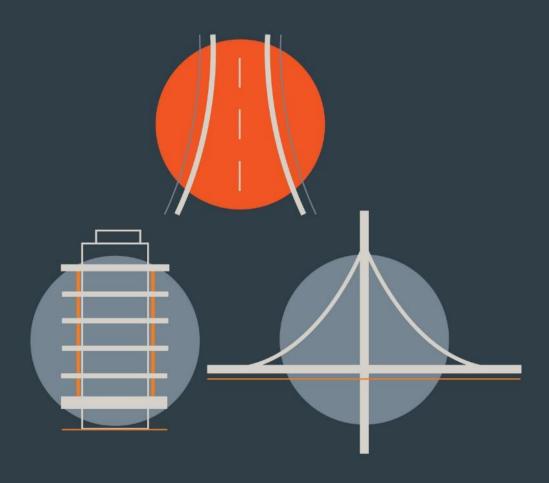
Residential Development at Lands at Cornelscourt Village, Old Bray Road, Cornelscourt, Dublin 18

**Report Title** 

**Mobility Management Plan** 

Client

**Cornel Living Ltd** 





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# **APPENDICES**

<b>Appendix A</b> Mode Specific Measure
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**Appendix B** Management & Monitoring Measures

**Appendix C** Marketing & Promotion Measures

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- 1.1 CONTEXT
- 1.2 BACKGROUND
- 1.3 STRUCTURE OF REPORT

# 1.0 INTRODUCTION

#### 1.1 CONTEXT

- 1.1.1 DBFL Consulting Engineers have compiled this framework Mobility Management Plan (MMP) as part of the planning application for a Build to Rent Scheme comprising 452 no. residential apartment units and 16 no. houses on a greenfield site located off of the R842 Old Bray Road in Cornelscourt, Dublin 18.
- 1.1.2 Build to Rent (BTR) Scheme is a delivery of purpose-built residential accommodation that is designed with the sole purpose to be used as a long-term accommodation and professionally owned and managed by an institutional landlord. A BTR scheme is generally of a very high-quality design with access to amenities and located within quality public transport nodes. In terms of mobility management, BTR offers greater advantage over the conventional rental apartments due to it being managed by a highly skilled management company with a focus on modes of travelling by walking, cycling and public transport. Typically, BTR developments have no dedicated car parking associated with individual apartments and are not provided as part of rental agreements for the residential units. Where parking is provided on site, residents can rent a parking space by paying a fee on first come, first serve basis.
- 1.1.3 This MMP has been prepared to guide the delivery and management of several coordinated initiatives which ultimately seek to encourage sustainable travel practices for all journeys to and from the proposed residential development.
- 1.1.4 This framework document aims to inform three distinct audiences as follows;
  - The appointed Mobility Manager who will be responsible for implementing and managing the MMP. Should the manager not be overly familiar with the MMP process they will find the process and context information as outlined in Chapter 2 invaluable. The MMP targets and measures introduced in Chapter 5 and Chapter 6 will be coordinated, administered and updated by the appointed Mobility Manager.
  - The Local Authority Officers who will be eager to ensure that the MMP initiatives are appropriately ambitious, deliverable and implemented fully.
     The officers, who will be very familiar with the MMP process, will be

- predominately interested in the proposed MMP Targets (Chapter 5) and associated measures (Chapter 6).
- The Residents of the proposed development who may be unfamiliar with the MMP process. They will find the process and context information as outlined in Chapter 2 invaluable. They may also be interested in the MMP targets and measures introduced in Chapter 5 and Chapter 6.

# 1.2 BACKGROUND

- 1.2.1 This Mobility Management Plan (MMP) has been prepared to guide the delivery and management of a package of integrated initiatives which seek to encourage sustainable travel practises at the proposed residential development located at the R842 Old Bray Road, Cornelscourt, Dublin 18. This document aims to expand the awareness of and increase travel options and mobility opportunities for the residents located at the site. The Plan will be used mainly by the appointed Mobility Manager who will be responsible for implementing and managing the MMP for the benefits of the residents who may be interested in reading this document to see how it directly affects them.
- 1.2.2 This Framework MMP has been prepared to guide the delivery and management of a package of integrated initiatives which ultimately seek to encourage sustainable travel practices of all residents and visitors travelling to/from the proposed residential development at Cornelscourt, Dublin 18.
- 1.2.3 The purpose of the Mobility Management Plan is to:
  - Provide a 'manual' and record for the Mobility Manager who will be appointed to oversee the implementation and development of the measures set out in the document,
  - A formal record for the local authority in regard to the type, scale and number of initiatives that the MMP initially proposes and subsequently their level of success in subsequent versions of the MMP which remains a 'live' document to be updated at least initially every 2 to 3 years following its implementation, and

 The MMP will seek to provide a long-term strategy for encouraging residents and visitors to reduce their dependency on travelling by car in favour of more sustainable modes of travel.

# 1.2.4 The aims of the strategy are:

- (a) to increase the awareness of residents, staff and visitors to all the transport options available to them and to the potential for travel by more sustainable modes, and
- (b) to introduce a package of both 'hard' (physical) and 'soft' (behavioural) measures that will facilitate travel by sustainable modes of travel to/from the subject residential development.

# 1.3 STRUCTURE OF REPORT

- 1.3.1 Following this introduction, the MMP framework including the definition of a MMP, its objectives, the scope and process involved in compiling and implementing such a plan is outlined in **Chapter 2**.
- 1.3.2 The environment within which the proposed residential development MMP is placed, such as location and local transportation system is briefly outlined in Chapter 3.
- 1.3.3 The MMP context in terms of local travel trends and 2016 census data are established in **Chapter 4**.
- 1.3.4 The MMP objectives and targets are established in **Chapter 5**.
- 1.3.5 In **Chapter 6** the measures and travel initiatives selected to encourage sustainable travel are discussed. These include Mode Specific Measures, Management Measures, Marketing Measures and Monitoring & Review Measures.
- 1.3.6 With the objective of establishing the basis for discussions with the local authority, from which an agreed MMP action plan can be adopted, **Chapter 7** presents a Preliminary Action Plan for the MMP at the residential development at Cornelscourt.
- 1.3.7 The main conclusions and recommendations of the MMP are summarised in **Chapter 8**.



- 2.1 What is a Mobility Management Plan?
- 2.2 What is a Residential MMP?
- 2.3 Who is Involved?
- 2.4 Objectives of an MMP
- 2.5 MMP Process
- 2.6 MMP Next Step
- 2.7 Policy Framework

# 2.0 MOBILITY MANAGEMENT PLAN FRAMEWORK

## 2.1 WHAT IS A MOBILITY MANAGEMENT PLAN?

- 2.1.1 The Dublin Transportation Office's (which has been subsumed into the National Transportation Authority (NTA) in December 2009) 2001 publication entitled "The Route to Sustainable Commuting" defines a MMP as "... a package of measures put in place by an organisation to encourage and support more sustainable travel patterns ...".
- 2.1.2 The MMP can be developed for an individual site or group of sites and designed specially to respond to a range of different site-specific land uses such as business (offices, retail, industrial etc.), residential and schools/ colleges/ universities.
- 2.1.3 Whilst the emergence and successful application of MMPs have only transpired over the last 15 years in Ireland, other countries have extensive experience in designing, implementing, marketing and monitoring the successful delivery of MMPs. Accordingly, MMPs are also known by a number of other names including:
  - Travel Plans;
  - Green Travel Plans;
  - Sustainable Mobility Plans; or
  - Sustainable Commuter Plans.

# 2.2 WHAT IS A RESIDENTIAL MOBILITY MANAGEMENT PLAN?

- 2.2.1 A Residential Mobility Management Plan is a package of measures designed specifically to reduce the number and length of car-based trips generated, whilst also encouraging more sustainable forms of travel and reducing the overall need to travel. It sets out objectives and targets to achieve sustainable travel patterns.
- 2.2.2 A successfully implemented Residential MMP can provide reductions in car usage, particularly influencing levels of single-occupancy car travel, with increased trips made by public transport, walking and cycling; and improve road safety and personal security (especially for pedestrians and cyclists).
- 2.2.3 Mobility Management Plans to date have mainly focused on the development of destination MMPs and to encourage travel by sustainable modes for employment and school developments. Destination MMPs focus on a particular journey purpose

- while a residential MMP is concerned with journeys made from a single origin (home) to multiple and changing destinations.
- 2.2.4 Best Practise guidance is provided in "Making Residential Travel Plans Work Good Practice Guidelines For New Development" published by the Department for Transport (UK) in September 2005 and "Making Residential Travel Plans Work" in August 2007. These documents highlight that a Residential MMP will be different to a school or workplace MMP as the pattern of journeys originating at a place of residence is more varied with multiple destinations and different needs and travel choices.
- 2.2.5 The DfT's (UK) "Making Residential Travel Plans Work Good Practice Guidelines" suggest that the growing interest in residential travel planning is being driven by two factors:
  - "the increased acceptance of travel planning as a legitimate part of the transport planning toolkit and an effective mechanism in helping both to reduce congestion and to promote the use of sustainable modes of transport"
  - "the pressure for new housing and its transport implications in many parts of the country is driving the need to find new ways of ensuring the development of more sustainable communities"

# 2.3 WHO IS INVOLVED?

- 2.3.1 A Residential MMP impacts the following stakeholders who should all be involved in some form or manner:
  - Local Authority Officers;
  - Housing developers;
  - Future residents at sites that have an MMP;
  - Residents in the community surrounding new housing developments with a MMP; and
  - Transport Operators.

# 2.4 OBJECTIVES OF A MOBILITY MANAGEMENT PLAN

- 2.4.1 The principal objective of an MMP is to reduce levels of private car use in parallel with encouraging people to walk, cycle, use public transport, car share or even reduce the number trips undertaken / required.
- 2.4.2 A comprehensive range of goals, and subsequent complementary secondary level objectives, can be identified with the purpose of achieving the ultimate objective of the MMP. This can be achieved through the delivery of a range of complimentary integrated initiatives which can positively influence travel behaviour and associated travel habits.
- 2.4.3 The specific objective(s) of an MMP can vary depending upon the organisation, site characteristics and specific land uses which vary with each site. Nevertheless, in the context of this MMP objectives can include;
  - a) For the Residents -
    - Address residents' need for access to a full range of facilities for work,
       education, health, leisure, recreation and shopping; and
    - Promote healthy lifestyles and sustainable, vibrant local communities.
  - b) The Local Community
    - Reduce the traffic generated by the development for journeys on the external road network;
    - Make local streets less dangerous, less noisy and less polluted;
    - Enhance viability of public transport; and
    - Improve the environment and the routes available for cycling and walking.

# 2.5 MOBILITY MANAGEMENT PLAN PROCESS

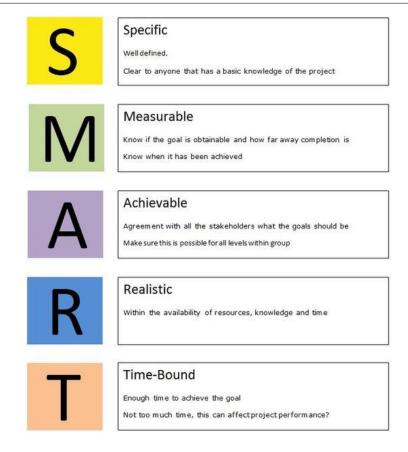
- 2.5.1 Once the decision has been made to produce a MMP the process of compiling the plan encompasses the 9 principal steps presented in **Graph 2.1** below.
- 2.5.2 The MMP however remains an 'active' document which continues to evolve and develop during its lifecycle. Accordingly, once the initial nine steps have been successfully completed (including monitoring and reporting requirements), the process recommences with the identification of new actions and associated targets

which instigates the second generation of the MMP. As a result, subsequent generations of the MMP can be incorporated into the management and operation of the residential development for as long as necessary or potentially even for the entire existence of the residential development.



**Graph 2.1: MMP Development Process and Status** 

2.5.3 Once the Residential development's specific objectives are identified "SMART" targets will both assist in defining the specific measures that are included and / or prioritised within the MMP (to reach the objective), and help with the monitoring and evaluation of the level of success achieved by the MMP. SMART targets, which can be agreed with the local authority should be;



# 2.6 MOBILITY MANAGEMENT PLAN NEXT STEP

- 2.6.1 In the context of the residential development's operational framework, the local receiving environment and the identification of the Preliminary Action Plan this document should form the basis by which;
  - (a) the subject residential accommodation development's specific travel characteristics are outlined and presented to the local authority; and
  - (b) through a partnership approach between the developers and the local planning authority, the Preliminary Action Plan is explored and reexamined with the objective of reaching agreement upon the MMP's measures and subsequently the adoption of an 'agreed' MMP Action Plan with targets, initiatives, timescales, responsibilities and resources clearly outlined and approved by both parties.
- 2.6.2 To enable this process to commence it is proposed that this MMP framework document, as compiled by DBFL is submitted to Dún Laoghaire Rathdown County Council. At the request of the local authority a meeting between the local authority officers and the developers can take place if required with the objective of formally

agreeing an MMP action plan and associated targets for the subject residential development as proposed at Cornelscourt, Dublin 18.

#### 2.7 POLICY FRAMEWORK

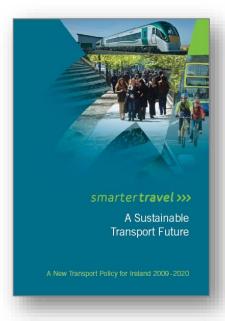
2.7.1 The MMP for the residential development is supported by comprehensive transport policy hierarchy in addition to being influenced directly / indirectly by other policy themes (e.g. environmental, health etc.) which generate a range of complementary policy instruments in addition to demands and pressures that clearly necessitate a change in existing travel behaviour. Commencing at EU level and subsequently transferred into national policy and regulations in Ireland the hierarchy continues from regional (Greater Dublin Area) to sub-region (Dún Laoghaire – Rathdown County Council) and eventually arriving at site (or land use) specific policy objectives.



Figure 2.1: MMP Policy Framework and External Influences

# **National Smarter Travel Policy**

2.7.2 'Smarter Travel - A Sustainable Transport
Future', was published in February 2009,
and represents a new transport policy for
Ireland for the period 2009-2020. The policy
recognises the vital importance of continued
investment in transport to ensure an
efficient economy and continued social
development, but it also sets out the
necessary steps to ensure that people
choose more sustainable transport modes
such as walking, cycling and public
transport.



- 2.7.3 The policy is a direct response to the fact that continued growth in demand for road transport is not sustainable due to the resulting adverse impacts of increasing congestion levels, local air pollution, contribution to global warming, and the additional negative impacts to health through promoting increasingly sedentary lifestyles.
- 2.7.4 The following five key goals form the basis of the Smarter Travel policy document:
  - Improve quality of life and accessibility to transport for all and, in particular, for people with reduced mobility and those who may experience isolation due to lack of transport.
  - Improve economic competitiveness through maximising the efficiency of the transport system and alleviating congestion and infrastructural bottlenecks.
  - Minimise the negative impacts of transport on the local and global environment through reducing localised air pollutants and greenhouse gas emissions.
  - Reduce overall travel demand and commuting distances travelled by the private car.
  - Improve security of energy supply by reducing dependency on imported fossil fuels.

- 2.7.5 These aims will be achieved through 49 specific actions, which can be broadly grouped into 4 key areas:
  - Actions to reduce distance travelled by private car and encourage smarter travel,
  - Actions aimed at ensuring that alternatives to the private car are more widely available,
  - Actions aimed at improving the fuel efficiency of motorised transport through improved fleet structure, energy efficient driving and alternative technologies, and
  - Actions aimed at strengthening institutional arrangements.
- 2.7.6 The opportunities and potential benefits that could be achieved by the implementation of a MMP are considered under the policy goal of encouraging Smarter Travel.
- 2.7.7 The Smarter Travel policy also includes for a comprehensive range of supporting 'actions' including mode specific (e.g. walking, cycling and public transport etc.) and behaviour change initiatives which both encourage and provide for sustainable travel practices for all journeys.

#### Transport Strategy for the Greater Dublin Area

- 2.7.8 Published in 2016 the role of the strategic transportation strategy (2016 to 2035) is to establish appropriate policies and transport measures that will support the Greater Dublin Area in meeting its potential as a competitive, sustainable city region with a good quality of life for all. The strategy seeks to meet:
  - Economic objectives by reducing delays and improving journey time reliability; Social objectives by improving safety, reducing



travel related stress and reducing the adverse impacts of traffic on neighbourhoods; and

- Environmental objectives by giving priority to those means of travel that are less damaging to our natural and built environments.
- 2.7.9 The strategy acknowledges that there will be only limited enhancements to road capacity, accordingly some measure of travel demand management (TDM) will be required in the form of (a) Control measures (b) Fiscal measures and (c) Other Complementary measures. One of the most important initiatives that are classified under the theme of Other Complementary measures are Mobility Management Plans.

# Dún Laoghaire - Rathdown County Development Plan 2016 - 2022

2.7.10 Adopted in 2016 and covering the period up to 2022 the *Dún Laoghaire – Rathdown County Development Plan* establishes the regulatory framework against which all development in the county takes place. The authority's sustainable travel and transportation objectives highlight the importance of influencing the modal shift towards more sustainable means of transport:

"An increased travel mode share for walking and cycling. This increase will be mainly related to local trips to work, schools, retail and leisure within the larger urban areas."

"An increased travel mode share for public transport for work trips to the main employment zones of Sandyford, Cherrywood and Dublin City Centre and between the other large urban centres. There may be scope to improve public transport mode share to larger urban centres along the main bus and rail corridors, particularly where this improves access and interchange between bicycle and rail."

2.7.11 Dún Laoghaire – Rathdown County Development Plan 2016 - 2022 outlines the importance and utilities of Mobility Management Plans and Travel Plans, as these documents may be used to manage site accessibility, maximise access to public transport and accommodate sustainable movement needs, which helps meet the various objectives of the development plan. It has become best practice to prepare mobility management plans for developments to improve sustainability and encourage sustainable travel trends as much as possible. This may include a modal shift from Private car usage towards walking, cycling, and public transport uptake.



- 3.1 SITE DESCRIPTION
- 3.2 PROPOSED DEVELOPMENT
- 3.3 PLANNING HISTORY
- 3.4 EXISTING TRANSPORT FACILITIES & SERVICES

# 3.0 SITE DESCRIPTION & EXISTING CONDITIONS

# 3.1 SITE DESCRIPTION

- 3.1.1 The site is zoned within the Dún Laoghaire Rathdown County Development Plan 2016 2022 as Objective A "*To protect and-or improve residential amenity.*"
- 3.1.2 As illustrated in **Figure 3.1** below, the site of the proposed residential development is located along the R842 Old Bray Road and is bound to the north by the N11 Stillorgan Road and the adjoining AIB Cornelscourt property. This site is located to the southeast of Dublin City Centre, with direct site access onto the R842 Old Bray Road on the site's western boundary. The site boundary is illustrated in **Figure 3.2** below.

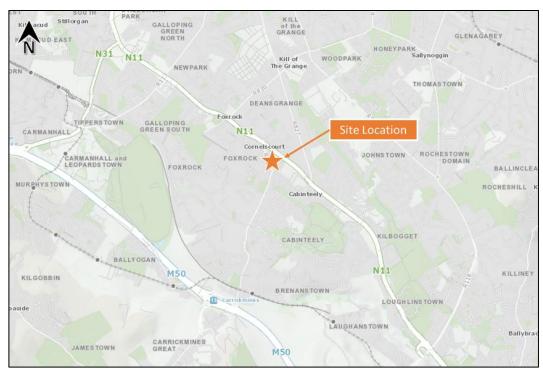


Figure 3.1: Site Location (Source: GeoHive)

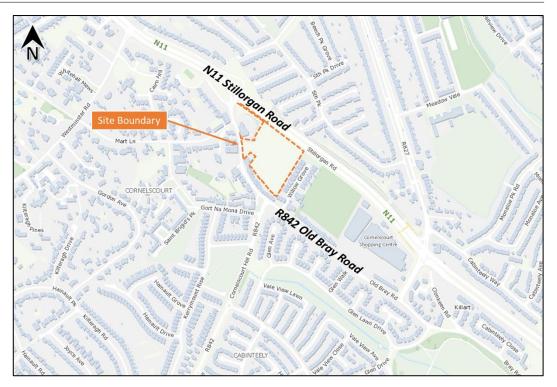


Figure 3.2: Site Boundary (Source: GeoHive)

## 3.2 EXISTING TRANSPORT FACILITIES & SERVICES

#### Road Network

- 3.2.1 The subject development site is located to the east of the R842 Old Bray Road. Travelling in a northbound direction along the R842 Old Bray Road, the road offers links towards the N11 national primary road, 140m from the subject site. Travelling southbound on the R842 Old Bray Road leads towards Cabinteely Village, located 1.6km from the subject site.
- 3.2.2 The R842 regional road in the vicinity of the site is a two-way single carriageway road. The road is of an approximate width of 6m adjacent to the development site.
- 3.2.3 The speed regulations for the R842 Old Bray Road are set at 50kph. The 50kph regulation is signposted at the exit of the N11 Stillorgan Road connecting to the R842 Old Bray Road as well as on subsequent roads connecting the N11 Stillorgan Road to the R842 Old Bray Road.
- 3.2.4 The N11 Stillorgan Road is a two-way dual carriageway road with a bus lane in both directions as well as a cycle track immediately adjacent to the bus lane, in both directions. The N11 Stillorgan Road has a speed regulation of 80kph for

- vehicles on the carriageway and a speed regulation of 60kph for buses and cyclists on the bus lane and the cycle track, in the vicinity of the site.
- 3.2.5 Travelling southwards on the N11 Stillorgan Road leads to Loughlinstown and provides links to Shankill and Bray as the M11; the M11 extends further south to Wicklow and Arklow. The M11 links to the M50 north of Bray; the M50 orbital route provides connections to Ballymount, Blanchardstown and Ballymun as well as Dublin Airport.
- 3.2.6 Travelling northwards on the N11 Stillorgan Road leads to Stillorgan as well as UCD and Donnybrook as the R138 Stillorgan Road. The N11 becomes the R138 at the junction with the N31 (Mount Merrion Avenue).
- 3.2.7 **Figure 3.3** below illustrates the key road corridors in the vicinity of the subject site.



Figure 3.3: Key Road Corridors (Source: Google Maps)

#### **Pedestrian Environment**

3.2.8 The R842 Old Bray Road is subject to a speed limit of 50kph with street lighting available on one side of the road. Pedestrians can benefit from the provision of footways on both sides of the carriageway, as shown in **Figure 3.4**.

3.2.9 The N11 Stillorgan Road has a limited provision of pedestrian footpaths, nearby to bus stop locations. Nearby residents use these footpaths to access bus stops located on the N11 Stillorgan Road, which offer many forward connections.





Figure 3.4: Pedestrian Facilities on the R842 Old Bray Road [Top: Facing

southwards; Bottom: Facing northwards]

(Source: Google Maps)

## Cycle Environment

- 3.2.10 In reference to the Greater Dublin Cycle Network Plan there are a variety of cycle facilities available on the routes leading to the subject site area. There are no cycling facilities on the R842 Old Bray Road, where the site access is located.
- 3.2.11 However, the proposed development site benefits from a cycle track, immediately adjacent to the road on the N11 Stillorgan Road (180m from subject site), as shown

by **Figure 3.5** below. This cycle track extends as far southwards as the intersection of the N11 Stillorgan Road with the R118 Wyattville Road. Travelling northwards, cyclists can avail of this cycle track in both directions as far as Donnybrook (intersection with Beaver Row and Anglesea Road), where a cycle lane is available on the R138 Donnybrook Road which provides links into Dublin City Centre.



Figure 3.5: Existing Cycle Facilities (Source: Sheet E8 GDA Cycle Network Plan)

### Public Transport - Bus

- 3.2.1 The subject site benefits from excellent public transport accessibility levels. Dublin Bus and Go Ahead operate a number of routes that serve the subject site providing links to/from Dublin City Centre and to key destinations in the Dún Laoghaire Rathdown County.
- 3.2.2 Dublin City Centre can be accessed from the site with a journey time between 40
   50 minutes. Dún Laoghaire and Bray are equally accessible by bus with journey times of approximately 25 minutes.
- 3.2.3 Dublin Bus routes 46a and 145 are easily accessible to the site and provide links to/from Dublin City Centre. Dublin Bus route 84 and its route variations (84a, 84x, 84k, 84h, 84t) provides linkages to towns to the south of Dublin, including Bray, Greystones and Newcastle.

- 3.2.4 Go Ahead Bus 63 connects the site to Dún Laoghaire to the north and to Carrickmines and Kilternan to the south. Bus route 75 links the site to Dún Laoghaire in the east and to Stillorgan Business Park, Dundrum and Tallaght in the west.
- 3.2.5 The 46a, 145, 63 and 75 bus routes all operate on a daily basis seven days a week and offer a good frequent schedule of services as summarised in **Table 3.1** below.
- 3.2.6 The subject site is also served by two NiteLink routes; the 46N route links D'Olier St. to Greystones and the 84N route connects D'Olier St. to Dundrum.
- 3.2.7 Links to Dublin Airport are facilitated by the Bus Éireann route 133 and Aircoach bus 702, which are served by bus stops approx. 900m from the site on the N11 Stillorgan Road. The 133 Bus Éireann route is an hourly service operating seven days per week. The 702 is an hourly service and provides a journey time of approximately 67 minutes from the subject site to Dublin Airport.

Route No.		Diversion	Mon - Fri	Sat	Sun
		Direction	(Mins/ no. services)		
	46a	From Phoenix Park to Dún Laoghaire	7	10	12
		From Dún Laoghaire to Phoenix Park	8	10	12
	84	From Blackrock to Newcastle	60	11 serv.	9 serv.
		From Newcastle to Blackrock	60	13 serv.	11 serv.
Dublin	84a	From Blackrock to Bray Rail Station	5 serv.	-	-
Bus		From Bray Rail Station to Blackrock	6 serv.	-	-
	84x	From Hawkins Street to Newcastle/Kilcoole	8 serv.	-	-
		From Newcastle/Kilcoole to Hawkins St.	10 serv.	-	-
	145	From Heuston Rail Station to Ballywaltrim	10	15	20
		From Ballywaltrim to Heuston Rail Station	10	15	20
	63	From Kilternan Village to Dún Laoghaire	30	30	30
Go		From Dún Laoghaire Station to Kilternan Village	30	30	30
Ahead Bus	75	From Tallaght to Dún Laoghaire	30	30	30
		From Dún Laoghaire to Tallaght	30	30	30

**Table 3.1: Bus Routes Serving the Site (Frequency)** 

3.2.8 **Figure 3.6** below provides details of the above-named bus routes with the closest interchange opportunities available to the subject site highlighted. The subject site is served by both inbound and outbound bus stops in close proximity to the site location.



Figure 3.6: Existing Dublin Bus & Go Ahead Bus Routes and Local Interchanges

(Source: GeoHive)

3.2.9 Figure 3.7 illustrates bus service opportunities in the area and the frequency available for each route on a neutral weekday. Reference can also be made to DBFL Drawing No. 180208-1000 which shows the existing transportation linkages within a 2000m radius of the subject site.



Figure 3.7: Existing Bus Route Frequencies (Source: BusConnects)

# Public Transport - Luas

- 3.2.10 The Carrickmines LUAS Stop is the most accessible LUAS stop to the proposed development. It is approx. 1.8km to the south of the site as shown in Figure 3.8 below. The LUAS Greenline provides access to Sandyford, Dundrum and the City Centre in addition to other destinations along its route (Figure 3.9). The subject site will also benefit from the improved connectivity through the LUAS Cross City service, providing connections to Dublin City Centre North, Phibsborough and Broombridge.
- 3.2.11 The Carrickmines LUAS stop benefits from a Park & Ride facility; car drivers can avail of reduced parking rates while they use the LUAS for the remainder of their journey. Four electric car charge points are provided at this Park & Ride.



Figure 3.8: Luas Accessibility to Proposed Development

(Source: Google Maps)

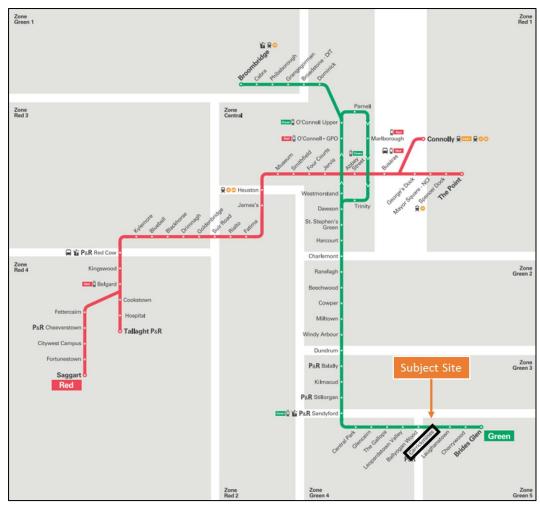


Figure 3.9: Luas Green Line Destinations (Source: NTA)

# Public Transport - Heavy Rail Network

- 3.2.12 The most accessible rail station to the subject site is the Dún Laoghaire Station, located approx. 4.5km north of the site. The station is accessible through the Dublin Bus route no. 46a with a journey time of approximately 25 minutes; the nearest bus stop serving the 46a route is approx. 850m from the subject site on the R830 Kill Lane. From the Dún Laoghaire DART Station, travelling south leads to Bray, Wexford and Rosslare amongst other destinations on the east coast of Ireland.
- 3.2.13 Northward connections to Pearse and Connolly Train Stations can be made from Dún Laoghaire, from which many forward connections are available.

# 3.3 PROPOSED TRANSPORT FACILITIES & SERVICES

## Cycle Network Proposals

- 3.3.1 In December 2013 the NTA published the report entitled *Greater Dublin Area Cycle Network Plan*. The report summarises the findings of a comprehensive body of work detailing a proposed Cycle Network incorporating Urban, Inter-urban and Greenroute networks covering the six county council areas that together form the defined Greater Dublin Area (GDA).
- 3.3.2 The subject site lies within the "Dublin South East Sector" as outlined within the Greater Dublin Area Cycle Network Plan (2013). The sector "extends outward from the city centre towards Dún Laoghaire and Cabinteely, at the edge of the urban area, and from the East Coast at Dublin Bay inland to a line between the Donnybrook and Sandyford areas."
- 3.3.3 In the vicinity of the subject site the following routes are proposed in addition to those indicated in **Figure 3.10** below:
  - **Primary Route 12/12A**: "St. Stephen's Green to the South East Sector via Leeson Street and Donnybrook"
    - This is a currently existing route which will benefit from a number of improvements to create a more attractive cycling environment.
  - Secondary Route SO6: "Dún Laoghaire to Tallaght via Ballycullen and Old Bawn"
  - Carrickmines Greenway: "Sandyford to Shanganagh leading to N5 East Coast Trail South"
- 3.3.4 Minor upgrades at specific junctions have been undertaken to date. More extensive upgrades are proposed as part of the BusConnects Core Bus Corridors Scheme.
- 3.3.5 The implementation of the above cycle infrastructure schemes by the local authority will be subject to further design, public consultation, approval, and importantly availability of funding and resources.

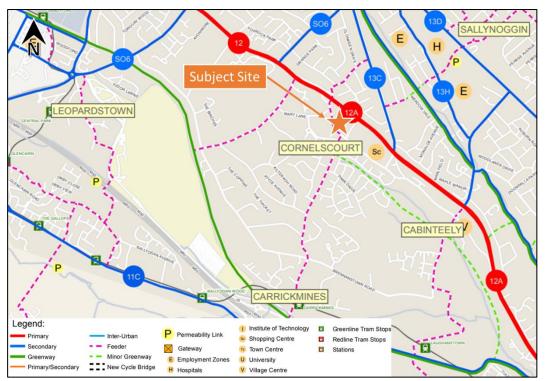


Figure 3.10: GDA Cycle Network Plan Proposals

(Source: Extract from Sheet E8 GDA Cycle Network Plan)

3.3.6 Shown in **Figure 3.11** below are the existing and proposed cycle routes in the Dún Laoghaire – Rathdown area. At the completion of this scheme, residents at the proposed development will be able to avail of a cycle route in the vicinity of the site access location on the R842 Old Bray Road. This route will connect the site to the N11 Stillorgan Road cycle track and will provide a cycle link southward on Cornelscourt Hill Road to connect with the existing cycling facilities on Glenamuck Road North and Ballyogan Road. Additionally, this southward link will connect cyclists to the Carrickmines LUAS Stop, 1.8km from the subject site, with a cycling journey time of 10 minutes.

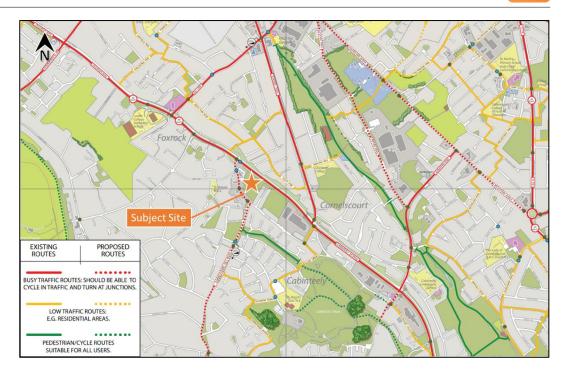


Figure 3.11: DLR Cycle Network Map (Source: DLRCOCO)

#### Public Transport Proposals - BusConnects

- 3.3.7 BusConnects is an initiative launched by the National Transport Authority with the aim of overhauling the bus system in the Dublin Region. This initiative includes review of bus services, the definition core bus network which comprises radial, orbital and regional core bus corridors. It also includes enhancements to ticketing and fare systems as well as transition to a new low emission vehicle fleet.
- 3.3.8 This initiative in the short-term proposes to implement a redesign of the existing bus network. The fundamental changes to the network expected would be as follows:
  - Increasing the overall amount of bus services. Providing new and frequent orbital services connecting more outer parts of the city together;
  - Simplifying the bus services on the key radial into "spines" where all buses will
    operate under a common letter system and buses will run very frequently and
    be more evenly spaced;
  - Increasing the number of routes where buses will come every 15 minutes or less all day;

- The frequent network would become a web-shaped grid, with many interchange opportunities to reach more destinations. Everywhere that two frequent routes cross, a fast interchange is possible; and
- Additional service would be provided at peak hours to limit overcrowding.
- 3.3.9 In relation to the subject site following this redesign in the bus network, the proposed development will be located in close proximity to a branch of a key bus "spine" where a bus frequency of every 5 minutes or better can be expected. This will be the "E Spine" which will connect Ballymun to the City Centre and Stillorgan. The E1 branch will operate on the N11 Stillorgan Road, directly accessible to the development site and is expected to provide a high frequency of service with a bus coming every 10 15 minutes:
  - The E1 branch would extend southwards from Stillorgan to Cornelscourt,
     Cabinteely and terminate in Bray, similar in parts to existing route No. 145.
- 3.3.10 The new BusConnects route 226 will replace the Dublin Bus route 84, however after crossing the N11 Stillorgan Road, it will continue south west onto Carrickmines. The connection onto Cabinteely Village will instead be through route 227 which then continues northwards on Pottery Road. A portion of the existing Go Ahead Bus route 63 (BusConnects route 226) will be removed south of the N11 Stillorgan Road, however this is an indirect, circular portion of the route.
- 3.3.11 **Figure 3.12** illustrates bus service opportunities in the area and the frequency available for each route on a neutral weekday from the BusConnect redesign. Reference can also be made to DBFL Drawing No. 180208-1001 which shows the proposed transportation linkages within a 2000m radius of the subject site.

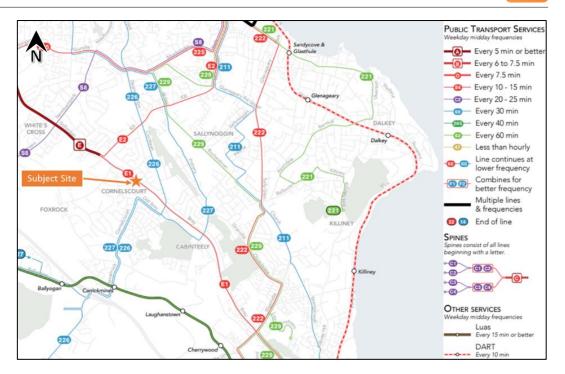


Figure 3.12: Proposed Bus Network (Source: BusConnects)

- 3.3.12 The Bus Network Redesign is the first step in a series of transformative changes to Dublin's bus network over the coming years. However, the next steps in this initiative are the improvements to the infrastructure and operation of the proposed Bus network which include:
  - building a network of "next generation" bus corridors on the busiest bus lines to make bus journeys faster, predictable and reliable;
  - developing a state-of-the-art ticketing system using credit and debit cards or mobile phones to link with payment accounts and making payment much more convenient;
  - implementing a cashless payment system to vastly speed up passenger boarding times;
  - a simpler fare structure, allowing seamless movement between different bus services without financial penalty;
  - new bus stops with better signage and information and increasing the provision of additional bus shelters; and
  - transitioning to a new bus fleet using low-emission vehicle technologies.

3.3.13 **Figure 3.13** illustrates the bus radial infrastructural corridors to be implemented as part of the BusConnects initiative. In relation to the subject site, the proposed development is approx. 250m from the nearest bus stop which will serve the radial core bus corridor of Bray to City Centre where bus journey time is anticipated to be approximately 40 - 45 minutes along the entire 13 km route, once constructed. The subject site is approx. 35m from the aforementioned bus corridor on the N11 Stillorgan Road.

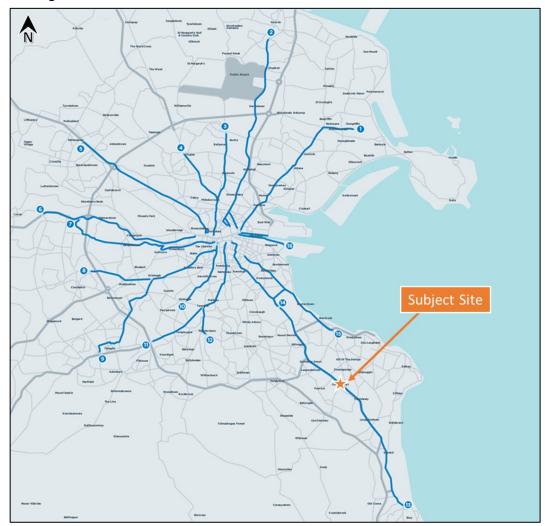


Figure 3.13: Proposed Radial Core Bus Corridors (Source: BusConnects)

3.3.14 Shown in **Figure 3.14** below is the proposed cross-section for the Core Bus Corridor Route 13, Bray to City Centre, in the vicinity of the subject site. As can be seen, pedestrian permeability along the route will benefit from a large improvement through the completion of this scheme. New pedestrian footpaths along both sides of the N11 Stillorgan Road, as well as pedestrian links, will

- increase road safety for pedestrians accessing bus stops on the N11 Stillorgan Road and encourage the use of the proposed bus network.
- 3.3.15 A pedestrian and cycle linkage is proposed along the northern boundary of the subject site which will provide residents with direct access onto the N11 Stillorgan Road. An additional linkage from the Cornelscourt site onto the adjacent Willow Grove is proposed which will provide another access point onto the R842 Old Bray Road.
- 3.3.16 As shown in **Figure 3.14** below, as part of the CBC scheme a pedestrian link to the South Park residential suburb, north of the N11 Stillorgan Road is proposed further enhancing pedestrian permeability along the N11 Stillorgan Road.
- 3.3.17 The BusConnects CBC scheme will enable further enhancements to the existing cycle tracks on both sides of the N11 Stillorgan Road as well as ensuring an elevated level of service and shorter journey times for the buses travelling on these routes.

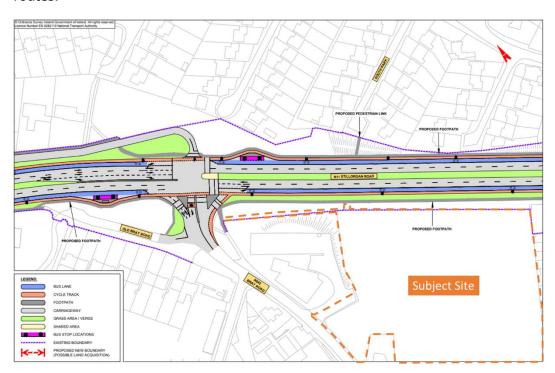


Figure 3.14: Emerging Preferred Route for Core Bus Corridor 13

(Source: BusConnects)

## Public Transport Proposals – Luas & Metro

- 3.3.18 According to current proposals by the NTA & TII, the proposed MetroLink will operate from Charlemont, immediately south of the Grand Canal, and will provide links to City Centre locations and Dublin Airport, terminating in Swords.
- 3.3.19 Residents of the Cornelscourt development will be able to avail of the proposed Metro Line through the Luas Green Line Stop, Carrickmines, and interchange at the Charlemont Luas Stop to access the underground metro.
- 3.3.20 Other proposed extensions to the Luas network include a Lucan Line operating from the City Centre to Lucan and the extension of the Green Line south from Brides Glen to Bray. Figure 3.15 shows the existing Luas network with the proposed service extensions and Metro Line.



Figure 3.15: Proposed Light Rail Network (Source: NTA)

### Public Transport Proposals – DART Expansion

3.3.21 Irish Rail is expected to implement the DART Expansion Programme where high frequency DART services are anticipated to be expanded to Drogheda, Dunboyne, Maynooth and Celbridge.

- 3.3.22 This will provide fast, high-frequency electrified services along two DART lines. The first will start at either Drogheda or Howth and terminate at Hazelhatch in Celbridge; the second will start at either Maynooth and M3 Parkway outside Dunboyne and terminate at Greystones.
- 3.3.23 Future residents at the Cornelscourt site will be able to benefit from this increased connectivity through the Dún Laoghaire DART Station which is easily accessible by bus with a journey time of approximately 25 minutes.
- 3.3.24 **Figure 3.16** shows the proposed rail network following the completion of the DART expansion programme in Dublin City Centre as referenced on the National Transport Authority's website.

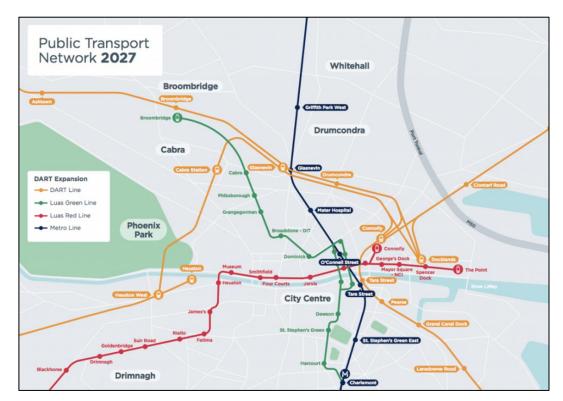


Figure 3.16: DART Network following Expansion Programme (Source: NTA)

#### Timescales for Future Infrastructure

3.3.25 The implementation of the above infrastructure schemes by the local and national authorities will be subject to further design, public consultation, approval, and importantly availability of funding and resources. As no specific completion dates for these schemes have been published, for the purpose of this Mobility Management Plan we have assumed that they will not be constructed by the subject residential schemes opening year. The proposed development site in

Cornelscourt is suitably located to benefit from the existing and continually improving sustainable transport links in the immediate vicinity of the site.

#### 3.4 PROPOSED DEVELOPMENT

- 3.4.1 The proposals (**Table 3.2**) seek planning permission to construct 452 no. residential apartment units and 16 no. houses on residential zoned lands. The residential development is to be built on a greenfield site in Cornelscourt, Dublin 18.
- 3.4.2 The proposed development will be based on a Build-to-Rent (BTR) model. This is defined in Chapter 5 of *Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities*, as published by the Department of Housing, Planning and Local Government (DHPLG) as:

"Purpose-built residential accommodation and associated amenities built specifically for long-term rental that is managed and services in an institutional manner by an institutional landlord."

Unit Type	Description	Quantity
	Studio	41
	One Bedroom Apartment	257
Apartments	Two Bedroom Apartment	136
	Three Bedroom Apartment	18
Hausas	Three Bedroom 2-Storey Semi-Detached House	10
Houses	One Bedroom Bungalow	6
Restaurant	Restaurant 140 m <sup>2</sup> Food-Based Retail	
Offices	149 m <sup>2</sup> Employment Offices	-
	Total	468

<u>Table 3.2: Proposed Development Schedule</u>

- 3.4.3 The development proposes to include a basement accessed through a ramp for vehicles and through stairs for the development's residents.
- 3.4.4 The development will also comprise the construction of associated infrastructure including landscaped shared surface courtyard, footpaths, and associated services as referred to in the Infrastructure Report.

3.4.5 As the proposed development is a full BTR scheme, at operational phase it will be a fully managed property (24/7). Residents will avail of a number of shared services such as a concierge, a café, communal open spaces, car parking, bicycle parking, laundry, waste disposal etc.

#### Vehicle and Pedestrian Accesses

- 3.4.6 The proposed site's vehicular access, onto the R842 Old Bray Road, is shared by the Cornelscourt AIB Bank. It is proposed to incorporate a one lane exit and a single entry lane onto the access to service the vehicles exiting the basement car park of the proposed development. A back-to-back right turn pocket will serve vehicles entering onto the site from the shared access with AIB Bank. The access junction onto the R842 Old Bray Road, will continue to operate as a priority junction. The proposed junction layout is shown in **Figure 3.17** below.
- 3.4.7 In accordance with the *Design Manual for Urban Roads and Streets*, a stopping sight distance of 49m for a 50km/h road is used to determine the forward visibility of vehicles at the access junction.
- 3.4.8 Pedestrians and cyclists can access the development via the proposed access from Old Bray Road; the access junction will lead pedestrians into the courtyard of the development site. A generous pedestrian space is proposed on the southern side of the site access leading towards the podium area.
- 3.4.9 A refuge will also be placed at the access junction, to allow safe crossings for pedestrians. Further pedestrian links will be provided from the northern boundary of the site to the N11 Stillorgan Road and to the adjacent Willow Grove, as shown in **Figure 3.18** below. The proposed site layout plan illustrates the permeable nature of the Cornelscourt site for pedestrians which will facilitate more sustainable travel choices for future residents of the site.
- 3.4.10 A dedicated cycle access is provided from the podium slab (via steps with adjacent wheel channels) to take cyclists from Old Bray Road to bike parking areas in the basement. This cycle route is completely separate from the vehicle access ramp to the basement.
- 3.4.11 An existing cycle lane is located along the N11 (adjacent to the site's north-eastern boundary). It is proposed to create a link to the N11 cycle lane (in the northern corner of the site with direct access from the basement's bicycle access point).

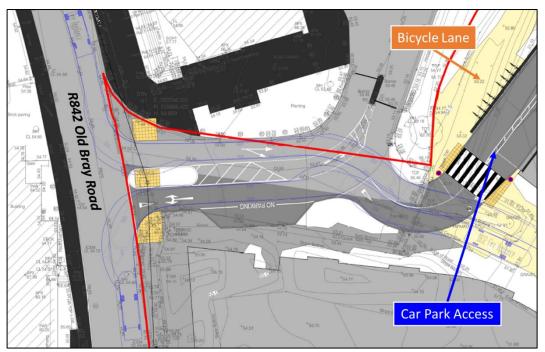
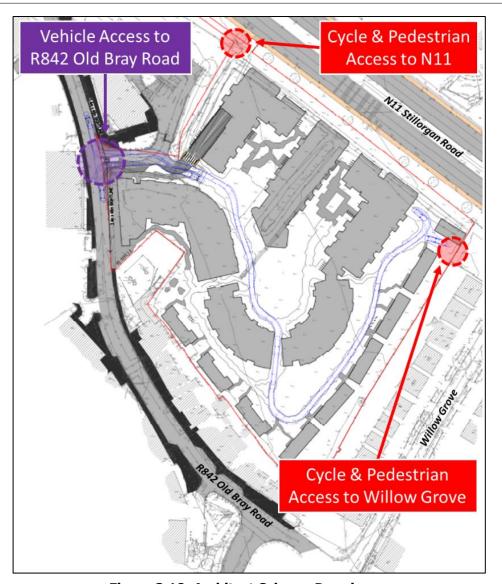


Figure 3.17: Site Access Junction Layout

3.4.12 Further details of the development proposals including the site layout and site access arrangements are illustrated in the architects' scheme drawings, in Figure3.18, and as submitted with this planning application.



**Figure 3.18: Architect Scheme Drawings** 

#### Car Parking

- 3.4.13 In order to determine the optimum on-site parking provision at the subject development, a 3 pronged approach was adopted based on the following;
  - a) Review of the 'Car Availability' and 'Means of Travel' as recorded within the 2016 Census results for apartment developments with similar characteristics to the subject development (**Chapter 4**);
  - b) DBFL car parking demand surveys at apartment developments within Dún Laoghaire - Rathdown County Council and other local areas with similar public transport accessibility levels (Chapter 4); and
  - c) Assessment of the DLRCC Development Plan Standards and the DHPLG Guidelines.

## • Car Parking Standards

- 3.4.14 Reference has been made to both Table 8.2.3 of the current Dún Laoghaire Rathdown County Development Plan (2016 2022) which sets out the minimum parking guidance for residential developments and Chapter 4 of Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities, as published by the Department of Housing, Planning and Local Government (DHPLG) in March 2018.
- 3.4.15 With regard to the proposed development schedule the associated DLRCC and DHPLG car parking requirements are outlined in **Table 3.3** below.

Parking 1	Гуре	DLRCC Standard	DHPLG Standard	Units	DLRCC Requirement	DHPLG Requirement	
	Studio	1 / unit		41	41		
	1 bed	1 /unit	Reduced overall	257	257	Reduced	
Apartment	2 bed	1.5 / unit	parking provision	136	204	overall parking provision	
	3 bed	2 / unit		provision		18	36
	1 bed	1 /unit	-	6	6	-	
House	3 bed	2 / unit	-	10	20	-	
			Total	468	564	-	

**Table 3.3: Car Parking Standards and Requirements** 

3.4.16 The DHPLG guidance categorises the subject site location as an "Accessible Urban Location" thereby giving justification for a reduced quantum of car parking provision due to the public transportation offerings in close proximity to the site. Additionally, the BTR nature of the proposed development implies lower car ownership and demand. Reference should be made to the DBFL Traffic and Transportation Assessment submitted as part of this planning application for additional information.

#### • Car Parking Provision

3.4.17 With reference to the car parking assessments undertaken (**Chapter 4**) and the above standards and guidelines, a ratio of approximately 0.6 car parking spaces to

- every residential apartment is recommended for this development. This equates to a car parking provision of 274 no. car parking spaces, of which 273 no. spaces will be at basement level and 1 no. space will be at ground level.
- 3.4.18 Development management will actively manage the site's parking arrangements through a Parking Management Strategy. The low availability and cost of car parking spaces (0.6 spaces/apartment unit) will discourage the use and ownership of private vehicles and promote the use of sustainable transportation modes such as walking and cycling.
- 3.4.19 Of the car parking spaces assigned to the proposed development;
  - 247 no. basement car parking spaces are allocated for the 452 no.
     apartments (including visitor spaces and 10 no. mobility impaired spaces);
  - 26 no. car parking spaces are allocated at basement level for the 10 no. 3 bed semi-detached houses and the 6 no. one bed bungalows;
  - 11 no. car parking spaces will be reserved as dedicated mobility impaired spaces as specified by the DLRCC requirements for 4% of the overall car parking provision;
    - 1 no. space will be at surface level by the development entrance;
    - 10 no. spaces will be at basement level;
  - 28 no. electric vehicle charging points have been assigned as per DLRCC requirements; and
  - 4% will be allocated as spaces for car sharing clubs (11 no. car parking spaces).

#### Cycle Parking

- 3.4.20 In order to determine an appropriate level of cycle parking provision for the proposed residential development reference is made to both (i) the DLRCC Standards for Cycle Parking and associated Cycling Facilities for New Developments requirements, and (ii) the DHPLG guidelines.
- 3.4.21 A generous provision of secure and accessible bicycle parking will be a key component of the transportation offering at the development which will encourage residents to adopt sustainable modes of transportation. Whilst DLRCC have detailed requirements in this regard, the requirements of the DHPLG Sustainable Urban Housing Standards generally exceed those of local authorities.

- 3.4.22 The DLRCC requirement is a total of 543 no. cycle parking spaces for this development. The DHPLG requirements are generally viewed as somewhat excessive. Application of these requirements results in an overall provision of 850 based on the current schedule of accommodation.
- 3.4.23 Recent experience in the determination of an appropriate provision for bicycle parking would suggest that the provision for the site should be between the local authority and the DHPLG standards.
- 3.4.24 Therefore, given the DLRCC requirements and considering the DHPLG cycle parking standards, a provision of 616 no. cycle parking spaces is proposed for this development site. Of this provision, 512 no. long stay cycle spaces will be at basement level and 104 no. spaces will be located at ground level which are intended as short stay cycle parking spaces for visitors to the development. These proposals exceed DLRCC requirements and are therefore compliant with the DLRCC requirements.
- 3.4.25 Additionally, 12 no. motorcycle spaces will be located at basement level.
  - Refer to the DBFL Traffic and Transportation Assessment submitted as part of this planning application for additional information.



- 4.1 INTRODUCTION
- 4.2 BUILD-TO-RENT MODEL
- 4.3 SUBJECT SITE PROPOSED MODAL SPLIT

# 4.0 COMMUTER TRENDS & TRANSPORT NEEDS

### 4.1 INTRODUCTION

- 4.1.1 It is important to establish baseline trends and area specific transport needs in developing an MMP. The site is located within an area comprising of primarily residential houses with the neighbourhood centre facilities being in close proximity. It is necessary to predict the nature of the proposed traffic to / from the site and investigate whether it is possible to influence the modal split of the commuters from the proposed development.
- 4.1.2 Varying demographic profiles that have an immediate impact on the traffic network are commuters commuting to / from home as well as other journeys such as school pick up / drop off and shopping trips. These can have their trip patterns influenced. Visitors are more difficult to influence in their trip patterns as they can be unpredictable.

## Dún Laoghaire - Rathdown County Context

4.1.3 The modal split for the proposed development would be compared against the modal split for the Dún Laoghaire – Rathdown County. The current modal split for the Dún Laoghaire – Rathdown County is indicated in **Figure 4.1** below.

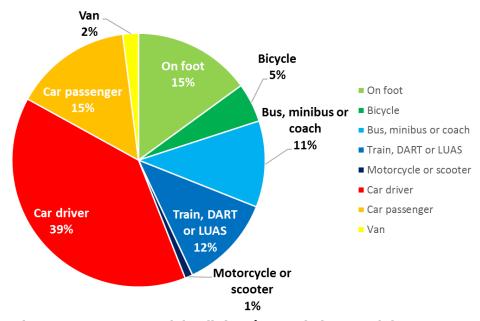


Figure 4.1: Current Modal Split in Dún Laoghaire - Rathdown County

(Source: DLRCC)

## Local Study Area Context

- 4.1.4 The Central Statistics Office's SAPMAP (Small Areas Population Map) data has also been investigated to determine the travel trends within the local vicinity of the subject Cornelscourt residential development. SAPMAP is an interactive mapping tool that allows users to pinpoint a location on the map and access 2016 census data related to that area.
- 4.1.5 **Figure 4.2** below illustrates the five small areas, composed of residential apartments, in the vicinity of the subject site. The CSO SAPMAP means of travel statistics from these five sites will be used to predict modal split targets for the proposed residential development. These sites best represent the development's future travel trends prior to the positive influence of the MMP initiatives, detailed within this MMP.



Figure 4.2: Locations of Census Small Areas Reviewed (Source: CSO)

#### Modal Split

- 4.1.6 The 2016 Census data for the modes of travel used within the Small Areas was assessed; the locations of these small areas relative to the proposed development are shown in **Figure 4.2** above. **Figure 4.3** below illustrates the modal split for each census small area reviewed. For all but site 5, the use of public transportation, cycling and walking composed over 50% of the modal split. The most used public transport mode (bus/LUAS) for each site is dependent on the site's proximity to these transport facilities. The trends observed in the modal split can be expected to represent that of the proposed development as all the sites benefit from the same public transport linkages as the subject site.
- 4.1.7 **Table 4.1** below shows the walking distance to the nearest LUAS stop from each Census Small Area. The LUAS mode share shown in **Figure 4.3** below can be seen to be directly correlated to the distance required to travel to access a LUAS stop.
- 4.1.8 Using **Table 4.1** below, Site 3 Galloping Green North is the most representative site to the proposed development as it is located directly adjacent to the N11 Quality Bus Corridor (as is the subject site) and an equivalent distance away from the nearest LUAS stop as the proposed Cornelscourt development.

Census Small Area	Walking Distance to Nearest LUAS Stop	LUAS Stop
Site 1 - Carmanhall	500m	Central Park
Site 2 - Carmanhall	250m	Central Park
Site 3 — Galloping Green North	1.9km	Sandyford
Site 4 — Galloping Green South	1.4km	Sandyford
Site 5 - Loughlinstown	1.2km	Cherrywood
Proposed Development	1.9km	Carrickmines

Table 4.1: LUAS Accessibility for Census Small Areas

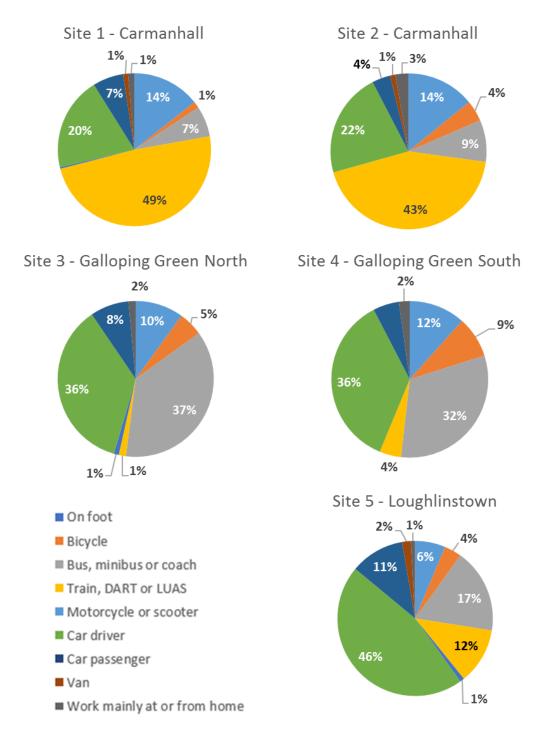


Figure 4.3: Means of Travel to Work/School for Census Small Areas Reviewed

## 4.2 BUILD-TO-RENT MODEL

4.2.1 As previously mentioned, the proposed development will be based on the BTR model. For proposals that qualify as specific BTR developments in the DHPLG planning guidelines, Specific Planning Policy Requirement 8 (SPPR 8) applies:

- "(iii) There shall be a default of minimal or significantly reduced car parking provision on the basis of BTR development being more suitable for central locations and/or proximity to public transport services. The requirement for a BTR scheme to have a strong central management regime is intended to contribute to the capacity to establish and operate shared mobility measures."
- 4.2.2 The organisational infrastructure required to achieve the objectives and targets set out in this MMP will be established prior to the completion of the scheme due to the requirements set out in SPPR 8 for specific BTR developments.

#### 4.3 SUBJECT SITE PROPOSED MODAL SPLIT

- 4.3.1 It is considered that an appropriate aim of the MMP would be to reduce the level of single occupancy car trips from the subject site and promote sustainable modes of travel. The key target of this MMP will therefore be to achieve a modal split reflective of 2016 census data, as observed in the tables and figures above, which reduces the number of car-based trips generated by the development and supplements these trips through the use of sustainable modes of transport. Accordingly, an overall minimisation of the number of single car trips undertaken may be achieved. The MMP would subsequently seek to transfer this previous 'car' based trips onto the following modes / travel options:
  - Bus
  - Cycle
  - Car Sharing
  - Bicycle Sharing
  - LUAS



- **5.1 INTRODUCTION**
- **5.2 MMP OBJECTIVES**
- **5.3 MMP ACTIONS & TARGETS**

## 5.0 OBJECTIVES & TARGETS

### 5.1 INTRODUCTION

5.1.1 In order to measure the ongoing success of the Mobility Management Plan and its various measures it is important that a series of objectives are set in conjunction to a range of associated targets. The proposed objectives and targets are set out in this section of the MMP.

### 5.2 MMP OBJECTIVES

- 5.2.1 The overall aim of this MMP is to reduce the dependency on the use of the private car by increasing residents' awareness to the other travel alternatives available.
- 5.2.2 To support this principal objective, several sub-objectives have been set out:
  - (a) Reduce private car use by encouraging people to walk, cycle, use public transport, car club share or even reduce the number of trips undertaken / required;
  - (b) Make all residents aware of the sustainable transport options available to them;
  - (c) Encourage the use of sustainable modes of transport;
  - (d) Encourage the most efficient use of cars and other vehicles;
  - (e) Reduce any transport impacts of the development on the local community;
  - (f) Promote walking and cycling as a health benefit to residents;
  - (g) Managing the ongoing development and delivery of the Mobility Management Plan with future residents;
  - (h) Promoting smarter working and living practices that reduce the need to travel overall; and
  - (i) Promote healthy lifestyles and sustainable, vibrant local communities.
- 5.2.3 The above objectives can be achieved through the integrated provision of hard and soft initiatives. Soft measures include the dissemination of important information regarding:
  - Routeing, timetable and ticketing information for bus and train services;

- The location and most convenient routes to / from local services (e.g. shops, medical facilities and schools etc.);
- Safe routes to school literature;
- Provision of live information for Dublin Bus at the reception;
- Provision of a free telephone service for calling a taxi, and information regarding taxi ordering apps;
- Cost data comparing public transport and private car journeys; and,
- The health benefits of walking and cycling to include safety advice.
- 5.2.4 Without such information, some people may choose the perceived option available to them which is often perceived to be the car, even if from a cost and duration of journey perspective this may not be the case.
- 5.2.5 Similarly, if a resident is unaware of the availability of local shops and services, they may choose to travel a greater distance than necessary in order to access a service.
- 5.2.6 Accordingly, the objectives of this MMP can therefore be summarised as follows:
  - Consider the needs of residents in relation to accessing facilities for education, health, leisure, recreation and shopping purposes, including identifying local amenities available that reduce the need to travel longer distances; and
  - Develop good urban design by ensuring permeability of the development to neighbouring areas and provision of cycle facilities including storage.

### 5.3 MMP ACTIONS & TARGETS

- 5.3.1 Targets are important as they give the MMP direction from its inception, providing measurable goals. When setting site-specific targets, it is important that they are 'SMART' (Specific, Measurable, Achievable, Realistic and Time-bound) in order that the outcome can be quantified and an assessment of what the MMP has or will achieve can be made.
- 5.3.2 Since the overall aim of the MMP is to minimise reliance upon the private car, it is appropriate to set a target which relates to this objective. It is also necessary to collect data to identify and understand the baseline travel habits, against which the MMP's progress can be measured. It is recommended that residents' questionnaires

are circulated once the site reaches 90% occupancy. These questionnaires will establish the baseline travel data for the subject site.

- 5.3.3 The Mobility Management Plan's initial actions (A) are set out below:
  - A1 The appointment of a Mobility Manager prior to occupation of the site;
  - A2 Provision of a portal to the MMP on a website for the development that includes information on all travel opportunities from the site that is made available to all residents prior to site occupation;
  - A3 In consultation with key stakeholders including the local authority, continually develop, implement, monitor, evaluate and review the progress of the MMP towards achieving the targets;
  - A4 To undertake a baseline travel survey when 35% of the residential units are occupied;
  - A5 To update modal split targets which can be reviewed once the baseline travel characteristics are established.
- 5.3.4 The Mobility Management Plan's principal targets (T) are set out below:
  - **T1** To support the development of the Cornelscourt lands as a sustainable community;
  - **T2** To provide sustainability in all ways including cost, health and environment reducing the impact on traffic congestion and air quality;
  - T3 To achieve a 95% resident awareness of the MMP and its aims and objectives;
  - **T4** To facilitate and encourage greater use of sustainable transport modes (walking, cycling, public transport) in preference to the use of the private car;
  - T5 Achieve the identified modal split travel targets.
- 5.3.5 The above targets will be achieved by introducing an integrated package of measures that focus on promoting travel to and from the subject development by sustainable modes of transport as a viable alternative to the private car. These means and supporting strategies will seek to encourage residents and visitors to consider lower carbon travel alternatives in everyday journeys.
- 5.3.6 The interim mode split targets for the subject site are set out in **Table 5.1**.

Mode of Travel	1 <sup>st</sup> Year Target (20)	MMP 5 - year Target (20)
On Foot	12%	15%
Bicycle	9%	14%
<b>Bus/Minibus/Coach</b>	40%	45%
Train/DART/LUAS	2%	2%
Car Driver	26%	15%
Car Passenger	8%	6%
Work from Home/Other	3%	3%

**Table 5.1: Mode Share Targets for Cornelscourt Development** 

- 5.3.7 The above targets are intended to be both realistic and aspirational as to act as a motivation for the MMP in general whilst remaining attainable. These targets are subject to ongoing revision following the completion of the baseline surveys (and subsequent surveys) once the site is occupied and the input of the MMP's key stakeholders.
- 5.3.8 As previously mentioned, this site's preferred Mode of Travel will be influenced by car ownership and availability. The car availability and ownership data, shown previously in **Chapter 4**, has accordingly been considered to determine the most likely travel trends for this development and thus generated an accurate prediction for modal splits, shown in **Table 5.1** above, and predicted trips from existing census data; this information displays the existing sustainable baseline. These goals have been set with an overall goal of delivering a sustainable development, and with the vision of setting attainable yet ambitious targets to ensure measurable success for this mobility management plan.



- **6.1 INTRODUCTION**
- **6.2 MODE SPECIFIC MEASURES**
- 6.3 MANAGEMENT & MONITORING MEASURES
- 6.4 MARKETING & PROMOTION MEASURES

## 6.0 MMP MEASURES

### 6.1 INTRODUCTION

- 6.1.1 Mobility management plans have a wide range of possible "hard" and "soft" tools from which to choose from with the objective of influencing travel choices. The following section introduces potential strategy measures that could be considered at the subject residential development. The range of initiatives discussed here is by no means exhaustive, but is indicative of the kind of measures available and the processes and resources required to implement them.
- 6.1.2 The 5 tier Travel Plan Pyramid below has been developed to illustrate the key elements of a successful Mobility Management Plan. (Reference: *Good Practice Guidelines: Delivering Travel Plans through the Planning System,* DfT (UK), 2009)



6.1.3 Accordingly, the Residential MMP is organised as a series of integrated substrategies covering the different modes of travel and associated management and awareness related issues to all modes.



Figure 6.1: MMP Action Plan Strategies

## 6.2 MODE SPECIFIC MEASURES

- 6.2.1 The following initiatives could be promoted to enable the objectives to be fulfilled, to encourage the best choice of travel other than private car.
  - a) Walking provision of facilities
  - b) Cycling discounted cycle purchase, bike service workshops, cycle training
  - c) Public Transport (Bus, Luas) discounted travel tickets
  - d) Private Car Strategy including car sharing and car clubs
- 6.2.2 These mode specific measures are discussed in more detail in **Appendix A** which is appended with this document.

### 6.3 MANAGEMENT & MONITORING MEASURES

6.3.1 Ensuring the success of a Mobility Management Plan, defining a management structure is critical to its effective implementation. Therefore, a Mobility Manager must be appointed and a Resident's Group should be established. This will ensure the ongoing success of the MMP.

- 6.3.2 A programme of monitoring has been designed to generate information by which the success of the MMP can be evaluated. This will be the responsibility of the Mobility Manager.
- 6.3.3 The MMP information will be reviewed and updated regularly. This is achieved by research into the travel options and liaising with the residents to determine the most appropriate and useful information to communicate. The Mobility Manager will also be responsible for managing the annual review of the MMP including the surveys to be undertaken by the residents.
- 6.3.4 Details of these measures can be found in **Appendix B** of this document.

#### 6.4 MARKETING & PROMOTION MEASURES

- 6.4.1 The Mobility Manager will be involved in the promotion of the MMP and to make residents aware of its existence.
- 6.4.2 The most important and cost-effective measure to be introduced as part of this MMP is the 'Welcome Travel Pack', which will be issued to all new residents of the site when they move in.
- 6.4.3 The Pack will contain information about all modes of transport available for journeys to and from the site. It includes information related to journeys to a number of local destinations which are considered to be key to residents. These include colleges, local shops, health facilities, and both bus stops and Luas stops within the local area.
- 6.4.4 Information within the Pack will include details of the listed destinations and the services and facilities they offer. In addition, contact details of the Mobility Manager will be provided. The Pack will also give details of safe pedestrian and cycle routes from the site, fare and timetable information for public transport.
- 6.4.5 A simple cost-benefit analysis of public transport versus the use of the private car will also be set out in the Travel Pack. This, along with all of the information contained within the Pack will be available prior to occupation and will be reviewed annually and updated as necessary.
- 6.4.6 The methods of the marketing measures are set out in **Appendix C** of this document.



- 7.1 Overview
- 7.2 Management & Monitoring Strategy
- 7.3 Walking Strategy
- **7.4 Cycling Strategy**
- 7.5 Public Transport Strategy
- 7.6 Private Car Strategy
- 7.7 Marketing & Promotion Strategy

## 7.0 PRELIMINARY ACTION PLAN

### 7.1 OVERVIEW

- 7.1.1 The coordinated application of the following 6 integrated sub-strategies ensures that the success of the MMP will be a product of the sum of all sub-strategies.
- 7.1.2 The following sections consider each specific sub-strategy within which details of the proposed actions are identified for the period of this plan. The proposed timescale of each MMP initiative are categorised as Completed, Short Term (1 year), Medium Term (3 years) or Long Term (5 years).

### 7.2 MANAGEMENT AND MONITORING STRATEGY

#### **MMP Management**

7.2.1 The development, implementation and coordination of the MMP in the short, medium and long term require management support and resources if it is to be successful in achieving its long-term aspirations and targets. Funding for many of the specific actions will need to be assigned appropriate budgets. The proposed management company for the BTR scheme is fully committed to the implementation, management and monitoring of the MMP. Some of the measures may in the longer-term result in cost savings. The role of management will also actively seek a partnership approach with other organisations as part of the continued development of the MMP.

#### MMP Monitoring

- 7.2.2 It is essential that the continued rollout and subsequent impact of the MMP initiatives is monitored on a regular basis for the following principal reasons;
  - To demonstrate that the various targets are being achieved (or not met, at which point the measures being used should be reviewed) as people only value what they can measure and relate to,
  - To ensure that the MMP continues to receive the support of the building complex's management, staff and its partners (internal and external),
  - To show that both financial and resource input is being utilised to maximum effect.

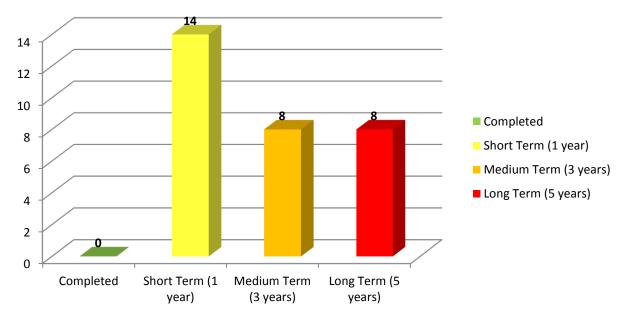
7.2.3 To ensure that the MMP is responsive to emerging opportunities and operational requirements, the status of the principal management and monitoring focused initiatives of the Residential MMP are outlined in **Table 7.1** below.

Table 7.1: Preliminary Schedule of MMP Management & Monitoring Initiatives

	Initiative	Status / Tir	nescale				
Ref		Completed	Short (1 year)	Medium (3 years)	Long (5 years)	Lead Party	Comments
MMS 1	Appointment of a Mobility Manager	-	✓	-	-		
MMS 2	Establish MMP Steering Group and meeting / reporting arrangements	-	✓	-	-		
MMS 3	Nominate MMP 'Champion' and role (Management)	-	✓	-	-		
MMS 4	Establish MMP 'Charter' and confirm management support for;  MMS 4a – MMP memorandum of understanding  MMS 4b – Identify and agree MMP objectives  MMS 4c – Review and establish MMP targets	-	<b>∀ ∀ ∀</b>	- - -	- - -		
MMS 5	In partnership with Local Authority review funding opportunities and potential budgets for; MMS 5a – Setting up and launching MMP MMS 5b – Annual MMP management costs MMS 5c – Participation in calendar of events MMS 5d – MMP incentives MMS 5e – MMP facilities MMS 5f – MMP training requirements	- - - - -	<ul><li>✓</li><li>✓</li><li>-</li><li>-</li><li>✓</li></ul>		- - - - - -		
MMS 6	Establish 'External' engagement contacts and collaboration programme.	-	✓	-	-		
MMS 7	Agree Monitoring and Reporting Programme with respect to;  MMS 7a – Resident Travel Surveys  MMS 7b – Roll out / uptake of MMP initiatives  MMS 7c – MMP Budgets  MMS 7d – MMP performance (KPI's)	- - - -	✓ - ✓ ✓	- - -	✓ ✓ ✓		
MMS 8	Facilitate the establishment and operation of mode specific 'user' groups (e.g. walking, cycling etc.)	-	-	✓	-		

MMS 9	Review travel practises by trip purpose and implement policy to encourage sustainable travel practices.	-	-	-	✓	
MMS 10	Appoint a resident 'Champion' for each mode specific 'user' group (e.g. walking, cycling, public transport etc.)	-	-	-	✓	
MMS 11	A Sustainable Travel Pack to be provided to all new Residents	-	✓	✓	-	

7.2.4 The identified Management and Monitoring strategy promotes a total of 30 measures. The implementation schedules of these measures are outlined in **Graph 7.1** below.



**Graph 7.1: Roll-out of MMP's Management & Monitoring Initiatives** 

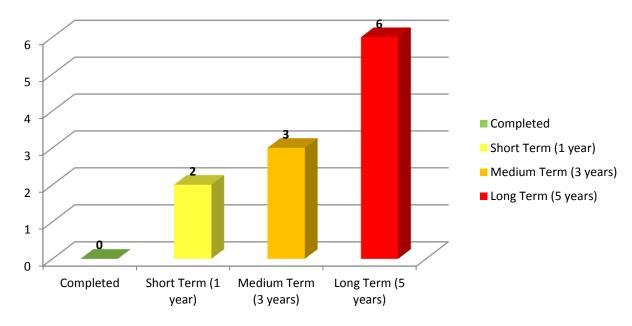
## 7.3 WALKING STRATEGY

7.3.1 The status and preliminary scheduling of the principal walking focused initiatives of the MMP are outlined in the **Table 7.2** below.

Table 7.2: Preliminary Schedule of MMP's Walking Initiatives

Ref	Initiative	Status / Ti	imescale	Lead	Comments		
		Completed	Short (1 year)	Medium (3 years)	Long (5 Years)	Party	
WS 1	Develop a 'Walking' Accessibility Sheet for the site.	-	✓	-	-		
WS 2	Explore the opportunity of creating a calendar of 'Walking' Events and incentives: WS 2a - Walk to work / school week WS 2b - Walk on Wednesdays WS 2c - Pedestrian Training WS 2d - Travel diary with incentive / awards scheme WS 2e - Coordinated with PT events	- - - -		✓ ✓ ✓ -	* * * * * * * * * * * * * * * * * * *		
WS 3	Undertake route audit and implement a review program to ensure appropriate infrastructure is provided / upgraded to meet walking and accessibility requirements for External routes to key off-site destinations	-	-	-	<b>√</b>		
WS 4	Develop a 'Walking' Fact Sheet	-	✓	-	-		

7.3.2 The MMP's Walking Strategy promotes a total of 11 measures. The preliminary implementation schedule of these walking initiatives is outlined in **Graph 7.2** below.



**Graph 7.2: Roll-out of MMP's Walking Initiatives** 

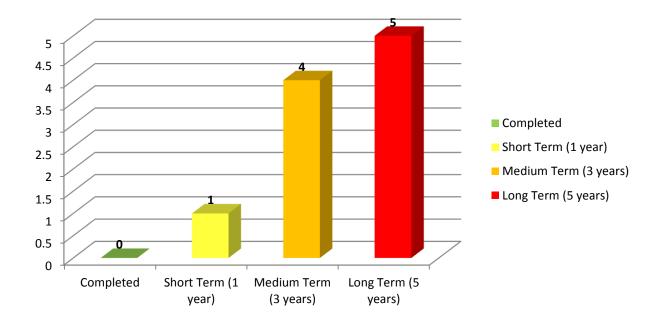
# 7.4 CYCLING STRATEGY

7.4.1 The status and preliminary scheduling of the principal cycling focused initiatives of the MMP are outlined in the **Table 7.3** below.

**Table 7.3: Preliminary Schedule of MMP's Cycling Initiatives** 

Ref	Initiative	Status / Timescale					Comments
		Completed	Short (1 year)	Medium (3 years)	Long (5 Years)	Party	
CS 1	Investigate the potential benefit and uptake of setting up a scheme to address personal security issues associated with cycling	-	-	-	<b>√</b>		
CS 2	Explore the opportunity of establishing a Bike Users Group	-	-	-	✓		
CS 3	Develop a 'Cycling' Accessibility Sheet for the site	-	✓	-	-		
CS 4	Explore the opportunity of creating a calendar of 'Cycling' Events and incentives	-	-	✓	-		
CS 5	Undertake route audit and implement a review program to ensure appropriate infrastructure is provided / upgraded to meet cycling requirements for external routes to key off-site destinations	-	-	-	✓		
CS 6	Investigate the potential demand for providing cycle training	-	-	-	✓		
<b>CS 7</b>	Explore the potential for launching a Travel Diary incentive / awards scheme	-	-	-	✓		
CS 8	Examine the opportunity and potential benefits and uptake of Bike service / maintenance workshops	-	-	✓	-		
CS 9	Market / Publicise the potential availability of employer operated discounted cycle purchase incentives	-	-	<b>✓</b>	-		
CS 10	Including Bicycle Sharing Stands on the Development such as Bleeperbike	-	-	✓	-		

7.4.2 The MMP's Cycling Strategy promotes a total of 10 measures. The preliminary implementation schedule of these cycling initiatives is outlined in **Graph 7.3** below.



**Graph 7.3: Roll-out of MMP's Cycling Initiatives** 

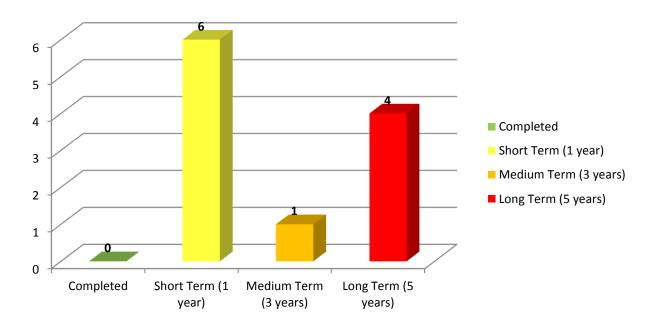
## 7.5 PUBLIC TRANSPORT STRATEGY

7.5.1 The status and preliminary scheduling of the principal public transport focused initiatives of the MMP are outlined in the **Table 7.4** below.

**Table 7.4: Preliminary Schedule of MMP's Public Transport Initiatives** 

Ref	Initiative	Status / Timescale					Comments
		Completed	Short (1 year)	Medium (3 years)	Long (5 Years)	Party	
PTS 1	Explore the opportunities of; PTS 1a - maintaining the existing bus services PTS 1b - Enhancing the catchment of these services	:	<b>√</b> -	-	- ✓		
PTS 2	Market / Publicise the potential for residents through their employers to purchase both annual and monthly TaxSaver tickets	-	✓	-	-		
PTS 3	Investigate the potential benefits of establishing a Public Transport Users Group	-	-	-	✓		
PTS 4	Develop a 'Public Transport' Accessibility Sheet for the site	-	✓	-	-		
PTS 5	Compile and disseminate a 'Public Transport' Fact Sheet	-	✓	-	-		
PTS 6	Explore the opportunity of implementing a calendar of 'Public Transport' Events and incentives	-	-	-	✓		
PTS 7	In partnership with Dublin Bus / LUAS and local authority ensure all local bus / Luas interchanges display up to date timetables, fare and route information	-	-	✓	-		
PTS 8	Encourage the use / initiatives for buses / LUAS where feasible for a range of different travel purposes	-	✓	-	-		
PTS 9	Promote the availability of the TaxSaver scheme	-	✓	-	-		
PTS 10	Explore the potential of a Travel Diary incentive / awards scheme	-	-	-	✓		

7.5.2 The identified Public Transport strategy promotes a total of 11 measures. The implementation schedule of these measures is outlined in **Graph 7.4** below.



**Graph 7.4: Roll-out of MMP's Public Transport Initiatives** 

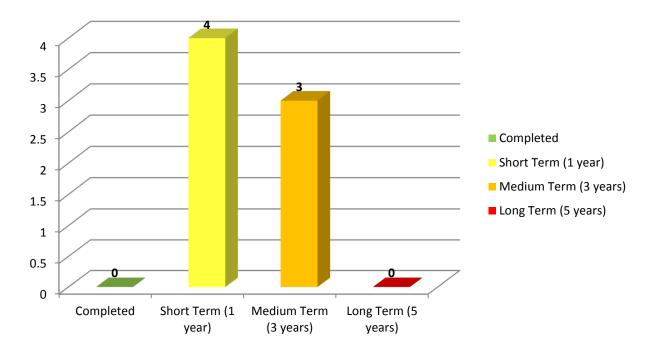
## 7.6 PRIVATE CAR STRATEGY

7.6.1 The identified action plan and preliminary scheduling of the principal private car focused initiatives of the MMP are outlined in the **Table 7.5** below.

**Table 7.5: Preliminary Schedule of MMP's Private Car Initiatives** 

Ref	Initiative	Status / Timescale					Comments
		Completed	Short (1 year)	Medium (3 years)	Long (5 Years)	Party	
PCS 1	Investigate the benefits of developing a 'Car' Fact Sheet	-	✓	-	-		
PCS 2	Develop a Parking Management Strategy	-	✓	-	-		
PCS 3	Explore the opportunities of encouraging informal arrangements between residents for 'shared' travel to work practices	-	-	✓	-		
PCS 4	Encourage use of formal car sharing website (www.carsharing.ie)	-	✓	-	-		
PCS 5	Explore the opportunities of informal arrangements between residents for travel to work / school / college	-	-	✓	-		
PCS 6	Disseminate information about GoCar.ie	-	✓	-	-		
PCS 7	Establish a Car Sharing Club, using GoCar, to promote an alternative to private cars	-	-	✓	-		

7.6.2 The MMP's Private Car Strategy promotes a total of 7 measures. The preliminary implementation schedule of these private car focused initiatives is outlined in **Graph 7.5** below.



**Graph 7.5: Roll-out of MMP's private Car Initiatives** 

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#### 7.7 MARKETING AND PROMOTION STRATEGY

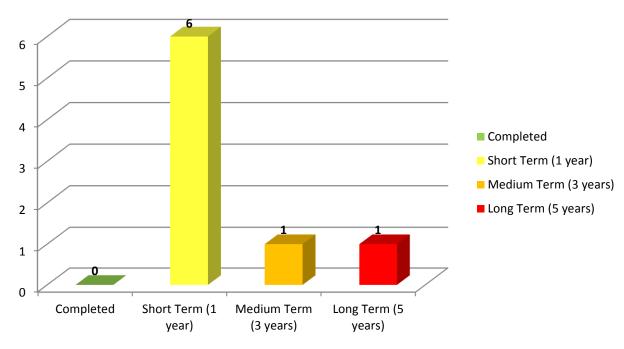
7.7.1 Increasingly referenced as the 'softer' form of initiatives, the provision of detailed information, raising awareness and promotion of the MMP and its measures is imperative to its success. The strategy involves the marketing and communication of the benefits of alternative active and more sustainable travel, increasing awareness of the adverse impacts of travel and transport on the environment, health and communities (local and national), by identifying ways in which individuals can make a difference will be an important element of the MMP. The Marketing and Promotion strategy also supports a number of the other interdependent MMP sub-strategies.

Table 7.6: Preliminary Schedule of MMP's Marketing & Promotion Initiatives

Ref	Initiative	Status / Timescale				Lead	Comments
		Completed	Short (1 year)	Medium (3 years)	Long (5 Years)	Party	
MPS 1	Develop a marketing plan for the MMP	-	✓	-	-		
MPS 2	Compile formal 'Sustainable Travel' induction package or 'Welcome Travel Pack' for each dwelling	-	✓	-	-		
MPS 3	Explore the cost benefits of developing a dedicated MMP website	-	✓	-	-		
MPS 4	Investigate the opportunity of developing an events calendar with 2 to 4 events per year and a supporting promotion strategy to market each event	-	-	✓	-		
MPS 5	Incorporate section / report success etc. of MMP process in local newsletters and other information dissemination initiatives	-	-	-	✓		
MPS 6	As part of Induction Sales Meeting with residents introduce the residential MMP, its objectives and recommended travel practices	-	✓	-	-		
MPS 7	Explore the cost benefits of developing a MMP App to enhance access to MMP information and events	-	✓	-	-		
MPS 8	Investigate the opportunity for a MMP annual newsletter for distribution to all residents	-	✓	-	-		

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7.7.2 The preliminary Marketing and Promotion sub-strategy promotes a total of 8 measures. The implementation schedule of these measures is outlined in **Graph 7.6** below.



**Graph 7.6: Roll-out of MMP's Marketing & Promotion Initiatives** 

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8.1 SUMMARY

## 8.0 SUMMARY AND CONCLUSIONS

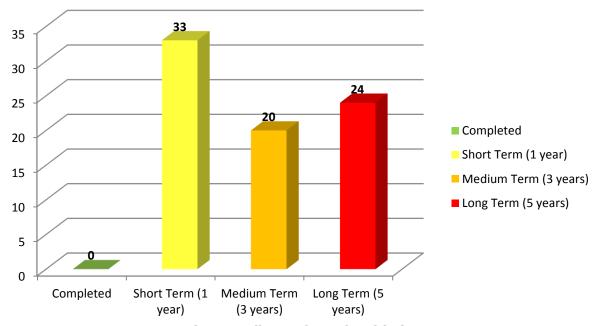
### 8.1 SUMMARY

- 8.1.1 This Mobility Management Plan has been prepared in support of a planning application for the development of 452 no. residential apartment units and 16 no. houses at the R842 Old Bray Road, Cornelscourt, Dublin 18. This MMP focuses primarily on how residents and visitors can be encouraged to use sustainable means of transport to and from the site. The subject site being a full BTR Scheme, it will be actively managed by a highly experienced management company with the focus of bringing in and supporting sustainable modes of transport and discouraging private car journeys to/from the site.
- 8.1.2 DBFL Consulting Engineers have compiled this MMP as the basis for discussions between the developers and planning officers from Dún Laoghaire Rathdown County Council. Through these scoping discussions the preferred strategy (and supporting measures and targets) will emerge with the resulting MMP detailing the agreed approach, actions and targets.
- 8.1.3 The measures proposed in this document will not only benefit the residents but will also help to mitigate any transport impacts of the development on the wider local community.
- 8.1.4 The identified preliminary action plan promotes a total of 77 initiatives across 6 sub strategy themes as presented in the Pie Chart below.



Figure 8.1: MMP Sub Strategy Themes & Initiatives

8.1.5 The implementation schedule of identified 77 MMP initiatives is outlined in **Graph 8.1** below. None of the initiatives of the action plan have yet been completed, however, 33 initiatives (or 43%) are planned to be implemented within 1 year of the residential development being occupied.



**Graph 8.1: Roll-out of MMP's Initiatives** 

- 8.1.6 In the context of the subject residential development's operational framework, the local receiving environment and the identification of the Preliminary Action Plan as summarised previously, this document seeks to form the basis by which;
  - the specific travel characteristics for the proposed residential development are outlined and presented to the local authority, and
  - through a partnership approach between the developers and the local planning authority, the Preliminary Action Plan is explored and re-examined with the objective of reaching agreement upon the MMP's measures and subsequently the adoption of an 'agreed' MMP Action Plan with specific targets, initiatives, timescales, responsibilities and resources clearly outlined and approved by both parties.

## **Appendices**

# **Appendix A**

Mode Specific Measures

## **A1.0 MODE SPECIFIC MEASURES**

#### Car Usage - Parking Management Strategy

- A1.1 A Parking Management Strategy will be prepared by the development management to manage the daily usage of the 272 no. car parking spaces provided as part of the development. The parking strategy is founded on the principles that none of the residential units will be allocated a parking space as part of the rental agreement for the property.
- A1.2 Aside from the GoCar spaces, the remaining spaces will be available for tenants to rent on a need's basis. The cost associated with the parking spaces is expected to be in the region of  $\in 100 150$  per month which is specified at such a rate so as to discourage the use of the private vehicle unless necessary and to encourage the uptake of more sustainable modes such as walking, cycling and public transport for which there are excellent opportunities within and directly adjacent to the development site.
- A1.3 The parking spaces will be allocated on a 'first come, first served' basis in terms of paying the prescribed fee. Access to the car park will be strictly controlled by a combination of barriers and shutters. Entry will be facilitated by coded entry and/or number plate recognition which will permit registered vehicles only to enter.

## Car Usage - Car Sharing

- A1.4 Car sharing is also known as lift-sharing, car-pooling or ride-sharing. Car sharing offers people a cost effective and a more sustainable way of travelling by car when other forms of transport are not viable.
- A1.5 Car sharing schemes encourage individuals to share private vehicles for particular journeys. Car sharing can be both formal and informal. Informal car sharing operates between individuals and neighbours and formal car sharing is defined by a more elaborate approach to trip matching, often focussed on the commuting journey.
- A1.6 Car sharing would reduce a number of car trips and participants will meet other members in the community. A National Car Sharing database is now available at <a href="https://www.carsharing.ie">www.carsharing.ie</a>. It is an all-island service for the public and is free of charge to use.
- A1.7 The benefits of car sharing:
  - reduces transport costs

- reduces the number of cars on the road which results in less pollution, less congestion and fewer parking issues
- reduces the need for a private car
- A1.8 The residential development's community website would have a section dedicated to the car share scheme and the residents would have an option to register. To encourage take up of the car sharing, the MMP Coordinator would host events to introduce prospective car sharers to each other and would help 'break the ice' as it is always more likely that people will share, particularly for the journey 'home', with somebody that they have met rather than a complete stranger.

#### Car Usage - Car Club

- A1.9 Car Clubs are membership-based schemes providing shared cars for hire. A Car Club can play an important role in reducing costs, congestion and environmental impact. Members have flexible access to the hire of a vehicle. Vehicles are parked in reserved parking spaces close to homes, town centres or workplaces and can be used and paid for on an hourly rate, daily or weekly basis. Individuals can join a car club or an organisation may have a corporate package with one of the car club providers.
- A1.10 Car sharing clubs in Dublin have experienced significant growth in recent years. The facility allows members' access to a shared car in the local area for an hourly fee. This facility could be an attractive option for those who choose to start walking or cycling to work but may require access to a car at short notice. There may be potential to encourage one of the car sharing clubs to establish a shared car at the residential development. Residents and visitors can obtain further information at <a href="https://www.gocar.ie">www.gocar.ie</a>. The benefits of such car sharing services include;
- the reduction of the number of cars on the road and therefore traffic congestion,
   noise and air pollution;
- minimising the demand for car parking and freeing up land traditionally used for private parking spaces, but which may not be used,
- increasing use of public transport, walking and cycling as the need for car ownership is reduced and
- car sharing allows those who cannot afford a car the opportunity to drive, encouraging social inclusivity.

#### Public Transport - Buses

A1.11 The residential development will be well served by Dublin Bus services with bus routes passing the subject site on the N11 Stillorgan Road. The bus stops are located in very close proximity with the closest Dublin Bus stop at only 200m from the subject site with frequent inbound services operating daily.

## Public Transport - Luas

- A1.12 The Luas Green Line serves the area with the Carrickmines stop 1.8km to the south of the subject site. The Green Line runs from Brides Glen to Broombridge serving Sandyford and Dundrum as well as the city centre. The subject site will also benefit from the improved connectivity by the LUAS Cross City service.
- A1.13 Encouraging the residents to use public transport starts with awareness and promotion. People's perceptions of public transport may be based on outdated experiences, or even on hearsay. Marketing information can be effective in selling the public transport service to them.
- A1.14 As well as providing information, part of the aim is to positively brand public transport, pointing out its advantages and attempting to reduce people's negative associations. The outcome of this is the importance of not encouraging people onto poor public transport, where negative experiences may further reinforce car preferences.
- A1.15 The use of information points within the development is an effective method of increasing awareness among residents about public transport options. These 'points' are usually information stands containing the latest bus and rail timetables, route maps and other promotional material. The development's website can also be a conduit for this information, and can incorporate links to the bus operators' websites and the Luas website.
- A1.16 A public transport information service can be offered to residents in which they have opportunity to register to receive public transport timetables for their preferred routes by email or text. Members are sent new timetables as they become available.
- A1.17 Financial incentives for staff can be an effective tool in the promotion of public transport use. This can be done through the provision of low interest or interest-free loans for the purchase of public transport season tickets where applicable (discounted season tickets etc.).

#### Walking

- A1.18 The development has been designed to ensure that the development is permeable with a number of access points / gateways to facilitate walking through the site. The feasibility of measures that promote walking will be influenced by factors such as the safety and ease of walking to and from the site and the age profile of commuters. Generally speaking a distance of up to 4km is considered reasonable for walking. This distance is only indicative but can help to define target groups.
- A1.19 The health benefits of walking are a key element in promoting Mobility Management Plans. Walking improves cardiovascular fitness and burns calories. Walking will also increase your muscle tone, boost metabolism, ease stress, raise energy levels and improve sleep, which combined can also help with weight loss. Regular walking can also reduce the risk of coronary heart disease, diabetes, strokes, high blood pressure, cancer, osteoporosis and arthritis.
- A1.20 Walking will mainly be self-promoting and initiatives should focus on making people aware of the routes available to them. A map showing the walking routes should be prepared and placed at key locations within the development. These could be stand-alone signs or maps on notice boards. This information would also be available on the community website.
- A1.21 It is important to ensure that pedestrians are safe and are satisfied with the facilities available and their maintenance. It should be noted that: -
  - Walking is truly the most-sustainable form of transportation, and the world's first form of travel.
  - All trips, regardless of mode, both begin and end on foot.
  - Walking needs to have a greater level of priority in most cities, like walk-signal times, safer well-lit / marked crosswalks and pedestrian zones.
  - Walking is an easy mode of travel for distances under 2km. Most people are prepared to walk between 800m to 1km to a train station or bus stop.

#### Cycling

A1.22 The residential development is well located for cycling journeys and this mode of travel should be encouraged with the provision of a wide range of routes within the development and new links to existing and future major routes in the local

area. A distance of up to 10km is considered reasonable for cycling. This distance is only indicative but can help to define target groups.

- A1.23 The on-site cycle facilities will be linked to the existing off-site cycle routes.
- A1.24 As with many measures relating to cycling, the aim is a mixture of support, through incentives and facilities, and encouragement, through information and marketing. Incentives and facilities at both trip origin and destination / place of work, education, worship etc. can include some of the following. The MMP will highlight that many of these are available at trip end destinations:
  - the provision of "pool" bicycles for short distance travel
  - the provision of well-located high-quality cycle parking facilities
  - storage, changing and shower facilities for cyclists

## **Appendix B**

Management & Monitoring Measures

#### **B1.0 MANAGEMENT & MONITORING MEASURES**

#### **B1.1** Introduction

B1.1.1 For the Mobility Management Plan to be successful, it is important that it is organised and managed well. The success of the Mobility Management Plan will also be subject to ongoing monitoring.

### **B1.2** Management Structure & Roles

- B1.2.1 The appointment of a Mobility Manger / Group is critical to the success of the MMP. The BTR Scheme will be managed by a highly skilled management company, who will oversee and ensure a successful MMP.
- B1.2.2 For the MMP to be successful it is essential that all residents take ownership of it. Therefore, as the development is being built out and the community becomes established it will become increasingly important for management responsibility to be supplemented by the local community residing at the subject development.

#### **Mobility Manager**

- B1.2.3 A Mobility Manager will therefore be appointed prior to first occupation of the site. The Mobility Manager will be employed full-time and therefore be available full-time, but their role as a Mobility Manager will be part-time (i.e. he / she will be employed for other work in addition to mobility management). Their role will include leading the implementation, monitoring and review of the Plan.
- B1.2.4 A MMP needs to be monitored, co-ordinated and marketed on a regular basis to ensure that it meets its objectives and its targets are achievable and realistic. The Mobility Manager is appointed to ensure the success of this plan. The primary duties of the Mobility Manager are:
  - To develop and oversee the implementation of the initiatives outlined in the plan;
  - To monitor progress of the plan;
  - To promote and market the plan;
  - To manage public transport discount fare schemes, cycle promotion schemes and events; and
  - To provide "travel advice and information" to residents.

B1.2.5 To promote and manage the shift towards high level, public transport use, the MMP should be monitored, developed, promoted and managed by the Mobility Manager. The Mobility Manager should encourage and promote the measures mentioned within this report to the commuters of the development.

### Residents Group

B1.2.6 As the development approaches full occupation; residents of the development will be invited to form a Residents Group.

## **B1.3** Monitoring

- B1.3.1 Baseline conditions will be established as early as possible following the first occupations of the development. Following the baseline survey, annual surveys will be undertaken until the development is fully occupied. By this time, it is expected that the travel patterns will have been established. A review of the trends in the MMP results would then be used to identify whether further monitoring is required.
- B1.3.2 The Mobility Manager will be responsible for undertaking the monitoring, the processing of results and the production of the reports with the results of the findings.
- B1.3.3 The monitoring will take place in the form of Travel Surveys. These will be carried out on the same day every year. It is recommended that the timing of the Travel Survey should take place in a neutral time of year i.e. Spring or Autumn.
- B1.3.4 The survey would be in the form of a questionnaire that residents would complete. Communication of the Travel Survey will be through letters in the post or email. This letter will inform all residents of how to complete the survey online. Residents can also request a paper copy of the survey to be filled out by hand rather than electronically. However, the online method would be the preferred channel. The survey will include questions to allow the monitoring of the particular targets that have been set in the MMP.
- B1.3.5 It is essential that the residents see the results of the survey and review their own travel patterns against the typical data. Therefore, the results should be available on the community website.

- B1.3.6 The Mobility Manager will be responsible for the preparation of the annual monitoring reports. The objective of the review will be to assess the success of the MMP and to identify potential for future improvement.
- B1.3.7 An important part of the review would be to revise information relating to public transport, cycling and walking routes to ensure that it is relevant and up-to-date. This is critical if residents are going to be able to rely on information when making travel choices.
- B1.3.8 The annual reports will also include a review of where targets are being met and also identify potential changes to the measures implemented by the plan where targets are not being met. Specific short-term targets will be considered and agreed to ensure progress towards the overall target. Targets will also be revised to ensure that they remain appropriate and challenging.

## **Appendix C**

Marketing & Promotion Measures

#### C1.0 MARKETING MEASURES

## C1.1 Raising Awareness, Marketing & Promotion

- C1.1.1 The education of residents on the Mobility Management Plan initiatives and the importance of contribution are very important. The services available to the residents must be communicated in a consistent and continuous manner to sustain behavioural change.
- C1.1.2 Promotion would start with the marketing of the residential development. The sustainable location of the development and the high-quality infrastructure provision for walking and cycling will be a prominent feature. The high-quality links provided by Dublin Bus and Luas to the various Employment Areas, City Centre and other links are also an attractive feature for encouraging sustainable travel for future residents.
- C1.1.3 Communications will include promotional initiatives and activities aimed at informing the residents of all relevant external bodies of the existing and proposed transport networks. Such initiatives will include, but not limited to:
  - Internal communications channels
  - Advertising local press and media
  - Publicity promotion of benefits

#### **C1.2** Sustainable Travel Pack

- C1.2.1 Promotion of sustainable travel will continue when residents take up occupation of their new accommodation. A 'Welcome Pack' can be provided which will include maps and timetable information for walking, cycling and public transport journeys. It will also include information on a range of incentives to encourage take up of public transport and cycling etc.
- C1.2.2 The 'Welcome Pack' will be produced and approved prior to first occupation and staff will be trained in the contents of the information contained. The 'Welcome Pack' will include:
  - A covering letter explaining the purpose of the 'Welcome Pack' and contact details of the Mobility Manager,
  - An overview of the Mobility Management Plan,
  - Maps for walking, cycling and public transport,

- Timetables for public transport (i.e. Dublin Bus, Luas),
- Local taxi information,
- Car sharing scheme information,
- Information on reducing the demand for travel,
- Sustainable travel voucher to encourage walking, cycling and public transport, and
- Pedometer pack with information on the health benefits of walking.
- C1.2.3 Increasing awareness of alternative modes to car use and the benefits is a central component of mobility management. In particular, residents should be made aware of the benefits of active travel modes including health and financial benefits. Key actions might include:
  - Establishing a clear brand concept for green / smarter travel to and from the site. This should be incorporated in all communication with the residents regarding commuting to and from the site;
  - Provide a central information point for residents in relation to travel options, this should be a physical point within the development but should also be made available on the internet. The latter could also include information on bus and rail routes and timetables;
  - New residents to the development should be informed about travel options;
  - Ensure the residential development is included as a key destination on journey planning apps.

#### C1.3 Personalised Travel Plan

- C1.3.1 An advisory leaflet will be provided in the 'Welcome Pack' to explain to new residents the sustainable transport options available in the MMP and that if they wish they may contact the Mobility Manager directly to discuss specific travel needs. The Mobility Manager will then use the information discussed to prepare a 'Personal Travel Plan' for that resident free of charge. The Personal Travel Plan will be based on individual lifestyles and in light of the available transport options for stated everyday journeys.
- C1.3.2 This process will allow residents to consider how they currently travel and promote alternative methods for their journeys to work, school and when accessing other local amenities. Personalised journey planning will also enable

residents who might not otherwise use public transport realise there are local services available that can suit their needs.

C1.3.3 The Mobility Manager is responsible for promoting the availability of this measure and residents will be encouraged to contact the Mobility Manager if they have any specific sustainable travel related queries.

#### C1.4 Online Website

- C1.4.1 A dedicated online website for the residential development may be created and will focus on providing appropriate, up-to-date information on sustainable travel options for accessing the development site.
- C1.4.2 This website will act as a 'one-stop-shop' for the dissemination of site-wide sustainable travel information to residents, as well as acting as a source of information for visitors. Information on the website will include details of local public transport routes, local amenities and facilities, walking and cycle maps and a link to online car sharing opportunities. The website will also provide links to other websites such as Dublin Bus and Luas so as to encourage residents to plan their journeys using sustainable transport.

### C1.5 Smart Device Travel App

- C1.5.1 A Travel App could be developed for the residents at the development as well as visitors travelling to the site. This smart device app will enable all users to gain instant access to travel information. This may include:
  - Timetables, location of stops, route information, fares, and real-time information for both buses and the Luas.
  - Interactive map showing users current location and highlighting local points of interest (e.g. closest bus stop)
  - Pedometer for walkers