

2021

Mobility Management Plan



Prepared by: T. Côrtes

Mobility Management Plan

Templar Place SHD, High Street, Balbriggan, Co. Dublin

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1 Introduction

ORS have been appointed to prepare a Mobility Management Plan (MMP) as part of the planning application for a proposed residential development, named Templar Place SHD, at the former Mall Shopping Centre site in Balbriggan, Co. Dublin.

The proposed development comprises a Build to Rent (BTR), Strategic Housing Development (SHD) as follows: Demolition of the existing buildings (former shopping centre and associated structures). Construction of 3 no. apartment blocks (Blocks A - C) ranging in height from 3 to 6 storeys (with Block B over 3 no. lower courtyard floors) providing a total of 101 units (19 no. studios, 41 no. 1-beds, 41 no. 2-beds). Provision of Resident Support Facilities/Resident Services and Amenities, 2 no. retail units, car parking (at ground floor), cycle parking, ESB substation/switch room, plant, bin stores, open space, landscaping, boundary treatments, all associated site works and services provision.

The site is located in Balbriggan town centre, near Balbriggan Harbour and the Balbriggan Library. The site location of the Templar Place SHD is characterised by the Fingal County Development Plan 2017 – 2023 as MC – Major Town Centre to ‘protect, provide for/or improve major town centre facilities. The Templar Place SHD is bounded by High Street to the southeast and Quay Street to the north. Both the vehicular and the pedestrian entrances to the development will be made via Quay Street, to the north and northwest of the site, respectively.

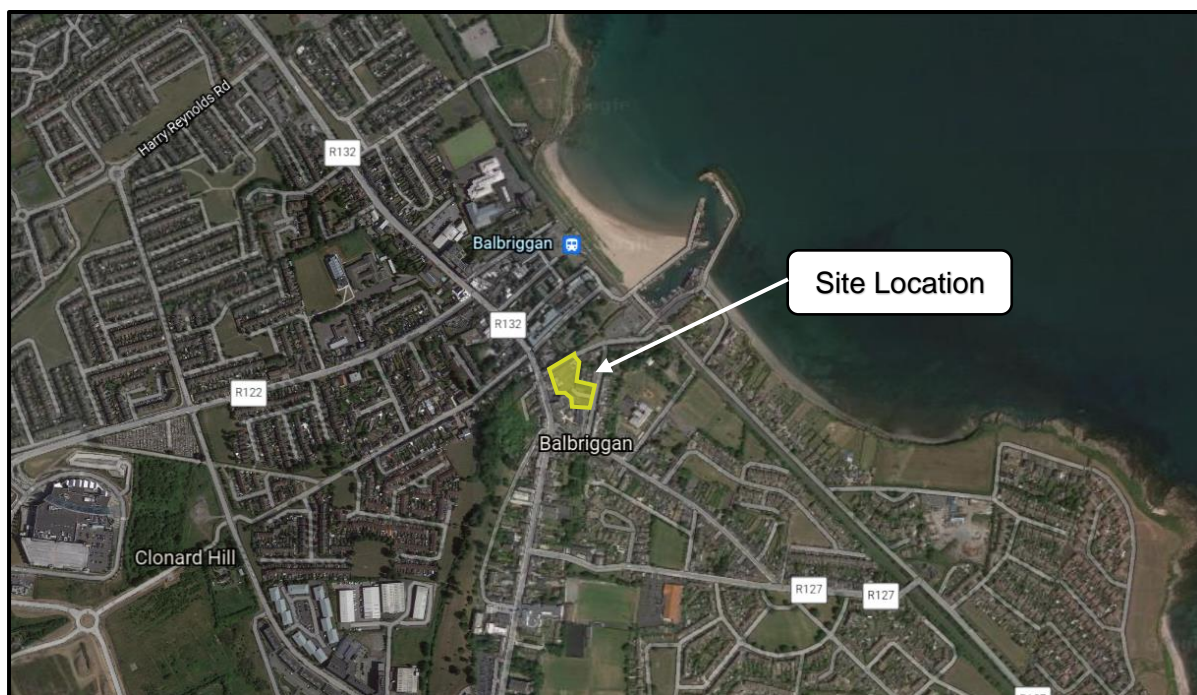


Figure 1.1 – Location of the Templar Place SHD (Source: Google Maps).

The Smarter Travel Strategy 2009 – 2020, sets out objectives and strategies aimed to promote a behavioural shift towards sustainable modes of transportation by making people aware of their impact on selecting environmentally friendly travel patterns.

The Templar Place SHD is part of the Build to Rent (BRT) scheme, which is residential accommodation built for the purpose of long-term rent with the aim to provide affordable alternatives to independently rented accommodation. The accommodation under the BTR scheme is generally of a very high-quality design, with amenities and located close to good quality public transport needs. The BTR scheme also provides a minimum or reduced car parking availability which are not part of the rental agreement and residents can rent a parking space by paying a fee.

As the Templar Place SHD will have reduced car parking availability, it is expected that residents will rely on alternative means of transport to travel to and from the development on a day-to-day basis.

In this regard, this plan is being prepared as a transportation demand management tool for the residents' Mobility Management Coordination Group when established. This will have the aim of reducing car use and the need for cars by increasing the attractiveness and practicality of other modes of transport, in order to achieve a national average of 55% sustainable transport usage (45% private car).

In this context, the MMP will set targets into the future which will be flexible and reflective of the maximum achievable modal split at any time, given the variety of factors involved and the available local infrastructure and other facilities available.

1.1 What is a Mobility and Management Plan?

A Mobility Management Plan aims to provide a package of measures that can be implemented by any given development to motivate users to consider sustainable transportation. Mobility Management Plans are particularly important in urban areas where provision can be made for the transportation needs of people and goods in a well-thought-out and planned manner.

Mobility Management can be best described as a transport demand management mechanism that seeks to provide for the transportation needs of people and goods.

A successful Mobility Management Plan or strategic plan for a development such as the Templar Place SHD will introduce a higher than normal proportion of users into more sustainable forms of transport thus reducing environmental, economic and social impacts.

Mobility Management Plans work best when investment by the relevant authorities presents a choice for users to alter their preferred modes of transport. A list of measures generally includes the attraction of using public transport, cycling, walking, car-sharing or a combination of these as alternatives to move away from standalone journeys to and from the premises by private vehicles as is the case in many areas.

1.2 Aims and Objectives

The aim of this Mobility Management Plan is to highlight alternative modes of transport to travel to and from the Templar Place SHD, hence, to reduce the usage of cars by increasing the attractiveness and practicality of other modes of transport. The measures suggested in this plan should ideally be part of a dynamic process, where they can be implemented by the site management, run on a pilot basis, reviewed by the Local Authority and monitored over time to assess their performance.

This Mobility Management Plan aims to determine the modes of transport that are utilised and determine the factors which influence travel decisions of those accessing the Templar Place SHD. The objective of this plan is to seek to achieve small changes in the approach residents have when travelling to and from the development.

This Mobility Management Plan recognises the urban setting surrounding the Templar Place SHD of commercial and residential developments and seeks to help residents to make use of other ways of transport instead of single used private cars. The proposals of mobility in this plan aim to introduce policies which will act together to reduce reliance on private vehicle use when travelling to and from the Templar Place SHD.

Once the objectives of the travel plan are established, the benefits associated with alternative means of travel should become apparent. This plan aims to bring the following benefits to the Templar Place SHD upon implementation:

- A net reduction in the level of traffic congestion associated with the development and on the surrounding road network at peak times
- Increased safety for pedestrians on the approaches to and from the residential development
- Increased levels of fitness among residents through using sustainable forms of transport such as walking and cycling
- A reduction in the carbon footprint associated with the development due to the decreased number of private vehicles travelling to the premises
- A reduction in the parking demand associated with the development which in turn will increase the safety for pedestrians and cyclists in the vicinity of the site
- Improved image of the development
- Improved relationships being forged by residents engaging in more active forms of transport.

This Mobility Management Plan introduces several policies with a view to making the Templar Place SHD safer, less congested and cleaner zone for all users. The propositions also aim to reduce the reliance on private vehicle use when travelling to and from the residential development. These policies include but are not limited to the following:

- Encouraging residents to use public transport whenever possible
- Encouraging residents to car-pool, reducing the overall number of single occupant vehicles trips to the residential development

- Encouraging residents to walk or cycle whenever possible
- Introduction of walking clubs

1.3 Methodology

In preparation for this mobility management plan, reference was made to the following documents:

- Fingal County Development Plan 2017 – 2023
- Smarter Travel – A Sustainable Transport Future 2009-2020
- Traffic Management Guidelines
- Dublin Transportation Office (DTO) Advice Note (2002) for Mobility Management Plans
- Our Balbriggan 2019 – 2025 Rejuvenation Plan
- Sustainable Urban Housing: Design Standards for New Apartments – 2018
- Apartment Living in Ireland 2019
- Carpooling Guidelines.

The first stage of the plan is to outline the parameters for the development, with the information available at this stage. This information includes the following items:

- Exploration of opportunities to reduce car usage
- Viability of public transport to and from the proposed residential development
- Suggest incentives to encourage sustainable transport
- Outline the existing level of public transport in the vicinity of the development and the likely future improvements to the network
- Describe the facilities available for pedestrians, ease of accessibility, cycle facilities.

The second stage of a Mobility Management Plan should involve the following items, to be undertaken by the residents' Mobility Management Group:

- Consultation with the Local Authority to agree on measures to be incorporated on site and to discuss any initiatives by the applicant to promote sustainable transport measures
- Consultation with residents and management
- Conducting additional surveys to establish changing travel trends
- Establishing a mobility management plan coordinator
- Implementation of measures outlined in the mobility management plan
- Ongoing review of the Mobility Management Plan.

2 Baseline Information

2.1 Travel Questionnaires

A comprehensive baseline survey of any given site is required to facilitate the Mobility Coordinator of the development to make informed decisions on mobility management and set realistic modal-split targets. This exercise typically relies on empirical data relating to the building occupant's travel routines, usually obtained by way of a travel questionnaire as detailed in **Appendix A**.

Given the fact that the status of this project currently lies in the planning phase, it is not possible to establish accurate, empirical travel patterns of occupants of the Templar Place SHD. Taking this into consideration, this report utilises alternative methods to establish baseline trends and provide a statement of the broad objectives with respect to mobility management for the site. The plan sets out broad targets and objectives along with the mechanisms, including both hard and soft measures, which could be put in place to support the modal shift.

At this stage, the plan is intended to provide a preliminary overview and will be revised accordingly when more detailed information regarding the final residents becomes available. This will also be cognisant of the nature of the development in relation to the number of residents. The formulation and implementation of a Mobility Management Plan is an iterative process; hence this plan is an evolving document and will be regularly updated based on experience gained from its implementation, operation, and the results of future surveys.

2.2 Transport Modal Split

A typical modal split analysis cannot be carried out due to the early stage of the development and the lack of actual data. An analysis of the 2016 Census was undertaken and the transport habits of the Balbriggan Urban Electoral Division was used to identify a baseline breakdown of current modes of transport in the area. This can be used to provide an initial modal split target, but it is recommended that a travel survey is undertaken after the Templar Place SHD has been concluded for a few months. This survey will outline a more comprehensive baseline to re-evaluate the modal split targets.

The breakdown of the reported modes of transport for the Balbriggan Urban Electoral Division area in 2016 is displayed in **Figure 2.1** overleaf. A typical modal split target would consist of 55% sustainable transport such as public transport, car-sharing or walking/cycling and 45% personal car use, as stated in Section 1. It is difficult to set targets like these for the site, considering that the actual method of transport for the occupants is yet to be identified and as mentioned above, a survey after a few months of operation will allow a more comprehensive modal split target to be set.

Based on the census data, the use of private vehicles, including driver and passenger, is at 48%, which is near the proposed national target set in the Smarter Travel document of 45%. The use of sustainable forms of transportation, such as walking, cycling and public transport, by residents of the Balbriggan Urban Electoral Division is at 49%, which is higher than the

national average of 21.6% obtained in the 2016 census. However, since after the census was undertaken in 2016, travel patterns may have changed in the town, which could imply that more people are making use of public transport than what was observed in the last census. The remaining data (3%) are for motorcycle and scooters and company vehicles such as vans and lorries.

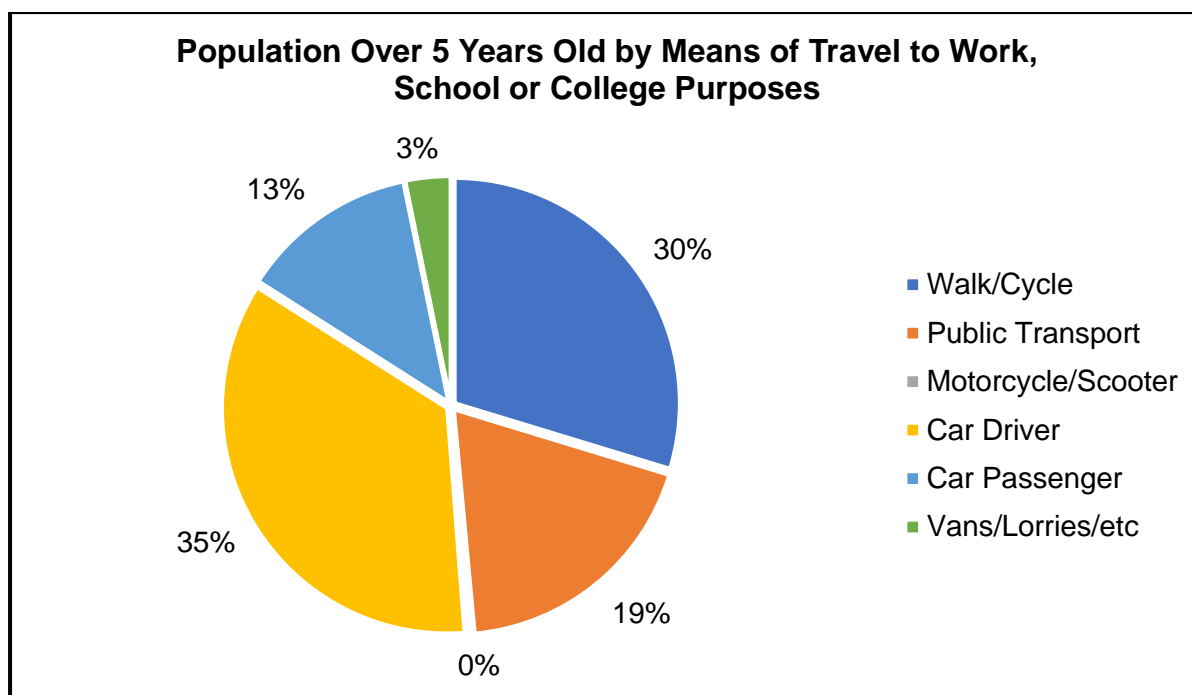


Figure 2.1 – Travel data for the Balbriggan Urban (CSO, 2016)

An analysis of the 2016 Census was also undertaken in relation to car ownership levels by house occupiers in the electoral area in order to identify a baseline breakdown of car owners within the Balbriggan Urban Electoral Division.

Based on the census data, there are 2,896 households within the development area. From the data obtained, there is a considerable preference for homeowners to own a car in the area, with 74% electing with one or more vehicles at home. The data notes that only 23% of households in the area actually do not own a car, which can be seen in **Figure 2.2** overleaf. Apartments and flats account for a total of 16% or 465 of household developments in the Electoral area as per **Figure 2.3** overleaf, whereas houses and bungalows are 83% of the total.

Apartments and flats tend to have lower car ownership compared to houses, as the Apartment Living in the Ireland 2019 document states that only 59% of apartments have their own parking space and that 50% of apartment residents living outside the Dublin area commute by private car. Also, as the apartment will be constructed under the BTR scheme, future residents will rely mostly on public transport, walking and cycling to complete their journeys.

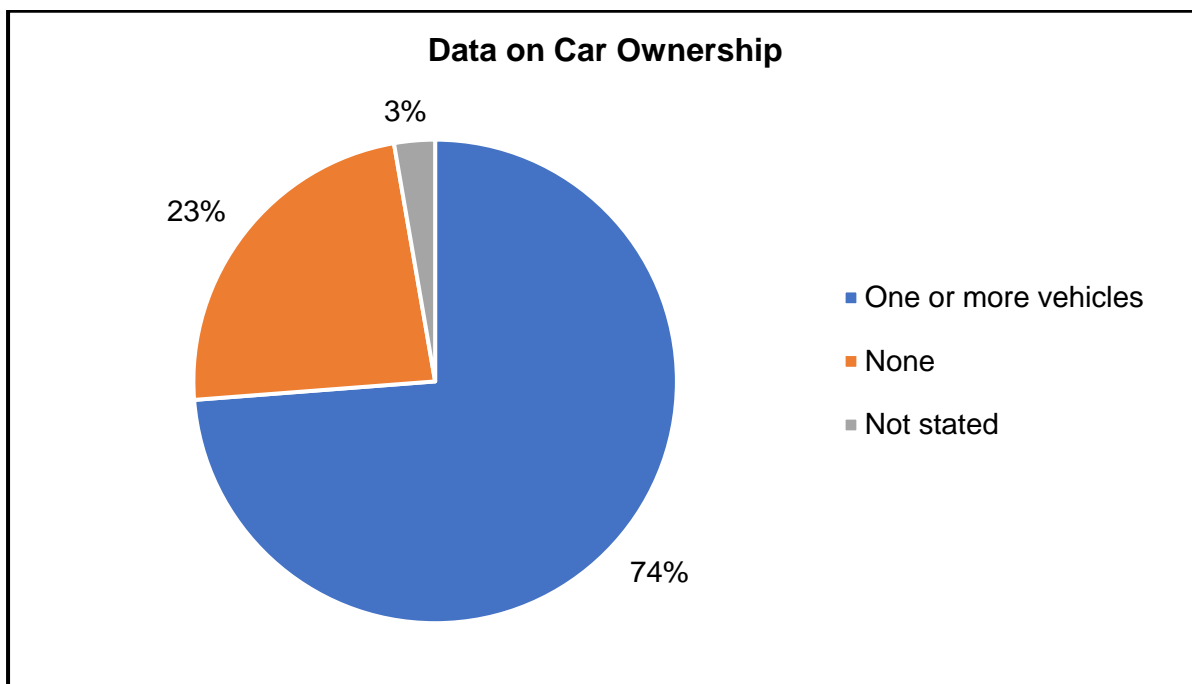


Figure 2.2 – Balbriggan Urban Car Ownership (CSO, 2016)

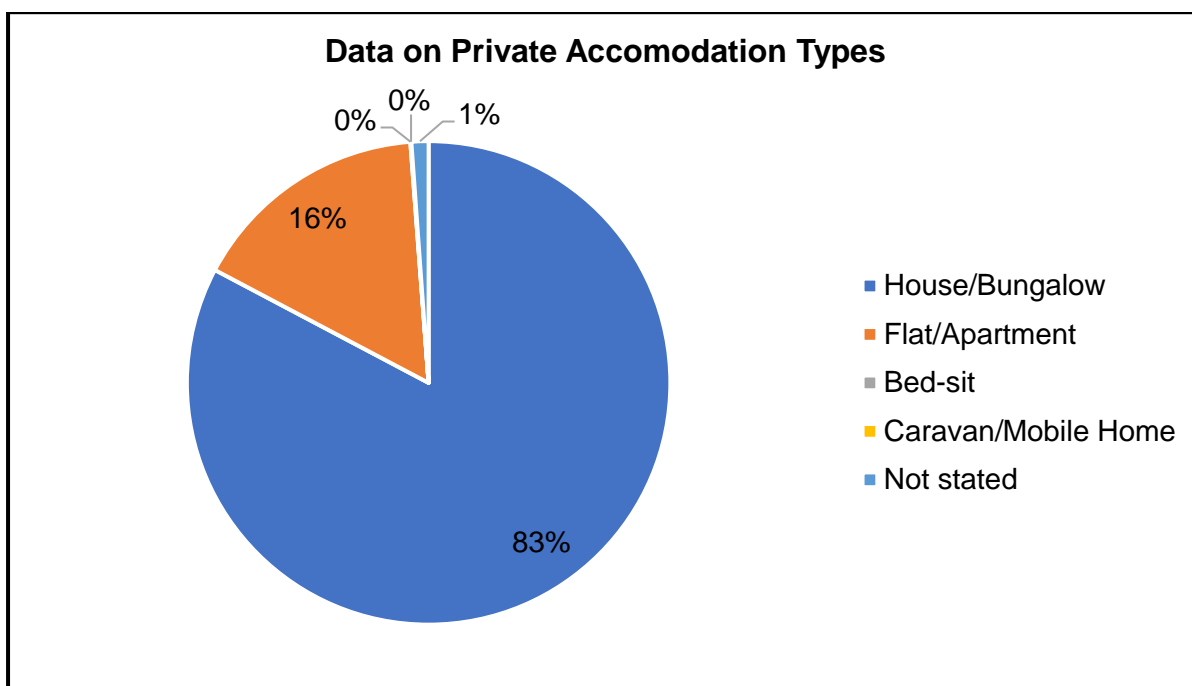


Figure 2.3 – Balbriggan Urban Accommodation Types (CSO, 2016)

3 Transport Infrastructure

3.1 Background

As stated previously, the principal aim of this Mobility Management Plan is to reduce the usage of private cars by increasing the attraction and practicality of other modes of transport. The key factor to overcome when influencing a shift towards alternative modes of transport is the perception that no other realistic alternatives exist to using the car.

Car trips are generally perceived as cheap, comfortable and flexible, and in some circumstances, cars represent an exhibition of prestige. Furthermore, Irish Government policy in the late 70's through to the 90's placed undue emphasis on promoting road-based transport at the expense of significant public transport upgrades. In order to stimulate a significant switch to sustainable transport, the surrounding public transport system needs to be, at a bare minimum, cost-effective, reliable and efficient.

While the quality of transport infrastructure within the surrounding area is beyond the control of the management of the Templar Place SHD, there are many techniques which can be deployed to encourage the switch to sustainable transport, discussed in Section 4. A review of the transport infrastructure within the vicinity is an ideal starting point to inform this discussion.

This section provides a review of the existing and proposed transport infrastructure for the surrounding area and investigates whether the quality of each mode of transport is sufficient to stimulate occupant uptake.

3.2 Site Access and Setting

The site is located at the town centre of Balbriggan and the area surrounding the proposed development is characterised as commercial and residential. The site is bounded by High Street and Quay Street, to the southeast and north, respectively. Beyond that, lies the Balbriggan Harbour, the Irish Institute of Music and Song and the Balbriggan Library. There are several schools and nurseries located within walking distance of the Templar Place SHD, as stated in Section 3.3.2 and 3.3.3 below.

Figure 3.1 shows the proposed site layout of the Templar Place SHD put forward by Rhonellen Developments Ltd. The vehicular entrance to the housing development will be made through a new priority-T junction to the north of the site, on Quay Street. The site will also have the provision of a pedestrian entrance to the northwest of the site, also through Quay Street.

The Templar Place SHD is located within the Balbriggan town centre and can be easily accessed through the extensive footpaths across the public road network, as outlined in Sections 3.3.2 and 3.3.3, or by public transport, shown in Section 3.3.4. The Balbriggan train station is located 450m, or a 6 minutes' walk, away from the pedestrian entrance to the site and there are also several bus stops located adjacent to the site. It is anticipated that residents will be able to use the public transport available to reduce the traffic load.



Figure 3.1 – Proposed Site Layout (Source: McCauley Daye O’Connell)

3.3 Existing Transport Infrastructure

3.3.1 Road Network

Balbriggan is a ‘Primary Development Centre’ according to the NSS and it is located approximately 18km from Swords and 33km from Dublin. Access to both locations is made through the M1 motorway. The Fingal County Development Plan, in ‘Objective Balbriggan 11’ aims to ‘ensure a safe and convenient road, pedestrian and cycle system promoting permeability, accessibility and connectivity between existing and new developments within the town’.

The site vehicular access will be made through Quay Street, a one-way traffic road with the provision of footpaths along both sides of the carriageway and on-site parking spaces. To the rear of the site lies High Street, a two-way road with footpaths along both sides of the carriageway and on-site parking to the southern side. To the west of the site is situated Bridge Street (R132), which connects the site to the north and south end of Balbriggan town.

According to the Our Balbriggan 2019 – 2025 Rejuvenation Plan, it is intended to transform Quay Street. As part of the works proposed are to widen footpaths to increase flows and visibility, maintain car park amenity, remove kerbing, enable its usage in evenings and weekends as a quality civic and meeting space, with seating area, plantings and other green features along the river bank.

The Templar Place SHD is surrounded by a dense network of regional and local roads and can also accessed through a variety of public transport, which provides a link to several

locations around Fingal and to the Dublin Metropolitan Area. Existing pedestrian facilities surrounding the development are extensive and of relatively good quality. Raised footpaths and public lighting are in place along the nearby streets.

Located in the Balbriggan inner town centre, the site is in close proximity to various amenities across the town. There are several bus stops and the Balbriggan train station located within a short walking distance to the site.

A review of the Road Safety Authority's (RSA) website was conducted to ascertain the safety of the roads within the development, as shown in **Figure 3.2** below. No incidents have been recorded near the proposed vehicular or pedestrian access. One minor incident was recorded at the junction between Quay Street and Bridge Street (R132) involving a car and a pedestrian, in 2007. Another 6No. minor incidents were recorded in the adjacent road network, also involving vehicles and pedestrians, however, the last incident was recorded in 2014.

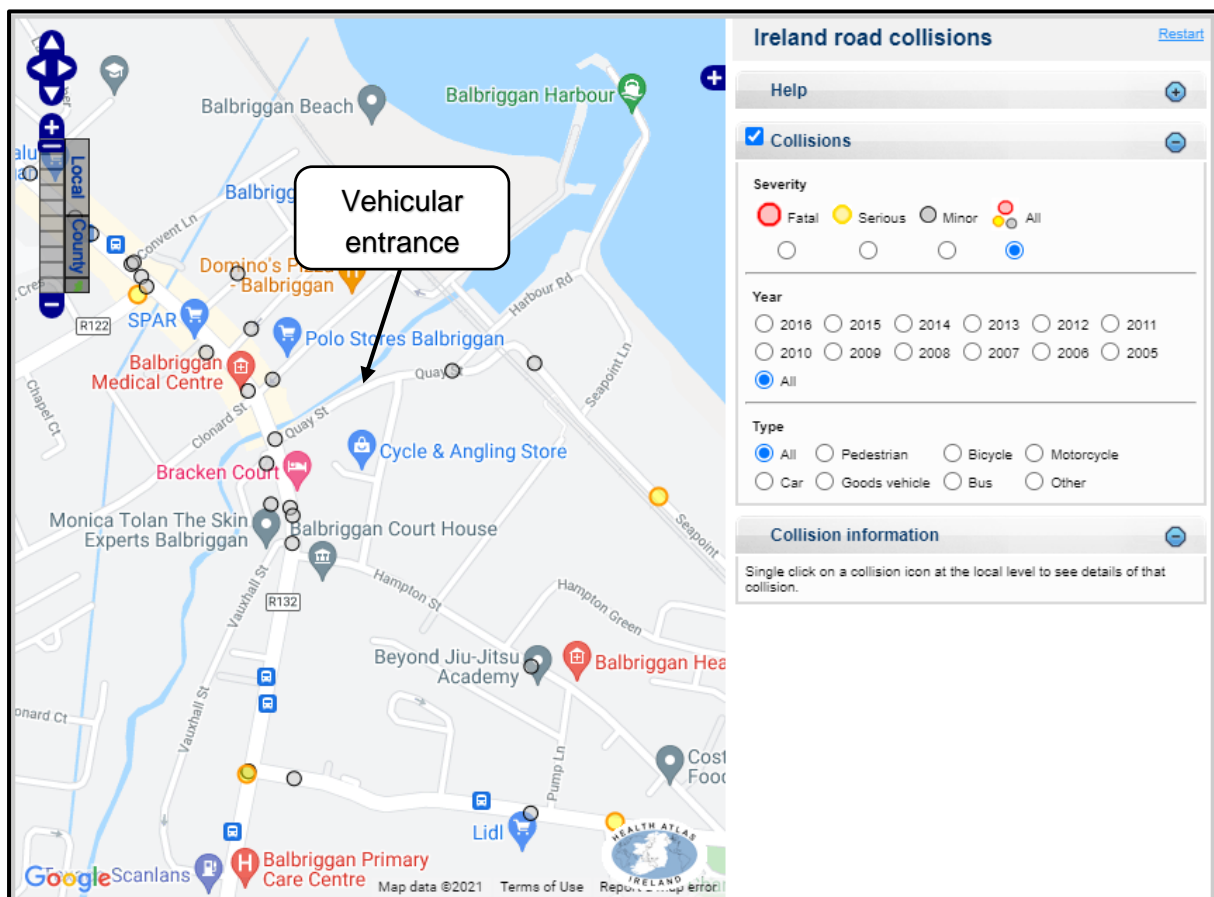


Figure 3.2 – Road Collision Data in the vicinity of the proposed development (Source: RSA).

3.3.2 Walking

The Templar Place SHD is at the Balbriggan inner town centre, categorised by the Fingal County Development Plan (FCPD) as MC – Major Town Centre, as can be seen in **Figure 3.3**

below. It is also seen in **Figure 3.3** below that there is an indication of a cycle/pedestrian route along the southern edge of the site, connecting it to a wider network across the town.

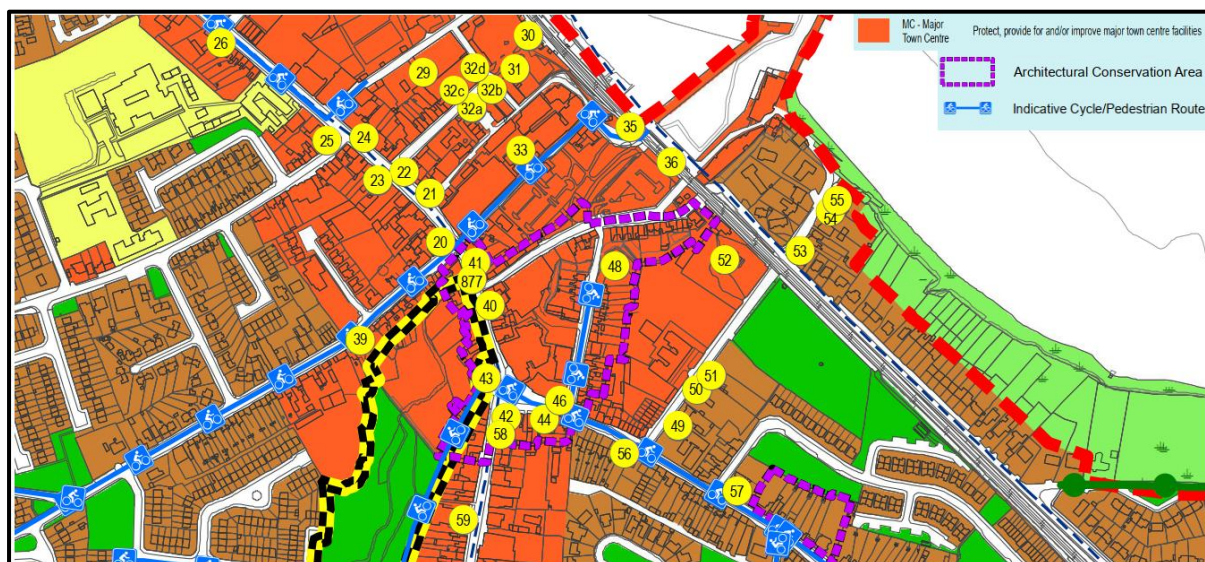


Figure 3.3: Land Zone Balbriggan (Source: Fingal County Development Plan 2017 – 2023)

The speed limit on these roads vary between 30/50kmph, with several traffic lights located along the traffic network in the vicinity of the site, which provides good pedestrian crossing facilities in the form of dropped kerbs and tactile paving.

Walking is a healthy and sustainable form of transport that can improve levels of health in the community, provide activity and reduce road traffic volume. **Figures 3.4** and **3.5** below show the location of schools, amenity sites, the Balbriggan train station and parks located across the town and that are easily accessed from the Templar Place SHD by the extensive footpath network. Walking is certainly a feasible option for potential residents, as the area embraces several means, and should be incentivised by the mobility coordinator(s) of the development.

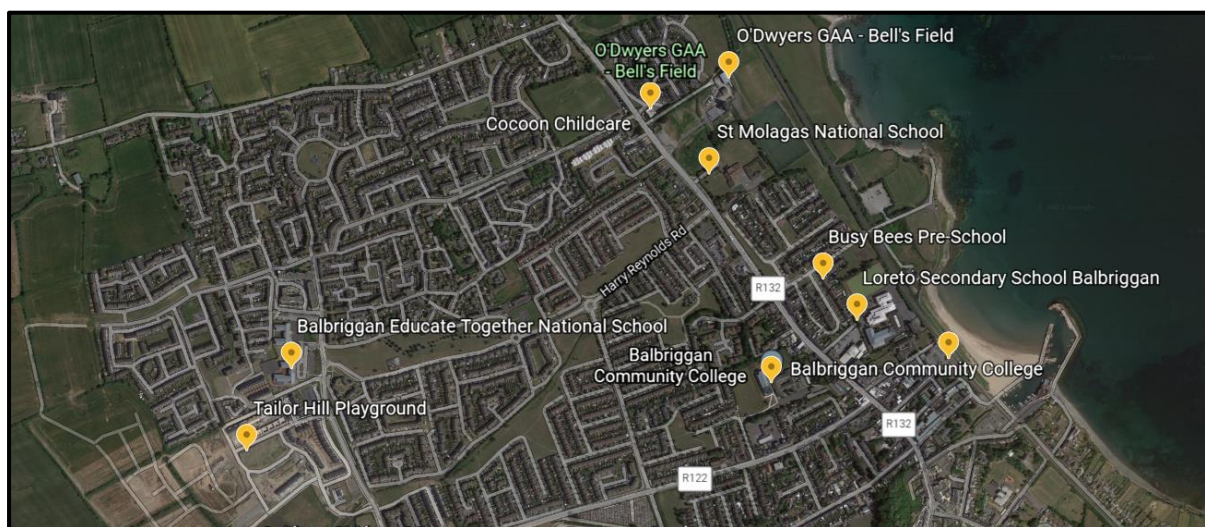


Figure 3.4: Locations North of the Site (Source: Google Earth)

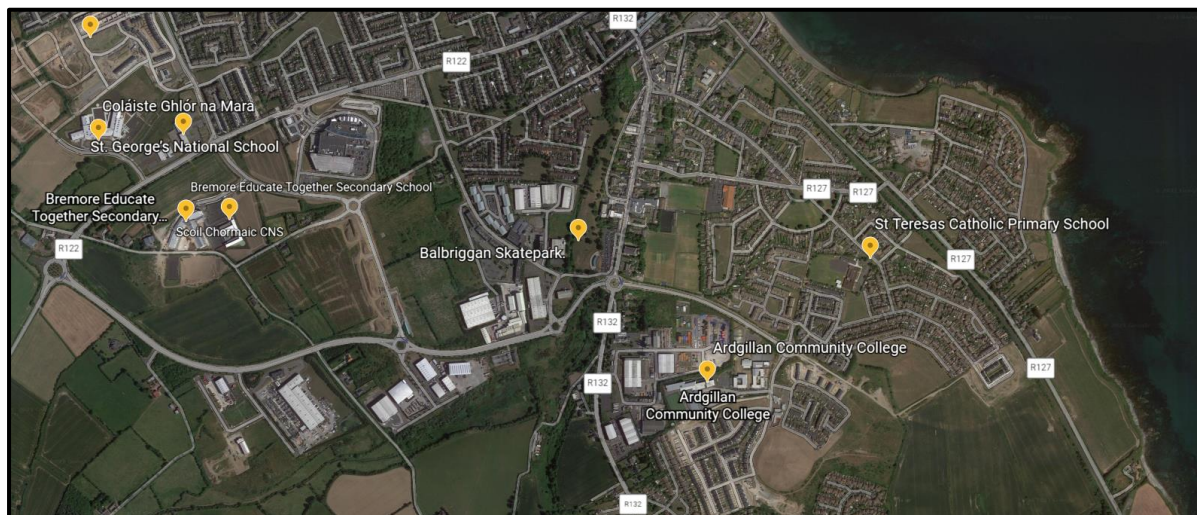


Figure 3.5: Locations South of the Site (Source: Google Earth)

3.3.3 Cycling

Balbriggan town centre, in the immediate vicinity of the site, does not provide dedicated cycle lanes through the extensive landholding, which imply that potential cyclists from the Templar Place SHD would have to share the road with other road users. However, as part of both the Fingal County Development Plan and the Our Balbriggan Rejuvenation Plan, there are plans to improve the town centre to make it more cyclist and pedestrian friendly in order to provide a safer environment for residents of the town and to reduce the need of car usage.

Table 12.9 of the Fingal County Development Plan states the bicycle parking standards for developments across the county. **Table 3.1** below summarises the standards requirements for residential developments.

Table 3.1 – Bicycle Parking Standards (Source: FCDP)			
Land Use	Criterion	Bike	Notes
Apartment, townhouse 1 bedroom	Unit	1	Plus 1 visitor space per 5 units

The site is proposed to offer 182No. bicycle parking spaces, of which 124No. will be for residents and 51No. for visitors. The site will provide dedicated secure and weather-proofed bike stands, in order to make cycling a feasible option for potential residents from an early stage. The total bicycle stands provided by the Templar Place SHD is higher than stated by the Fingal County Development Plan and the DHLGH, again in a manner to provide cycling as a practicable option for residents.

3.3.4 Bus Services

Due to its location being relatively close to Dublin, Balbriggan is well served by buses to and from various locations across the country. **Table 3.2** below summarises the bus routes connecting Balbriggan to several locations throughout the country.

Table 3.2 – Bus Services Available in Athlone (Source: TFI)				
Route	Service Operator	Origen	Destination	Weekday Services
33	Dublin Bus	Dublin	Balbriggan	25
33a	Go-Ahead Ireland	Balbriggan	Dublin Airport	24
33x	Dublin Bus	Balbriggan	Dublin	4
101	Bus Eireann	Drogheda	Dublin	86
191	James Carolan	Stamullin	Dublin	7
192	Local Link Louth Meath Fingal	Drogheda	Balbriggan	8
195	Local Link Louth Meath Fingal	Ashbourne	Balbriggan	10

Balbriggan also has a local bus service, named B1, which offers buses from Monday to Friday approximately every 30mins from 6:40am to 7:30pm, with a total of 39 services a day. On Saturdays, the services are reduced to 24 a day, from 9:15am to 7:00pm. **Figure 3.6** below shows the bus route.

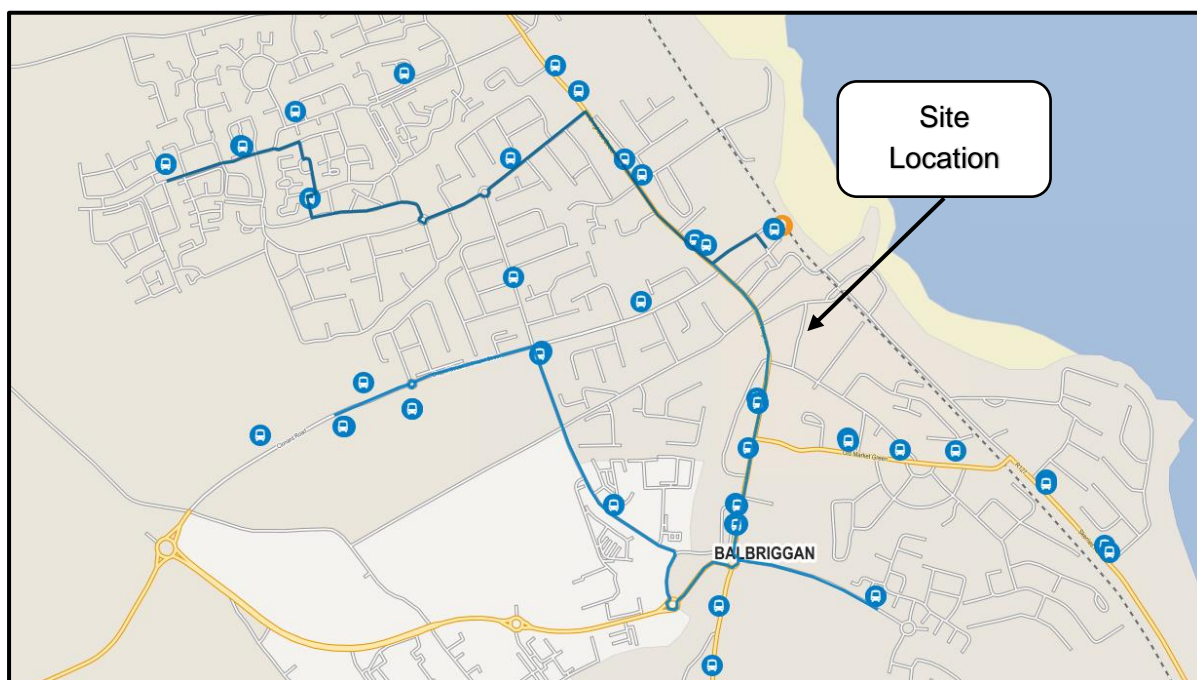


Figure 3.6: Bus service B1 (Source: TFI)

Also, from **Figure 3.6** above, it can be seen that the closest bus stops to the Templar Place SHD are on Bridge Road (R132), 300m either south or north from the site, which serves for bus route B1 and 101.

3.3.5 Rail Services

The Balbriggan rail station operates two routes: Dublin – Dundalk and DART and Dublin Commuter with trains operating in these routes several times a day. The station is located 400m north of the proposed site. Walking to the station is approximately 5 minutes through Bridge Street (R132) and Railway Street.

Figures 3.7 below displays the railway routes which cover Balbriggan.

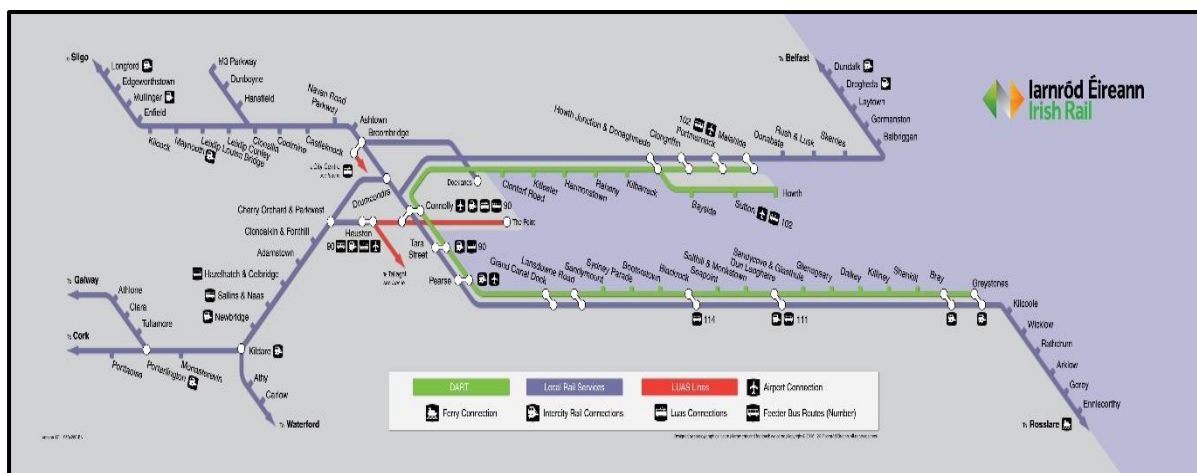


Figure 3.7: Railway Routes Covering Balbriggan (Source: Irish Rail)

3.3.6 Car-Sharing

There is one major car-share service in Balbriggan, called GoCar. The competitive advantage this company hold over traditional rental companies is that customers can rent vehicles by the hour rather than the standard day rate. Such initiative reduces the requirement of owning a private vehicle.

Figure 3.8 below shows the locations where a vehicle can be found in the town. Currently, GoCar vehicles can be found at the Balbriggan Train Station and at the Tesco car park. The walking distance from the Templar Place SHD to the locations are 5 minutes and 17 minutes, respectively.

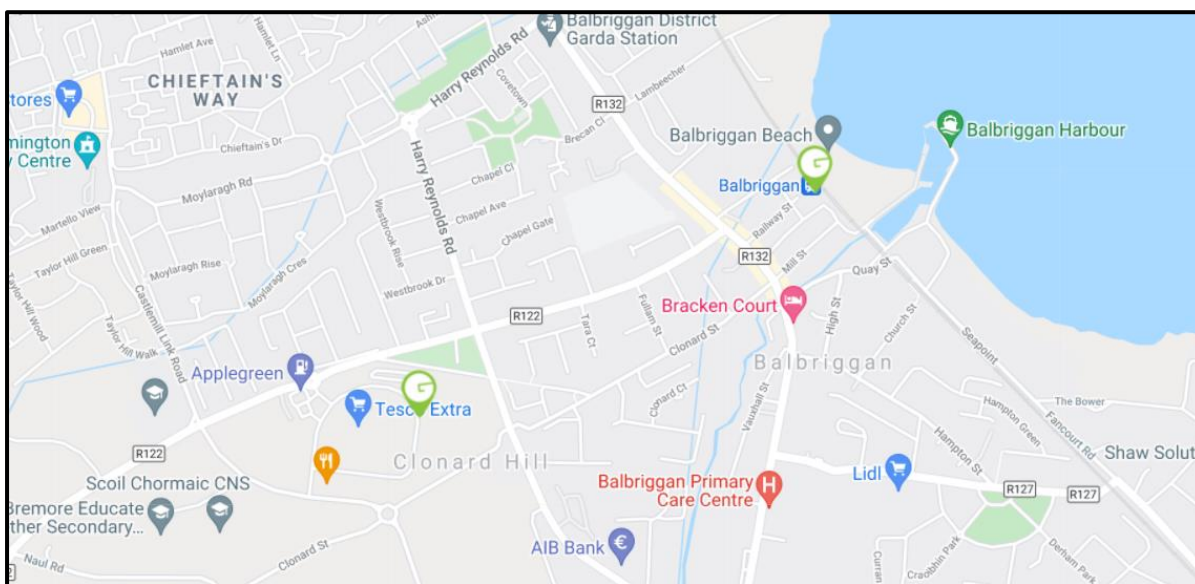


Figure 3.8: GoCar availability within Balbriggan town area (Source: gocar.ie)

4 Action Plan

4.1 Background

In order for the mobility management plan to be implemented successfully, it is important that upper management of the Templar Place SHD make residents aware of the local public transport and the benefits of reducing the traffic load on the surrounding road network.

The design and implementation of safe infrastructure is a key component to ensure sustainable transport options are attractive to future residents. This action plan outlines several strategies to encourage the uptake of more sustainable methods of transport and reduce car journeys by residents of the Templar Place SHD, reducing the associated burden on both the surrounding development and the environment.

4.1.1 Smarter Travel Strategy

The Smarter Travel Policy 2009 – 2020 is a government policy which recognizes the importance of a sustainable means of travel and aims to make people aware of their impact on the way of transportation into a more environmentally friendly one.

Higher demands of private vehicle on roads are not a suitable choice nowadays. Behavioural patterns related to single-car usage, once changed, could minimise congestions and emissions which contribute to the greenhouse effect. Additionally, a shift into more active and sustainable transportation could introduce a healthier lifestyle to the people involved.

Aimed to ensure that people adopt sustainable ways of transportation, the Smarter Travel Policy sets out 5 key goals, summarised as follows:

- *“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 maximizing the efficiency of the transport system and alleviating congestion and infrastructure bottlenecks*
- *Minimize the negative impacts of transport on the local and global environment through reducing localized 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.”*

Therefore, the government policy sets out key action to achieve sustainable transport, which will focus on:

- Attractive distance between key locations encouraging behavioural change, consequently reducing the distance travelled by car
- Alternative means of transport be largely available
- Actions aimed at improving alternative technologies and fuel efficiency of motorised transport
- Actions aimed at delivering the targets.

The intention of the government with the Smarter Travel Policy is to support actions where the use of public transport, cycling, walking and a shift of behaviour be encouraged.

4.1.2 Build to Rent Scheme

As mentioned in Section 1 above, the Templar Place SHD will be constructed under the Build to Rent scheme. Under the DHPLG documents, guidelines referring to car park availability are stated in the Specific Planning Policy Requirement 8, as shown below:

‘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 Walking

Walking is one of the most beneficial activities people undertake on a day to day basis. Walking is a great way for residents to engage, make friends and enhance the sense of community at the proposed residential development. In addition, there are public bus services operating within walking distance of the development. Some of the main benefits to walking are as follows:

- Research has shown that people who walk to work are more aware of the green cross code and road safety issue
- The more people that walk rather than drive will result in fewer cars in the vicinity of the proposed development leading to a safer environment
- Studies have shown that people who walk to work are more alert than those who do not especially early in the morning
- Walking to work provides an excellent platform for friendships to be formed between people
- Walking reduces the development’s carbon footprint and enhances sustainability
- Walking is an excellent activity to increase overall fitness and studies have shown that people that incorporate walking into their daily routines benefit from an increased feeling of well-being.

The Templar Place SHD is located within Balbriggan town centre, approximately 5 minutes’ walk to the Balbriggan train station. The Balbriggan beach is also 5 minutes walking from the site which provide leisure for future residents. Lidl and Tesco are located within 8 to 15 minutes’ walk from the proposed residential. A great number of schools and nurseries are also located within walking distance to the development. **Figure 4.1** overleaf shows walking distance from the proposed development, for 10, 20 and 30 minutes.

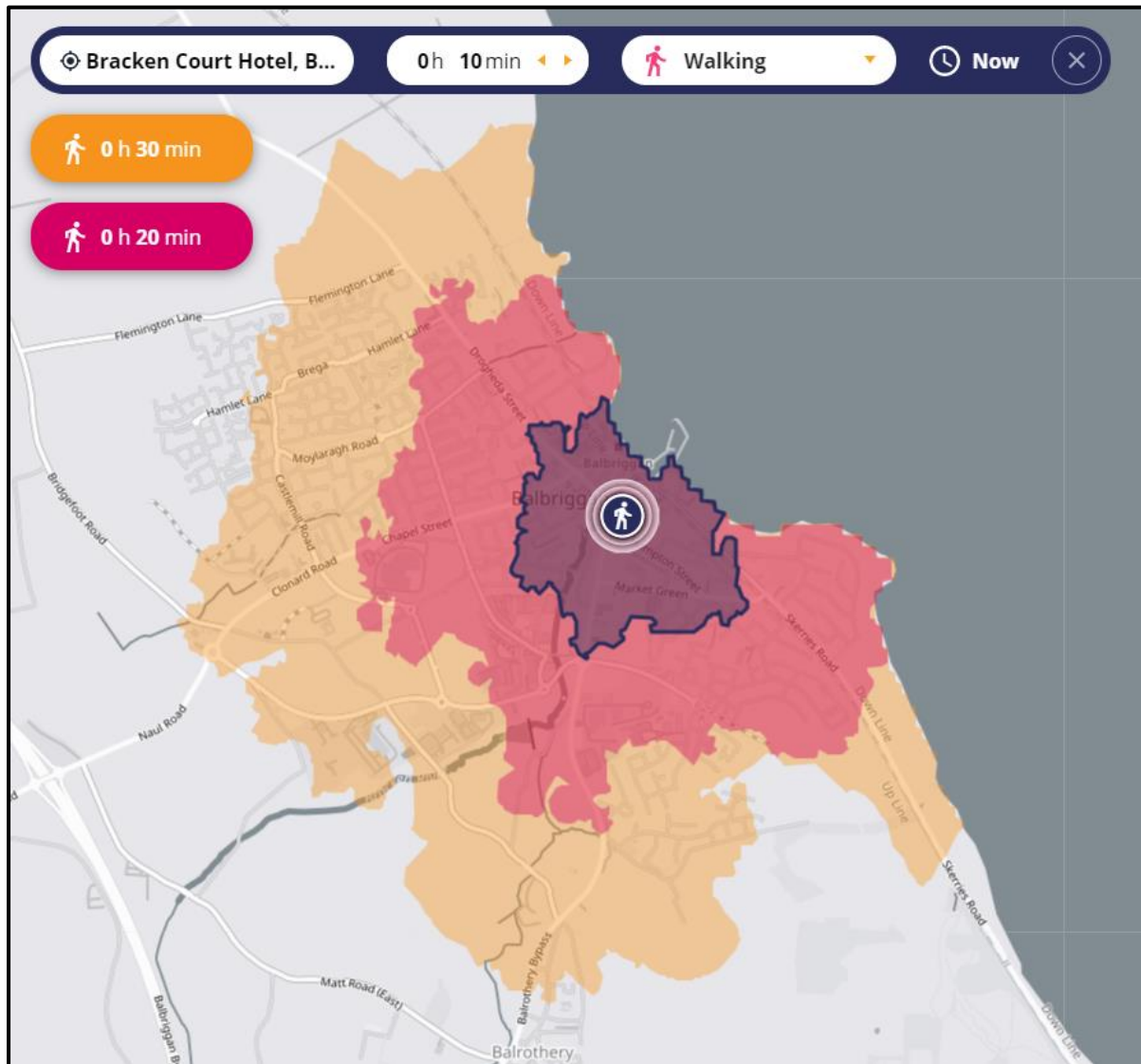


Figure 4.1: Walking distances from the Templar Place SHD (Source: traveltime.com)

4.2.1 Incentives to Encourage Walking

With a view to encourage walking to the development, this mobility management plan proposes to introduce several challenges and incentives to capture the attention of residents. Such measures/challenges include but are not limited to the following:

- The introduction of walking clubs: these will encourage residents to support each other, and lead to more walking in groups to and from the proposed development
- Organise a pedometer challenge among residents: systems like this encourage a friendly rivalry between participants and can lead to friendships being formed.

4.3 Cycling

Cycling is an excellent activity to improve overall fitness. It is one of the fastest ways for an

individual to travel, aside from using public and private transport, and raises the level of road safety awareness and it is the third most popular activity in Ireland. Some of the main benefits of cycling are discussed below.

- Cycling will have monetary benefits/savings to those who cycle as opposed to using their private cars as fuel costs will be reduced
- Cycling provides people with the platform to become independent and not reliant on traditional forms of transport to reach their destination
- Cycling is enjoyable and is a fantastic recreational activity
- Cycling is an excellent way to explore the local area and become more aware of the wider community
- If more people cycle as opposed to driving, there will be less traffic congestion thus resulting in a safer route network
- Cycling is an excellent way to make friends, particularly when cycling in groups
- Cycling is an excellent activity to do on a regular basis and improves overall fitness.

The promotion of cycling to and from the Templar Place SHD is a key area where more sustainable forms of transport could be introduced. Towards promoting cycling from an early stage, 182No. weather-proofed bike stands will be provided within the proposed scheme.

The site is located in the inner town centre, due to its proximity to the town centre, cycle distances from the development are considerably short, where to go to any location in the town takes approximately only 10 mins. **Figure 4.2** overleaf shows distance reached with 10 minutes cycle.

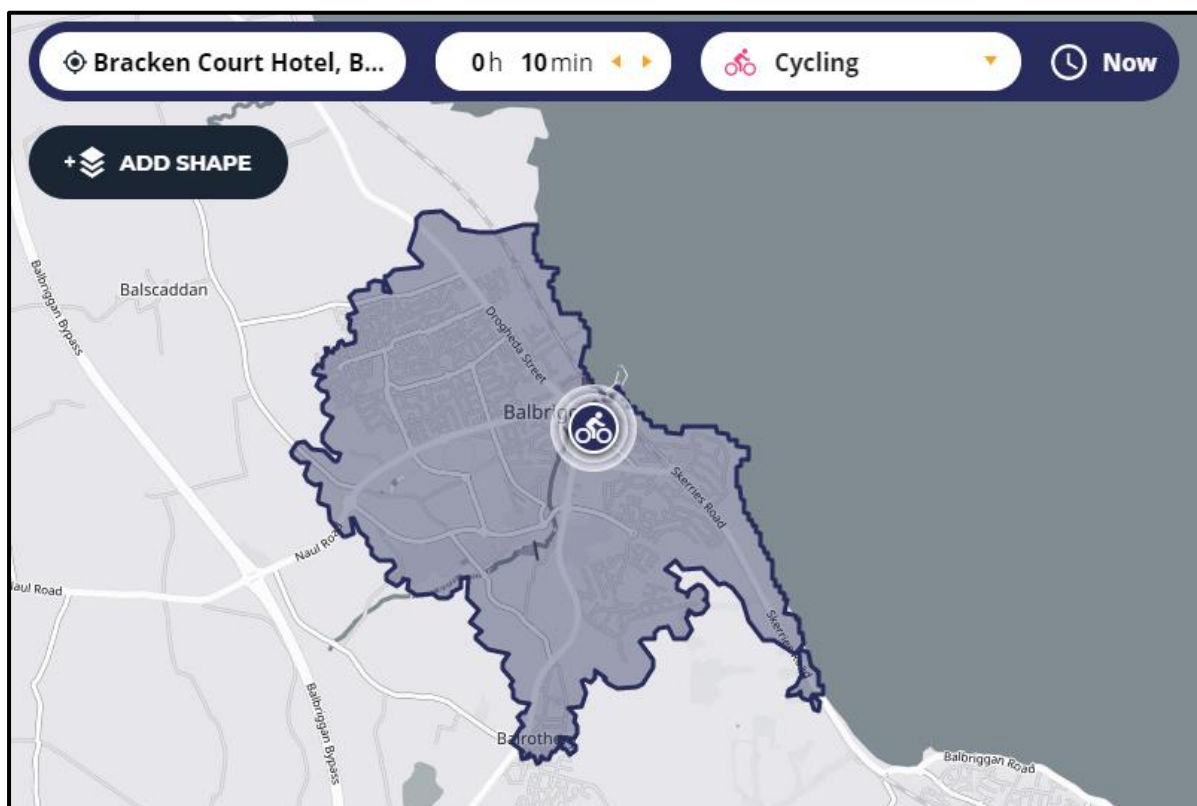


Figure 4.2: Cycling distance from the Templar Place SHD (Source: traveltime.com)

4.3.1 Incentives to Encourage Cycling

With the aim of encouraging cycling as a mode of transport, this mobility management plan proposes to introduce a number of challenges and incentives to capture the attention of residents. Such measures/challenges include but are not limited to the following:

- Organise training days on the rules of the road and how they apply to cyclists
- Organise bike maintenance training talks
- Encourage participation in local bicycle or triathlon clubs
- Invite bike suppliers for a “try before you buy” demonstration to residents
- Consider organising a bicycle pool for residents where shared bikes are available.

4.3.2 Cycling Clubs

Cycling clubs are a great way of meeting new people while maintaining and improving your fitness. Most cycling clubs put together organised group rides weekly or monthly for cyclists of various skill levels. It is the perfect way to discover new routes, new riding buddies, improve your group-riding skills and connect with fellow cyclists in a social setting. You can also learn things from other cyclists like bike repair tips, workout ideas and other secrets to improve your cycling.

4.4 Public Transport and Incentives to Use Public Transport

As stated previously in Sections 3.3.4 and 3.3.5, Balbriggan offers a great variety of bus and rail services, which will enable residents to commute to a good range of towns as well as one local bus services. In order to encourage the use of public transport, this Mobility Management Plan proposes to introduce various measures to entice residents to avail of public transport.

- Providing bus timetable information for residents
- Publicise the availability of Real Time Information. Real Time Information shows when your bus is due to arrive at your bus stop so you can plan your journey more accurately
- A 'buddy' system for residents travelling to/from similar work/school locations
- Providing information at common areas for taxi services serving the local area.

According to the Apartment Living in Ireland 2019, 35% of those who commute to work do so for between 30 to 59 minutes. **Figure 4.3** below shows that travelling from public transport from the proposed development for up to 1 hour, residents can reach Dublin to the south and Drogheda to the north.

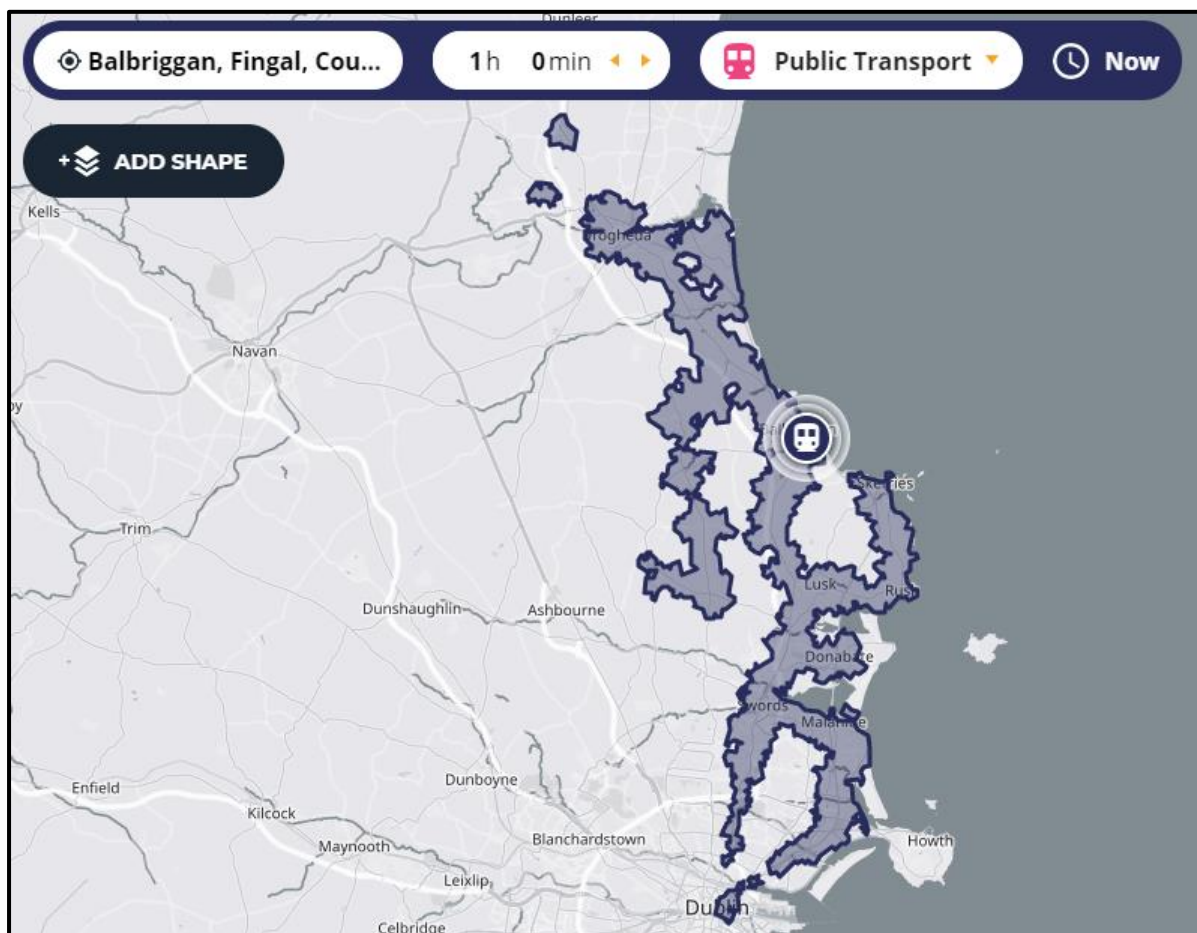


Figure 4.3 – Travel time from the Templar Place SHD by public transport (Source: traveltime.com)

The nearest bus stops are only 3 minutes walking either southwest or northwest from the development, on the regional road R132. The Balbriggan train station is located to the north of the site, and it is 5 mins walking distance from the proposed residential development.

The 'BusConnects' project aims to overhaul the current bus system in Dublin through a 10-year programme of integrated actions to deliver a more efficient, reliable and better bus system for more people. The 'BusConnects' services proposed for Balbriggan as shown in Figure 4.4 below, will consist of 2 No. bus routes connecting Balbriggan to the Dublin Airport and University College Dublin (UCD).

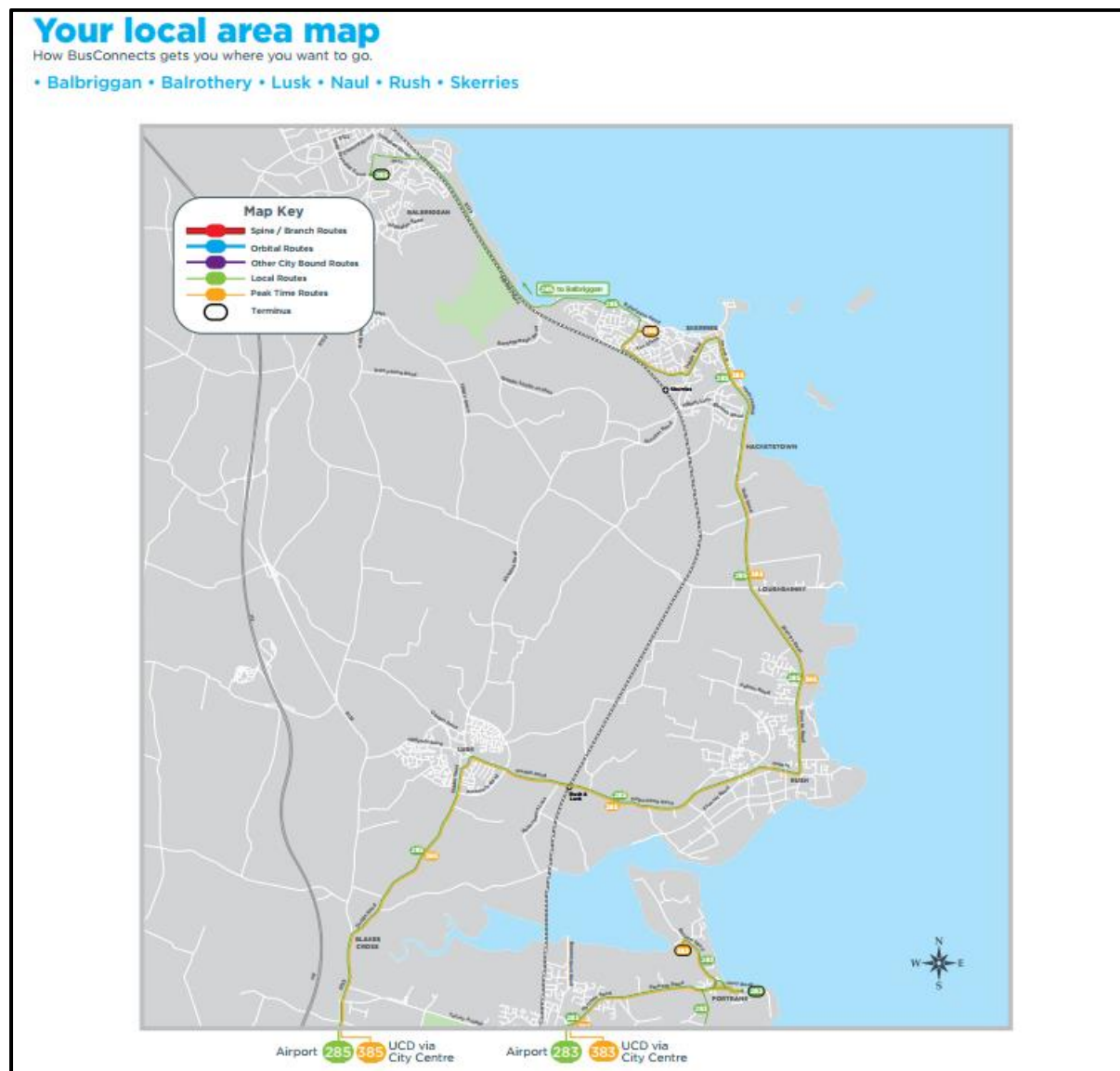


Figure 4.4 – Proposed 'BusConnects' for Balbriggan (Source: busconnects.ie)

The Dart+ program, which intends to revolutionise travel in the Greater Dublin Area is open for public consultation. The program will increase the DART network from its current 50km to 150km and will bring the DART lines to several other locations. The program is intended to

promote multi modal transit, active transport, boost regional connectivity and make public transport the preferred option for more people. The line which will cover Balbriggan is the Coastal North, as can be seen in **Figure 4.5** below.

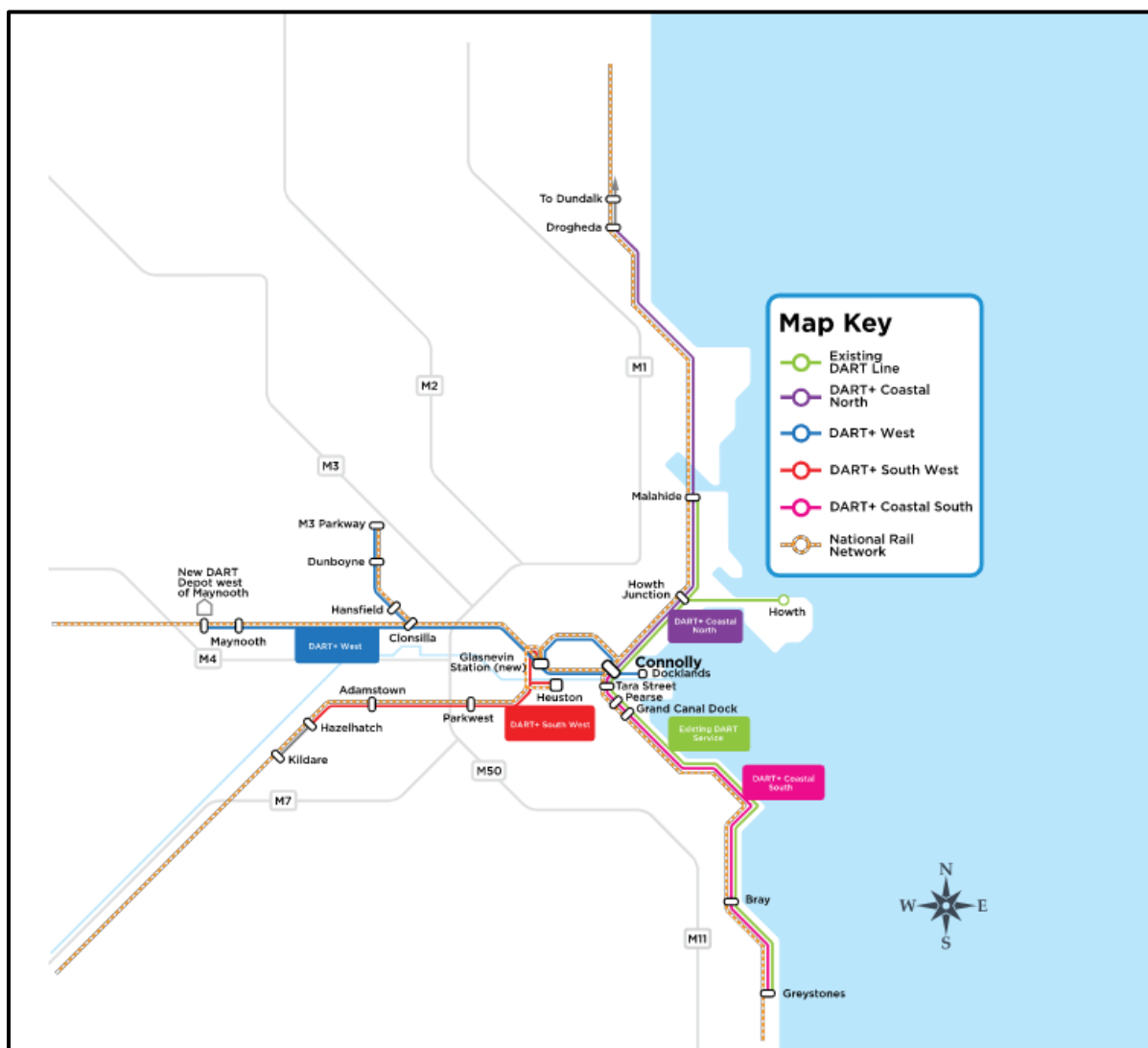


Figure 4.5 – Proposed DART+ lines (Source: dartplus.ie)

4.5 Car-Sharing

Car-sharing, also known as carpooling, system has been introduced all over the world over a variety of different organisations and facilities and has proven to be a successful measure in reducing vehicular traffic. Every day people travel to work, school, etc. and many people near each other make their own individual trips by private vehicle. The main benefit of introducing a carpooling system is that people can share their vehicle thereby reducing the overall number of vehicles to and from the residential development at peak times. By carpooling just once a week, studies have shown that commuters fuel costs can be reduced by up to 20%, and when doing regularly, emissions can be reduced by 4% to 5%. Furthermore, the reduction of

vehicular traffic results in a net decrease in the demand for car parking spaces, which are already reduced in the development.

As the number of parking spaces is reduced in the Templar Place SHD, the introduction of a carpooling scheme would be of great benefit to residents. However, for the scheme to be effective, it is essential that residents and the residential management ensure that the occupancy of a vehicle travelling from the proposed residential development is maximised. This can be done in a number of ways; however, the most effective way of coordinating the process is to map where each resident works/study and designate drivers to give them a lift on designated days.

The residential management would also make available to residents a carpooling software. This particular software can be used in the residents' phone where their information is recorded, and potential matches are automatically generated based on work/school schedule and preferences. This method generally provides greater security, ensuring privacy for participants and enhanced matching facilities.

4.5.1 Incentives to Encourage Car-Sharing

In order to encourage carpooling in the Templar Place SHD, this Mobility Management Plan proposes to introduce a number of incentives to entice residents to embrace the scheme, such as follows:

- Make clear that drivers will not have to go out of their way to pick up a person who is not on their desired route
- Promote the financial benefits of the scheme
- Promote systems whereby those who are given a lift share in fuel costs
- Consider holding draws and raffles for residents who carpool.

4.6 Car Parking Allocation

As stated previously, the Templar Place SHD will be constructed under the Build to Rent (BTR) scheme, where car parking spaces are minimised or reduced, and the site is located near public transport. The site will provide 25No. car parking spaces, which will be placed at the ground floor.

Based on a review of the current transport infrastructure available to the proposed site, the current network provides a significant level of connectivity with the town centre and other towns near Balbriggan, with both the bus and rail services. Walking and cycling within the town are a feasible activity due to the fact that any of these journeys are considered short within the town area.

4.7 Action Plan Summary

The Summary Action Plan is described in **Table 4.1** below complete with indicative figures for target modal splits for the next three years. Modal Split Targets will be determined following on from the first residents' survey shortly after the development is constructed, typically within

the first six months. This will show existing travel patterns with realistic targets set to improve the modal split of residents at the development.

Given the iterative nature of Mobility Management Plans, this table should be revisited periodically following the completion of future travel and transport surveys issued by the residential's Mobility Manager.

Table 4.1 – Action Plan Summary

	Travel Distance	Target Modal Split	Key Incentive Mechanisms
Walking	2-3 km	32%	Introduce pedometer challenges
			Introduction of walking clubs
Cycling	5-10km	12%	Introduce cycle challenges
			Organise bike maintenance training talks
			Encourage participation in local bicycle or triathlon clubs
			Invite bike suppliers for a “try before you buy” demonstration to residents
			Provide road safety and bicycle maintenance seminars
Public Transport	10-50km	22%	Post bus routes and timetables
			Post information on costs, commuter tickets / multi-trip reductions
			Introduction of a ‘buddy’ system
Car Sharing	10-100km	11%	Raise awareness of well-being, environmental and cost-saving benefits
			Provide a platform to connect residents travelling to and from similar routes
Private Vehicle	10-100km	23%	Raise awareness of well-being, environmental and cost-saving benefits of alternatives
			Provide designated parking for e-vehicles

5 Implementation of the Mobility Management Plan

5.1 Background

In order for the mobility management plan to be successful, investment and resources will need to be made available to implement the proposals outlined. The Mobility Management Plan will also need to be reviewed periodically to assess how the proposals are being received by the residents and to determine realistic targets for the plan.

Setting realistic targets is vital to the success of the mobility management plan, as is ensuring that its proposals are embraced by residents. It is important that realistic targets are set out early and that promotion drives are undertaken to help ensure that targets are met.

5.2 Mobility Management Plan Coordinator

The main target of this Mobility Management Plan is to ensure that the traffic impacts associated with the day-to-day operations of development are minimised. Achieving this target will result in a wide range of benefits to the daily operation of the Templar Place SHD and wider community.

For the Mobility Management Plan to be successful it is essential that a mobility management coordinator is appointed to monitor the progress of the plan on an ongoing basis. The coordinator and assistant coordinator are to be confirmed when the Templar Place SHD is completed.

- Mobility Management Plan Coordinator
To be confirmed
- Assistant Mobility Management Plan Coordinator
To be confirmed

The duties of the Mobility Coordinator will include:

- Conducting travel surveys at regular intervals once the development is completed and operational. These surveys will provide detailed and up-to-date information on travel habits which can be used to develop new strategies that encourage travel by alternate modes
- Implementation of various schemes/plans aimed at encouraging the uptake of more sustainable means of travel
- Acting as an information point for residents
- Negotiating with public transport companies and other service providers
- Branding of the plan
- Ongoing promotion and marketing of the plan through various mediums
- Evaluation and adaptation of the plan in the light of experience.

It is important that the mobility management plan coordinator and assistant coordinator work closely together while promoting the plan on the residential development. The involvement of the residents at an early stage will be essential to the success of the plan. ORS recommend

that the Mobility Management Plan coordinators consult with residents and management to discuss the strategy for the implementation of the plan. This may help to spread the workload involved in implementing the plan and provide a platform for feedback to be presented.

Vital to the success of the Mobility Management Plan will be ensuring that sufficient time and a suitable budget is available to implement the measures discussed in this plan.

The main roles and responsibilities of the mobility management plan coordinator are detailed in the following sections.

5.2.1 Promoting the Mobility and Management Plan

Promotion of the sustainable forms of transport discussed in the Mobility Management Plan is required to ensure that the attitudes of residents are impacted. It is important that the mobility management plan coordinator recognises the needs of residents and the areas where they may be willing to change their attitudes to travel. This information can be obtained by issuing questionnaires.

It is important that the mobility management plan coordinator leads by example by embracing the proposals of the plan in their daily routine.

5.2.2 Management and Review

Management and review of the mobility management plan are vital to track progress and determine realistic milestones in the implementation of the plan. It is recommended that the travel patterns of residents are reviewed on an annual basis. ORS have compiled a questionnaire which is attached in Appendix A of this report which will provide the mobility management plan coordinator(s) with all the necessary information to review travel trends at the Templar Place SHD. It is recommended that this questionnaire, or a similar online version, is issued annually to monitor and track travel pattern changes amongst residents. ORS would also suggest leaflets and information booklets to be produced to make dwellers aware of the Mobility Management Plan and what it intends to achieve.

This will allow the mobility management plan coordinator to track progress in terms of milestones and adjust the milestones that are set too high or too low. It will also ensure that changing travel patterns are taken into account to ensure that the plan continues to reflect the needs of the users.

6 Conclusions

6.1 Key Findings

Baseline information was collected from several publicly available sources to demonstrate the viability of different modes of sustainable transport within the vicinity of the site. The present-day scenario for each mode of transport was determined as follow:

- **Private Vehicle:** The Templar Place SHD is located in the town centre of Balbriggan, Co. Dublin, which offers great connectivity to several regional and national roads that connect the town to various locations across the country. The M1 motorway is located less than 10 minutes west from the site entrance.
- **Walking:** The vicinity of the site holds an extensive footpath network with crossing points in form of dropped kerb and provision of tactile paving. Walking is a feasible option for residents who work or study in town.
- **Cycling:** At present, there are no dedicated cycle lanes across the town centre, however, it is part of the FCDP to introduce cycle routes along the town centre, as well as widening existing footpaths and providing meeting spaces to make the town centre more attractive for cyclists and pedestrians.
- **Bus Services:** There is an extensive level of service provided by bus services connecting Balbriggan to various other locations as well as a local bus service. The site is also well connected to other commuter towns. Access to the site is anticipated to improve if the roll-out of the 'BusConnects' programme is delivered.
- **Rail Services:** The Balbriggan train station is located only 5 minutes from the site and offers 2No. routes with several trains throughout the day. The proposed DART+ line, named Coastal North, which is still in the consultation phase will be a great asset for sustainable transport if introduced.

6.2 Recommendations

- Mobility management is a process that is intended to be ongoing over a number of years with the end target being reduced vehicle numbers arriving and departing from the Templar Place SHD. Sustainable transportation should be embraced by the residents and not be seen as a chore and an anti-car approach. This report assists in providing alternative modes of transport and incentives to help promote the uptake in such forms of transport, as the Templar Place SHD has car parking capacity reduced. It should be noted however that the actual monitoring and review of the initiatives proposed in this plan will be a far greater part of the Mobility Management Plan itself.
- Essential to the success of the plan is the appointment of a mobility management plan coordinator for the proposed development. The mobility management plan coordinator will be responsible for implementing the measures discussed in the plan and should be granted sufficient time and resources to help ensure the plan is a success.

- The Mobility Management Plan mainly focuses on the travel attitudes of residents, and it is essential to the success of the plan that they are consulted from the outset. Successful coordination of tasks and communication could also be transferred to residents if they are consulted from the onset of the implementation of the plan.
- Residents will play a pivotal role in the implementation of the plan as they after all are the target audience to take an active role in the plan. The plan will evolve and develop with the premises, taking into account changing patterns in travel and the new needs of the site users.
- In order to ensure that the plan is effective and up to date it is encouraged that the stakeholder survey attached in Appendix A of this report is issued annually to establish changing travel patterns and targets. It should be noted that failing to meet targets should not be viewed as a failure, particularly in the first years following the implementation of the plan. This period should be used to recognise achievable targets and put forward long term goals.
- The availability of a public transport connection between the Templar Place SHD and the catchment areas can make a great difference to modal choice and future modal shift, as can the provision of dedicated safe cycle routes and more bus connections. While the proposed development management will have no control over the provision of such services, they can educate and influence the residents to investigate various options in relation to using existing infrastructure for part or all of their journeys.



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o: +353 1 5242060 | e: info@ors.ie | w: www.ors.ie

Appendix A – Sample Letter and Questionnaire

Dear Residents,

RE: MOBILITY MANAGEMENT PLAN QUESTIONNAIRE

The Local Authority has requested that we prepare a mobility management plan to assess the transport situation at the Templar Place SHD, Balbriggan, Co. Dublin.

The first step in the Mobility Management Plan process is to ascertain the current travel patterns of the residents. In an effort to achieve this, a questionnaire has been designed to assess the methods used by the residents to travel to and from their houses.

The attached questionnaire asks a few short questions associated with how you travel to and from the Templar Place SHD. This questionnaire will take approximately 5 minutes to complete.

In addition, the last question in the questionnaire provides you with the opportunity to bring your comments and observations associated with the delivery of the improvements to the development. As an important member of the development, your inputs and support are vital to the safe operation of our facilities. On this basis, your observations are welcomed and will be thoroughly considered.

Please return your completed questionnaire to me, no later than XX/XX/XXXX.

Thank you for your consideration and support.

Yours sincerely,

Mobility Management Plan Co-Ordinator

Residents Questionnaire

Section 1: Travel Patterns

1. Are you male or female?

Male

Female

Prefer not to say

2. How far do you travel from your apartment to work/school?

Less than one 1 km

1 – 1.9 km

2 – 2.9 km

3 – 3.9 km

4 – 4.9 km

5 km or more

3. How do you usually travel from your apartment to work/school? *(Please tick the most appropriate, or state other)*

<input type="checkbox"/>	By private car
<input type="checkbox"/>	By carpool/car-share
<input type="checkbox"/>	By Bus (public)
<input type="checkbox"/>	On foot
<input type="checkbox"/>	By bicycle
<input type="checkbox"/>	By taxi

Other, please state:

4. How do you normally travel from work/school to your apartment? *(Please tick the most appropriate, or state other)*

<input type="checkbox"/>	By private car
<input type="checkbox"/>	By carpool/car-share
<input type="checkbox"/>	By Bus (public)
<input type="checkbox"/>	On foot
<input type="checkbox"/>	By bicycle
<input type="checkbox"/>	By taxi

Other, please state:

5. Is there a bus service available to take you to or from your apartment?

Yes

No

Don't know

6. How far is the bus stop from your apartment?

0 – 0.5 km	
0.6 – 1 km	
1 – 1.9 km	
2 – 2.9 km	
3 – 3.9 km	
4 – 4.9 km	
5 km or more	

7. How far is the bus stop from your work/school?

0 – 0.5 km	
0.6 – 1 km	
1 – 1.9 km	
2 – 2.9 km	
3 – 3.9 km	
4 – 4.9 km	
5 km or more	

8. Do you own a bicycle?

Yes	
No	

9. How many cars are there at your apartment?

None	
1	
2	
3	
Over 3	

10. If you could choose, how would you like to travel to your work/school?
(Please tick the most appropriate, or state other)

	On foot
	By bicycle
	By bus
	By private car
	By carpool/car-share
	By taxi

Other, please state:

11. If you do not walk or cycle to work/school, what most stops you from doing so?

.....

.....

.....

Section 2: Travelling by Walking/Cycling

12. I like/would like to cycle to/from my apartment because:

.....

.....

13. How safe is the journey to your apartment on foot?

Safe	
Average	
Unsafe	
Dangerous	

14. How safe is the journey to your apartment by bicycle?

Safe	
Average	
Unsafe	
Dangerous	

15. Do cars and/or buses cause a problem on or near your apartment grounds?

Yes	
No	

16. If yes, what problems do they cause and where?

.....

.....

17. Is bicycle storage good enough at present on the residential development?

Yes	
No	

Section 3: Travelling by Bus/Train

18. When walking to and from the bus stop, how safe do you consider your route to be?

Safe	
Average	
Unsafe	
Dangerous	

19. Do you have a bus or train pass?

Yes	
No	

20. Is pupils' behaviour a problem on your bus?

Yes	
No	

21. Does your bus sometimes arrive late or leave too early?

Yes	
No	

22. Is overcrowding a problem?

Yes	
No	

Section 4: Travelling by Car

23. How many fellow residents usually travel with you?

None	
1	
2	
3	
4	

24. If you are given a lift to your work/school, is the journey only being made just to bring you to your work/school?

Yes	
No	

25. If the answer to the question was NO (e.g., your driver continues driving to go to work) approximately how much longer is your driver's journey because they have taken you to your work/school?

No extra time	
Less than 5 minutes	
5 – 10 minutes	
More than 10 minutes	

26. If your work/school is not in the driver's shortest route to work, could you be dropped off at a certain location and complete your journey by bus or on foot?

Yes – By bus	
No – By foot	
No	

27. If yes, how far away from your work/school is the drop off point?

Less than one 1 km	
1 – 1.9 km	
2 – 2.9 km	
3 – 3.9 km	
4 – 4.9 km	
5 km or more	

28. If no, please explain why this option would not work for you and/or your driver.

.....

.....

Section 5: Hazardous Journey

29. Have you ever been involved in a road accident on your journey to or your apartment?

Yes

No

30. If YES, how were you travelling?

By foot

By bicycle

By bus

Given a lift

31. Please describe what happened.

.....

.....

32. Have you ever been involved in a near-miss on your journey to or from your apartment?

Yes

No

33. If YES, how were you travelling?

By foot

By bicycle

By bus

Given a lift

34. Please describe what happened.

.....

.....

35. Have you ever been bullied, threatened or scared on your journey to or from your apartment?

Yes

No

36. If YES, how were you travelling?

By foot

By bicycle

By bus

Given a lift

37. Please describe what happened.

.....

.....

Section 6: Health and Fitness

38. How often do play sport or exercise?

Most days	
Twice a week	
Once a week	
Less than once a week	
Never	

39. How long does each period of exercise last on average?

15 mins or less	
Around half an hour	
Around 1 hour or more	

40. Are you satisfied with your current level of fitness?

I would like to feel fitter	
I feel fit enough	
I feel unfit	

41. List three activities you would like to do which help you get fitter.

1.
2.
3.

42. If you cycle, how many journeys have you made in the last 7 days? (nor including work journeys)

Once	
Twice	
Three times or more	
None	

43. Where did you go?

.....

.....

44. If you have any other comments or suggestions about travel to and from the residential development, please share them here:

.....

.....

.....

.....

.....

Thank you for taking the time to complete this questionnaire, your participation is appreciated.