



## **Travel Plan**

Residential Development at Auburn, Malahide Road

## March 2021

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Client Name: Kinwest Limited

**Document Reference:** 19-020r.010 Travel Plan

Project Number: 19-020

## Quality Assurance – Approval Status

This document has been prepared and checked in accordance with Waterman Group's IMS (BS EN ISO 9001: 2015 and BS EN ISO 14001: 2015)

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Comments



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#### 1. Introduction

#### 1.1 Background of Report

This Travel Plan has been prepared by Waterman Moylan to accompany a planning application to An Bord Pleanála for a proposed Strategic Housing Development (SHD) in lands around Auburn House in Malahide, Co. Dublin.

The proposed development will consist of the preservation and protection of the existing Protected Structure of Auburn House as 1 no. residential dwelling, the conversion of the existing stables of Auburn House to accommodate 4 no. dwellings and the construction of 406 no. residential dwellings, apartments and duplexes providing for an overall total of 411 no. residential units.

#### 1.2 Program

It is expected that construction of the proposed development will commence in 2021 for completion in c. 2025.

#### 1.3 Scope

This Travel Plan will be a key operational element for the proposed residential development at Streamstown Masterplan. The owners will implement a Travel Plan on an ongoing basis with the triple objectives of promoting sustainability, enhancing the use of public transport and reducing dependency on the use of the private car.

This Travel Plan is intended to deal with the typical day-to-day operational conditions at the site. The targets set out in the plan will be achieved against the background of expanding public transport capacity.

The Plan will assess, examine and manage the typical traffic that will be generated by the residential units during the operational phase of the development. It will also encourage the residents to avail of public transport by improving awareness of public transport options and providing information on bus and train routes and frequencies.

#### 2. Site Location

The site is located between the existing Abington residential development and the Malahide Road. The site entrance is from the Malahide Road, adjacent to the Malahide Road/Back Road junction.

The subject lands form the western, northern, and eastern boundaries of Auburn House, an eighteenth century three-storey mansion located within a wooded demesne. Malahide Castle is approximately 900m north-east of the site.



Figure 1 | Site Location (Source: Google Maps).

## 3. Site Accessibility

#### 3.1 Walking

The national Transport Authority (NTA), formerly the Dublin Transport Office, have published the document "The Route to Sustainable Commuting" which describes acceptable walking distances for pedestrians without mobility impairment. This document states that 4,000m or approximately 50 minutes is the preferred maximum walking distance.

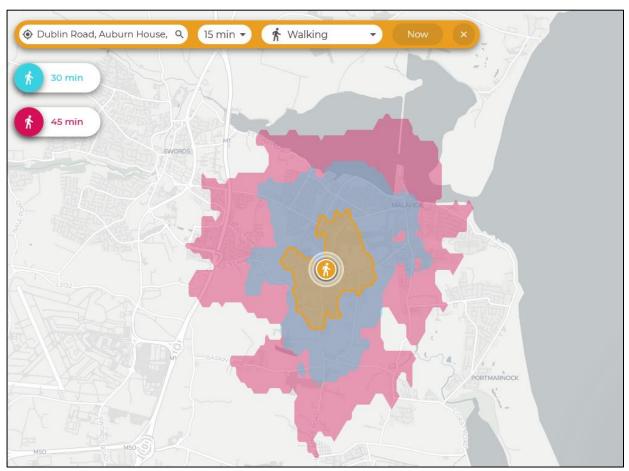


Figure 2 | Walking Time from the Proposed Development at Streamstown Masterplan.

As illustrated in Figure 2, walkable distance from the development would allow residents to walk to Malahide Centre (northeast of the site), where currently comprises a number of facilities of all types, including leisure, retail and commercial developments within a walking time of approximately 30-45 minutes. The Malahide Rail Station is also reachable within the time range of 30-45 minutes and is currently a good option for those residents wishing to commute to Dublin City Centre.

A network of inter-connected footpaths is provided along the entire route from the subject site towards the Malahide Centre.

#### 3.2 Cycling

As per walking, the NTA document "The Route to Sustainable Commuting" mentioned earlier also describes acceptable cycling distances for cyclists without mobility impairment. According to this document 10Km is the maximum distance people will travel by bike. There are a large number of commercial and employment

areas within 10km or c.50min bike ride from the site. As show in Figure 3, those travelling by bike from the proposed development site could reach Malahide Centre within 15-minute cycling, Dublin Airport within 30-minute cycling and Dublin City Centre (North side) within 45-minute cycling.

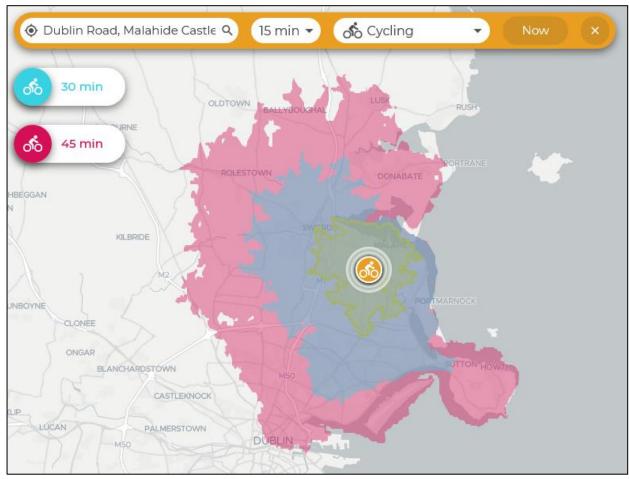


Figure 3 | Cycling time from proposed development

#### 3.3 Rail

The closest train station (Malahide) is located approximately 2.0km (24-minute walk/7-minute cycling) northeast of the site access off R106 Dublin Road (Figure 4). Walking access from the subject site to the Malahide Station would be via R107 Malahide Road and R106 Dublin Road. Along the route to the station, a narrow footpath, directly adjacent to the carriageway, is provided on the western side of R107 Malahide Road. On the R106 Dublin Road, a wider footpath is provided along the western side of the carriageway and on both sides of the road from Yellow Walls Road up until the Malahide Station. No cycle lanes are provided along the route.

The Malahide Station is served by Commuter Rail and DART services.

The Commuter Rail service through Malahide Station serves all stations from Dundalk through Dublin City Centre to Gorey. The service operates at 3 – 4 services per hour in both direction on weekdays.

The DART service through Malahide Station serves all station from Malahide through Dublin City Centre to Bray and Greystones. On weekdays, this service operates at a 20-minute frequency in both directions.



Figure 4 | Location of Rail Stations

#### 3.4 Bus

The subject site is directly served by public bus services. The closest bus stops are located on R107 Malahide Road just to the north of the junction with Back Road, being Bus Stops No. 3579 (Northbound) and No. 3645. The subject bus stops are served by the Bus Routes 42. This route is operated by Dublin Bus and connects Talbot Street in Dublin City Centre to Sand's Hotel on Portmarnock. A summary of Dublin Bus Route 42 frequency is presented in Table 1. The location of the subject bus stops in relation to the proposed development site is illustrated in Figure 5.

Route No.	From	То	Am Weekday Frequency (07:00 to 09:00)	Pm Weekday Frequency (17:00 to 19:00)
42	Talbot Street	Sand's Hotel (Portmarnock)	Every 15 to 30 minutes	Every 20 to 25 minutes
42	Sand's Hotel (Portmarnock)	Talbot Street	Every 20 minutes	Every 20 to 25 minutes

**Table 1** | Bus Route 42 - AM and PM Weekday Frequency



Figure 5 | Walking Route between Bus Stops and the Subject Site

Travel time from the subject bus stop on R107 Malahide Road (southbound) to Talbot Street in Dublin City Centre is approximately 32 minutes. On the opposite direction, the travel time from the subject bus stop on R107 Malahide Road (Northbound) to Malahide Centre is approximately 11 minutes, and to Sand's Hotel in Portmarnock is approximately 22 minutes.

The proposed internal layout will include pathways and pedestrian crossings throughout the site leading to the bus stops outside the site. From the centre point of the site, it is approximately 400m (5-minute walk) to the closest bus stops.

#### **3.5 Go Car**

The closest GoCar vehicles are located at Malahide Centre, Bridgefield Car Park, Malahide Dart Station and at Ard Na Mara off Yellow Walls Road. See Figure 6.

At the time of writing in March 2021, one vehicle is provided at each GoCar station, except for the Bridgefield Car Park Station which provides two.



Figure 6 | Location of GoCar Stations (Source: www.gocar.ie)

## 4. Transportation Improvements

#### 4.1 Roads and Junctions

#### 4.1.1 R107 Malahide Road / Back Road Junction Upgrade System

As part of the subject development works, it is proposed to upgrade the existing R107 Malahide Road / Back Road priority-controlled T-junction to a four-armed junction. The additional fourth arm of the proposed layout will be the main vehicular access to the subject development site.

The proposed scheme will comprise:

- Construction of the fourth arm of the junction to provide controlled access to the proposed development site;
- Installation of a new traffic signal infrastructure with 4 normal traffic phases and 1 pedestrian phase;
- Provision of dedicated pedestrian crossings with dropped kerbs and tactile paving on Back Road (E) and R107 Malahide Road (N) arms;
- Reconfiguration of the Back Road (E) approach to include a dedicated right-turning pocket lane;
- Reconfiguration of the R107 Malahide Road (S) approach to include a dedicated right-turning pocket lane;
- Improvements to the existing footpaths northeast, southwest and southeast of the junction;
- Provision of advanced stop lines for cyclists on the southern, eastern and northern approaches;
- Provision of MOVA control with loop detectors as per Fingal County Council requirements.

The proposed upgrade layout for this junction can be seen in Waterman Moylan Drawing No. 19-020-P110 accompanying the subject application.

#### 4.2 Greater Dublin Area Cycle Network Plan

Proposals for the Greater Dublin Area Cycle Network Plan were published by the National Transport Authority in December 2013. The plan sets out a vision and a strategy for the construction and/or designation of a comprehensive network of cycling routes throughout the Greater Dublin Area (Counties Dublin, Meath, Kildare and Wicklow).

An extract from Sheet N9 (Proposed Cycle Network for Dublin North West) is reproduced in Figure 7 below:



Figure 7 | Proposed Cycle Network Upgrades

As part of the subject development works, it is proposed to provide advanced stop lines for cyclists on the southern, northern, and eastern approaches of the proposed signalised junction between R107 Malahide Road / Back Road. These advanced stop lines will provide a safe area for cyclists in front of vehicular queues and help position themselves correctly for their right/left turning movements.

#### 4.3 Bus Connects

The Bus Connects project currently being promoted by the National Transport Authority aims to deliver a much-enhanced bus service to the Greater Dublin Area (GDA). The route proposed to serve the subject development is the **Secondary Radial Routes 20 and 21 and Peak Times Route X78** (See Figure 8). The frequency of this proposed route is presented below.

Route No.	From	То	AM Weekday Frequency (07:00 to 09:00)	PM Weekday Frequency (17:00 to 19:00)
20	Malahide	City Centre	Every 30 minutes	Every 30 minutes
21	Swords Business Park	City Centre	Every 30 minutes	Every 30 minutes
X78	Malahide	UCD	2 Buses at 07:00	1 Bus at 16:00 1 Bus at 17:00

**Table 2** | Bus Connects Routes 81 – Weekday Frequency

For bus routes 20 and 21, the frequency of buses on weekends is 30-minutes except for hours 06:00 – 08:00 which have a 60-minute frequency.



Figure 8 | BusConnects Route Map

#### 4.4 DART Expansion Programme

The DART Expansion Programme is included within the 10-year horizon for the National Development Plan 2018 – 2027. It includes for an extension of the Dart Service to Balbriggan and an increased weekday frequency of 15 minutes in each direction.

#### 4.5 GoCar

It is expected that GoCar will provide 4-6 shared car club vehicles in the proposed SHD scheme by Auburn House in Malahide. A letter to confirm GoCar's intention to provide these new car club vehicles is included in Appendix A.

#### 4.6 Pedestrians

Additional pedestrian facilities, such as renovated footpaths and new dedicated pedestrian crossings will be provided on R107 Malahide Road / Back Road junction prior to the construction of the proposed development.

The internal layout of the site will include an interconnect network of footpaths. These footpaths will include greenways into the existing woodlands surround Auburn House and also connect to the site access point at Carey's Lane via a pathway alongside the road. The internal layout can be seen in the architect drawings accompanying the documentation package. A green route footpath will be used as another site access point connecting to the site entrance at R107 Malahide Road.

## 5. Proposed Development

#### 5.1 Development Proposals

The development proposed as part of the subject application will be located on the northern portion of Streamstown Masterplan and will comprise:

- 102 house units (including the stables and the Auburn House).
- 43 duplex units.
- 266 apartment units over 8 apartment blocks.
- A childcare facility with 173sqm od area.
- Total of 411 residential units.

As part of the proposed development works, it is also proposed to upgrade the R107 Malahide Road / Back Road from a priority-controlled T-junction to a signalised four-armed junction. The fourth arm of the proposed signalised junction will be the main vehicular access to the proposed development site. A secondary vehicular entrance is proposed off Carey's Lane to the west which will be accessed via Streamstown Lane.

The overall proposed development is programmed to be fully constructed and occupied by the end of c. 2025.

The development proposals will increase the pedestrian permeability of the site and surrounding area by introducing footpaths within the development. This increased permeability makes the development an attractive place to travel by foot.

Furthermore, the proposed development will provide safe/secure cycle parking. In order to encourage those traveling from the development to travel by bike there will be a total of 716 No. of cycle parking spaces provided within the scheme. Please refer to section 5.4.3.

#### 5.2 Proposed Access

The proposed development will have two access points. To the east of the development there is the primary vehicle access point leading to the junction between R107 Malahide Road and Back Road. This will also be an access point for pedestrians and cyclists using a green route through a woodland area which connects to the junction of R107 Malahide Road and Back Road. There will be a toucan crossing connecting the proposed development to pedestrian footpaths on both Malahide Road and Back Road. The other site access point is on the west side of the proposed development off Carey's Lane.

#### 5.3 Car Parking

#### 5.3.1 Fingal Development Plan 2017 - 2023

Standards for car parking in new developments are set out in Table 12.8 of the Fingal Development Plan 2017 - 2023. Based on that, Table 3 below sets out the parking requirements applicable to the subject proposed development.

Land Use	Standard	Norm or Max
House – Urban / Suburban (1 or 2 bedrooms)	1 – 2 spaces within the curtilage	Norm
House – Urban / Suburban (3 or more bedrooms)	2 spaces within the curtilage	Norm
Apartment (1 bedroom)	1 space per unit plus 1 visitor space per 5 units	Norm
Apartment (2 bedrooms)	1.5 space per unit plus 1 visitor space per 5 units	Norm
Apartment (3 bedrooms)	2 spaces per unit plus 1 visitor space per 5 units	Norm
Creche	0.5 space per classroom	Norm

**Table 3** | Fingal Development Plan 2017 – 2023 - Car Parking Standards

#### 5.3.2 Car Parking Required

Based on the car parking standard set out in the Fingal Development Plan 2017 - 2023 (FDP), the total car parking required to serve the proposed development within the Auburn Lands is 667 spaces as calculated in Table 4.

There are no car parking standards set out for duplexes within Fingal Development Plan. Therefore, for the purpose of calculation, the car parking standards for apartment / townhouse have been applied for the duplex units

Land Use	d Use Units FI		Required Car Parking Spaces		
House – Urban / Suburban (1 or 2 bedrooms)	3	1 - 2 spaces within the curtilage	3 spaces for residents		
House – Urban / Suburban (3 or more bedrooms)	99	2 spaces within the curtilage	198 spaces for residents		
Apartment / Duplex (1 bedroom)	136		136 spaces for residents + 27 spaces for visitors		
Apartment / Duplex (2 bedrooms)	161	1.5 space per unit plus 1 visitor space per 5 units	242 spaces for residents + 32 spaces for visitors		
Apartment / Duplex (3 bedrooms)	12	2 spaces per unit plus 1 visitor space per 5 units	24 spaces for residents + 2 spaces for visitors		
Creche	6 class		3 spaces		
Total	411 6 class	-	603 spaces for residents + 62 spaces for visitors + 3 spaces for the Creche		

Table 4 | Total Car Parking Spaces Required under FDP Standards.

#### 5.3.3 Design Standards for New Apartments – March 2018

In March 2018, a revised version of the document "Sustainable Urban Housing: Design Standard for New Apartments" was released. The parking standards set out in this document are considerably lower than those contained in the Fingal Development Plan 2017 – 2023 in respect to apartment developments.

The following extracts from the "Design Standards for New Apartments – March 2018" summarise the guidelines for parking:

"In suburban/urban locations served by public transport or close to town centres or employment areas and particularly for housing schemes with more than 45 dwellings per hectare net (18 per acre), planning authorities must consider a reduced overall car parking standards and apply an appropriate maximum car parking standard."

#### 5.3.4 Car Parking Proposed

The number of car parking spaces projected to serve the proposed development at Auburn Lands is presented in Table 5 below:

	Block / Land Use	No. of Units	Under Croft / Under Podium	Podium/Street	Total
ס	Apartment Blocks 1, 2 and 3	159	164	8	172
(Including	Block 6	21	-	24	24
Incl g)	Block 7	6	6	-	6
arking (In Parking)	Block 8	25	-	28	28
Residential Parking Visitor Parkir	Duplex Block 1	6	-	10	10
ntial Pa Visitor	Apartment Blocks 4 and 5	92	92	5	97
lenti Vi	Duplexes 2A, 2B, 2C, 2D				0
esid	Houses	97	-	194	194
<u>~</u>	Auburn House and Stables	5	-	9	9
	Crèche	6 classes	3 (Staff Spaces)	4 (Drop-off Spaces)	7
Total Residential Parking		411 Units	262	278	540
Total	Commercial Parking/Dropoff	6 classes	3 (Staff Spaces)	4 (Drop-off Spaces)	7

Table 5 | Proposed Car Parking

As can be seen from the above, it is proposed to provide a total of 540 residential car parking spaces. There are 262 residential/visitor spaces, plus an additional 3 staff car parking spaces, provided under croft / under podium. There are 278 podium / on-street spaces for residents and visitors, plus an additional 4 drop-off spaces for the crèche. Note that the four street level drop-off spaces provided for the crèche can also be used for residential visitor drop-off outside of crèche drop-off and pickup hours.

The reduced provision of 1 car parking space per apartment / duplex unit reflects the location of the development in relation to public transport services. This is in line with the Design Standards for New Apartments as outlined above and is considered adequate to serve the proposed development.

#### 5.4 Cycle Parking

#### 5.4.1 Fingal Development Plan 2017 - 2023

Standards for bicycle parking in new developments are set out in Table 12.9 of the Fingal Development Plan 2017 - 2023. Based on that, Table 6 below sets out the cycle parking requirements applicable to the subject proposed development.

Land Use	Standard	Norm or Max
Apartment	1 per bedroom + 1 visitor space per 5 residential units	Norm
Houses	N/A	-

Table 6 | Fingal Development Plan 2017 – 2023 - Cycle Parking Standards

#### 5.4.2 Cycle Parking Required

Based on the cycle parking standard set out in the Fingal Development Plan 2017 - 2023 (FDP), the total cycle parking required to serve the proposed development at Auburn Lands is 544 spaces as calculated in Table 7.

As for car parking, the cycle parking standard for apartment / townhouse have been applied for the duplex units.

Land Use	Units	Bedrooms	FDP Standard	Required Cycle Parking Spaces
Houses	102	318+	N/A	N/A
Apartment / Duplex (1 bedroom)	136	136	1 space per unit bedroom	136 for residents
Apartment / Duplex (2 bedrooms)	161	322	1 space per unit bedroom	322 for residents
Apartment / Duplex (3 bedroom)	12	24	1 space per unit bedroom	24 for residents
Apartment / Duplex (Total Units)	309	-	1 space per 5 units	62 for visitors
Total	411	800+	-	482 for residents 62 for visitors

Table 7 | Total Cycle Parking Spaces Required under FDP Standards

## 5.4.3 Cycle Parking Proposed

The number of cycle parking spaces projected to serve the proposed development is presented in Table 8 below:

Land Use	Units	Proposed Standards	Proposed Cycle Parking Spaces
Apartment / Duplex (1 bedroom)	136		
Apartment / Duplex (2 bedrooms)	161	2.32 spaces per apartment. duplex unit	716 spaces for residents and visitors
Apartment / Duplex (3 bedrooms)	12		
Total	309	-	716 spaces

Table 8 | Cycle Parking Proposed

As can be seen from the above, the bicycle parking proposed exceeds the Fingal Development Plan 2017 – 2023 requirements.

## 6. Modal Choice Targets

#### 6.1 Strategy

The strategy for this Travel Plan is based on the movement of people not vehicles.

The objectives of the Plan are:

- (a) To endeavour to reduce the use of the car by single occupants;
- (b) To endeavour to reduce the use of the car for the journey from Auburn Lands to work, especially during network peak periods;
- (c) To encourage the development of more sustainable transport modes for trips to and from Auburn Lands
- (d) To increase the percentage of persons choosing to walk, cycle or travel by public transport to and from Auburn Lands instead of driving;
- (e) To create an alliance with Fingal County Council, providers of public transport and tenants/owners of other major developments to promote a sustainable transport network in the Auburn Lands area.

In pursuance of achieving these objectives, targets for residents have been set for the future year of 2030.

These targets are based on data presently available and will be measured to monitor progress. They follow examples of good practice in other developments both in Ireland and overseas.

Further targets will be developed during the implementation of this Plan as development and infrastructure progresses and new data becomes available.

The promoters of Auburn Lands are aware of the importance of maximising opportunities to make non-car trips for the journey to/from the development. To this end, the provision of close facilities helps in reducing the car use for other purposes (i.e. schools, employment, shopping, etc.).

#### 6.2 Existing Modal Split – Adjoining Areas

The existing modal split for journey to work or school/college was extracted from the Census 2016. Census 2016 was carried out by the Central Statistics Office (CSO) on April 24<sup>th</sup>, 2016. The subject area and the surrounding Small Areas Zones were surveys for the modal split. Figure 9 below shows the five areas surveys.

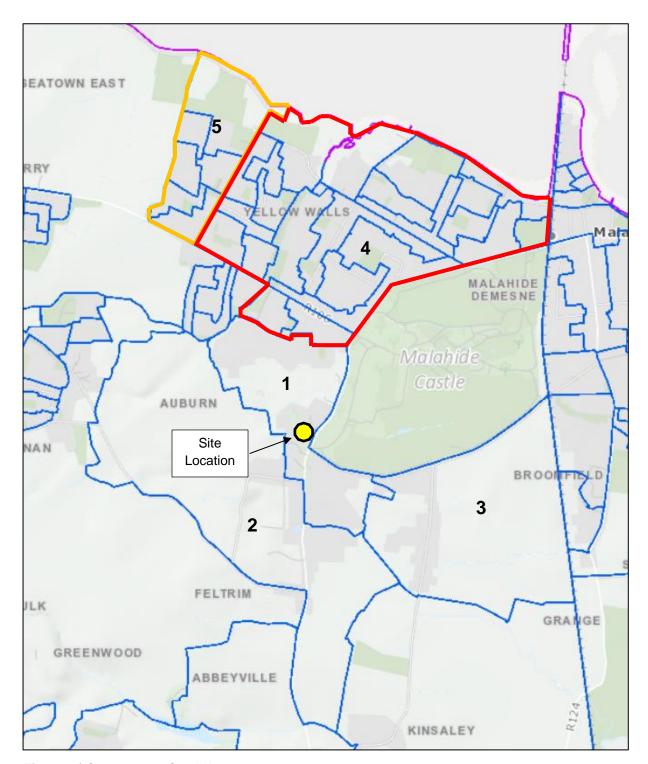


Figure 9 | Census 2016 Small Areas

The existing modal split for the journey to work by the residents at the Small Areas (Zones) as surveyed in Census 2016 is presented in Table 9:

Area	Рор.	Trip Attractor	Car Driver	Car Passenger	Train	Bus	Bicycle	On Foot	Others or Not Stated	Total	
328	Work	92	3	8	3	2	1	4	113		
1			81%	3%	7%	3%	2%	1%	3%	100%	
		College	18	50	17	14	3	6	2	110	
			16%	45%	15%	13%	4%	5%	2%	100%	
	325	Work	78	1	14	4	3	2	3	105	
2			74%	1%	13%	4%	3%	2%	3%	100%	
		College	6	64	8	18	1	6	3	106	
			6%	60%	8%	17%	1%	6%	3%	100%	
	353	Work	90	3	19	5	3	3	5	131	
3			69%	2%	15%	4%	2%	2%	6%	100%	
			College	5	66	3	12	7	5	2	100
			5%	66%	3%	12%	7%	5%	2%	100%	
	6,224	Work	1495	49	472	218	49	78	54	2415	
4			62%	2%	20%	9%	2%	3%	2%	100%	
		College	75	458	169	289	34	360	31	1416	
			5%	32%	12%	20%	2%	25%	2%	100%	
	1,547	Work	507	28	85	116	15	13	15	779	
5				65%	4%	11%	15%	2%	2%	2%	100%
		College	29	190	47	142	14	65	9	496	
			6%	38%	9%	29%	3%	13%	2%	100%	
Total	8,777	Work	2262	84	598	346	72	97	81	3543	
			64%	2%	17%	10%	2%	3%	2%	100%	
		College	133	828	244	475	59	442	47	2228	
			6%	37%	11%	21%	3%	20%	2%	100%	

Table 9 | Existing Modal Split Census 2016

The surveyed 'modal split for the journey to work, school or college' by the residents at the five consulted areas as surveyed in Census 2016 recorded that 65% of 8,777 population generated 5,771 trips for the journey to work, school or college. Work trips made up for 40% of trips generated in the area, some 66% were by car, 17% by Train, 10% by Bus, 2% by Bicycle, 3% On foot and 2% were others or not stated. College trips made up 25% of the trips generated in the area, some 43% were by car (37% of these were car passenger), 11% by Train, 21% by Bus, 3% by Bicycle, 20% by Foot, and 2% were others or not stated.

#### 7. Travel Plan

#### 7.1 Introduction

The Dublin Transportation Office in its Advice Note on Mobility Management Plans (July 2002) describes Mobility Management as "a transport demand management mechanism that seeks to provide for the transportation needs of people and goods. The aim is to reduce demand for and use of cars by increasing the attractiveness and practicality of other modes of transport."

A Travel Plan will be implemented and developed on an ongoing basis with the triple objectives of promoting sustainability, enhancing public transport and reducing dependency on the use of the private car. It is important to strike an appropriate balance between promoting new development and preventing excessive car parking provision that can undermine cycling, walking and public transport use.

The Travel Plan is intended to deal with the typical day-to-day operating conditions at the site.

#### 7.2 Action Plan

#### 7.2.1 Walking

It is known that there are many local, global and personal benefits to walking to/from work every day. The proposed development is not situated close to any business/retail parks. Residents will be encouraged to walk to the nearest dart station in Malahide Town for access to the city centre. A Facebook page will be set up in order to create a communication tool between residents to meet and walk together, therefore, create a sense of community between residents of the development.

Furthermore, residents will be encouraged to travel from/to work under a travel share-mode, meaning walking to/from the closest rail/bus station before using these other means of transport.

#### 7.2.2 Cycling

Cycling is a great way to travel short distances. It helps to promote independence and helps the environment. This way of transport would be a great option for residents to travel to work from the proposed development. An effort will put into target an increase in residents who cycle to work. The good cycle infrastructure around the development will facilitate this task. For those residents wishing to commute to work by this mode, the proposed development will provide a total of 582 No. secure bicycle parking spaces on site for the apartments units and cycle spaces will be provided on curtilage for the houses. The number of bicycle spaces can be increased if demand arises.

#### 7.2.3 Public Transport

There are many benefits to taking public transport (rail and bus service) every day to/from work, such as helping the environment by reducing carbon emission, reducing congestion, saving money and allowing you to relax and read. In this regard some initiatives will be used to encourage residents to take public transport to work such as, information about tax incentives for public transport users, provision of up to date public transport timetables and routes and advise the new residents about local bus routes and the nearest bus stops, and the travel time to/from Dublin City Centre and key cities.

#### 7.2.4 Car Sharing

There are many benefits of car sharing to/from work every day, such as reducing carbon emissions, reducing fuel costs and parking fees, reducing congestions and journey times due to fewer cars being on the road and increasing the pleasure of the journey due to less congestion and to having company.

A car sharing scheme will be incentivised to encourage the future residents to commute together and to minimise the number of people traveling to and from work alone.

#### 7.3 Strategy for Travel

The strategy of this Travel Plan will be to encourage residents to reduce dependency on the private car and instead encouraging travel by green modes of transport.

The methodology to be employed to implement the strategy will include:

- The provision of an extensive information service for public transport routes at locations within the development;
- The ongoing updating of public transport information adjacent to the development;
- Advising residents of tax incentives for public transport and bike to work schemes which may be available from their employer;
- Lobbying the public transport operators to ensure the ongoing provision of a high level of service on the public transport routes serving the development;
- The provision of secure cycle parking;
- The provision of good footpaths and pedestrian crossings in the area of the development;

The provision of information regarding car sharing scheme;

### 7.4 Specific Measures

#### 7.4.1 Transport Co-ordinator

A management company will be appointed by the developer to manage the development. A senior member of staff from the management company who supports the philosophy of the Plan will be appointed as the Co-ordinator. The Co-ordinator should be appointed within 2 months of the Site being occupied. A dedicated commuter space will be provided within the tenant amenity area where travel information, timetables, access to the internet and notice boards will be provided.

The Co-ordinator's roles in the development, implementation and management of the Plan shall include:

- Promotion of the Travel Plan to residents:
- Implementation and maintenance of the Plan;
- Monitoring progress of the Plan;
- Liaison with public transport operators and officers of the Planning and Highway Authorities;
- Production of information reports for the Developer, the Occupier(s) and the Planning and Highway Authorities; and
- Ongoing assessment of the objectives of the Plan.

Within the first 4 months of being appointed, the Co-ordinator shall arrange for a resident's travel survey to be carried out. This can be achieved by means of self-completion questionnaires, which will help to identify travel requirements and set targets and needs.

The information requested in the questionnaire should include:

- Personal details:
- Primary mode of transport;
- Current travel patterns including the time taken to travel to work and the place of work;

- Views on alternative modes to the car (i.e. what would encourage them to switch to other modes); and
- · Usage of car sharing scheme;

Traditionally, response rates to such questionnaires are relatively low and it may be necessary to encourage recipients to complete and return them.

The information obtained from the survey should be entered onto a database and used to formulate and monitor the implementation of the Plan and to set and review targets. These targets are to be agreed with the Planning and Highway Authorities or their agents within 6 months of the survey being carried out.

#### 7.4.2 Public Transport

Up to date local bus and rail timetables will be maintained within the tenant amenity area and other fixed points within the facilities on the site. Residents will be advised of their location. In addition, Internet access to travel information will be provided. The developer will provide all new residents with a travel pack showing alternative modes of travel to the development. Where possible, the developer will advise visitors to the site of alternative modes of travel to that of the car.

#### 7.4.3 Provision for Cyclists

Secure bicycle parking facilities will be provided for residents at designated areas within the apartment blocks and on the curtilage of each house. For visitors and Crèche users, a number of bicycle parking will be provided through the site at the surface level. Local cycle route information will be provided in the tenant amenity area and at other fixed points within the development, and residents will be advised of their location. Details of the cycle parking provided is included in Section 5.4.3.

#### 7.4.4 Car Parking

The co-ordinator will be responsible for the management of inappropriate parking within the development.

#### 7.5 Monitoring of the Travel Plan

The monitoring and review of the Plan will be the responsibility of the Co-ordinator. The travel survey will establish the initial modal split of travel by residents.

The Co-ordinator, in consultation with the Developer, the Occupiers, and the Local Authority or its agents, will agree annual targets, following completion and analysis of the travel survey, for increasing the percentage of non-car modes.

The Co-ordinator will:

- Meet with officers of the Local Authorities or its agents within a period of 6 months following occupation
  of the building(s) and thereafter every 12 months to assess and review progress of the Plan and agree
  objectives for the next 12 months, and
- Prepare and submit to senior management of the Developer, the Occupier(s) and the Local Authorities
  or its agents, an annual Monitoring Report.

#### 7.6 Marketing and Implementation

As part of the implementation of this Plan, the Management Company will provide all new residents at the site with a Travel Pack. The pack will include:

- The Travel Plan;
- · Public Transport information such as Bus and Rail routes and frequencies;

- Benefits of the Travel Plan for residents and visitors;
- Details of tax incentives available, such as Bike to Work Scheme, Tax Saver Scheme for public transport tickets, etc.
- Travel Survey Form;
- Details of pedestrian facilities;
- Details of cycle facilities; and
- Details of car sharing scheme.

#### 8. Conclusion

This Travel Plan has been prepared in support of a planning application for a residential development in the surrounding lands Auburn House, Malahide, County Dublin. This document focused on how residents could be encouraged to use sustainable means of transport to and from the site and to minimise the number of residents who will drive to work.

The implementation of the strategy proposed in this document, such as the provision of: secure cycle parking spaces; up-to-date information of public transport routes and bus stop locations; information about bike to work scheme to all residents; will encourage residents to reduce dependency of private car and increase the travel by green modes of transport. These measures will not only benefit the residents but will also prevent any transport impacts that can be provoked by the operational phase of the proposed development.

# UK and Ireland Office Locations

