

3.4 Sustainable Movement & Transport

3.4.1 Introduction

Since the original 2006 Woodbrook-Shanganagh LAP, the strategic transport planning policy context has changed considerably with the emergence of a series of higher level policy and guidance documents, as well as new state agency structures and responsibilities, including the National Transport Authority (NTA) and Transport Infrastructure Ireland (TII).

The key policy documents emerging since 2006 include, inter alia:

- Government's 'Smarter Travel - A Sustainable Transport Future', (2009) and
- 'National Cycle Policy Framework 2009-2020';
- 'Transport Strategy for the Greater Dublin Area 2016-2035' (NTA) and the
- Accompanying 'Integrated Implementation Plan 2013-2018'; as well as the
- NTA's 'Greater Dublin Cycle Network Plan' (2013).

Although the over-arching transport objectives of the previous LAP remain robust and valid in terms of promoting a sustainable residential community predicated on (i) the proximity of the planned DART Station and (ii) walking and cycling as sustainable modes of transport, - certain aspects, relating to the strategic road network and wider infrastructure delivery, need to be revisited in the current context.

In this regard, it is essential to clarify that contemporary studies in the environs of the Plan Area currently being advanced by agencies with responsibility for transport infrastructure delivery and funding, - namely the NTA and TII - will, when completed, take precedence over the former North Bray & Environs Land-Use & Transportation Study (NBE LUTS).

Having regard to the above, the Council will actively seek to secure the elements of the movement strategy for the Plan Area which are within its remit, through the development management process or otherwise, and will also liaise and co-operate with stakeholders to facilitate and expedite more strategic level transport infrastructure to be provided by agencies such as the NTA / TII.

3.4.2 Assets & Existing Transport Context

The Woodbrook-Shanganagh LAP Area generally benefits from good access to both National and Regional road networks and is well-served by public transport in the form of Dublin Bus and (in the near future) the DART services (See Map 7, Section 2.5).

In terms of recreational routes, there are existing internal pedestrian / cycle routes within Shanganagh Park and although these provide a connection to the beach at one access point, there is, generally, a lack of connectivity to the wider environs outside the Park.

3.4.3 Challenges & Opportunities

The Woodbrook-Shanganagh LAP presents a real opportunity to achieve a modal shift from the private car to other sustainable transport modes such as walking, cycling and public transport. The challenge will be to secure early and timely delivery of key connections and strategic public transport elements - such as the DART Station - so to establish behaviour change from the outset.

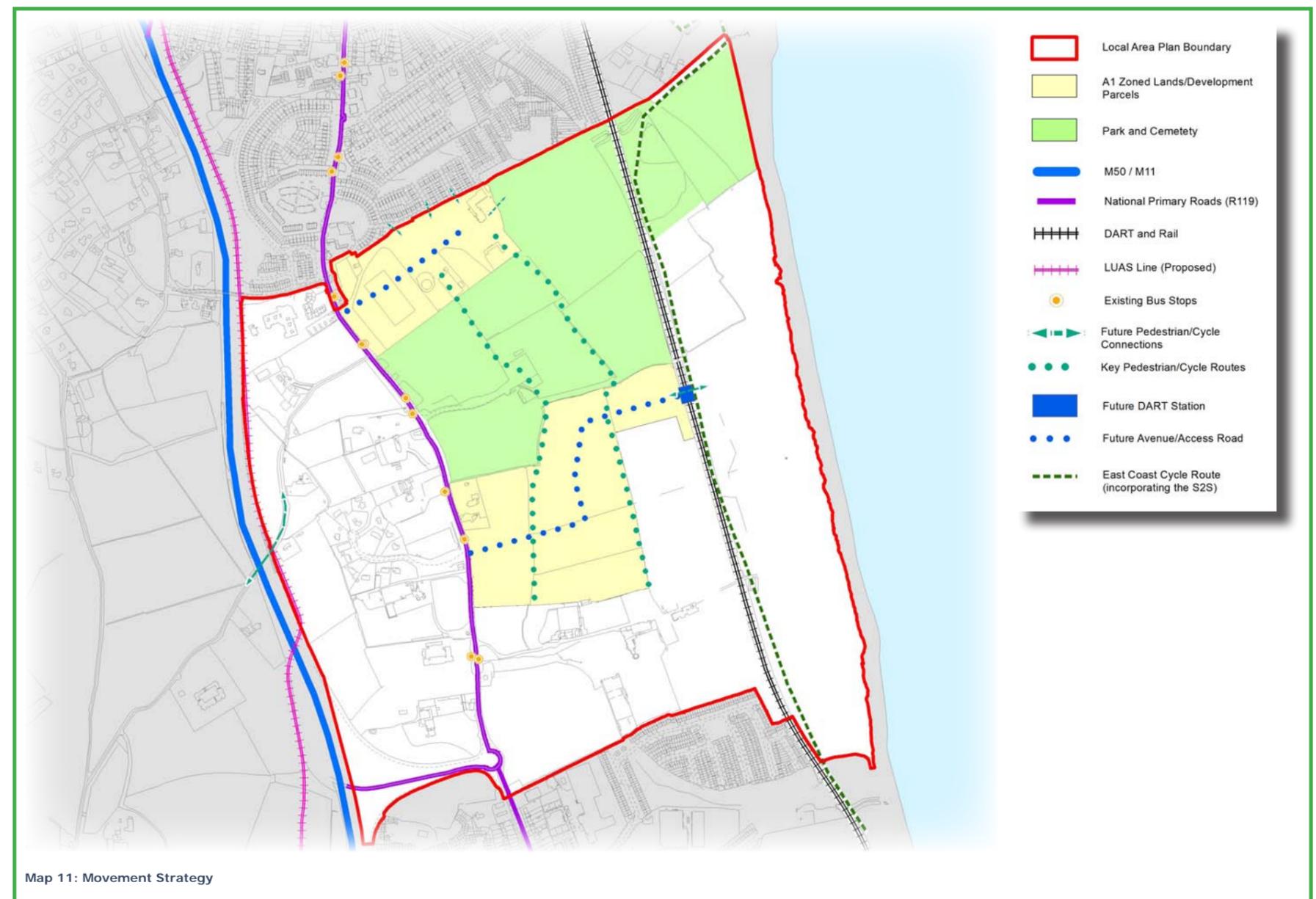
Shanganagh Park, straddling the two development parcels, creates the opportunity for a relatively fine grain of pedestrian and cycle routes to achieve a good level of permeability and connectivity between the sites and to key facilities such as the DART Station and Neighbourhood Centre. However, the actual DART Line and M11 Motorway Corridor create severance and barriers to east-west movement in terms of recreational routes to the wider area and linkages to the Green Infrastructure Network.

Notwithstanding a potential shift towards more sustainable modes of transport, car ownership levels are, nevertheless, likely to remain high to

cater for occasional use and particularly for families. This in turn impacts on car parking requirements and consequently density levels. A key challenge will be to effectively control parking provision as a travel demand management measure.

3.4.4 The Way Forward

In essence, the movement strategy for the LAP is to prioritise walking and cycling in an environment that is safe, pleasant, accessible and easy to move about within the neighbourhoods, and where journeys from and to the new development area are predominantly by sustainable means of travel. Accordingly, it will be important to improve overall connectivity to public transport, but also interconnectivity between different forms of public transport. The key elements to deliver on this movement strategy for the LAP Area are set out below (See Map 11):



i. Walking & Cycling

The ambition is to promote walking and cycling as the predominant modes of transport for commuting, short utility or local trips, trips to schools and recreational trips in the new sustainable community at Woodbrook-Shanganagh. This approach accords with the policies and imperatives set out in Government's Smarter Travel, the NTA's Strategy and the County Development Plan (Policies ST2-ST7).

On this basis, the framework strategy for Plan Area seeks to maximise permeability and connectivity for pedestrians and cyclists so as to create direct and attractive routes to key points of interests from within each of the development parcels, namely, the Neighbourhood Centre; the school site; the DART Station; civic spaces and recreational amenities. The Green Axis and Linear Park are examples of amenity spaces that will also function as pedestrian and cycle routes. It is also a key objective to secure pedestrian and cycle links between the two development parcels via a number of corridors through Shanganagh Park (See Cycle & Pedestrian Routes Map).

The characteristics of the Plan Area are ideal to achieve a modal split in favour of walking and cycling, with the centre point of each development parcel only 300m from the Dublin Road (Bus Stops) or circa 900m from the furthest or eastern extremity of each site (Shanganagh Castle & DART Station). Equally, the connecting routes between the two sites and key facilities within are all below the 1km threshold (See Cycle & Pedestrian Routes Map).

The following are the key pedestrian and cycle links to be provided in the LAP Area:

Table 7: Pedestrian and Cycle Links

No.	Description	Proposed / Existing
1	Dublin Road (N11 Primary Radial Route)	Existing & Proposed
2	Shanganagh Park (Perimeter Route to Coastline)	Existing
3	East Coast Cycle Route (DART Line & Linear Park)	Proposed
4	Dublin Road / Shanganagh Castle	Proposed
5	Shanganagh Castle / DART Station	Proposed
6	Green Axis (North / South Woodbrook Site)	Proposed
7	Central Avenue Shanganagh Castle (DMURS)	Proposed
8	Main Avenue Woodbrook (DMURS)	Proposed

As part of the development management process, proposals for new development in the Plan Area must demonstrate how the proposal positively contributes to the emerging network of pedestrian and cycle linkages within the Plan Area and also how it may contribute to improved linkages to-and-from the County Cycle Network and / or the Greenways associated with the Council's Green Infrastructure Strategy, as well as the NTA's Cycle Network Plan for the Greater Dublin Area, where applicable.

In particular, close examination should be given to the potential for connections to the National East Coast Trail Cycle Route and the N11 Radial Cycle Route (UCD to Corbawn Lane, Shankill via Wyattville Road).

ii. Public Transport

a. Woodbrook DART Station

The creation of a compact sustainable residential community at Woodbrook-Shanganagh is essentially predicated on the provision of the planned DART Station at Woodbrook providing direct access to the Suburban Rail Network and wider heavy rail network as defined in the NTA's Transport Strategy for the Greater Dublin Area.

Section 5.2.5 of the NTA's Strategy relates to the DART Expansion Programme, stating that additional rail stations will be provided over the period of the Strategy. Woodbrook is one such site identified as a likely location on the South-Eastern Line.

The Council will actively promote the provision of a DART Station at Woodbrook to serve the two development parcels within the Plan Area, as well as the surrounding established suburban areas. It will also seek early delivery of the planned DART Station so as to establish sustainable commuting and travel patterns at the outset and to this end, the Council will liaise with the NTA and / or other statutory agencies to front-load this key infrastructure element, which could potentially be delivered within a 3 year timeframe.

b. Parking Facilities at DART Station

The Council will seek provision of a temporary surface car park facility - to accommodate up to circa 150-200 car spaces – to be delivered in tandem with the new DART Station on A1 Zoned lands within the LAP.

The temporary car park facility is to be provided in close proximity to the DART Station. This facility will support higher patronage levels and viability of the DART Station pending the comprehensive development of the new residential neighbourhoods at Woodbrook and Shanganagh Castle. The temporary parking facility may be provided until such time as proposals emerge for a possible longer term solution, or as otherwise to be agreed by the Planning Authority, in consultation with the NTA.

The Council is cognisant of the fact that the NTA's Strategy for the Greater Dublin Area, identifies Woodbrook as a possible location for a strategic Park and Ride facility – as in a suitable locale where rail services intersect with the national road network, adjacent to, or outside of, the M50. To this end, the Council will ensure that delivery of the LAP Development Strategy and /or Objectives will not preclude future provision of a strategic Park and Ride facility in the immediate or wider environs of the Plan Area. Any such provision will be subject to the process set out below.

The Council will also seek to ensure that the County Development Plan is consistent with the NTA's 'Transport Strategy for the Greater Dublin Area 2016-2035', having regard to the fact that the NTA's Strategy post-dated the adoption of the 2016-2022 Dún Laoghaire-Rathdown County Development Plan.

Accordingly, the Council will, as part of the statutory process for the preparation of a new Development Plan, (or as a Variation to the Development Plan), whichever may be most appropriate, give consideration to the inclusion of a Specific Local Objective (SLO) to support the NTA's Strategy in terms of promoting a strategic Park & Ride facility either in the Woodbrook Area or in the environs thereof.

c. Luas Extension (Line B2)

The NTA's 2016-2035 Transport Strategy for the Greater Dublin Area makes provision for extension of the Luas Green Line from Cherrywood to Bray Environs as part of the longer-term strategy for Light Rail Network, and this in turn is reflected in the Dún Laoghaire County Development Plan 2016-2022.

The Transport Strategy advises that, whilst a decision on the final alignment has yet to be made, it is likely to run from Cherrywood via Shankill and the former Bray Golf Club lands with a terminus point close to Bray DART Station. This is the alignment as shown on the County Development Plan Maps (Maps 10 & 14). For the purposes of the Plan Area the route alignment traverses the M11 at Shankill and then southwards along the eastern side of the M11 on lands currently zoned as greenbelt (Zoning Objective GB).

The alignment is such that there may be potential for provision of a Luas Stop at, or in the vicinity of, the southern fringes of Shankill, which would in turn connect the Plan Area to the major employment centres and retail destinations along the Luas Line, namely, Cherrywood, Sandyford and Dundrum. In this way, the eventual extension of Luas could potentially, afford a remarkably high level of public transport accessibility to the new residential neighbourhood at Woodbrook-Shanganagh.

It is acknowledged, however, that any extension of the Luas from Cherrywood will be contingent on, and subsequent to, the Luas Green Line being upgraded to Metro in order to provide the necessary passenger capacity, as set out in the NTA Strategy. Accordingly, the Luas Extension is envisaged as a medium-to-longer term element of the NTA Strategy.

d. Bus Infrastructure

The LAP Area is presently well-served by bus infrastructure with a number of Dublin Bus Routes providing access to the City Centre and Dún Laoghaire Town Centre. There is an existing Bus Priority Route along the Dublin Road which also connects the Plan Area to Cherrywood. Proposed Bus Priority Schemes for the area include an extension of the existing network to Old Connaught Avenue and also southwards along the Old Dublin Road to the Wilford Interchange at the County Boundary, and ultimately linking to Bray as identified in the NTA Strategy for the Greater Dublin Area. The existing and proposed bus network within and adjoining the Plan Area relate to, or comprise part of the Bray -N11 – UCD – Donnybrook Core Radial Corridor identified in the NTA Transport Strategy.



Photo 9: Bus Route - Dublin Road

The NTA has commissioned an on-going study to establish the requirements for any improvements on 10 Radial Core Bus Corridors in the Dublin Region, of which the Bray to UCD Core Bus Corridor is one. It is envisaged that the findings of the study, which will be issued as a draft report in the near future and may incorporate proposals specifically in relation to the Dublin Road / LAP Area (March 2017). The Council will work closely with the NTA to facilitate implementation of any proposals arising from the study.

The Core Bus Network represents the most important bus routes in the Region and are generally characterised by a high frequency of bus services, high passenger volumes and with significant trip attractors along the route. This Core Network is supplemented by other bus services operating on lower frequencies and on other routes.

An additional characteristic of the Core Bus Network as identified by the NTA Strategy is that it will provide greater opportunity for reliable and convenient interchange with heavy rail and light rail services. In this regard, the Council will seek to secure interchange facilities with the future DART Station and, as a longer-term potential option, any future Luas Stop within the Plan Area or immediate vicinity.

Having regard to the close proximity of the two development parcels to existing bus stops along the primary Dublin Road corridor, bus access within and between the two parcels will not generally be necessary. However, it is considered appropriate to allow for bus access to facilitate a public transport interchange at the DART Station.

e. Public Transport Interchanges

The County Development Plan (Table 2.2.4) identifies an interchange between Suburban Rail (DART) and QBN (Quality Bus Network) at Woodbrook, as one of primary public transport interchanges to be developed in the County during the lifetime of the Plan.

A Woodbrook interchange facility should comprise of a bus lay-by and taxi-drop off, complemented by safe and secure cycle parking facilities as per the NTA's Cycle Manual, as well as accessible walking routes, all set in a high quality and attractive public realm context.

iii. Travel Demand Management

Notwithstanding the importance of transport infrastructure, with the emphasis on pedestrian, cyclist and public transport infrastructure, the Council also acknowledges the importance of Travel Demand Management as an important tool to manage and cater for people's travel needs rather than simply providing more physical capacity for travel, such as roads.

This LAP ensures the dedication of road space to pedestrians and cyclists as part of the 'Design for Manual for Urban Roads and Streets' (DMURS), in addition to cycle and pedestrian routes. The Plan also promotes and actively encourages the provision of necessary supporting infrastructure for operation of car-clubs which work on a short-term hire basis and reduce the need to own a car and consequently the need for car storage or parking requirements. In addition, the Plan will seek the provision of electric vehicle charging points at on-street parking bays, and Park & Ride facilities as well as at homes / residential blocks.

To ensure the incorporation of effective travel demand measures, and ultimately the delivery of sustainable transport objectives, the Council will require the submission of Travel Plans for all residential and school developments in the Plan Area, as part of the overall development management process.

iv. The Road Network

The NTA's Transport Strategy 2016-2035 addresses the road network in the Greater Dublin Area in the context of a series of principles for road development which include, inter alia:

- that there will be no significant increase in road capacity for private vehicles on radial roads inside the M50 motorway;
- that any proposed road scheme is consistent with the NTA Strategy and Government policies related to transport;
- that the travel demand and development needs giving rise to any road proposal are in accordance with Regional and National policies related to land-use and development planning.



Photo 10: M11 Motorway

Two significant elements of the NTA Strategy pertaining to the road network relate to increased public transport provision in urban areas and implementing demand management measures to address congestion issues on radial National routes approaching the M50 Motorway to ensure that these routes retain sufficient capacity to fulfil their strategic functions.

In this regard, Transport Infrastructure Ireland (TII) published its 'M11/N11 Corridor Study (J4 M50 – J14 Coyne's Cross) - Needs Assessment Report' in April 2017, which has recommended a number of improvements to the M11/ N11 Corridor, including:

- Upgrading of the M11/N11 to 3 lanes to junction 8 (Kilmacanogue). This would be phased with 3 lanes as far as junction 6 (Bray Central) being prioritised.
- Improved connectivity between the M11/N11 to Bray with the provision of an additional bridge crossing over the River Dargle.

The proposals set out within the TII Corridor Study are indicative at this stage and subject to further detailed investigations, however, it does provide for measures that would benefit the Plan area as they would take pressures off the Local Road Network.

The County Development Plan 2016-2022 includes a number of Six-Year Road Objectives including the Dublin Road, Bray from the Wilford Interchange to the Wicklow County Boundary) and also the M11 Upgrade (M50 to Fassaroe).

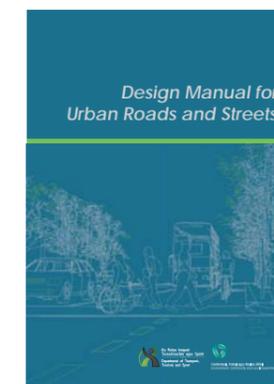
Dún Laoghaire-Rathdown Council will co-operate and liaise with the NTA and TII in relation to securing appropriate improvements to the road network within the Plan Area, and also the strategic National road network as it relates to the M11/ M50 Corridors in the wider environs of the Plan Area, having regard to the TII M11/N11 Corridor Study.

In relation to the local road network, it is considered that the proposed development will not impact significantly on the capacity of the roads network given that existing congestion associated with access to the M50 / Bray Exit occurs south of the Plan Area – the resolution of which will be dependent on upgrades to the M11 / N11 on foot of the TII Corridor Study.

Nonetheless, in the event of any road widening or road improvement scheme along the Dublin Road, the Council will seek to retain its sylvan character and to this end, will give consideration in the first instance to innovative design solutions which allow for retention of a significant proportion of the existing mature trees and historic boundary walls in situ. Design solutions may include the provision of publicly accessible pedestrian / cycle routes internal to the two respective development parcels.

In the event that road widening is considered necessary to meet the requirements of the NTA / TII, as may arise from the on-going Corridor Studies or otherwise, the Council will promote the planting of replacement semi-mature trees and re-instatement of any historic boundary walls or features, as appropriate. In addition, any loss of trees arising from essential road widening will be mitigated by proposed new tree belts to be provided to a substantial depth along the road frontage in each of the development parcels and as part of Master Plan proposals for Shanganagh Park.

For Shankill Village, the existing traffic levels act as deterrent for through traffic and it is envisaged that any northbound road traffic originating from the Plan Area will likely access the N11/M11 Corridor via the Wilford Interchange. Notwithstanding, there may be potential for further traffic calming measures to be implemented in Shankill Village. Consideration will also be given to opportunities to incorporate or align some village / public realm improvements with any traffic calming measures proposed. In order to establish the traffic needs of Shankill Village, a Traffic Management Plan will be produced having regard to any potential future impacts deriving from the traffic generated from the Plan area. Any such proposals will most likely be subject to a separate non-statutory consultation process.



DMURS (2013)



NTA Transport Strategy 2016

v. Design Guidance

New development in the Plan Area will be required to maximise permeability and connectivity for pedestrians and cyclists in order to create direct attractive links to adjacent road and public transport networks - all in accordance with the Urban Design Manual – A Best Practice Guide, (2009) and ‘Design for Manual for Urban Roads and Streets’ (DMURS), (2013). DMURS sets out a holistic approach to the design of urban streets in cities, towns, suburbs and villages. It assigns a higher priority to pedestrians and cyclists and as such underpin an attractive, safe and sustainable residential neighbourhood.

3.4.5 Policy and Objectives

Policy WS4: It is the Policy of Dún Laoghaire-Rathdown County Council:

To promote sustainable transport forms such as walking, cycling and public transport as set out in the Government’s ‘Smarter Travel – A Sustainable Transport Future 2009-2020’ and to support planned infrastructure that prioritises public transport, as well as new cycling and pedestrian interconnections to key public transport nodes, school and amenity destinations in the Woodbrook-Shanganagh LAP Area and wider environs.

It is an Objective of Dún Laoghaire-Rathdown County Council:

T1:	To promote sustainable transport forms such as walking, cycling and public transport as set out in the Government’s ‘Smarter Travel, A Sustainable transport Future 2009-2020’.
T2:	To promote the provision of a DART Station at Woodbrook as set out in the National Transport Authority’s (NTA) ‘Transport Strategy for the Greater Dublin Area 2016-2035’ and the County Development Plan 2016-2022 Objective (SLO 127) and to ensure that the DART Station is designed in a manner to accommodate a pedestrian over-bridge in the interest of permeability and enhancing access to the lands to the east.
T3:	To seek early delivery of the planned DART Station in order to establish sustainable commuting and travel patterns at the outset as an integral element of a newly emerging sustainable community.
T4:	To provide for a public transport interchange between Suburban Rail (DART) and the Quality Bus Network (QBN) at the planned Woodbrook DART Station
T5:	To provide for a temporary car park to accommodate up to 150-200 Car Parking Spaces in the immediate vicinity of the planned DART Station at Woodbrook.

T6:	To support the delivery of a Strategic Park and Ride facility within the Plan Area in accordance with the objectives of the NTA’s Transport Strategy for the Greater Dublin Area 2016-2035. The location of a Strategic Park and Ride will be dependent on the provision of a DART Station and on the implementation of the relevant recommendations of the TII Study of the M50 and N11 Corridor. The Local Authority will co-operate with the NTA to identify an appropriate location for a Strategic Park and Ride that will serve a wider catchment while protecting the amenities of the existing and new communities. A report and potentially an amendment to the County Development Plan regarding the Strategic Park and Ride may be brought to the Council for their decision over the life of this Plan as a Variation, or to be addressed in the next County Development Plan.
T7:	To co-operate with the National Transport Authority, Transport Infrastructure Ireland and Wicklow County Council in relation to on-going corridor studies in respect of the Dublin Road Core Bus Corridor M11 / N11 which will inform potential road infrastructure improvements and public transport provision both in the Plan Area and the wider environs.
T8:	To seek to retain the sylvan character of the Dublin Road in any road improvement schemes and to ensure that any loss of mature trees will be mitigated by replacement tree-planting with consideration also to the re-instatement of any historic walls or features along any new road alignment.
T9:	To provide for high quality pedestrian and cycle network within the LAP Area with high levels of permeability, passive surveillance and supervision where feasible and to ensure that this network will provide attractive, legible and direct links to the Neighbourhood Centre, the DART Station, Bus Stops, Shanganagh Park and the wider area outside the Plan Boundary.
T10:	To ensure that all proposals for new roads, streets and residential layouts comply with the ‘Design Manual for Urban Roads and Streets’ (DMURS, 2013) which focuses on the needs of pedestrians, cyclists and public transport users.
T11:	To provide for safe and secure cycle parking at appropriate locations within the LAP Area and in particular close to recreational or community facilities, residential units, transport nodes, shops and services.
T12:	To provide pedestrian / cycle access across the M11 Corridor at Allies River Road as a longer-term objective (in conjunction with LUAS Line B2).

T13:	To promote the development of the National East Coast Trail Cycle Route, as relevant to the LAP Area and cognisant of facilitating connections to outside the Plan boundary and wider area.
T14:	To adopt a proactive mobility management approach and to encourage a culture of sustainable travel in the new residential neighbourhoods at Woodbrook-Shanganagh. Travel Plans will be required for large scale residential proposals and / or each of the key sites at Master Plan Level.
T15:	To support the set-up of Car Club Schemes in accordance with Policy ST23 of the County Development Plan 2016-2022 and in particular to facilitate the spatial provision or management arrangements as part of significant development proposals which incorporate locally based short-term car hire facilities or ‘car clubs’ for residents use as an alternative to car ownership.
T16:	To promote and provide for any future Luas Extension (Luas Line B2) in the Plan Area in general accordance with the route alignment as shown in the County Development Plan 2016-2016, and to actively seek the provision of a Luas Stop within the Plan Area or its immediate environs with consideration to a possible future public transport interchange, most probably with the QBN Route.