

Project

**Residential Development,
Sheriff Street Upper and East Road, Dublin 1**

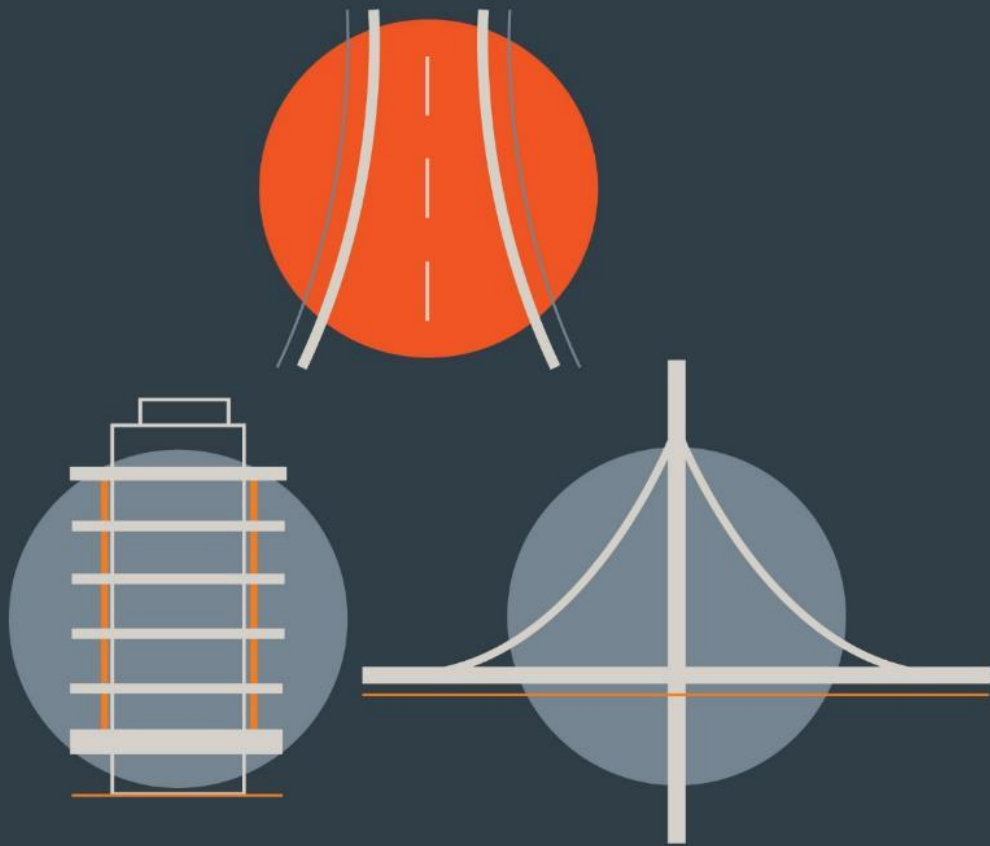
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MOBILITY MANAGEMENT PLAN

Client

Glenveagh Living Limited

TRANSPORTATION



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Appendix C	Marketing & Promotion Measures



CHAPTER 1

Introduction

1.1 CONTEXT

1.2 BACKGROUND

1.3 STRUCTURE OF REPORT

1.0 INTRODUCTION

1.1 CONTEXT

- 1.1.1 DBFL Consulting Engineers (DBFL) has been commissioned by Glenveagh Living Limited to prepare a Mobility Management Plan (MMP) for a proposed residential development on a site which forms part of the Castleforbes Business Park, located on the eastern edge of Dublin City Centre. The subject site is currently occupied by the Castleforbes Industrial Estate, TAB Tyres & Batteries and Vernon Catering, amongst other businesses, with vehicular access provided directly from Sheriff Street Upper.
- 1.1.2 The development proposals include the demolition of the existing on-site Castleforbes Business Park development and its replacement with a residential development across c. 9 No. buildings (8 residential and 1 cultural) comprising residential apartments, community, retail, creche uses plus ancillary car / bicycle parking areas at basement level. The subject development site is located on the R101 Sheriff Street Upper within the Castleforbes area, east of Dublin City Centre.
- 1.1.3 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.
- 1.1.4 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.
- 1.1.5 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** and the **Employees** 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 R101 Sheriff Street Upper, Dublin 1. This document aims to expand the awareness of and increase travel options and mobility opportunities for the residents and employees 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 benefit of the residents and employees 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 Sheriff Street Upper.
- 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, employees 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 characteristics of the development proposals are briefly outlined in **Chapter 3**.

1.3.3 The existing commuter trends and modal split for the environment within which the proposed development's MMP is located is briefly outlined 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 Castleforbes.
- 1.3.7 The main conclusions and recommendations of the MMP are summarised in **Chapter 8**.



CHAPTER 2

Mobility Management Plan Framework

- 2.1 WHAT IS A MOBILITY MANAGEMENT PLAN?**
- 2.2 WHAT IS A COMMERCIAL 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 to reduce the number and length of car trips generated by a commercial development, while 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 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/commercial MMP is concerned with journeys made to and from a single origin (residence/workplace) to multiple and changing destinations.

2.3 WHO IS INVOLVED?

2.3.1 A Commercial MMP impacts the following key stakeholders who should all be involved in some form or manner in the process:

- Local Authority Officers,
- Property / Commercial developers,
- Facility Management Personnel,
- Future occupants at sites that have an MMP,
- Residents in the community surrounding new housing developments with an 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 and Employees –**

- Address residents' and employees' 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.

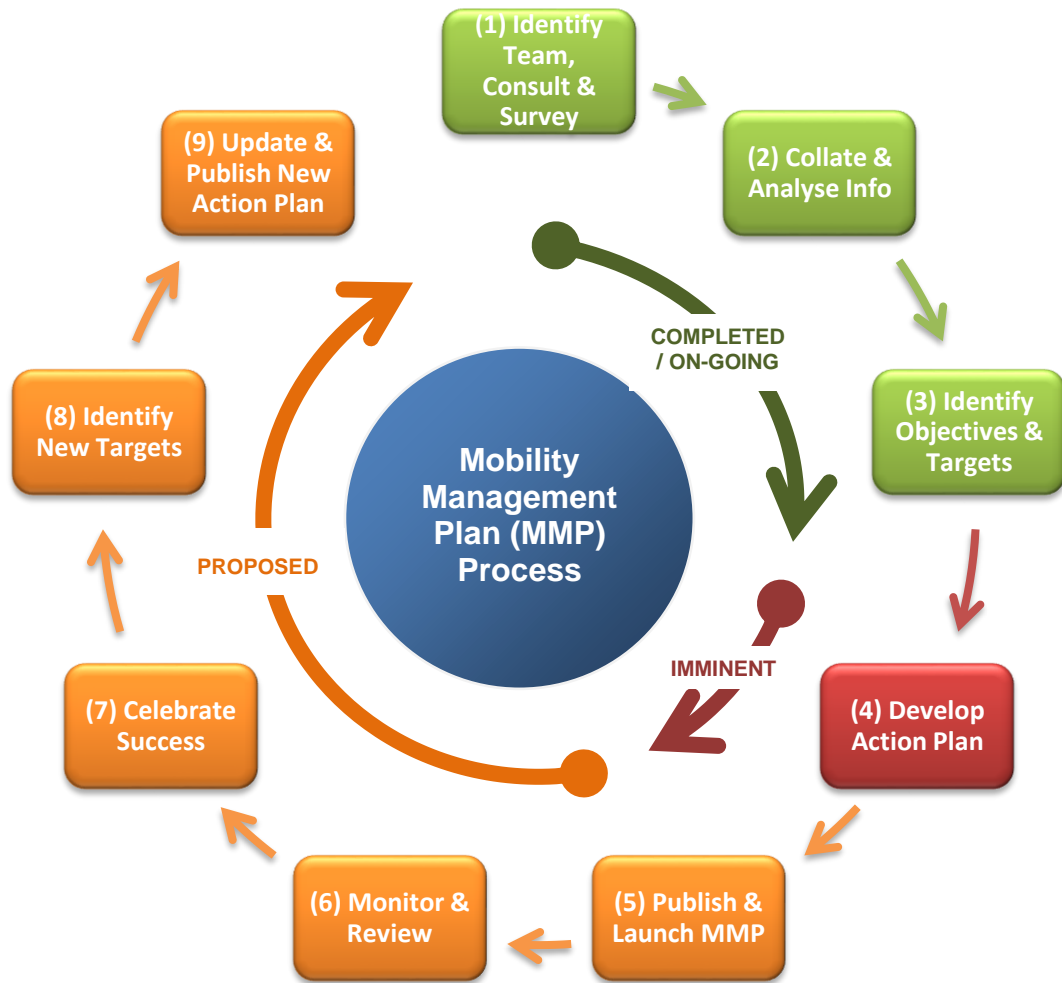
b) **The Local Community** –

- 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 an 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;

S	Specific Well defined. Clear to anyone that has a basic knowledge of the project
M	Measurable Know if the goal is obtainable and how far away completion is Know when it has been achieved
A	Achievable Agreement with all the stakeholders what the goals should be Make sure this is possible for all levels within group
R	Realistic Within the availability of resources, knowledge and time
T	Time-Bound Enough time to achieve the goal Not too much time, this can affect project performance?

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 Castleforbes 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 re-examined 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 Dublin City 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 Castleforbes, Dublin 1.

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.
- 2.7.2 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 (Dublin City Council) and eventually arriving at site (or land use) specific policy objectives.

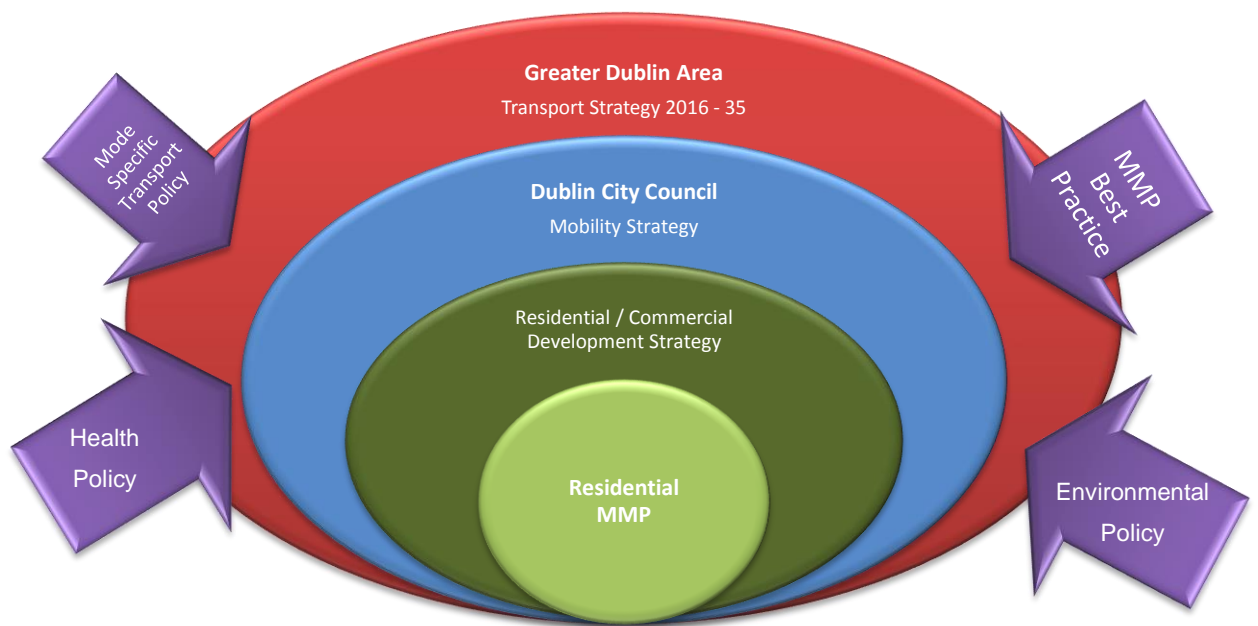
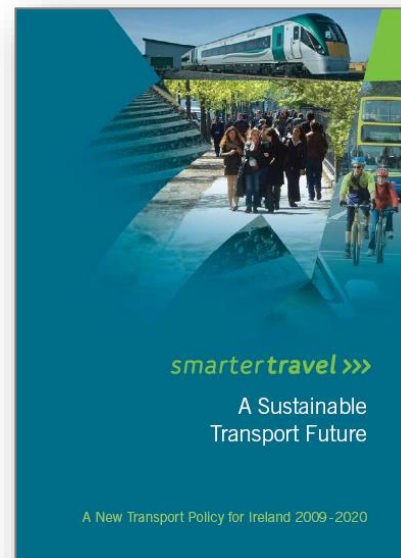


Figure 2.1: MMP Policy Framework and External Influences

National Smarter Travel Policy

2.7.3 *'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.



2.7.4 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.

2.7.5 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.

2.7.6 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.

2.7.7 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.

2.7.8 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

2.7.9 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.

2.7.10 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.

Dublin City Council Development Plan 2016-2022

2.7.11 Adopted in 2016 and covering the period up to 2022 the Dublin City Council Development Plan establishes the regulatory framework against which all development in the county takes place. In both the authorities' transportation objectives and development standards the objectives and subsequent thresholds for the requirements of MMPs/Travel Plans are clearly detailed in Section 8.5.5 of the Development Plan.

North Lotts & Grand Canal Dock Planning Scheme 2014

2.7.12 The subject site is located immediately to the north of the North Lotts & Grand Canal Dock Planning Scheme 2014 boundary. The scheme governs the development / redevelopment of the Plan area as illustrated in **Figure 2.2** below.

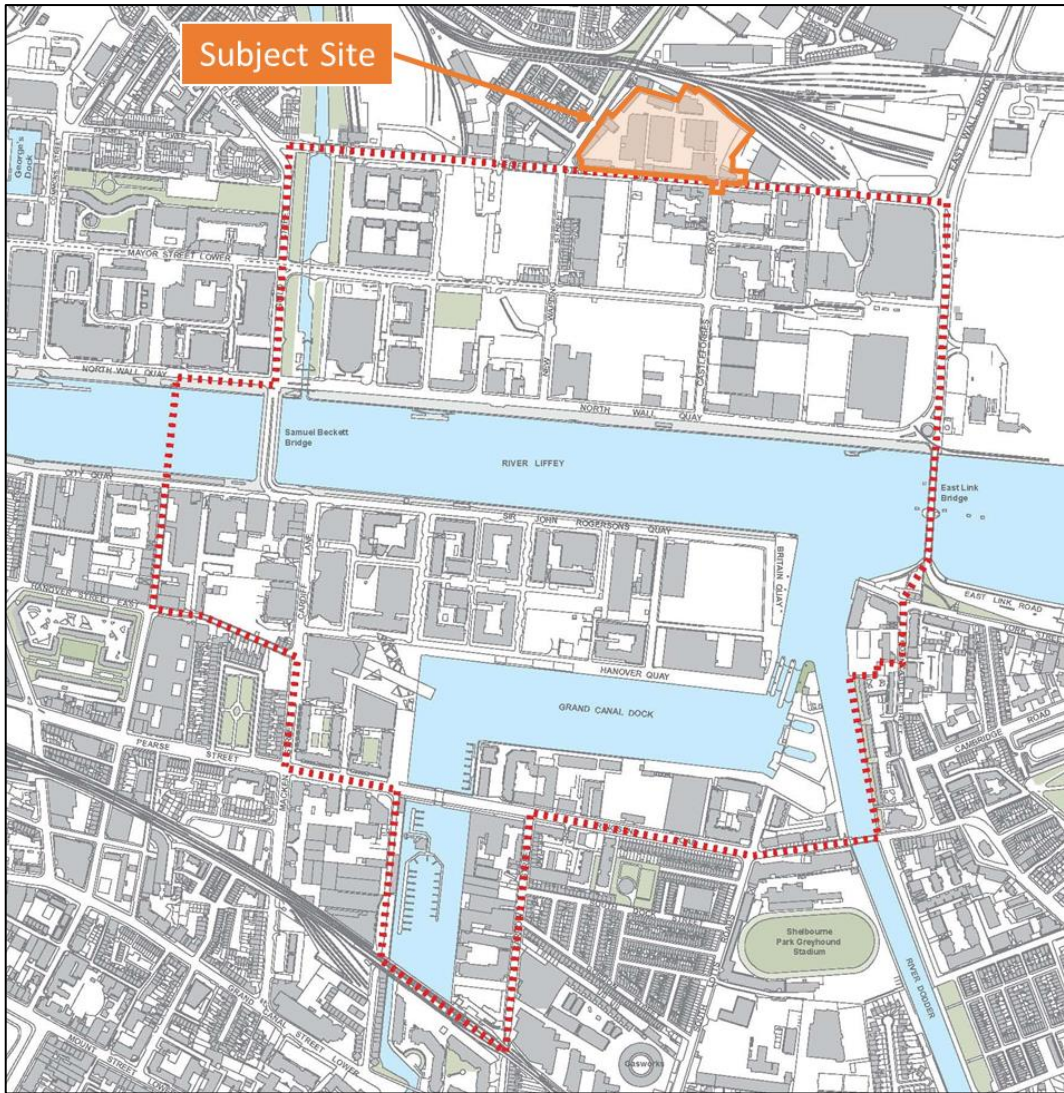


Figure 2.2: North Lotts & Grand Canal Dock Planning Scheme 2014 boundary
(Source: Extract of North Lotts & Grand Canal Dock Planning Scheme 2014)



3.1 SITE DESCRIPTION

3.2 PROPOSED DEVELOPMENT

3.0 SITE DESCRIPTION & PROPOSED DEVELOPMENT

3.1 RECEIVING ENVIRONMENT

3.1.1 A full description of the subject site and the local transportation environment (including the local road network, cycle and pedestrian infrastructure and public transport provision and accessibility) is included within the Traffic and Transport Assessment accompanying this Mobility Management Plan.

3.2 SITE DESCRIPTION

3.2.1 The Castleforbes development site is located in the North Wall district which forms the eastern edge of Dublin City Centre. The site is bounded to the south by Sheriff Street Upper and to the North and East by Lands in the control of Irish Rail. Sheriff Street Upper terminates to the east at a signal-controlled junction with East Wall Road with links southbound onto North Wall Quay via Castleforbes Road.

3.2.2 East Wall Road provides a direct connection to the strategic M50 and M1 Motorways via the Dublin Port Tunnel. To the west, Sheriff Street Upper provides access to Docklands train station, Connolly and Busáras Transportation Hubs, to North Circular Road via Seville Place and to Sir John Rogerson's Quay via Samuel Beckett Bridge. The general location of the subject site in relation to the surrounding road network is illustrated in **Figure 3.1** below.

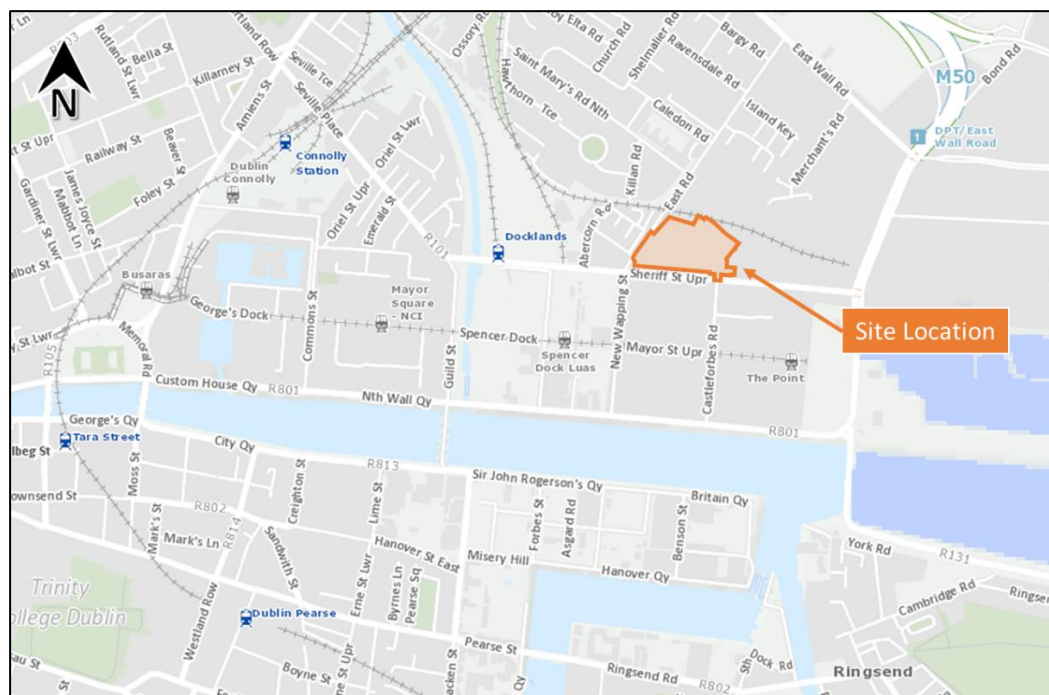


Figure 3.1: Site Location (Source: GeoHive)

3.3 PROPOSED DEVELOPMENT

3.3.1 The development proposals include the demolition of the existing on-site Castleforbes Business Park facilities and its replacement with a residential development across c. 9 No. buildings (8 residential and 1 cultural) comprising of residential apartments, community, retail, creche uses plus ancillary car / bicycle parking areas at basement level.

3.3.2 With reference to O’Mahony Pike Architects scheme drawings the development schedule is summarised in **Table 3.1** below.

Unit Type		No. of Units	Total No. Units	GIA (m ²)	
Residential	Apartments	Residential (Studio)	100	698	56,938
		Residential (1 Bed Apt.)	406		
		Residential (2 Bed Apt.)	169		
		Residential (3 Bed Apt.)	15		
		Duplex (2 Bed Apt.)	8		
	Live/Work Residential Units	4			
	Residential Communal Amenity	-		1,263	
Commercial	Retail	3		1,154	
Other	Cultural	1		2,859	
	Creche	1		469	
Total GIA:				63,025	

Table 3.1: Development Schedule Summary

3.3.3 Further details of the development proposals including the site layout and site access arrangements are illustrated in the architects’ scheme drawings as submitted with this planning application.

3.3.4 Taking into consideration Table 16.1 of the current Dublin City Development Plan 2016-2022; and Chapter 4 of *Sustainable Urban Housing: Design Standards For New Apartments Guidelines For Planning Authorities*, it is considered appropriate a

parking provision of 179 no. car parking spaces (0.25 spaces per unit) for 702 Build to Rent residential units.

- 3.3.5 The provision will include 9 disabled spaces (5%) and 3 no. car share spaces. Also, 18 no. e-Car parking spaces will be provided in accordance within the development (10%). The total car parking provision for the development is 179 no. spaces located at basement level. There are also an additional 7 no. on-street car parking spaces at surface level plus 1 no. set down/loading area.
- 3.3.6 The development provides 1,392 no. bicycle parking spaces on site at a ratio of 1.53 spaces per bedroom. Of these 1,392 cycle parking spaces, 1010 no. are long term bicycle parking spaces, 30 no. are disabled / cargo bicycle parking spaces and 352 no. are short stay visitor spaces. This provision is in excess of both the DCC and the DHPLG development standards by 662 no. spaces and 130 no. spaces respectively. This increased level of cycle parking is intended to encourage and support a positive modal shift away from a dependency on car travel.
- 3.3.7 A full description of the proposed development characteristics is included within the Traffic and Transport Assessment accompanying this Mobility Management Plan.



CHAPTER 4

Commuter Trends & Transport Needs

- 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 where feasible to establish travel trends and area specific transport needs when initially developing an MMP. The subject site is located within a primarily commercial area although there are other land uses nearby within walking distances such as schools, retail, residential and leisure. It is necessary to predict the nature of the proposed traffic to/from the site and investigate whether it is possible to influence the mode of travel for the commuters to the proposed development.
- 4.1.2 Varying demographic profiles that have an immediate impact on the traffic network indicate commuters travelling to/from work as well as other journey types 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.
- 4.1.3 The current modal share for the Greater Dublin Area is indicated in the **Figure 4.1** below.

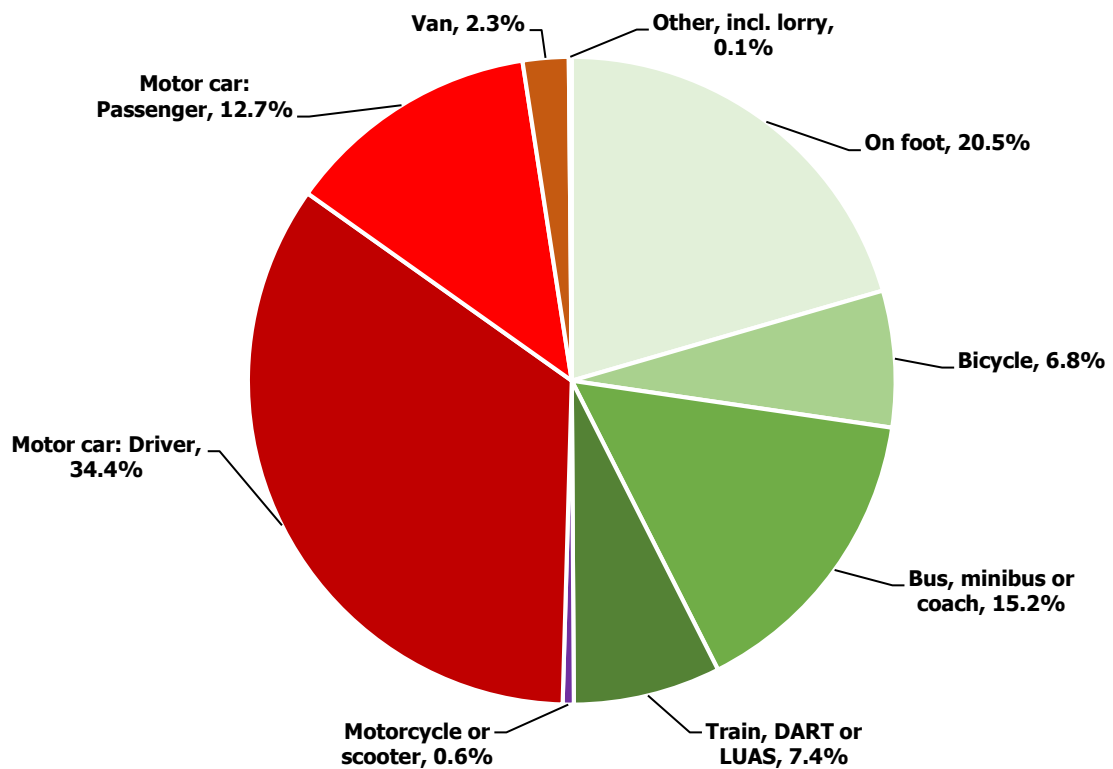


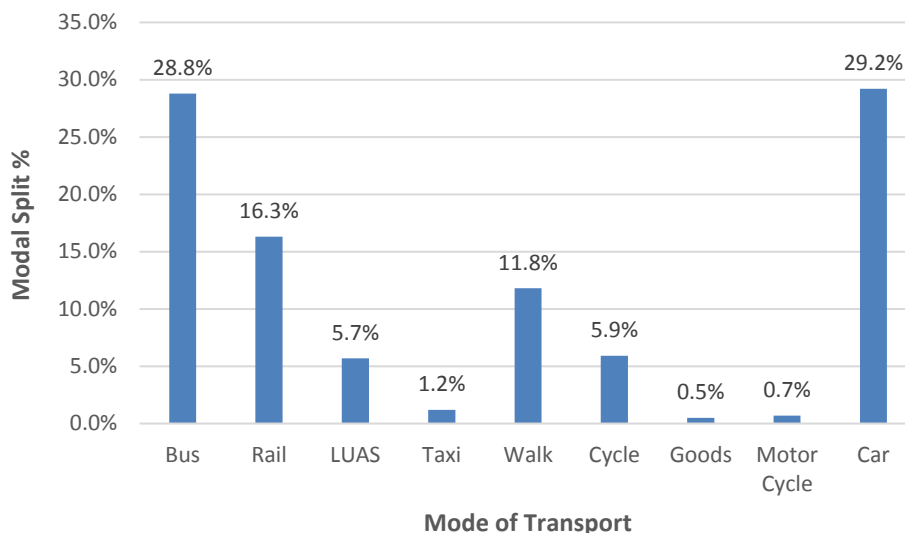
Figure 4.1: Modal Share in Greater Dublin Area (Census 2016)

4.1.4 **Table 4.1** below summarises the mode share based on trip purpose (i.e. shopping, leisure, work, education etc.).

Trip Purpose \ Mode	Car/Van	Taxi	Bus	Train/DART	Luas	Bicycle	Walking
Grocery Shopping	31%	17%	21%	4%	12%	16%	29%
Leisure/Sport	19%	47%	23%	31%	30%	46%	42%
Travelling to Work	18%	7%	16%	25%	21%	17%	6%
Other Shopping	14%	10%	20%	16%	17%	7%	12%
Education	9%	3%	11%	3%	6%	9%	6%
Business as part of work	7%	6%	5%	12%	9%	3%	3%
Other purpose	2%	11%	5%	10%	4%	1%	3%

Table 4.1: Purpose of Trip based by Modal of Travel (Source: www.nationaltransport.ie)

- 4.1.5 The National Transport Authority’s Canal Cordon Report (2017) data has also been investigated to determine the travel trends within the local vicinity of the subject Castleforbes 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.
- 4.1.6 The NTA’s figures were analysed to establish current commuter trends in the area of the site. This analysis will form the basis of the initial travel characteristics that could be generated by the proposed residential development at Sheriff Street Upper.
- 4.1.7 The analysis highlighted the trend in modes used by the network users when travelling to work or school / college through various canal cordon points. The summary of the data for the selected sites have been summarised and illustrated in the following **Graph 4.1**.
- 4.1.8 This graph reveals that the majority (50.8%) of those travelling to work do so by public transport (Train, Bus, Luas) whilst 17.7% take active modes of transport (walking & cycling). 29.2% of the working population in this area travel as either a car driver or as a car passenger.



Graph 4.1: Current (2017) Modal Share for Existing Commuter travel Trends

4.1.9 The Canal Cordon data discussed above would provide indicative resident and staff travel trends for a development of this nature, particularly in this area of Dublin City for travel to work by non-car modes.

4.2 BUILD-TO-RENT MODEL

4.2.1 As previously mentioned, part of 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 DEVELOPMENT 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 the utilisation of sustainable modes of travel. The key target of this MMP will therefore be to promote the relatively sustainable travel trends associated with similar residential developments in the surrounding area of Dublin City.

4.3.2 The MMP would subsequently seek to promote the following modes / travel options:

- LUAS
- Bus
- Cycle
- Walking, and
- Car Sharing



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' and employees' 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/staff 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 and employees;
- (g) Managing the ongoing development and delivery of the Mobility Management Plan with future residents and employees;
- (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:

- Routing, 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/employee 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 and employees 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' and

employees' 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/staff upon hiring;

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 and commercial 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 Castleforbes 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 and employee 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, employees and visitors to consider lower carbon travel alternatives in everyday journeys.

- 5.3.6 Baseline surveys cannot be collated at this time as the scheme does not physically exist. Nevertheless, interim mode share MMP targets have been identified for the first year after initial occupation of the proposed development. These targets will be reviewed within six months of the baseline travel survey of employees being completed. This baseline data will provide a better understanding about what is achievable and what measures best suit the subject Castleforbes site.
- 5.3.7 The interim mode split targets for the subject site are set out in **Table 5.1** and **Table 5.2**. These targets are based on CSO 2016 census data, as recorded at adjoining residential and commercial areas as previously introduced in **Chapter 3**.

Mode of Travel	Canal Cordon Mode Split (2017)	1 st Year Target (2022)	MMP 5-year Target (2027)
On Foot	11.8%	10.0%	11.0%
Bicycle	5.9%	4.0%	5.0%
Public Transport	43.8%	69.0%	73.0%
Motorcycle/Scooter	0.7%	0.0%	0.0%
Car (Including Taxi)	29.2%	17.0%	11.0%
Other (incl. lorry)	0.5%	0.0%	0.0%

Table 5.1 Interim Mode Share Targets for Castleforbes Residential Development

Mode of Travel	Canal Cordon Mode Split (2017)	1 st Year Target (2022)	MMP 5-year Target (2027)
On Foot	11.8%	18.0%	19.0%
Bicycle	5.9%	9.0%	11.0%
Public Transport	43.8%	65.5%	67.0%
Motorcycle/Scooter	0.7%	0.0%	0.0%
Car (Including Taxi)	29.2%	6.5%	3.0%
Other (incl. lorry)	0.5%	1.0%	1.0%

Table 5.2 Interim Mode Share Targets for Castleforbes Commercial Development

- 5.3.8 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.



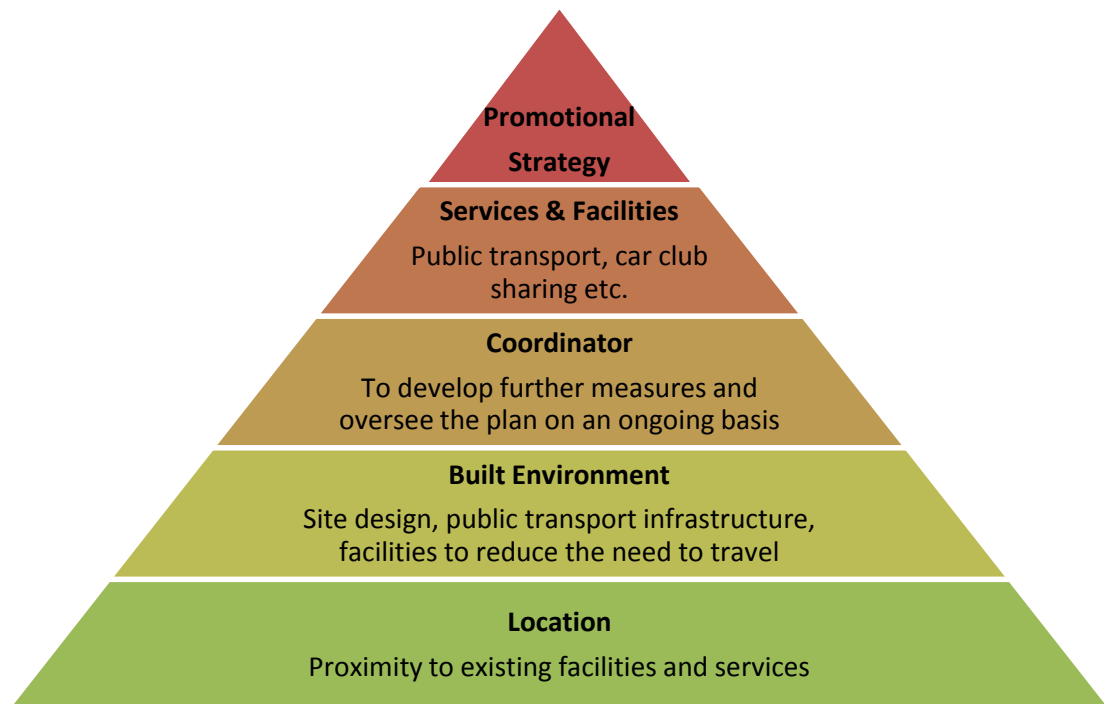
- 6.1 INTRODUCTION**
- 6.2 MODE SPECIFIC MEASURES**
- 6.3 MANAGEMENT &
MONITORING MEASURES**
- 6.4 MARKETING & PROMOTION
MEASURES**

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 MMP is organised as a series of integrated sub-strategies covering the different modes of travel and associated management and awareness related issues to all modes.

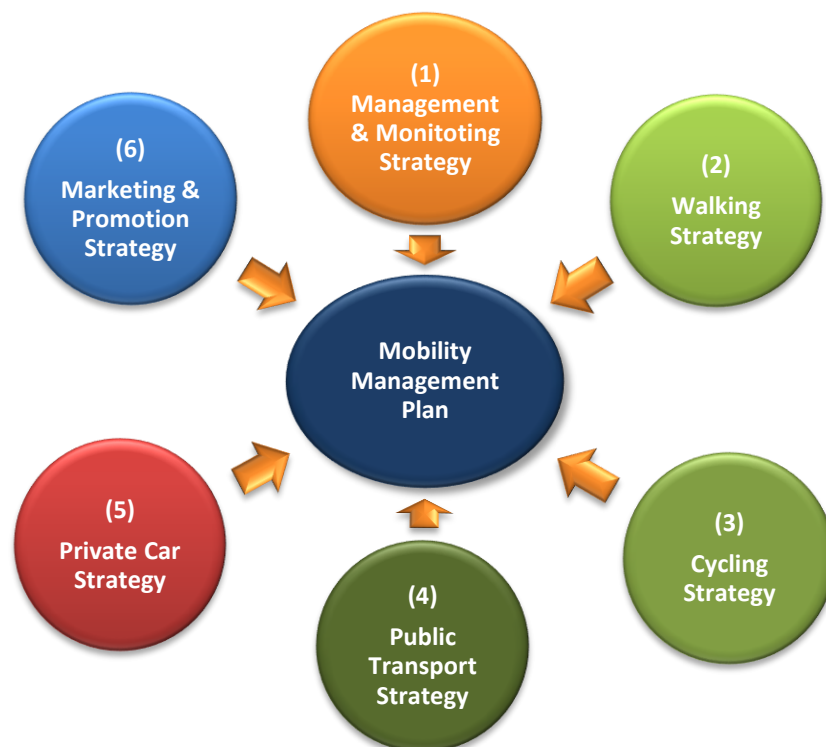


Figure 6.1: MMP Action Plan Strategies

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 and Staff 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 and employees 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 and employees.

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 and employees 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 and employees 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 and employees. 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.



CHAPTER 7

Preliminary Action Plan

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

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. 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 MMP development, implementation and coordination 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 MMP continued development.

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;

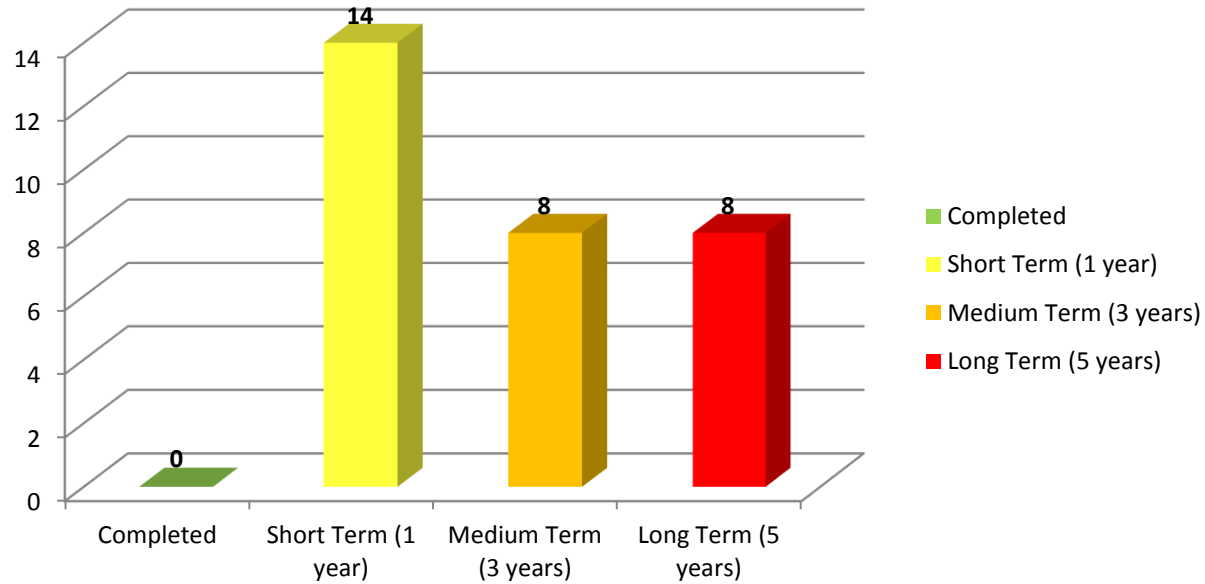
- To demonstrate that the various targets are being achieved (or not met, at which point the measures being used should be reviewed) as people only value what they can measure and relate to,
- To ensure that the MMP continues to receive the support of the building complex's management, staff and its 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 MMP are outlined in **Table 7.1** below.

Table 7.1: Preliminary Schedule of MMP Management & Monitoring Initiatives

Ref	Initiative	Status / Timescale				Lead Party	Comments
		Completed	Short (1 year)	Medium (3 years)	Long (5 years)		
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	-	✓	✓	✓		
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	-	✓	-	-		
MMS 6	Establish 'External' engagement contacts and collaboration programme.	-	✓	-	-		
MMS 7	Agree Monitoring and Reporting Programme with respect to;	-	✓	-	✓		
	MMS 7a – Resident/Employee 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 and employee '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 and employees.	-	✓	✓	-		

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

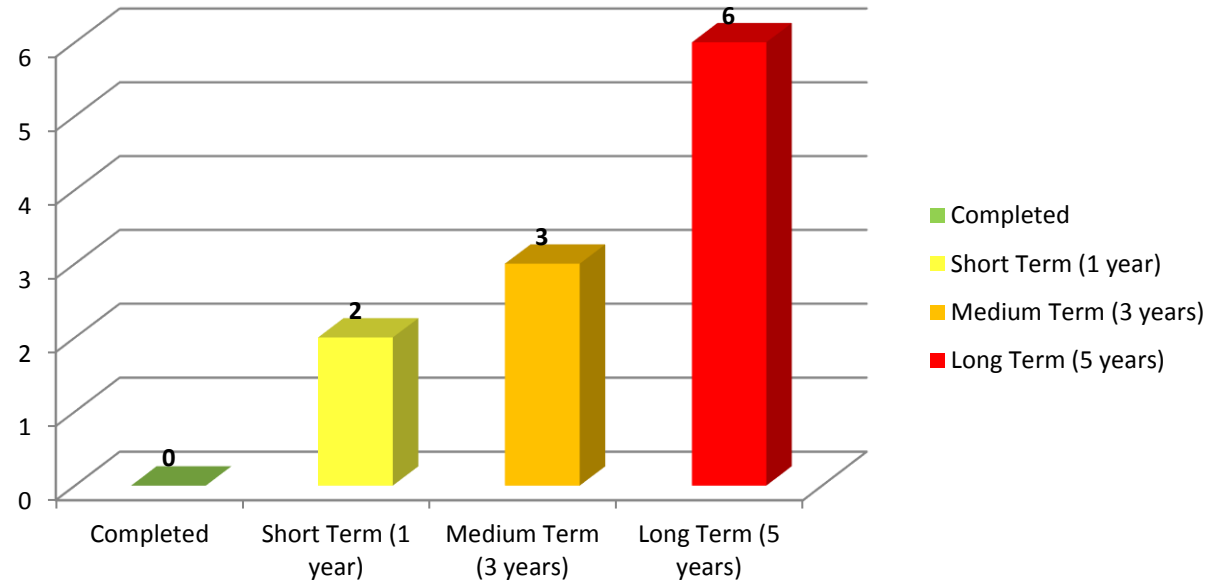
7.3 WALKING STRATEGY

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 / Timescale				Lead Party	Comments
		Completed	Short (1 year)	Medium (3 years)	Long (5 Years)		
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	-	-	-	✓		
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

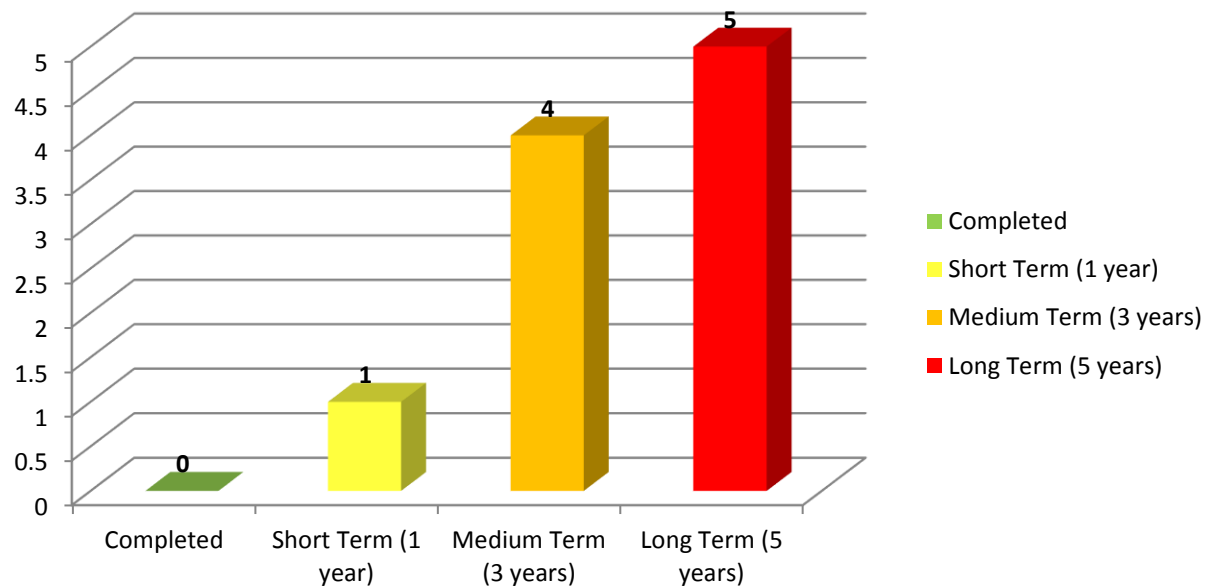
7.4 CYCLING STRATEGY

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				Lead Party	Comments
		Completed	Short (1 year)	Medium (3 years)	Long (5 Years)		
CS 1	Investigate the potential benefit and uptake of setting up a scheme to address personal security issues associated with cycling	-	-	-	✓		
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	-	-	-	✓		
CS 7	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	-	-	✓	-		
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

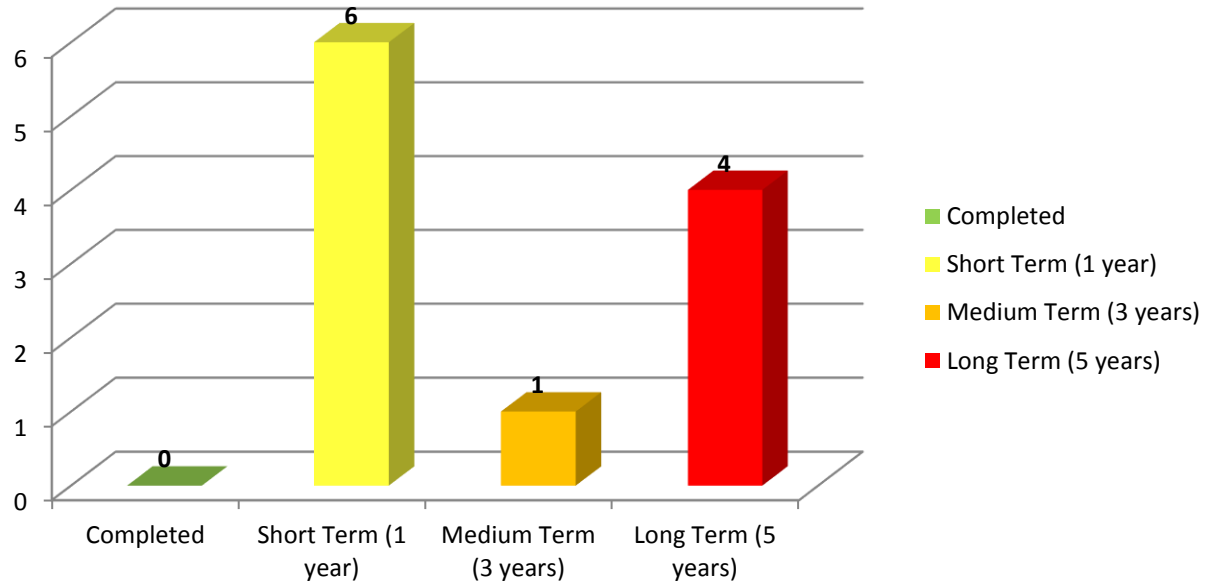
7.5 PUBLIC TRANSPORT STRATEGY

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				Lead Party	Comments
		Completed	Short (1 year)	Medium (3 years)	Long (5 Years)		
PTS 1	Explore the opportunities of;						
	PTS 1a - maintaining the existing bus services PTS 1b - Enhancing the catchment of these services	-	✓	-	-		
PTS 2	Market / Publicise the potential for residents and employees 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

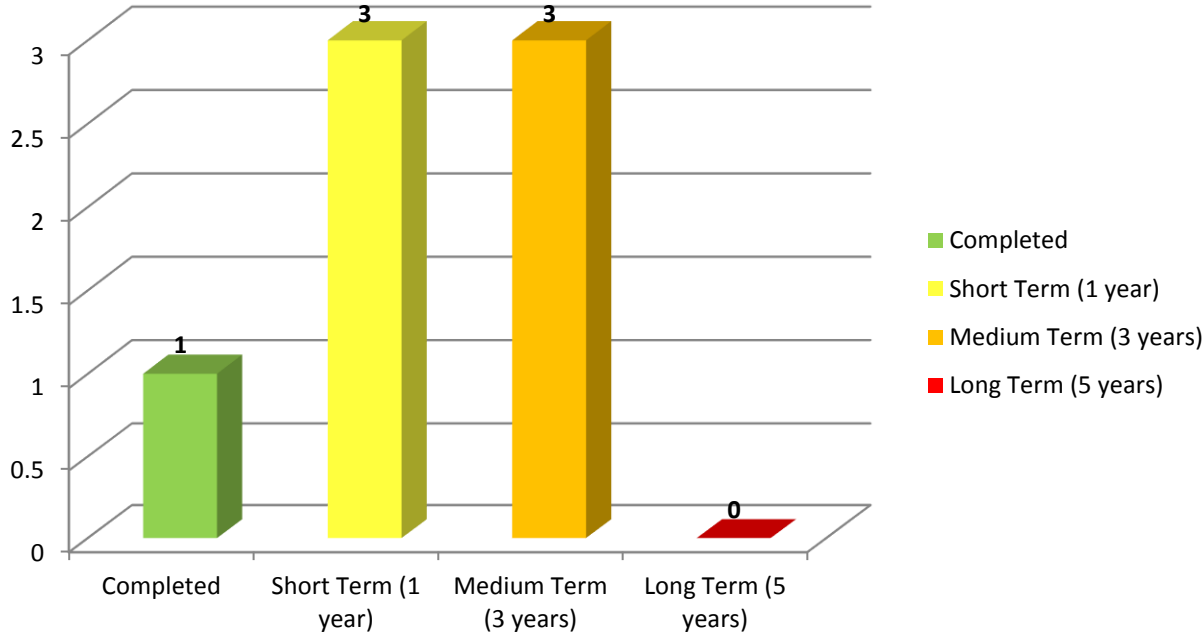
7.6 PRIVATE CAR STRATEGY

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				Lead Party	Comments
		Completed	Short (1 year)	Medium (3 years)	Long (5 Years)		
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 and employees 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 and employees 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

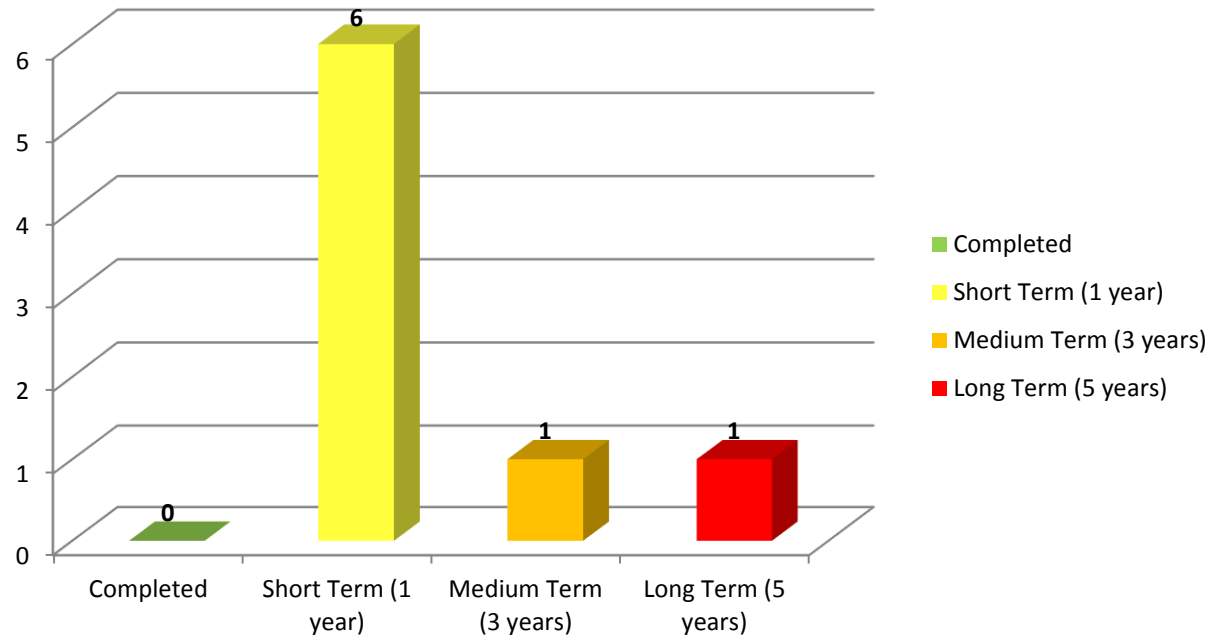
7.7 MARKETING AND PROMOTION STRATEGY

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 Party	Comments
		Completed	Short (1 year)	Medium (3 years)	Long (5 Years)		
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 and employees introduce the commercial MMP, its objectives and recommended travel practices	-	✓	-	-		
MPS 7	Explore the cost benefits of developing an MMP App to enhance access to MMP information and events	-	✓	-	-		
MPS 8	Investigate the opportunity for an MMP annual newsletter for distribution to all residents and employees	-	✓	-	-		

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



8.1 SUMMARY

8.0 SUMMARY AND CONCLUSIONS

8.1 SUMMARY

- 8.1.1 DBFL Consulting Engineers (DBFL) has been commissioned by Glenveagh Living Limited to prepare a Mobility Management Plan (MMP) for a proposed residential development on a brownfield site located at the Castleforbes Business Park, R101 Sheriff Street Upper, Dublin 1.
- 8.1.2 The development proposals include the demolition of the existing on-site Castleforbes Business Park development and its replacement with a residential development across c. 9 No. buildings (8 residential and 1 cultural) comprising residential units, community, retail, creche uses plus ancillary car / bicycle parking areas at basement level.
- 8.1.3 This MMP focuses primarily on how residents, employees and visitors can be encouraged to use sustainable means of transport to and from the site. The subject site being a 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.
- 8.1.4 DBFL Consulting Engineers have compiled this MMP as the basis for discussions between the developers and planning officers from Dublin City 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.
- 8.1.5 The measures proposed in this document will not only benefit the residents and employees but will also help to mitigate any transport impacts of the development on the wider local community.
- 8.1.6 The identified preliminary action plan promotes a total of 77 initiatives across 6 sub strategy themes as presented in the Pie Chart below.

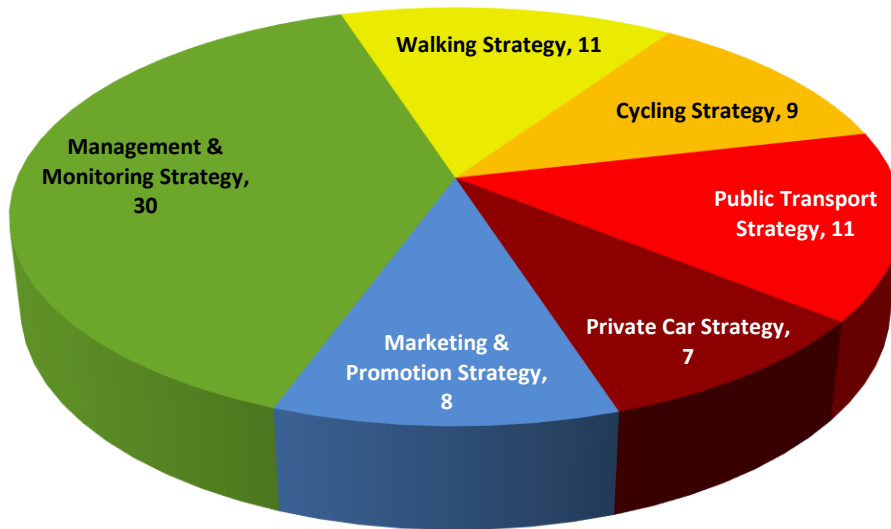
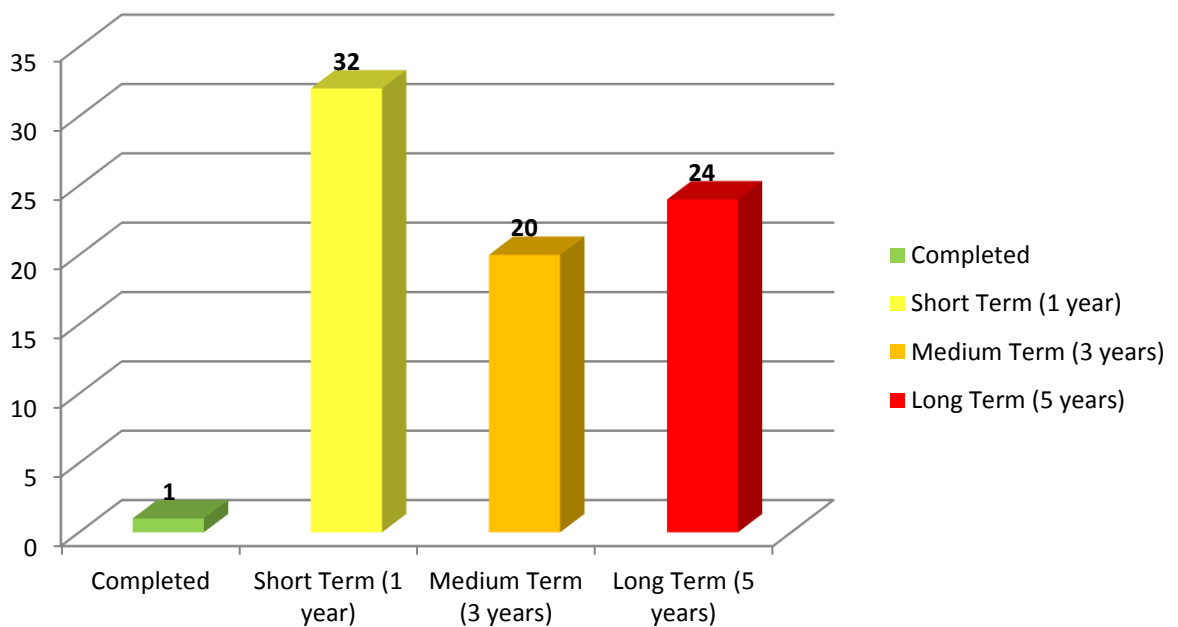


Figure 8.1: MMP Sub Strategy Themes & Initiatives

8.1.7 The implementation schedule of identified 77 MMP initiatives is outlined in **Graph 8.1** below. One of the initiatives has already been completed, with a substantial proportion (32 initiatives or 43%) planned to be implemented within 1 year of the residential development being occupied.



Graph 8.1: Roll-out of MMP's Initiatives

8.1.8 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 179 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 €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 www.carsharing.ie. 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 residents and employees 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, employees and visitors can obtain further information at www.gocar.ie. 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 Sheriff Street Upper, East Road and North Wall Quay. The bus stops are located in very close proximity with the closest bus stop at only 450m from the subject site with frequent services operating daily.

Public Transport - Luas

A1.12 The Luas Red Line serves the area with the 'The Point' Stop 400m to the southeast of the subject site. The Red Line runs from Tallaght / Saggart to the Docklands serving both Heuston and Connolly Rail Stations 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 and employees 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 and employees 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 and employees 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 and employees 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 and working 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 and employees.

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 & Staff Group

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

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 and employees would complete. Communication of the Travel Survey will be through letters in the post or email. This letter will inform all residents and employees of how to complete the survey online. Residents/Employees 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 and employees 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 and employees 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 and employees on the Mobility Management Plan initiatives and the importance of contribution are very important. The services available to the residents and staff 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 and employees.

C1.1.3 Communications will include promotional initiatives and activities aimed at informing the residents and employees 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 and companies occupy the commercial spaces within the development. 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/employees 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 and employees regarding commuting to and from the site;
- Provide a central information point for residents and employees 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/employees 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/employees 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/staff member 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 and employees 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/employees who might not otherwise use public transport to 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/employees 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 and employees, 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 and employees 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 and employees 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