



Travel Plan

Residential development at Clonburris, Adamstown, Co. Dublin

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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

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. This Travel Plan was prepared by Waterman Moylan as part of a planning application for a proposed residential development located at Clonburris, Adamstown, Co. Dublin

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2. Receiving Environment

2.1 Proposed Development

The Proposed Development is for 385 No. Units and comprising of 139 No. Houses, 92 No. Duplexes and 154 No. Apartments on a total net development area of 13.37 hectares.

Lon	d I loo					
Land Use		1-Bed	2-Bed	3-Bed	4-Bed	Summary
	Houses			98	41	139
Residential	Duplexes		21	71		92
	Apartments	48	106			154
TOTAL		48	127	169	41	385

Table 1 | Proposed Schedule of Accommodation

The development includes all associated site works and infrastructure, including internal roads, paths, cycle-paths, public lighting, utilities, foul and surface water drainage and landscaped open-space.

2.2 Site Location

The proposed development at Clonburris, Adamstown, Co. Dublin is located approximately 2.37km South of Lucan town centre while the Grand Canal is located approximately 130m South of the subject site. The site is bound to the North by the main Dublin-Cork Rail line, to the West by the R120 (Newcastle Road), to the East by Hayden's Lane and to the South by Lucan Pitch and Putt Club. The coordinates at the Centroid of the proposed development are 53°20'2.57388" N, 6°27'2.98368" W. The location of the proposed development is shown in *Figure 1*.



Figure 1 | Proposed Development - Site Location (Source: Google Maps)

2.3 Program

It is expected that construction of the proposed development will commence in Q4 2023 for completion in Q4 2026.

3. Travel Plan

3.1 Introduction

This Travel Plan will be a key operational element for the Proposed Development at Clonburris, Adamstown, Co. Dublin. 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.

3.2 Action Plan

3.2.1 Walking

The area has limited pedestrian access, as part of the development there will be signalised pedestrian crossings to provided safety. Pedestrians will be encouraged to make use of these to walk to nearby bus stops on the R120 and along Castlegate Way. It should be noted that planning permission has been granted under Reg Ref: SDZ20A/0021 for infrastructural works in anticipation of the submission of this proposed development. Permission has been granted for the upgrading of Hayden's Lane and its Junction with the R120 which will include the following works:

- Signalisation of the Hyden's Lane and R120 junction, incorporating pedestrian and cyclist crossings.
- Creation of off-road cycle track at the junction upgrade on the east side, and creation of on-road cycle track on the west side.
- The upgrading of Hayden's Lane to incorporate on and off-road cycle lanes, bus stops, pedestrian
 crossings, and parking bays, with the location of the existing pedestrian footpaths to be relocated
 to facilitate construction of the previous items.
- The creation of vehicular access points, one to the north of Hayden's Lane and two to the south.

3.2.2 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. There are currently limited cycling tracks in the area but as part of the GDA cycle network, a route is planned providing access to Dublin City. As mentioned in section 3.2.1, cycling will be easily incorporated into the proposed development.

3.2.3 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.

3.2.4 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 by 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.

3.3 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 information regarding the car haring scheme;
- The provision of good footpaths and pedestrian crossings in the area of the development.

3.4 Specific Measures

3.4.1 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.

3.4.2 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.

3.4.3 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, 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 5.2.

3.4.4 Car Parking

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

3.5 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.

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3.6 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.
- · Details of pedestrian facilities;
- · Details of cycle facilities; and
- · Details of car sharing scheme.

4. Accessibility to the Site

4.1 Walking Accessibility

The "Guidelines for Providing for Journeys on Foot" published by the Institution of Highways & Transportation in 2000 indicates that acceptable walking distances will vary between individuals and circumstances, such as an individual's fitness, physical ability, and personal motivation; the size of the city itself and the quality of the surrounding footpath network. This document also suggests walking distances and times based on an average walking speed of 1.4m/sec (approximately 400m in five minutes). *Table* 2 below summarises these suggestions.

	Town Centres	Commuting/School Site-seeing	Elsewhere
Desirable	200m (2.5-minutes)	500m (6-minutes)	400m (5-minutes)
Acceptable	400m (5-minutes)	1,000m (12-minutes)	800m (12-minutes)
Preferred Maximum	800m (10-minutes)	2,000m (24-minutes)	1,200 (15-minnutes)

Table 2 | Suggested Walking Distances (Source: Guidelines for Providing for Journeys on Foot)

Based on *Table 2*, *Figure 2* below indicates the extent of the Desired, Acceptable, and Preferred Maximum walking catchments from the closest access to the R135 of the proposed development in blue. The orange indicates the extent of the 400m walking catchment, the red represents the 800m walking catchment and the purple represents the 1200m walking catchment.

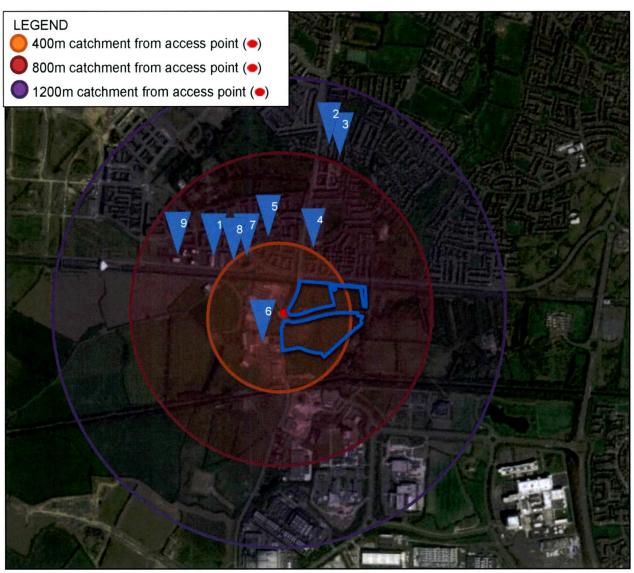


Figure 2 | Walking Catchments from Proposed Development

No.	Name	Description	Category	Range
	Adamstown Castle Educate Together National School	Primary School		
1	St John the Evangelist National School	Primary School	Education and Childcare	<800m (Acceptable)
	Adamstown Community College	Community College		
2	Spar	Shop	Retail and Other	<1200m (Preferred Max)
3	Finnstown Pharmacy and Medical Centre	Pharmacy and Medical Centre	Health and Wellbeing	<1200m (Preferred Max)
4	Busy Kids, Hansted Road	Crèche/Kindergarten	Education and Childcare	<800m (Acceptable)
5	Castlegate park	Park	Sports and Recreation	<800m (Acceptable)
6	Goodwins	Build and DIY Products	Retail and Other	<400m (Desirable)
7	Londis	Shop	Retail and Other	<800m (Acceptable)
8	Giraffe Childcare	Crèche	Education and Childcare	<800m (Acceptable)
9	Community Centre	Community Centre	Health and Wellbeing	<800m (Acceptable)

Table 3 | List of Identified Community Facilities

It should be noted that within the accessible area of 1.2 km, 11 social services can be identified, amongst which there are 2 primary schools, 1 community college, 2 childcare facilities, 1 pharmacy, 1 community centre, 3 retail facilities, and one park are represented.

Further key services can be accessed within a reasonable distance in Lucan or in the city centre. The provision of social and community infrastructure facilities is considered adequate for the current number of residents in this area.

4.2 Cycling Accessibility

As presented for walking, a similar catchment exercise has also been undertaken for the cycling mode of transport. Based on an average cycling speed of 3.3m/sec (i.e., 15km/h), a distance of approximately 4.0km (15 minutes) is desirable, approximately 7.5km (30 minutes) is Acceptable and approximately 11km (45 minutes) in the Preferred Maximum. In *Figure 3* below, the light blue area indicates the extent of the 4km cycling catchment, the dark blue area represents the 7,5km cycling catchment and the purple area represents the 11km cycling catchment from the proposed development.

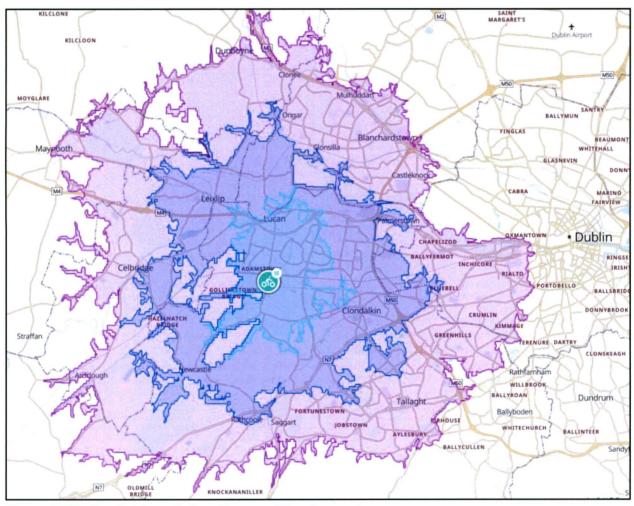


Figure 3 | Cycling Catchments from Proposed Development

L3005 L3103 Leixlip M4 N4 R403 L1058 GOLLIERSTOWN BRIDGE Clondalkin **LEGEND** Education and Child care Retail and other L2001 Bus Stops Health and Wellbeing R120 Park / Recreational Newcastle Eat/Drink

Focusing on the 15-minute catchment Figure 4 depict the amenities within these ranges.

Figure 4 | 15-minute Cycling Catchments from Proposed Development

There are many amenities within the 15-minute cycle isochrone (*Figure 4*). The 30-minute and 45-minute isochrone indicate access to several towns and areas such as shopping centres, supermarkets, business parks, and both primary and secondary schools. The most relevant areas include Clondalkin, Leixlip, Palmerstown, Newcastle, Tallaght, Blanchardstown, Clonee, and Dunboyne.

4.3 Future Pedestrian and Cycling Accessibility

4.3.1 Pedestrian and Cycle Movement

The Grand Canal Green Route runs through and along the entire southern boundary of the SDZ lands and links the SDZ lands with Dublin City Centre in the form of a dedicated pedestrian and cycle route. This creates an opportunity for routes within the SDZ lands to link with this strategic corridor. The linear nature of the Kildare/Cork Railway Line also creates the opportunity to create a parallel green corridor and pedestrian and cycle route that will mirror and ultimately link with the Grand Canal Green Route.

Cycling and walking shall be encouraged throughout the SDZ lands with the creation of a network of dedicated, and street integrated, pedestrian and cyclist routes. In accordance with the Design Manual for Urban Roads and Streets (DTTS & DECLG, 2013) (DMURS), all streets within the SDZ lands shall be designed for pedestrian and cyclist movement.

There shall be no barriers to pedestrian or cyclist movement between residential developments. Barriers created by the canal and railway shall be overcome by overbridges

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 the Cycle Network Plan (Proposed Cycle Network Dublin Mid-west Sheet N5) is reproduced in Figure 5 below.

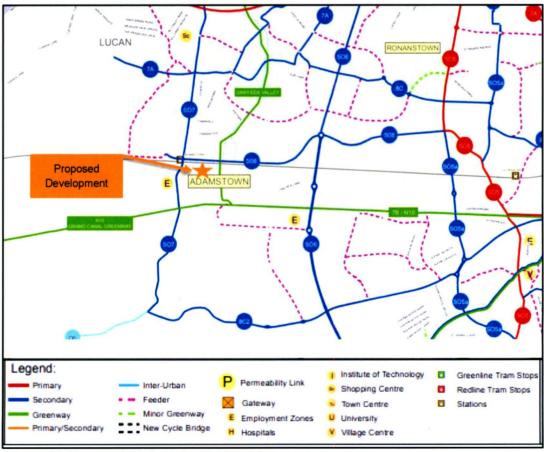


Figure 5 | Proposed Cycle Network Upgrades.

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4.3.2 Link Streets

The primary function of Link Streets is to connect the SDZ lands together by connecting Arterial Streets, Urban Centres, and Development Areas including local nodes and open spaces. Link Streets shall be designed to provide the main multi-modal spines for movement within the SDZ lands.

Link Streets will form a vital linking component between Arterial Streets and Local Streets and will be instrumental in creating a highly accessible and permeable street network. Link Streets will act as the principle corridors for the movement of pedestrians, cyclists, public transport (local buses), and vehicles within and through the SDZ lands

Existing roads that are designated as Link Streets under this Planning Scheme (Hayden's Lane, Lock Road, Griffeen Avenue and the Lucan-Newlands Road) shall be upgraded as traffic calmed streets. These upgraded streets will be augmented by a framework of new Link Streets that will traverse the SDZ lands in the form of east-west streets to the north and south of the rail line together with a connecting north-south Link Street. All Development Areas shall therefore be afforded direct and convenient vehicular, public transport, pedestrian, and cyclist access to Link Streets.

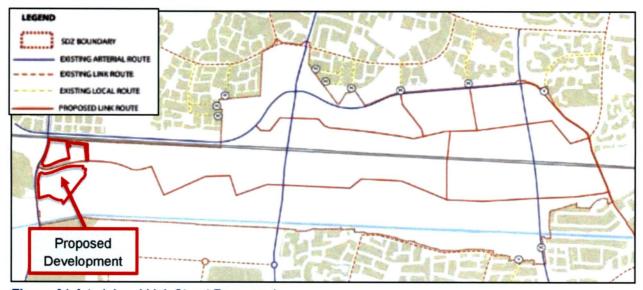


Figure 6 | Arterial and Link Street Framework

4.3.3 Bridges

The barriers created by pre-existing strategic roads, the Grand Canal and the Kildare/Cork Railway Line form challenges to movement across the SDZ lands. Rather than being avoided or mitigated, these features will be integrated within the urban structure of the SDZ lands with important connections across them.

A number of bridges are required to enable north-south movement across the Canal and Railway for different modes. A total of five new bridges are proposed in addition to the upgrade of an existing pedestrian and cycle bridge to a Green Bridge at Hayden's Lane.

The various types of bridges that are existing and proposed (13 in total) on the SDZ lands and the type of movement they will support is set out in the *Table 4*.

Bridge Type	Number
Canal Overbridge – pedestrian & cyclist	3 (including 1 existing)
Canal Overbridge – vehicular, public transport, pedestrian & cyclist	3 existing
Rail Overbridge – pedestrian & cyclist	3 (including 1 existing for
(No level crossings over the railway line will be permitted)	upgrade as green bridge)
Rail Overbridge – vehicular, public transport, pedestrian and cyclist	4 (including 3 existing)
(No level crossings over the railway line will be permitted)	

Table 4 | Canal and Rail Bridges

4.4 Bus Network

There are two bus stops along the R120 which is estimated to be a 9-minute walk from the site entrance. There are numerous bus stops along Castlegate Way and Adamstown Avenue, with the closest bus stops estimated to be a 9-minute walk from the site entrance. *Figure* 7 below shows the location of the bus stops relative to the proposed development.

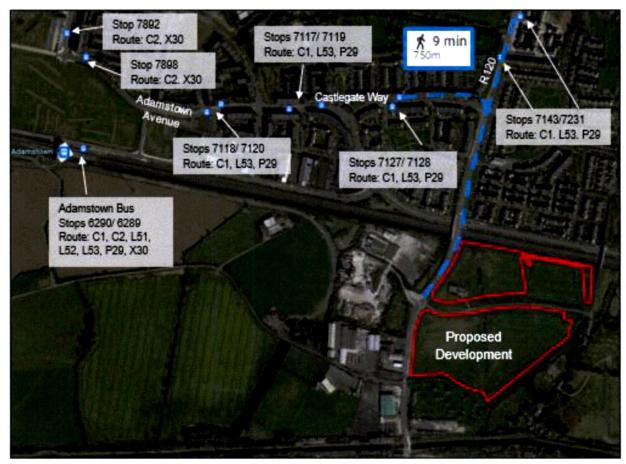


Figure 7 | Bus Stop Locations

Table 5 below shows the bus routes and their frequencies, these services link to key amenities such as Dublin City Centre, Blanchardstown, Adamstown, and University College Dublin (UCD). The timetable of the routes shown in *Table 4* can be found in Appendix E of the TTA. *Figure 8* to *14* show the routes in proximity of the proposed development.

	Service	ervice Destination				Frequency		
Route	Provider	Direction From	Direction To	Weekday	Saturday	Sunday		
	Dublin Bus	Adamstown – Outside Train Station (Via Dublin City)	Sandymount – Saint John's Church	7 mins (During AM Peak) 24 Hours	29 mins 24 Hours	30 mins 24 Hours		
C1	Dublin Bus	Sandymount – Saint John's Church (Via Dublin City)	Adamstown – Outside Train Station	8-10 mins (During PM Peak) 24 Hours	29 mins 24 Hours	28 mins 24 Hours		
	Dublin Bus	Adamstown – Outside Train Station	Sandymount - Saint John's Church	6-10 mins (During AM Peak) 24 Hours	29 mins 24 Hours	29 mins 24 Hours		
C2	Dublin Bus	Sandymount - Saint John's Church	Adamstown – Outside Train Station	5-10 mins (During PM Peak) 24 Hours	28 mins 24 Hours	28 mins 24 Hours		
	Go Ahead	Adamstown Station	Liffey Valley Sc	1 hr (05:50-22:55)	1 hr (05:50-22:55)	1 hr (07:50-22:55)		
L51	Go Ahead	Liffey Valley Sc	Adamstown Station	1 hr (05:55-23:00)	1 hr (05:50-22:45)	1 hr (07:50-22:50)		
L52	Go Ahead	Adamstown Station	Blanchardstown Sc	1 hr (06:25-23:25)	1 hr (06:20-23:25)	1 hr (08:20-23:25)		
LUZ	Go Ahead	Blanchardstown Sc	Adamstown Station	55 mins (06:15-23:25)	1 hr (06:15-23:15)	1 hr (08:15-23:20)		
L53	Dublin Bus	Liffey Valley Sc	Outside Train Station	25 mins (05:28-23:32)	29 mins (06:10-23:27)	26 mins (07:39-23:32)		
LOO	Dublin Bus	Outside Train Station	Liffey Valley Sc	25 mins (05:54-11:54)	29 mins (05:52-23:35)	26 mins (07:40-23:35)		
P29	Dublin Bus	Adamstown Station	Ringsend Road	10 mins (07:21-07:51)	No service	No service		
	Dublin Bus	Ringsend Road	Adamstown Station	20 mins	No service	No service		

				(17:00-18:00)		
V20	Dublin Bus	Adamstown Station	UCD	20 mins (06:45-08:10)	No service	No service
X30	Dublin Bus	UCD	Adamstown Station	35 mins (16:50-17:25)	No service	No service

Table 5 | Dublin Bus AM and PM Weekday Frequencies



Figure 8 | Bus RouteC1: St John's Church - Adamstown Station



Figure 9 | Bus RouteC2: St John's Church - Adamstown Station

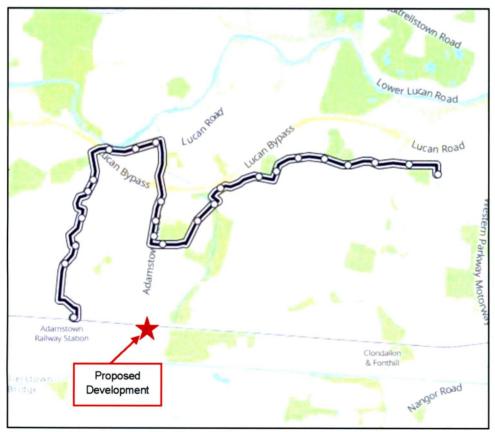


Figure 10 | Bus Route L51: Liffey Valley SC - Adamstown Station

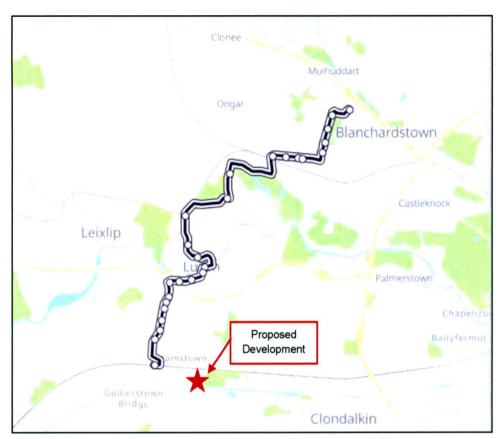


Figure 11 | Bus Route L52: Blanchardstown SC - Adamstown Station

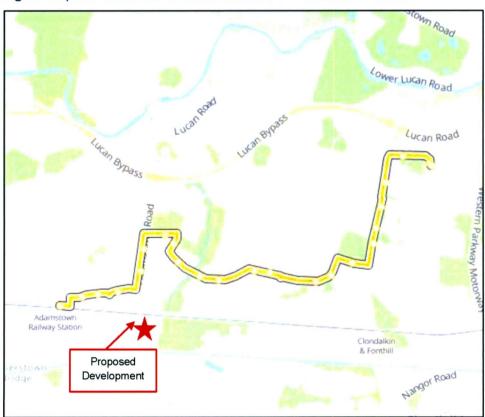


Figure 12 | Bus Route L53: Adamstown Station - Liffey Valley SC



Figure 13 | Bus Route P29: Adamstown Station to Ringsend Road

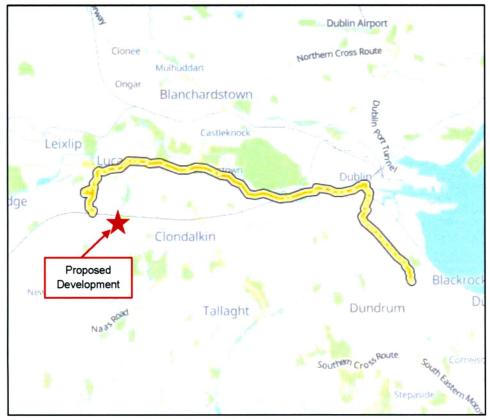


Figure 14 | Bus Route X30: Adamstown to UCD

4.4.1 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. The bus services will be dominated by high frequency "Spine routes" that follow the main radial corridors in the city centre, and beyond. The proposed development is not located on a "spine route" but has a local route and a peak only route connecting to the city centre.

With the New Link Road through the proposed development, and transport improvements as per the SDZ, there will be high connectivity to the D1 (Clongriffin - City Centre - Grange Castle) and W4 Route (Liffey Valley - Clondalkin - Tallaght). *Figure 15* shows the close proximity if the proposed development to the Bus Connects routes while *Table 6* highlights the frequencies of the routes.

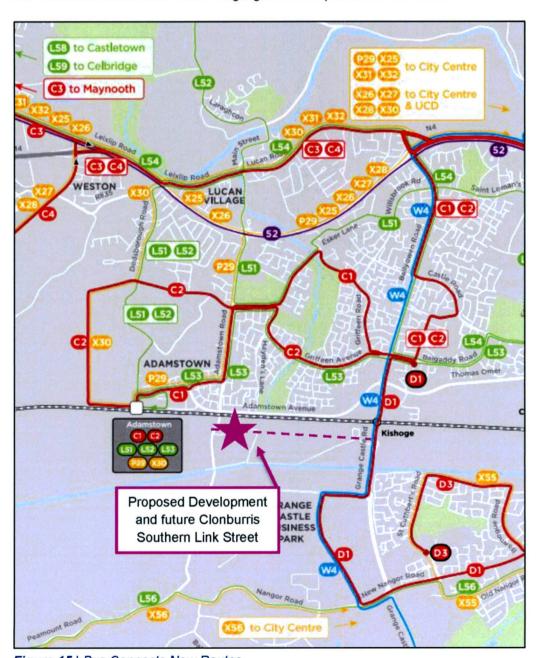


Figure 15 | Bus Connects New Routes

Davida	Destination.			
Route	Destination	Weekday	Saturday	Sunday
D1	Clongriffin - via City Centre - Grange Castle	Every 15mins (72 Services)	Every 15-20mins (61 Services)	Every 30-20mins (41 Services)
W4	Blanch. SC - Liffey Valley - Grange Castle Rd - Tallaght	Every 15-30mins (44 Services)	Every 30-60mins (32 Services)	Every 30-60mins (29 Services)

Table 6 | Bus Connects - Route Frequency Table

4.5 Rail

The closest train station, Adamstown Station, is located approximately 1.5km (18-minute walk; 6-minute cycle) west of the subject site - See *Figure 16*. Walking and cycling access from the subject site to the Adamstown station is via R120, Castlegate Park, Castlegate Lawn to Station Road which has a good network of footpaths, sections of the route have dedicated cycle lanes.

For the commuter route from Dublin to Cork, this station has 25 services departing throughout the day from Monday to Friday, and 7 additional services on Saturday, 5 services on a Sunday. For the commute from Cork to Dublin the station has 22 services departing throughout the day from Monday to Friday, 17 additional services on a Saturday and 5 services on a Sunday.

For the commuter route from Portlaoise- Kildare- Dublin, this station has 21 services departing throughout the day from Monday to Friday and 7 additional services on Saturday, 5 services on a Sunday. For the commuter route from Dublin - Kildare - Portlaoise The station has 21 services departing throughout the day from Monday to Friday, 17 additional services on a Saturday and 5 services on a Sunday.

The time table for these routes can be found in Appendix E of the TTA.



Figure 16 | Walking and Cycling Routes to nearby Train Stations

Further to Adamstown Station, Clondalkin-Fonthill station is served by commuter services to Heuston Station. Intercity trains do not serve this station. Following the recent upgrading of the Phoenix Park Tunnel, services calling at Clondalkin-Fonthill Station now offer connections to Drumcondra, Connolly, Tara Street, Pearse, and Grand Canal Dock. Eastbound services calling at Clondalkin-Fonthill offer good connections to Heuston station, which is the busiest station on the intercity train network offering strong connections to the regional cities and towns. Clondalkin Fonthill Station is located approximately 4.3km (50-minute walk; 13-minute cycle) west of the subject site - see *Figure 16*.

4.5.1 Future Rail

The DART+ Programme aims to improve current rail services across Dublin City and Greater Dublin, by modernising and providing an electrified and more frequent and reliable rail service, enhancing capacity on the rail corridor. As part of the programme, the rail service between Hazelhatch & Celbridge station and Dublin City Centre is planned to be electrified with higher frequency. At the time of writing, the south west portion of the project was in the tender process for construction phase while the fleet was at design completion and start of manufacturing. The project will increase train capacity from the current 12 trains per hour per direction to 23 trains per hour per direction (i.e., maintain the existing 12 services, with an additional 11 train services provided by DART+ Southwest). This will increase passenger capacity from the current peak capacity of approximately 5,000 passengers per hour per direction to approximately 20,000 passengers per hour per direction.

4.6 Luas Network

Clonburris is located approximately 4km north of the Luas Red Line, which connects Tallaght and Citywest to the City Centre and Docklands. The closest red line Luas stops to the Proposed Development are Belgard and Cheeverstown on the Citywest extension. These stations are located 7.8km and 8.2km respectively from the Proposed Development. Cheeverstown Luas station has a park and ride facility with 312 parking spaces. The Luas operates from 05:30-00:30 midweek. At peak times, there is a Luas every 9-10 mins and at off peak times this drops to 10-15mins. The journey time from Belgard to the city centre is approx. 38 minutes.

4.7 Car Sharing (GoCar)

With reference to *Figure 14*, the closest GoCar vehicle is located in the car park in Adamstown which is less than 800m northwest from the proposed development's access. Other locations of the GoCar services can be found in Lucan and Liffey Valley.



Figure 17 | Location of Closest GoCar Station (Source: www.gocar.ie)

5. Car Parking

5.1 Car Parking

In order to determine the appropriate amount of vehicle parking for the proposed development, reference will be made to the following guidelines/policies:

- South Dublin County Council Development Plan 2022-2028.
- Design Standard for New Apartments Dec 2022.
- The Clonburris Strategic Development Zone Planning Scheme (May 2019).

5.1.1 South Dublin County Council Development 2022-2028

Tables 12.25 and 12.26 set out the Maximum Parking rates for non-residential and residential development. Parking rates are divided into two main categories:

Zone 1: General rate applicable throughout the County.

Zone 2 (Non-Residential): More restrictive rates for application within town and village centres, lands

zoned REGEN, and brownfield / infill sites within Dublin City and Suburbs settlement boundary within 800 metres of a train or Luas station and within 400-500 metres of a high-quality bus service (including proposed services

that have proceeded to construction).

The provision of parking spaces for car sharing / pooling will be encouraged and will not impact on the maximum rates in Table 12.25

Zone 2 (Residential): More restrictive rates for application within town and village centres, lands

zoned REGEN, and brownfield / infill sites within Dublin City and Suburbs settlement boundary within 400-500 metres of a high-quality public transport service (includes a train station, Luas station or bus stop with a

high-quality service).

As part of the Clonburris SDZ Planning Scheme, Zone 2 parking standards prescribed under the South Dublin County Council Development Plan 2022 – 2028 shall be applied to all areas that have been identified with an accessibility level of 1, 2 or 3 (see *Figure 18* – Source: Figure 2.2.8 of the Clonburris SDZ). Zone 1 parking standards shall be applied to all other areas of the SDZ lands (level 4).

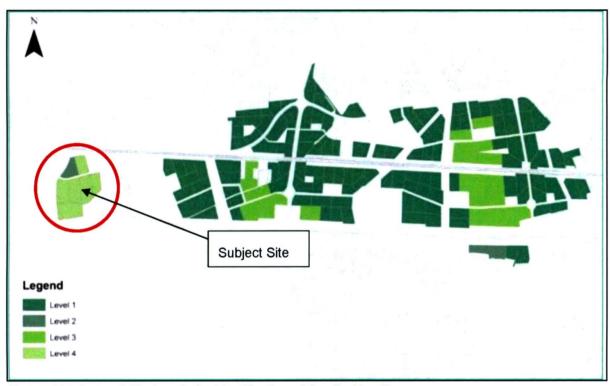


Figure 18 | Accessibility Levels for Identification of Car Parking Zones

The majority of the site is level 4 and therefore will be classified as Zone 1. The section northwest of the subject site is level 2 and therefore will be considered Zone 2. The standards are as follows:

Dwelling Type	No. of Bedrooms	Zone 1	Zone 2
	1 Bed	1 space	0.75 space
Apartment/Duplex	2 Bed	1.25 space	1 space
	3 Bed+	1.5 spaces	1.25 spaces
	1 Bed	1 space	1 space
House	2 Bed	1.5 space	1.25 space
	3 Bed+	2 spaces	1.5 spaces

Table 7 | South Dublin County Council Development Plan - Car Parking Standards

5.1.2 Design Standards for New Apartments – December 2022

In December 2022, a revised version of the document "Sustainable Urban Housing: Design Standard for New Apartments" was released.

Chapter 2 of the Design Standard for New Apartments sets out the following "types of location" which are defined by site's accessibility and proximity to public transport and town/city centres:

"1) Central and/or Accessible Urban Locations

- Sites within walking distance (i.e., up to 15 minutes or 1,000-1,500m), of principal city centres, or significant employment locations, that may include hospitals and third level institutions;

- Sites within reasonable walking distance (i.e., up to 10 minutes or 800-1,000m) to/from high-capacity urban public transport stops (such as DART or Luas); and
- Sites within easy walking distance (i.e., up to 5 minutes or 400-500m) to/from high frequency (i.e., min 10-minute peak hour frequency) urban bus service.

2) Intermediate Urban Locations

- Sites within or close to i.e., within reasonable walking distance (i.e., up to 10 minutes or 800-1,000m), of principal town or suburban centres or employment locations, that may include hospitals and third level institutions;
- Sites within walking distance (i.e., between 10-15 minutes or 1,000-1,500m) of high-capacity urban public transport stops (such as DART, commuter rail or Luas) or within reasonable walking distance (i.e., between 5-10 minutes or up to 1,000m) of high frequency (i.e., min 10 minutes peak hour frequency) urban bus services or where such services can be provided;
- Sites within easy walking distance (i.e., up to 5 minutes or 400-500m) of reasonably frequent (min 15-minute peak hour frequency) urban bus services.

3) Peripheral and/or Less Accessible Urban Locations

- Sites in suburban development areas that do not meet proximity or accessibility criteria;
- Sites in small towns or villages."

Chapter 4 of the Design Standard for New Apartments sets out the quantum of car parking or the requirement for any such provision for apartment developments.

"1) Central and/or Accessible Urban Locations

- In larger scale and higher density developments, comprising wholly of apartments in more central locations that are well served by public transport, the default policy is for car parking provision to be minimised, substantially reduced or wholly eliminated in certain circumstances. The policies above would be particularly applicable in highly accessible areas such as in or adjoining city cores or at a confluence of public transport systems such rail and bus stations located in close proximity.
- These locations are most likely to be in cities, especially in or adjacent to (i.e. within 15 minutes walking distance of) city centres or centrally located employment locations. This includes 10 minutes walking distance of DART, commuter rail or Luas stops or within 5 minutes walking distance of high frequency (min 10 minute peak hour frequency) bus services.

2) Intermediate Urban Locations

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 standard and apply an appropriate maximum car parking standard.

3) Peripheral and/or Less Accessible Urban Locations

 As a benchmark guideline for apartments in relatively peripheral or less accessible urban locations, one car parking space per unit, together with an element of visitor parking, such as one space for every 3-4 apartments, should generally be required."

5.1.3 Car Parking Required

The Design Standards for New Apartments is also assessed within this report but as a guideline. For the purposes assessing the requirement for the Proposed Development, the Clonburris SDZ Planning Scheme will take precedence as these are the maximum figures for car parking and minimum standards for cycle parking. The Clonburris SDZ Planning Scheme standards are set out under the *South Dublin County Council Development Plan 2022 – 2028*.

Based on the SDCCDP standards, *Table 8* below, sets out the number of parking spaces required for the Proposed Development.

The current site layout has apartments and duplexes in the northwest comer and therefore Zone 2 will be applied to this area. The houses will use Zone 1 classification.

Unit Type	Zone	Standard Applied	No. of units	No. of Bedro	oom	Total
Houses	1	2 spaces per unit	139	3 – Bedroom +	139	278
	1	1 space		1 – Bedroom	0	-
Duplexes and Apartments – Zone 1	1	1.25 space	114	2 – Bedroom	57	71
	1	1.5 spaces		3 – Bedroom +	57	86
Subtotal (zone 1)						435
	2	0.75 space		1 – Bedroom	48	36
Duplexes and Apartments – Zone 2	2	1 space	104	2 – Bedroom	70	70
, tpartimente Zene Z	2	1.25 spaces		3 – Bedroom +	14	18
Subtotal (zone 2)						124
Total (Zone 1+ Zone 2)	-		385	-		558

Table 8 | Proposed Development - Car Parking Requirement.

5.1.4 Car Parking Proposed

Based on the *Design Standards for New Apartments – December 2022*, the development site being located in an Intermediate Urban Location, the apartment guidelines state that "planning authorities must consider a reduced overall car parking standard and apply an appropriate maximum car parking standard".

In this regard it is considered that a parking standard for Houses, Duplexes and Apartments in Zone 1 adopt a standard of 1.5 spaces per unit while the Apartments and Duplexes in Zone 2 adopt of a standard of 0.9 space per unit.

	ZONE 1		
Unit type	No. of units	Space provided	Total
Houses, Duplexes and Apartment	253	1.5	390
		22.8% In curtilage	89
Visitor spaces			42
Disabled Parking			18
		Sub-Total	408
	ZONE 2		
Unit type	No. of units	Space provided	Total
Duplexes and Apartment	132	0.9	119
	S	Semi Basement parking	76
		On street parking	43
Visitor spaces			0
Disabled parking			11
		Sub-Total	130
OVERALL TOTAL			538

Table 9 | Proposed Development - Car Parking Proposed.

As a requirement, at least 5% of the allocated car parking spaces must be disabled parking. Additionally, 20% of the allocated car parking spaces support electric charging ports. Therefore, included in the 538 total car parking spaces are 27 disabled spaces, 94 EV charging spaces, and 42 visitor spaces. (Refer to architectural drawing 6268-P-008 or Figure 19 of this report).

5.2 Cycle Parking

In order to determine the appropriate amount of cycle parking for the proposed development, reference will be made to the following guidelines/policies:

- South Dublin County Council Development Plan 2022-2028.
- Design Standard for New Apartments Dec 2022.
- The Clonburnis Strategic Development Zone Planning Scheme (May 2019).

5.2.1 South Dublin County Council Development 2022 - 2028

Cycle parking standards for the Clonburris SDZ Planning Scheme also use the SDCC Development 2022–2028 as the minimum cycle parking standards. The design standards shall also be in accordance with the NTA's National Cycle manual (2011).

Table 12.23 of the Development Plan sets out Minimum Bicycle Parking rates for all new development in the County. Bicycle parking rates are divided into two main categories:

- Long Term: These are to be designed for use by residents and employees. Such spaces should be located in a secure area that is not freely accessible to the general public
- **Short Stay:** These are to be designed for ease of use by the general public. Such spaces should be located in highly visible areas that are easy to access and allow for cargo bikes,

For the purposes of this assessment and based on the SDCC Development Plan, duplexes will fall under the same classification as apartments for both short term and long-term stay. For houses, cycle parking is provided in-curtilage.

	建设在100%。100%。100%。100%。100%	
Unit Type	Long Term	Short Term
Apartment/Duplexes	1 per bedroom 1 per two apartments	

Table 10 | Cycle Parking required

5.2.2 Design Standard for New Apartments – December 2022

The following extracts from the "Design Standards for New Apartments – December 2022" summarise the guidelines for cycle parking:

"Quantity – a general minimum standard of 1 cycle storage space per bedroom shall be applied. For studio units, at least 1 cycle storage space shall be provided. Visitor cycle parking shall also be provided at a standard of 1 space per 2 residential units. Any deviation from these standards shall be at the discretion of the planning authority and shall be justified with respect to factors such as location, quality of facilities proposed, flexibility for future enhancement/enlargement, etc."

5.2.3 Cycle Parking Required

Based on the Sustainable Urban Housing: Design standards requirement, *Table 11* below, sets out the number of bicycle parking spaces required for the Proposed development.

BIK	E SPACES REQUIRED	-Blocks 1,2,3,4,5,6,7,8,9,10	
	Dup	olex	
Unit type	no. of units	space required	Total
2 bed	71	2	142
3 bed	71	3	213
0.5 per unit (vis.)	142	0.5	71
Sub-Total			426
	BIKE SPACES REQU	JIRED-Blocks 1,2,3,4	
	Apartments (Blocks 1&2)	
Unit type	no. of units	space required	Total
1 bed	48	1	48
2 bed	56	2	112
3 bed +	0	3	0
0.5 per unit (visitors)	104	0.5	52
Sub-Total			212
		OVERALL TOTAL	638

Table 11 | Proposed Development - Cycle Parking Requirement.

Document Reference: 21-055r.010 Travel Plan

5.2.4 Cycle Parking Proposed

The number of bicycle parking spaces projected to serve the proposed development is presented in *Table 12* below.

Dunley Tarresse	
Duplex - Terraces	
	Total
Bicycle Parking	392
Visitor Bicycle Parking	80
Cargo Bike Parking	28
Visitor Cargo Bike Parking	52
Sub-Total	552
BIKE SPACES PROVIDED-BIO	cks 1 and 2
Apartments (Blocks 18	§. 2)
	Total
Bicycle	232
Visitor Bicycle	66
Cargo bike	8
Visitor Cargo Bike Parking	20
Sub-Total	326
OVERALL TOTAL	878

Table 12 | Cycle Parking Provided

A total of 878 cycle parking spaces will be provided for the Proposed Development, inclusive of 624 residential cycle spaces, 146 visitor spaces, 36 cargo spaces and 72 visitor cargo spaces. Approximately 40% of the cycle spaces shall accommodate EV charging therefore 347 secured EV charging spaces will be provided (308 secured EV charging spaces for bicycles and 39 secured EV charging spaces for cargo bicycles). Refer to architectural drawing 6268-P-008 or Figure 19 of this report.

Adequate provision has been made for cycle parking space since the required minimum of 638 cycle parking spaces has been surpassed.

5.3 Parking Review

The figure below is an extract from the architectural drawing 6268-P-008 which depicts the various parking allocations for the Proposed Development.

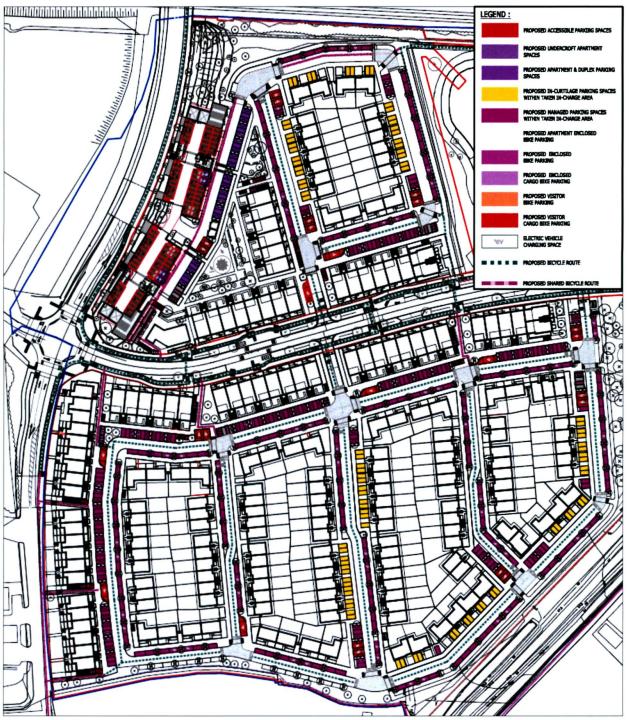


Figure 19 | Proposed Parking Strategy Plan

The proposed developments on-site car parking spaces will remain within the control of the appointed management company.

It considered that the proposed provision of 538 car park spaces and 878 bicycle parking spaces, at the proposed development is appropriate due to the following:

- High quality and frequent public transport services available in close proximity to the subject site (9-minute walk,750m to the closest bus stops);
- A much higher cycle parking provision is proposed compared to the development plan minimum requirement thereby ensuring travel by bicycle to / from the subject development site is a viable mode of travel;
- The availability of car share vehicles in the locality in addition to the provisions of a residents dedicated GoCar vehicle (9-minute walk,750m to the closest GoCar);
- According to the Census in 2016, there are low levels of car ownership in residential area in close proximity to the Proposed Development (1.44 per unit section 4.1 of this report);
- The existence of a robust and achievable Travel Plan encouraging sustainable travel modes;

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 Clonburris, Adamstown, Co. Dublin to work, especially during network peak periods;
- (c) To encourage the development of more sustainable transport modes for trips to and from Clonburris, Adamstown, Co. Dublin.
- (d) To increase the percentage of persons choosing to walk, cycle or travel by public transport to and from Clonburris, Adamstown, Co. Dublin instead of driving;
- (e) To create an alliance with South Dublin County Council, providers of public transport, and tenants/owners of other major developments to promote a sustainable transport network in the Clonburris, Adamstown, Co. Dublin.

In pursuance of achieving these objectives, targets for residents have been set for the future year of 2026.

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 at Clonburris, Adamstown, Co. Dublin 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 census data for the neighbouring residential area to the surrounding the site has been consulted to obtain information regarding car ownership. The survey recorded that the population of 9413 people living in these Small Areas had a cumulative car ownership of 3919 vehicles, equivalent to 1.44 cars per residential unit. The details of the census can be found in Appendix C of the TTA.

The census data was consulted further to obtain information regarding modal split to work, school or college. The modal split is illustrated in *Figure 20* below.

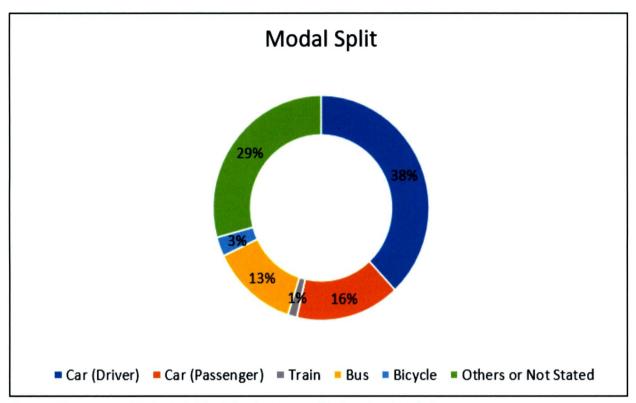


Figure 20 | Census 2016 Modal Split for Journey to Work, school or College

Census 2016 recorded that 54% of trips were by car, 1% by train, 13% by bus, 3% by cycle and the remaining 29% by walking/other or were not stated.

With the introduction of the additional Luas links, Dublin Bus + Bus Connects Routes, additional bridge, local streets and cycle routes proposed in the GDA Cycle Network Plan in 2042, it is anticipated that there will be a large shift away from cars and towards rail or bus with cycling supplementing these modes of transport.

7. Conclusion

This Travel Plan has been prepared in support of a planning application for a residential development in Clonburris, Adamstown, Co. 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 GDA Transport Strategy 2022 - 2042; 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

