or a shared street approach (or both), pending available road widths and traffic calming.
- Declutter, rationalise and improve provision of seating, bike parking, litter bins and wayfinding. Place-making approach to maximise points of interest along the street to increase sense of place.
- Junction improvements on Main Street in accordance with DMURS to improve pedestrian and cyclist priority and safety.
- Improve pedestrian crossings and provide additional crossing opportunities at a variety of locations, extend crossing timings.
- Upgrade the junction with Quay Street and the new entrance to Mill Pond Park. This will be an important node and focal point on the street and will facilitate safe and direct movement for pedestrians

- and cyclists along the green and blue corridor of the Bracken River, Mill Pond Park, the Harbour and the future Fingal Coastal Way.
- Create safer, more legible connections for pedestrians and cyclists between Main Street and Mill Pond Park via Vauxhall Street, St. Paul's Crescent, and the Dublin Street carpark by widening path, improved lighting, visibility, and wayfinding.



#### 15.3 Heart of Balbriggan: Mill Pond Park

The Mill Pond Park is a rich green and blue corridor following the River Bracken, running adjacent to Vauxhall Street and Dublin Street. bordering Clonard Street to the north and Harry Reynolds Road to the south. It has significant potential as it affords the opportunity to create a lively green space in the heart of Balbriggan town centre to spend time in, as well as opening up connectivity between the town centre and surrounding residential areas to the west for people walking and cycling. The proposed interventions aim to improve connectivity and access to Mill Pond Park, an important natural amenity and recreational space at the heart of Balbriggan town centre.

Fingal County Council

Urban Regeneration Development Fund (URDF)

Medium Term



#### 15.4 Railway Steet, Station, and Plaza

The Railway Street, Station and Plaza project will improve the public realm of this area, enhance the station's role as a multi-modal interchange hub, and provide better connectivity and legibility between the station, the beach, the Harbour area, and the Town Centre.
Fingal County Council
Irish Rail National Transport Authority
Urban Regeneration Development Fund (URDF) Sustainable Transport Measures Grant Active Travel
Medium Term









The Railway Street and Station Plaza has significant potential to create an excellent "first impression" as people enter Balbriggan. The Strategy supports a public realm strategy which seeks to reenergise the attractiveness of this historic, bustling quarter to create a Multi-Modal Interchange Hub and a high-quality Gateway for Balbriggan. The Strategy proposes the following measures:

- Public realm-led reconfiguration of existing arrangement to improve pedestrian environment and interchange between modes, including:
- High-quality sheltered and secure parking for all micromobility (e.g., adaptive bikes, cargo bikes, scooters, etc.) close to entrance.
- Public sharing schemes such as BleeperBikes and TIER.
- Bus shelter & Real Time Information (RTI).
- Bays for GoCar and other car sharing schemes, e.g., Enterprise, Yoko.
- Parcel collection lockers.
- Café kiosk.
- Create a pedestrian plaza at the entrance of the Station Yard with high-quality paths along pedestrian desire lines.
- Improve visual connection between Main Street and Station, through design and wayfinding. This is an important vista to aid legibility.
- Acquisition of Boxing Club & Derelict Station Masters House to repurpose as public realm and commercial use.
- Reverse direction of vehicular movement on Railway Street and Convent Lane to form a one-way clockwise system.
- Improve permeability between Station Yard and Convent Lane/archway to beach to the north, and to George's Hill/Quay Street to the south.
- Improved uplighting, removal of blind corners, and investigate opportunities for improved surveillance around the archway.
- Draw on the heritage assets of the immediate area including remnants of its textile production, manufacturing and trade story.

#### 15.5 Chapel Street Low Traffic Neighbourhood

The Strategy proposes the creation of a Low Traffic Neighbourhood within Chapel Street and Clonard Street, between Bridge Street to the east and Harry Reynolds Road to the west.
Fingal County Council
National Transport Authority
Active Travel
Short-Medium Term

A Low Traffic Neighbourhood is a scheme where vehicular traffic on residential or commercial streets is greatly reduced. This is done by minimising the amount of traffic that comes from vehicles using the streets to get to another destination. This is often referred to as 'through-traffic' or 'rat-running'.

Traffic is significantly reduced by using temporary or permanent barriers called "modal filters". These filters can include bollards or planters, trees, emergency gates or can be camera operated in some limited instances.

This method of filtered permeability creates networks of streets so people can safely travel through the area by walking, wheeling or cycling. Private motorised vehicles still have easy access to all homes and businesses without driving directly through the neighbourhood. Emergency vehicles can also be prioritised to reach their destinations quicker.

A modal filter and shared surface arrangement is proposed at the eastern end of Chapel Street to curtail through vehicular traffic. Space at this end of the street could be reserved for displaced loading bays and disabled parking from along the Main Street.

This arrangement would still allow access to all properties and existing parking areas, but vehicular traffic on Chapel Street would have to exit via Harry Reynolds Road and/or Clonard Street.

Filtering through traffic on Chapel Street would enable the creation of a traffic-lite Safe Route to School for a cluster of schools including St. Peter



and Paul's Junior National School and Balbriggan Community College.

Key measures for the Chapel Street LTN:

- Place a modal filter at the eastern end of Chapel Street. Space at the end of the street could be reserved for displaced loading bays and disabled parking from along Main Street.
- Upgrade local junctions in accordance with DMURS, e.g., Chapel Crescent, Chapel Ct, Fulham Street. Upgrade R122 / Castle Link Road / Naul Road junction to provide a safer environment for pedestrians and cyclists (adjacent to St. George's National School).
- Rationalisation of poles/street clutter, e.g., parking signage, blank poles, etc.
- Remove turning lane at Clonard St. / Bridge St. junction and utilise space to build-out footpath and provide loading bays and disabled parking bays that may be displaced from Main Street.
- More legible northern entrance to Mill Pond Park, through better lighting, and wayfinding. The blank gable wall on Clonard Street presents an opportunity for place-making through a mural or 'living wall' to indicate an entrance to the Park.

#### 15.6 Fingal Coastal Way

A key objective of the Fingal Development Plan 2023-2029 and the Greater Dublin Area Transport Strategy, the Fingal Coastal Way is a proposed greenway extending from Newbridge Demesne in Donabate to the Fingal county boundary, north of Balbriggan. The overall length of the scheme will be approximately 32km, depending on the final route selected. It is currently at Route Selection stage.
Fingal County Council
National Transport Authority
Active Travel
Medium Term



Figure 15-2: Route Options for Balbriggan Section 2D. Source: Fingal County Council.

The Fingal Coastal Way, when completed, will be a flagship active travel route for Balbriggan. It will not only be an important route for tourism

throughout the county, but also for improving connectivity to towns such as Skerries and Rush. It also provides the opportunity to improve local connectivity within Balbriggan.

The Fingal Coastal Way project commenced in 2019, beginning with a Constraints Study and early stage of public consultation. The project is now at the Feasibility Study and Options Assessment stage, a two-step process. Figure 15-2 illustrates the possible route options for the Balbriggan section, as identified by the Fingal Coastal Way project team.

While the project is ongoing and is at Route Option stage, the Strategy recommends the following for consideration for the Preferred Route within the Study Area:

- Consideration to reallocate one general traffic lane on Seapoint Lane to complement the Quay Street & Environs scheme.
- Spurs / connections to:
- Schools, such as Loreto Secondary School and St. Molaga's National School.
- Balbriggan Railway Station.
- Proposed Bremore Regional Park.
- Western neighbourhoods of Balbriggan via Quay Street and Mill Pond Park.
- Increase in cycle parking at the Harbour.

## 16 Supporting Measures



#### 16.1 Overview

Supporting measures will be essential to the creation of physical, social, and cultural environments where walking, cycling and public transport are attractive alternatives to the private car.

The full benefits of the proposals under the Active Travel Strategy cannot be achieved through the provision of infrastructure alone and must be combined with the implementation of measures that support the best use of that infrastructure and promote behavioural change.

Supporting measures are primarily demand orientated, i.e., they attempt to influence and manage people's travel choices rather than provide more physical capacity for travel.

It will take a wide breadth of supporting measures to:

- Create a community culture in Balbriggan that prioritises sustainable transport as instinctive modes of choice.
- Improve public awareness and educate users on available options to help them make the best choices.
- Improve end-to-end trip facilities and integration.

Fingal County Council's Active Travel Strategy sets out five steps to promote behavioural change:

- Engagement.
- Enablement.
- Communication.
- Training and Advice.
- Inspiration.

This section outlines supporting measures that build upon the sustainable transport proposals, under the following broad themes:

- Urban Design and Placemaking.
- Behavioural Change Initiatives.
- Technology for Sustainable Transport.

# 16.2 Urban Design & Placemaking

#### Our Balbriggan Programme Office

The Our Balbriggan Programme Office will be tasked with overseeing the delivery of all Our Balbriggan projects would ensure a consistency, coherence, and legibility of all the projects, and that design standards are upheld, thereby reinforcing a sense of place within the town.

#### Measure SM1

#### Our Balbriggan Programme Office

The Our Balbriggan Programme Office and leadership team will ensure cohesion and consistency with overarching objectives of the Our Balbriggan Rejuvenation Plan in the delivery of Active Travel projects by the responsible department(s) of Fingal County Council.

#### Consistency with the Our Balbriggan Public Realm Strategy

The Balbriggan Active Travel Strategy recognises and supports the development of the Our Balbriggan Public Realm Strategy and design guidance.



There will be consistency between the two, with the Public Realm Strategy providing additional detail to the over-arching themes outlined in this Active Travel Strategy on items such as material and paving, street lighting, or wayfinding.

#### Measure SM2

#### Our Balbriggan Public Realm Strategy

The Balbriggan Active Travel Strategy supports the development of the Our Balbriggan Public Realm Strategy to provide a framework for the design of Our Balbriggan public realm projects.

#### Green Infrastructure

There is a growing importance in finding more nature-based solutions to support climate adaptation and mitigation measures. Green Infrastructure (GI) is recognised as playing a significant role in the built environment, by reducing local temperatures and local flooding.

Depending on the type of GI, it can also provide cleaner air and water as well as significant value for the community with cleaner air, biodiversity, and beautiful green spaces.

Street trees can contribute so much to our local environment.
From promoting biodiversity, reducing the heat island effect to 'cleaning' the air. Planting 17 trees can absorb enough CO2 annually to offset up to 26,000 miles of driving.

Active travel routes should not only be safe and direct, they should also be Attractive – this is one of the five main requirements for cycle-friendly infrastructure according to the NTA's Cycle Design Manual and good practice cycle design generally. One such way to enhance the attractiveness is through GI such as tree-lined streets/paths (e.g. as done on Woonerfs – see Figure 5-5), rain gardens and more generally Sustainable Urban Drainage Systems (SUDS).



Image 16-1: Living Wall at Trinity Business School, Dublin.



Image 16-2: 'Oasis of Aboukir' Living Wall in Paris. Source: Dezeen.

SuDS 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 has been proven to promote good public health and wellbeing.

It is an objective of the Fingal Development Plan 2023-2029 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".



Image 16-3: Rain Gardens can add colour and greenery to otherwise "grey" environments.

#### Measure SM3

#### SuDS & Green Infrastructure

Fingal County Council will work with the relevant stakeholder to ensure that appropriate Green Infrastructure / SuDS elements are incorporated into Our Balbriggan active travel and public realm scheme designs.

#### Our Balbriggan Wayfinding Strategy

Wayfinding, or legibility, relates to how easily people can find their way around an area. For pedestrians and cyclists this is of particular importance as they are more likely to move through an area if the route is clear.

Lack of awareness of routes and distances to destinations can be a barrier to walking and cycling for tourists/visitors, and for those with intellectual or cognitive disabilities.

DMURS provides guidance on wayfinding, as well as several wayfinding techniques such as visual cues (i.e., landmarks), surface treatments, lighting, sight lines and, where appropriate, signage. It is important that wayfinding techniques do not contribute to street clutter.

At present, there is a great need to improve the overall legibility of Balbriggan; key destinations

such as the railway station, Mill Pond Park and the harbour hidden in plain sight. Quality signage and an overall Our Balbriggan Wayfinding Strategy will provide an important connection for those that already live in the town and assist visitors by improving navigation upon arrival as well as moving within the town centre.



Image 16-4: Existing Fingerpost Signage in Balbriggan.

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 space. 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.

The Our Balbriggan Public Realm Strategy will contain further guidance on the design of an Our Balbriggan Wayfinding Strategy.



Image 16-5: Wayfinding Scheme that was recently introduced in Bandon, Co. Cork, including a heritage trail for the town. Consists of Network of Map Panels, and Fingerpost Signs.

#### Measure SM4

## Balbriggan Wayfinding Strategy

Fingal County Council will prepare and implement an overarching, consistent town-wide Wayfinding Strategy to improve the legibility of Balbriggan and raise the profile of key destinations.

#### Playful Streets

Play streets are a low cost and easy way to turn streets into play spaces. They are generally

neighbour-led and involve the closure of a residential street to vehicular traffic for a few hours to a day. During this time, children and residents living on the street can play and socialise freely and safely outside.



Image 16-6: Children playing on streets in Balbriggan as part of the Playful Streets initative in June 2023. Source: Alan Betson/The Irish Times.

Children in Ireland are increasingly growing up indoors and moments for communities to gather and get to know each other have become all too infrequent. In this way, Playful Streets encourage children to play outside, making exercise fun and easy, while at the same time fostering positive social connections between neighbours, by providing a time and space for informal interactions.

Playful Streets challenge the culture of street space being predominantly a space for car, and

instead look to rebalance this toward a place for people and the community.



In June 2023, A Playful City and Fingal County Council launched A Playful Streets initiative, with one of the first Playful Street Pilot Schemes taking place at Taylor Hill Grange, Balbriggan.

#### Measure SM5

#### Playful Streets

Fingal County Council will continue to promote, encourage, and facilitate more Play Streets across Balbriggan.

Fingal County Council will actively seek opportunities to incorporate "play" into public realm improvements and active travel schemes. Playfulness in our public spaces is important to not only create a Child-Friendly place, but to add colour, interest, and vibrancy.

#### Measure SM6

#### Healthy Streets

Fingal County Council will work with relevant stakeholders to ensure that Our Balbriggan active travel and public realm projects take into consideration the 10 indicators of the Healthy Streets Approach.

## Healthy Streets Approach

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 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.



Image 16-7: Opportunities to freely sit or lean are an important element of a vibrant, inclusive, and healthy public realm. They allow people to rest, socialise, and enjoy the space. Source: DBFL.

# 16.3 Technology for Sustainable Transport

Technological advancements offer transformative potential to enhance the user experience and explore the possibilities of multi-modal integration.

An initiative of Fingal County Council, Smart Balbriggan, a programme that aims to ensure Balbriggan benefits from 'smart' and 'digital' initiatives, presents an opportunity to improve awareness and access to the transport network and services.



#### Mobility as a Service

Mobility as a Service (MaaS) is a concept which involves the use of technology to support integration and multi-modal travel. It represents the transition away from depending on personally owned transport to a model based on mobility provided as a service.

MaaS usually takes the form of a unified gateway/online account which provides access to the user to public transport, cycle hire, car clubs and taxis at the click of a button. MaaS will

also be a useful tool in land use planning to support car free or low car developments near public transport hubs and provide access to a car without owning one when needed.

#### Car Clubs

Car clubs are a growing area in Ireland with the long-established GoCar that operates nationwide, recently being joined by the YUKO car club in Dublin. Car clubs can be an important tool in facilitating car-free or low-car development in urban areas, providing access to a car for residents without the on-going expense of owning one. There is credible evidence to suggest that the increased availability of car clubs leads to a reduction of private car ownership. A recent survey undertaken by Steer Davies Gleave in London (Carplus, 2016) suggests that 10.5 private cars are removed from London's roads for each car club vehicle as users' dispose of their cars. Furthermore, a third of round-trip car club members reported that they would have bought a private car had they not joined a car club meaning a deferred purchase of a further 22 cars per car club vehicle.

There are two GoCar bases in Balbriggan – a car at the railway station and a van at the Millfield Shopping Centre. 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 have to be brought back to a base.



#### Electric Vehicles

The use of EVs is expected to grow significantly in the coming years. The NPF, in line with Ireland's Climate Action Plan and Climate Mitigation Plan, envisages the progressive shift towards EVs and hybrid traction systems for private vehicles and public transport fleets.

This expected increase in the use of EVs must be supported by the development of public charging infrastructure. An uplift in the number of EVCPs is envisaged to include slow-charge, medium change and fast-charge facilities primarily replacing existing parking spaces. EVs, however, are not a panacea to alleviating congestion or the pressing issue of reallocating private car storage space for sustainable transport and biodiversity. Care must be taken when considering the placement of on-street EVCPs to ensure that they are not sited in areas of high pedestrian and cyclist movement where associated cables and charging infrastructure may form barriers and create clutter.

#### Virtual Loading Bay Systems

Kerb space in urban areas have many competing uses including car parking, street furniture, trees, cycle lanes and commercial deliveries. Some cities in Europe have begun trialling Virtual Loading Bay Systems to support a more efficient use of kerbside space for delivery and servicing.

Virtual Loading Bay Systems allows users to find and book available spaces with the use of an app. This reduces congestion by eliminating the need to search for available spaces and in effect, acts as a demand management technique



as spaces must be booked in advance.

Virtual Loading Bay 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 will allow drivers to book a virtual loading bay on previously restricted kerb space.

## Dynamic Parking Technology

To support a more efficient use of kerbside space, urban areas in Europe have begun trialling smart technology including dynamic on-street parking models and virtual loading bays recouping costs by charging for vehicles to use this service. This technology can be investigated further in Ireland to minimise conflict for competing demands for limited road space and to reduce search traffic and local congestion. Virtual parking and advanced booking of loading bays can assist companies make deliveries on time, reducing congestion and conflict.

Limerick City and County Council recently trialled a pilot project launched by the Disabled Drivers Association of Ireland (DDAI) around the use of a mobile application, SpaceFinder, to search and reserve available blue badge parking bays in advance.

The app also provides real time information on the use of accessible parking bays to the local authority which enables them to plan for future provision and location of accessible spaces. In July 2023, Dun Laoghaire and Rathdown County Council (DLRCC) launched the dlr Spacefinder App to provide live information on the location and live availability of the 37 accessible spaces in Dun Laoghaire town centre providing an adaptable template for Balbriggan.

#### Measure SM5

#### Technology for Sustainable Transport

Fingal County Council will collaborate with Smart Balbriggan to investigate the use of technology for sustainable transport initiatives including:

- Investigate the potential for Mobility as a Service (MaaS) systems to facilitate sustainable transport.
- Investigate the feasibility of dynamic parking and loading systems in Balbriggan to support the more efficient use of parking provision in the town and limit the impact of "search traffic" on the network.
- Investigate the potential for the launch of the SpaceFinder app in Balbriggan.

# 16.4 Behavioural Change Initiatives

Information and education campaigns are an important 'soft' supporting measure to raise awareness and improve understanding of the options and travel choices available to people. Information campaigns play an important role in helping the general public to overcome the barriers of switching from private car use to sustainable modes such as walking.

Similarly, raising awareness of the multitude of health, social, environmental and economic benefits of walking and creating people-friendly places is also an effective way of encouraging people to change habits, as well as securing buy-in from the general public and business owners.

**Benefits of SRTS** 

The introduction of a School Streets Zone in Malahide resulted in a 43% reduction in school related traffic on surrounding roads.

The use of technology in the communication of information has evolved considerably over recent years and opportunities to take advantage of effective and efficient new methods of communication via mobile applications and social media should be explored.

In delivering sustainable transport improvements, consideration should be given to branding, marketing, and advertising and using smart, creative, cost-efficient campaigns targeted at increasing and maintaining sustainable transport demand. Information campaigns should be an integral part of the successful delivery of Balbriggan Active Travel Strategy.

Behavioural change initiatives could include:

- Smarter Travel Workplaces.
- Safe Routes to School.
- One-off events such as Car-Free Day, EU Mobility Week and Cyclovia.
- Cycle training provided in schools, workplaces and community centres.
- Dedicated apps to crowdsource user data to suggest improvements to the walking and cycling environment.

#### Workplace Travel Planning

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 Fingal Development Plan 2023-2029 requires Travel Plans for new developments. Workplace travel planning provides the opportunity to communicate the implementation of the Strategy and to promote its benefits directly with a large number of commuters.

#### Measure SM6

## Workplace Travel / Mobility Management Plans

Fingal County Council and the NTA will progress the continuation and expansion of workplace travel planning in the Balbriggan area.

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

- Millfield Shopping Centre.
- Castle Mill Shopping Centre.
- Organisations within the Stephenstown Industrial Estate.
- Organisations within the Castlelands area.

#### School Travel Planning

Improving school travel planning throughout Balbriggan is critically important to providing the physical and social activity young people need and reducing the social, health and environmental impacts of car-based school commutes. According to the 2016 Census POWSCAR data, 46% of journeys to school are by active modes which is a strong base to start from with significant potential to further increase this through both enhancing the infrastructure, as well as behavioural change initiatives.



Image 16-8: Bike Week 2022 Family Fun Day. Source: FCC.

Attempts to incorporate Active Travel are sometimes undermined by a lack of adequate design provision for walking and cycling, and by readily available car parking. To address some of these issues, Fingal County Council will work with schools and other relevant stakeholders to implement Active School Flag and Green School

Programmes, as well as establishing Safe Routes to School.

Green School audits and Active School Flags prepare a school and a local authority for redesigning the streetscape outside of their front gate Traffic at the front of school at peak drop-off and pick-up times poses a significant hazard for school children, as well as significantly negatively impacting air quality.

Congestion and parked cars can reduce visibility of and for children crossing roads, particularly cars parked in pedestrian areas which can further block access and reduce available footpath width. This often leads to overcrowding on front-of-school footpaths, forcing children and their carers to walk on the road, all of which disincentivises walking, scooting and cycling to and from school.

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

- To accelerate the delivery of walking, scooting and cycling infrastructure on key access routes to schools.
- To provide front-of-school treatments which will enhance access to schools.
- To expand the amount of bike and scooter parking available at schools.

Table 9-2 above presents some initial recommendations to increase accessibility to schools in Balbriggan by walking, wheeling, scooting, and cycling. Fingal County Council will liaise with schools to deliver Safe Routes to School measures.

#### Measure SM7

#### School Planning and Design

Development Plans, SDZ Planning Schemes and Local Area Plans should ensure that access by walking, cycling and public transport is a key determinant in the location of new schools.

Planning for new schools and the expansion of existing schools should ensure that the detailed design is undertaken in a manner which maximises the priority for pedestrians and cyclists.

Fingal County Council will aim to complete Safe Routes to School projects at all eligible schools in Balbriggan a timely fashion. This includes targeted infrastructural improvements to facilitate initiatives such as the School Bike Buses, Walking Buses, and Park & Stride drop-off areas within walking distance of schools.

#### Special Events

The possibility of Balbriggan hosting one-off special events such as Car Free Days, EU Mobility Week, or Ciclovia should be explored.

Fingal County Council have previously held Car Free Days in other county towns such as Malahide for European Mobility Week which were of great success and included demonstrations by mobility partners such as Bleeper Bike.

Hosting a special event can provide an opportunity to trial changes to how our streets function in terms of movement and place, without committing to them. Tactical urbanism, pop-up Play Streets, car-free days, festivals and markets are an opportunity to raise awareness of Balbriggan's expanding sustainable transport options, showcase the possibilities, and gain live feedback from the community to inform decision-making and the design process.

#### Measure SM7

#### Special Events

Fingal County Council will host special events in Balbriggan throughout the year such as a Car-Free Day, EU Mobility Week and Cyclovia to promote and raise awareness of the Town's expanding sustainable mobility options and showcase new public realm projects.



PEDAL POWER SMOOTHIE BIKES (MAKE SMOOTHIES BY PEDALLING A BIKE)

MAGICIAN • BALLOON MODELLING • GLITTER TATTOOS

BLEEPER BIKES - ELECTRIC BIKE DEMO

FINGAL COUNTY COUNCIL - ROAD SAFETY STAND

FACE PAINTING • MUSIC • & MORE...







Image 16-9: Poster for Malahide Car Free Day 2022. Source: FCC.

# Part C | Strategy Outcomes & Delivery



# 17 A Phased Approach - Implementation

# 17.1 A Phased Approach

A phased approach will be adopted when implementing the Balbriggan Active Travel Strategy.

It should be noted that the individual projects put forward by this Strategy will be subjected to individual feasibility studies, environmental, archaeological, and architectural assessments, detailed design and any other relevant statutory procedures and consultation with relevant statutory stakeholders.

A plan of implementation will follow the publication of the Balbriggan Active Travel Strategy.

## 17.2 A Collaborative Approach

The successful delivery of the Balbriggan Active Travel Strategy proposals will require collaboration between a broad range of stakeholders, from various Fingal County Council departments, the National Transport Authority, Transport Infrastructure Ireland, Irish Rail, Eastern and Midlands Regional Assembly, advocacy groups, and the wider community of Balbriggan.

It is acknowledged that each of the projects will require to be appraised individually in terms of feasibility, design, planning, approval, and funding.

# 17.3 Indicative Implementation Table

Table 7 overleaf presents an indicative implementation table with suggested timeframes as follows:

- Short-term: up to 2026.
- Medium-term: up to 2030.
- Longer-term: up to 2043.

The pace of implementation of some of the Active Travel Strategy will be dedicated by the level of available funding and the length of time to deliver schemes through the planning process.

Many of the bigger infrastructure schemes particularly in relation to public transport such as the DART+ Coastal North and BusConnects have indicative timeframes outlined in the Greater Dublin Area Transport Strategy 2022-2042. Many of the more complex schemes including the re—configuration of the Balbriggan Railway Station is likely to be a

medium-long term project and entail a close level of cooperation with multiple stakeholders and landowners.

However, given the level of transformation in how we travel required by the Climate Action Plan 2023, there is a need to radically prioritise the reallocation of existing road space towards public transport and active travel.

It is therefore envisaged that much of the proposed walking and cycling projects can be delivered through the updated NTA Rapid Build Active Travel programme in the short-medium term.

## 17.4 Rapid Build

It is anticipated that many of the proposed Active Travel schemes will be delivered through the NTA's Rapid Build Active Travel programme. The programme seeks to deliver high-quality walking and cycling infrastructure quickly using cost-effective methods.

NTA

db 1

Rapid Build Active

**Travel Facilities** 

Many of proposed schemes in this Strategy entail junction tightening, traffic calming and reallocation of existing road space. It is envisaged that these schemes can be delivered in the most part, without expensive and lengthy land acquisition process and by minimising changes to the drainage system.

# 17.5 Funding and Operation Costs

Aside from capital investment, the implementation of the Active Travel Strategy will incur on-going operation costs. A significant amount of funding for some projects has been secured through the Council's Capital Programme and the Urban Regeneration and Development Fund. (URDF). However, other forms of supplementary funding and agreements are likely to be sought including;

- The NTA's Active Travel Investment Progamme;
- Development contributions for strategic transport infrastructure;
- Site-specific development contributions; and/or
- Land agreements through the development management process for example for footpath widening or cycle lane provision.

No.	Action	Short-Term	Medium-Term	Long-Term			
		(Up to 2026)	(Up to 2030)	(Up to 2043)			
	ACTIVE TRAVEL NETWORK						
AT1	Pedestrian Network						
AT2	Street Clutter Audit						
AT3	Universal Design & Accessibility						
AT4	Inclusive Design & Safety						
AT5	Balbriggan Active Travel Network						
AT6	Clonard Brook Greenway						
AT7	Safe Routes to School						
AT8	Cycle Parking Facilities						
AT9	Shared Bike Systems & Micromobility						
PERME	ABILITY						
PY1	Permeability						
PUBLIC	TRANSPORT						
PT1	Multi-Modal Interchange Hub						
PT2	Balbriggan Bus Services						
PT3	Bus Stops & Shelters						
PT4	Review of Short-Hop Fare						
PT5	Extension TFI 90 Minute Fare						
JUNCTI	ION IMPROVEMENTS						
JN1	Junction Design Principles						
JN2	Junction Improvements						
ROAD	AND STREET NETWORK						
RS1	Balbriggan's Road and Street Network						
RS2	Motorway and National Road Network						
RS3	Regional & Local Roads & Sustainable Transport						
RS4	Flemington Lands Street Network						
RS5	Speed Limit Review						
RS6	Town Traffic Management Measures						
OUR B	ALBRIGGAN REJUVENTATION PLAN PROJECTS						
	Quay Street						
	Heart of Balbriggan: Main Street						
	Heart of Balbriggan: Mill Pond Park						
	Rail Street, Station and Plaza						
	Chapel Street Low Traffic Neighbourhood						
	Fingal Coastal Way						
CAR PA	ARKING MANAGEMENT						
CP1	Approach to Parking Management						
CP2	On-Street Mobility Points						

# 18 Strategy Outcomes, Monitoring & Reporting

#### 18.1 What will success look like?

By 2030, Balbriggan's streets will be quieter, safer and more attractive for all users. We will have continued to reduce the speed and volume of private motor vehicles on our streets. Balbriggan's town centre will be a more vibrant, walkable, and a more overall enjoyable place to linger and spend time in.

Walking and cycling will be how people choose to trave particularly for short trips or those linked with public transport. Longer trips will be made by public transport supported by an accessible and inclusive shared mobility schemes. Deliveries and servicing impacts will be mitigated through fewer trips, condensed operating hours, and greener and quieter vehicles.

Balbriggan will be better prepared for the impacts of climate change with more street trees, planting and rain gardens to reduce surface run-off in times of heavy rainfall. We will have made dramatic improvements in air quality and improved road safety for all users.

## 18.2 Strategy Outcomes

#### Key Transport Modelling Findings

A comprehensive, tiered modelling approach was undertaken as part of the development this Strategy. This work is summarised in Appendix D. This approach also included a sensitivity test utilising the NTA's Cycle Propensity tool that enable a forecast over-and-above existing active travel levels through the implementation of appropriate supporting measures.

The modelling assessment framework found that the implementation of the Plan's proposed transport infrastructure interventions and measures would have the following positive impacts:

- An achievable sustainable mode share of 57%: 43% non-car/car in the short mmedium term.
- 39% of this mode share comprises of active travel. Linked trips with public transport account for an additional 18%.
- A significant reduction in traffic volumes in the Town Centre and residential streets such as Clonard Street and Chapel Street.
- Emissions and Noise Levels
- The level of CO2 emissions would fall significantly by 26% in 2027 and

- approximately 40% in 2043. This reduction is as a direct result of the Plan's proposals in addition to a reduction in travel due to remote working and the use of electric vehicles.
- A significant reduction in noise in the core town area (between Hamlet Lane and the Harry Reynolds Road) and adjacent streets such as Chapel Street of between 3 to 10dB by 2027.

#### Working from Home & Remote Hubs

The updated models now include a variation to account for the likelihood of a degree of remote working in the future. Applying this variation to the base model, this scenario suggested a significant reduction use of the private car from 63% mode share in 2022 to 57% in 2027.

This suggest that it may be beneficial for Fingal County Council to continue to introduce remote working hubs in Balbriggan that may be attractive to workers as an alternative to office or home working. Additional remote working hubs located close to an increasingly accessible town centre is highly likely to yield additional benefits in terms of increased footfall and vitality and further use of sustainable transport options.

The outputs identified above are the result of a transport modelling exercise and should be viewed as minimum achievable outcomes. The following section identifies additional mode share targets based on available information from sources including the GDA Transport Strategy 2022-2042, FCC's Active Travel Strategy for Fingal and information compiled to inform the development of this strategy and modelling process.



#### Our Balbriggan Mode Share Targets

Mode share targets have been set for Balbriggan, as presented in *Table 18-1*, up to 2043, with an interim year of 2030.

These mode share targets build on the outcomes of the strategic transport modelling exercises undertaken as part of the appraisal of this Strategy, and take into account targets set by the *Greater Dublin Area Transport Strategy* 

*2022-2042* and the *Fingal Active Travel Strategy* published in May 2023.

Certain details of this Strategy, for example, objectives for Fingal County Council to work with the NTA, Irish Rail and other stakeholders to expand and realign the town and regional bus and train services, and behavioural change initiatives have not been fully accounted for or captured within the model as they are subject to further assessment and engagement.

However, as these proposals aim to make sustainable modes of travel more attractive relative to the private car, it is considered likely that as they are realised, higher active travel and public transport mode shares than those within the model are achievable.

It is envisaged that these targets will be updated and adjusted once 2022 Census POWSCAR data is released in order to provide the most up-to-date baseline figure.

Table 18-1: Balbriggan Active Travel Strategy Mode Share Targets for Travel to Work, School or College.

Mode	Strategy	2016	2030	2043
A coline	GDA TS	27.6%	N/A	33.9%
Active Travel	Our Balbriggan	28%	34%	40%
	GDA TS	14.6%	N/A	17.5%
Public Transport	Our Balbriggan	17%	19%	25%
	GDA TS	57.7%	N/A	48.6%
Car	Our Balbriggan	55%	47%	35%

# Our Balbriggan Targets for Travel to School

A key aim of the Strategy is to encourage more children to walk and cycle to school in Balbriggan, more safely and more often. Fingal County Council have a deserved reputation for innovation in the provision of 'Safer Routes to School and School Streets and Cycling and Walking Buses.

This Strategy aims to build upon that momentum with several proposals that facilitate slower streets, better pedestrian crossings and dedicated cycle infrastructure.

To help measure the success of this, the Strategy sets out separate indicative mode share targets aligned with short-term, mediumterm, and long-term years.

Table 18-2: Primary School Mode Share Targets.

Mode			
Active Travel	48%	55%	65%
Public Transport	5%	8%	10%
Car	47%	37%	25%

Table 18-3: Secondary School Mode Share Targets.

Mode	2027	2035	2043
	50%	62%	70%
	8%	15%	15%
	42%	23%	15%

The targets are intentionally ambitious to reflect the need to increase sustainable travel, meet climate action targets, improve air quality and promote physical activity and social cohesion. The targets have been split into primary school and secondary school students

to reflect the significant difference in the ways these age groups travel school.

Incremental targets have been set to reflect the gradual implementation of changes to the transport network and the impact of behavioural change. The recommendations of the Strategy such as Safe Routes to School, 30kph speed limit, cycle facilities, filtered permeability measures, car parking management, etc., will support and facilitate this modal shift, however, coordination from all stakeholders will be required to achieve it.

#### Additional Mitigation Measures

Based on the findings from the modelling assessment the Balbriggan Active Travel Strategy should incorporate the following recommendations to mitigate some of the potential impacts shown by the traffic and transport assessment.

These are set out below.

Better Interurban Routes: The Greater Dublin Area Transport Strategy identifies a number of significant high-quality transport radial connections from Balbriggan to Dublin City to be delivered in the coming years including DART + and connections to BusConnects and future Metrolink.

However, there here will be a need to continue to work with the NTA and other

relevant stakeholders to further develop orbital public transport options to key workplace destinations such as across the County including as Swords, Blanchardstown, Malahide, Dublin Northern Fringe to address a high carbased commuting pattern from Balbriggan. This is likely to include provision over-and-above those identified in the Connecting Ireland and Local Link services.

- Additional Demand Management Measures: These typically relate to additional parking controls that discourage long-stay parking and/or commuter parking.
  - Parking controls entail the control of availability and supply of parking through the development management process by facilitating car-free and low-car development and undertaking regular reviews of available kerbside space with a view to reallocating underutilised space to higher value uses including tree planting, public seating, cycle parking and more accessible bus stops.
- Additional Behavioural Change Measures are also recommended to prioritise and focus on modal shift for short length journeys particularly where journeys can be completed by walking under 2 km and cycling under 8 km. Each school in Balbriggan should be

Each school in Balbriggan should be encouraged to enlist on the Green-

Schools programme and conduct an audit to identify short- and medium-term measures including Front of School and route planning improvements.

There is additional scope to include Residential Travel Planning measures – for example in new developments such as Castlelands, Flemington Lane, and Taylor's Lane that provides travel planning advice and incentives for new residents. Similarly, there is scope for additional Workplace Travel Planning in areas such as the Millfield Shopping Centre and Stephenstown Industrial site.

# 18.3 Monitoring and Review

The Balbriggan Active Travel Strategy is considered to be a 'live' document that will be reviewed and updated as it evolves.

Fingal's Active Travel Strategy identifies a requirement to develop a County-wide Monitoring and Evaluation framework that will likely include key towns such as Swords and Balbriggan. Data sources such as pedestrian counts, cycle counts, walkability audits, parking surveys, air quality surveys and collision data will be used to measure the progress of the Strategy.

#### Measure SO1

### Monitoring & Review

Fingal County Council will continue to monitor and report on the delivery of the Balbriggan Active Travel Strategy.





