

Chapter 6 Infrastructure

6.0 Introduction

The requirement for the expansion of Dungarvan's public infrastructure is derived from both the development levels experienced in the Town up to 2008, and the estimated needs of the future development patterns in the Town. The achievement of an appropriate balance between infrastructure provision and land use zoning establishes an effective and efficient foundation for future capital investment in the Town.

Policy INF 1

To protect and where necessary enhance the quality of service infrastructure that will promote socio-economic development and environmental objectives in the Town, and improve the quality of life for its citizens.

6.1 Transport

As Dungarvan is a predominantly urban area characterised by a close network of medium to densely populated areas, the National, Regional and Local roads provide the physical connections that are essential to meet the daily transport requirements of its citizens. The main connections to National and international travel are available to both the east and west of Dungarvan through Waterford and Cork rail, airport and ports.

6.2 Road Network

National Routes are major long distance through routes that provide the connections between Dungarvan and its surrounding counties, cities, towns and air/sea port facilities. The N25 forms the main national route to and from Dungarvan traversing through the outer bounds of the town centre area. There are 3 Main Regional Roads feeding the Town and they represent the next tier in the road hierarchy. Local Roads make up the third tier in the road hierarchy and there are approximately 30km of such roads in the Town.

The National Road network is under the remit of the National Roads Authority, whilst the Council is responsible for the maintenance and extension of both the Regional and local roads.

Requirements with regard to Road Safety Audits and Traffic Impact Assessments are set out in Section 10.2.3 of the Town Development Plan.

Objective INF 1

It is an objective of the Council to protect the carrying capacity of the National Road and associated junctions in the interest of road safety.

6.2.1 National Route

The National Development Plan 2007 – 2013 identifies several key routes as strategic route corridors (e.g. Atlantic Road Corridor), and the continued development of these roads is essential for the future socio-economic development of the Town. As per the National Policy Transport 21, Dungarvan Town Council will generally not permit, (apart from the exceptions set out in Section 10.2.1 of Chapter 10 Development Standards), any development which requires direct access onto a National Route in an area where the maximum speed limit applies and in transition zones. However, the location of new National Road access points for residential, commercial, industrial or other development uses are open to consideration in built-up areas where speed limits of 50-60kmph apply, taking into consideration preserved route corridors as set out in the *Zoning Map* as Road Reservation, RR. Sightline requirements for National Roads are set out in Section 10.2.4 of this Plan. Given safety requirements, no reductions in sightline requirements will be permitted on National Roads.

6.2.2 Regional Routes

These roads serve as the spine routes through the town linking all areas whilst also acting as feeder routes to the National Road and coastal drives. In recognition of the strategic importance of this road network to the future development of the Town the carrying capacity and safety of Regional Roads will be protected as far as is practicable through the imposition of restrictions on new access points. Exceptions to the restriction of new access points onto Regional Roads are set out in Section 10.3.2 of Chapter 10 Development Standards. Appendix A5 sets out the Schedule of Regional Roads in the Town. Sightline requirements for Regional Roads are set out in Section 10.2.4 of this Plan. Given safety requirements, no reduction in sightline requirements will be permitted on Regional Roads.

6.2.3 Local Roads

These roads make up over the highest percentage of the Town's road provision, and provide the vital connections between communities, facilities and places of work, which are fundamental to the operation of daily life within the Town. In general, the principle of accessing appropriate development from local roads is acceptable to the Planning Authority subject to the site suitability criteria and road safety considerations as set out in Sections 10.2.2, 10.2.3 and 10.2.4 of Chapter 10 Development Standards.

Policy INF 2

To protect the efficient and safe operation, and facilitate the ongoing development of National, Regional and Local Roads throughout Dungarvan in accordance with the National Development Plan 2007-2013 and Transport 21. The Planning Authority shall have regard to the Spatial Planning and National Roads (Draft) Guidelines for Planning Authorities and any subsequent guidelines on road planning that may be issued from the DoEHLG or the Department of Transport during the lifetime of this Plan. The Planning Authority shall consult with the NRA in the preparation of any Masterplan which may affect the carrying capacity of a National Road.

6.3 Major Road Development Proposals

In seeking to consolidate and improve the Town's existing roads whilst also further expanding the network, the Council propose the following development works subject to the availability of funding:

- Monang Road Realignment and Improvements
- Lisfennel Road Realignment and Improvements
- Coolagh link Road
- Fairlane to Shandon link Road
- Smarter Travel Development programme

These proposals seek to improve connections to the Towns Road network, and combined with appropriate traffic calming measures will also enhance safety levels and relieve areas of traffic congestion. Dungarvan Town Council supports the Cork/Waterford Atlantic Corridor.

Other road developments will be considered on a needs basis and will be developer driven. The road infrastructure in this instance will be delivered along with other appropriate services prior to development in order to sustainably provide for said development.

Objective INF 2

Subject to appropriate funding the Council will continue to maintain and improve where possible the Regional Roads through the Town.

Objective INF 3

It is an objective of the Council to support major improvements by reserving such corridors of any such proposed routes free of developments that would interfere with such improvements.

6.4 Traffic Management

Investment by the Council in traffic management infrastructure will result in reductions in traffic congestion, vehicle speeds and accidents, whilst also promoting both walking and cycling. To ensure the achievement of these benefits, the Council promotes the use of appropriate traffic calming measures, parking byelaws, an improved public transport system and enhanced pedestrian/cyclist facilitation. Appropriate setback reserves will facilitate future traffic calming measures whilst also enhancing cyclist and pedestrian provision.



Cyclist Pedestrian Signage

6.5 Parking

The Council proposes to improve, maintain and diversify public car parks, subject to funding availability, during the Plan period. The provision of facilities for all users is seen as fundamental to the encouragement of sustainable transport initiatives. The Smarter Travel objectives, subject to funding, will lead the way in achieving those aims. The Council will also use car parking management options such as short term car parking, limited period free parking, business parking, school set down zones, bike parking, goods delivery parking, electric vehicle parking/charging points, etc, to optimise the use of public car parking spaces, where appropriate.

The parking requirements for private developments are set out in Section 10.56 of Chapter 10 Development Standards.

Policy INF 3

To ensure the adequate provision of off-street vehicle/ bicycle parking in urban areas to meet the needs of local residents, shoppers, workers and businesses.

6.6 Transport Modal Split

The National Spatial Strategy, the Regional Planning Guidelines, Transport 21, and the National Cycle Policy Framework seek to develop a sustainable transportation system which reduces travel times and fuel consumption. Whilst constant factors such as our temperate climate and largely rural based society have maintained our over-reliance on the private motor vehicle, other more recent factors including the improved road network, a growing population, higher incomes and a lack of appropriate public transport alternatives have further increased this dependency. Analysis of Central Statistic Office figures illustrate that private motor vehicle usage for travel to work in Waterford increased from 75% in 2002 to 77.9% in 2006 and Nationally from 70% to 71.4%, whilst all other modes of transport have experienced decline.



Cyclist Signage

Means of Travel	Waterford		% Change	State
	2002	2006		2006
Private Vehicle	75.0%	77.9%	2.9%	71.4%
Walk	13.2%	12.0%	-1.2%	11.0%
Cycle	1.5%	1.3%	-0.2%	2.1%
Bus	2.5%	2.3%	-0.2%	6.1%
Train	0.4%	0.1%	-0.3%	3.0%
Motor Cycle	1.3%	0.7%	-0.6%	0.7%
Work at Home	6.1%	5.7%	-0.4%	5.7%

*The statistics where mode of transport was 'not stated' or 'other' have not been included.

Table 6.1 Modal Split of Travel to Work 2002 - 2006

The modal split in the County is becoming increasingly unsustainable and a greater balance of transport modes must be achieved through the promotion of improved public transport service

provision and enhanced integration between transport modes. The requirement for this is further underlined by the fact that 60.5% of all persons in Waterford in 2006 lived more than 2km from their place of work.

Policy INF 4

To support and co-operate with public and private transport operators in the provision of an effective, attractive and sustainable transport service and in the development of key infrastructural requirements such as accessible bus set-down locations in appropriate urban locations.

6.7 Public Transport**6.7.1 Bus Eireann Services**

Bus Eireann operates a service linking Dungarvan with the cities of Cork and Waterford. There are services from Waterford and Dungarvan to Youghal, Midleton and Cork City, with onward connections to Killarney and Tralee. Likewise there are hourly services from Dungarvan to Waterford with onward connections to Dublin, Limerick and Wexford.

Policy INF 5

To support the extension of the public bus services, especially in linking the outer urban areas, by seeking the provision of public transport infrastructure, such as bus stops, shelters, etc as part of new developments.

6.7.2 Private Bus Operators

The Department of Transport's Register of Licensed Road Passenger Transport Operator includes 37 such operators for County Waterford. Whilst the majority of these operators provide non-scheduled services, at present 5 of these provide 9 designated bus routes in the County, in conjunction with scheduled links to Youghal, Wexford and Dublin Airport.

Policy INF 6

To support public and private bus operators in the provision of a well functioning, integrated public bus network, which enhances Dungarvan's competitiveness, encourages economic improvement, promotes balanced regional development and contributes to social inclusion.

6.7.3 Non-Scheduled Transport Services

There are 581 privately owned public service passenger vehicles operating in Waterford consisting of 183 buses, 260 taxis, 83 hackneys and 55 limousines. At present 11.5% of the taxis operating in the County are wheelchair accessible which is greater than the National average of 7.5%. However, on a per capita basis the number of taxis and hackneys operating in Waterford is below the National average.

Policy INF 7

Dungarvan Town Council will support and maintain the provision of taxi rank facilities during the lifetime of the Plan.

6.8 Rural Transport

The Déise Link Community Transport Service was established under the Rural Transport Programme in 2001 and seeks to promote social inclusion through the provision of a door-to-door accessible and affordable rural transport service. Déise Link operates 16 rural transport routes providing an essential link for persons living in rural areas to service centres such as Dungarvan. The demand for the service is evident in the large numbers of persons using it (46,000 persons in 2008).



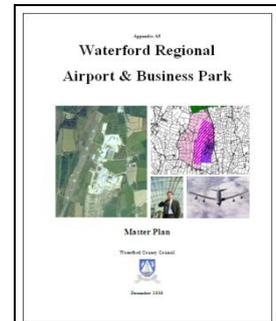
In recognition of the importance of improving the accessibility of the Town to and from rural locations, the Council supports the extension of the Rural Transport Programme throughout the County during the lifetime of the Plan. To assist and compliment the Programme and other such initiatives which respond to local travel needs, the Council will seek to enhance the facilitation of improved or new infrastructure as may be required. The appropriate co-locating of transport service provision at these bus stops will be encouraged by the Council where practicable.

Policy INF 8

To support the Rural Transport Initiative and the provision of an integrated public transport system as a means of reducing social isolation and as a viable long-term sustainable public transport option.

6.9 Waterford Regional Airport

Waterford Regional Airport is located approximately 9km to the south east of the Gateway City of Waterford. The airport is a key gateway to Ireland's south east and the availability of its convenient and increasingly frequent air services is making a growing contribution to the facilitation of both tourism and business activities in the region.



6.10 Smarter Travel

Smarter Travel – A Sustainable Transport Future (2009) is a new transport policy for Ireland covering the period 2009-2020. It sets out five key goals:

- To reduce overall travel demand;
- To maximise the efficiency of the transport network;
- To reduce reliance on fossil fuels;
- To reduce transport emissions; and
- To improve accessibility to transport.

The policy is aimed at reversing unsustainable travel patterns through the promotion of walking, cycling, car pooling etc. Furthermore the policy is focused on improving the environment and people's quality of life through the associated health benefits of sustainable modes of transport.

Cycle facilities shall be incorporated into the design and layout of developments schemes as appropriate including road schemes and development schemes in accordance with the National Cycle Policy Framework, Department of Transport 2009, and any subsequent documents to be released on foot of same, providing guidelines and standards.

Dungarvan, through its bid in the Smarter Travel area competition, has set out its own blueprint, *GoDungarvan*, for the integrated and sustainable delivery of a smarter travel future for the Town. Both behavioural change and infrastructural improvement/development in an integrated approach to establish the town as a smarter travel area has been drafted. The plan sets out the actions to be implemented over a five year period subject to the appropriate funding streams coming available.

Policy INF 9

To implement the smarter travel policy framework as produced by the Department of Transport in conjunction with the GoDungarvan Smarter Travel blueprint for the Town and to encourage the sustainable creation of cycle and pedestrian friendly communities through the provision of cycle paths and other initiatives to curtail the dependency on private motor vehicles whilst seeking to minimise the depletion of the hedgerow resource that could potentially arise from cycle path provision.

Objective INF 4

It is the objective of the Council to support the policies of the 'National Cycle Policy Framework 2009-2020-Smarter Travel', Department of Transport, April 2009 while ensuring that any environmental effects of the implementation of the policies are fully assessed and adequately mitigated.

Objective INF 5

It is the objective of the Council to promote the sustainable development of safe and convenient pedestrian and cycling facilities in the towns and villages, to minimise the dependence on private motor vehicles, and to encourage an active and healthy lifestyle. New and upgraded road developments will be encouraged to integrate cycle lanes. These will include urban development's and short distance routes.

Objective INF 6

Require planning applications for residential, commercial, retail, community, educational and industrial developments to demonstrate the proposal's accessibility for pedestrians and cyclists. The Council will also seek the provision of appropriate, well-designed pedestrian ways for residential development proposals to link with amenities and facilities. Such proposals shall adhere to the Guidelines on Sustainable Residential Development in Urban Areas and Urban Design Manual (DoEHLG May2009).

6.11 Cycling and Pedestrians**6.11.1 Cycling**

Cycling is an environmentally friendly mode of transport which can help create a healthier population, safer communities and reduce traffic congestion. As such, provision for cyclists is an essential element of any integrated transport system. The National Cycle Policy Framework and the Cycle to

Work Scheme launched by the Government in 2009 further emphasises this requirement, and is in line with the National sustainable development strategy, '*Sustainable Development – A Strategy for Ireland*', which identifies the need for the increased provision of cycle lanes. The Council supports the extension of a cycle path network to the towns and villages throughout the County. Studies will be undertaken during the life of the Plan to investigate the potential for the development of cycle lanes between settlements with the concept of developing a broader cycling network. Further provision of cycle lanes and bicycle parking will be ensured through the application of the policies as set out in Chapter 10 Development Standards, Sections 10.5, 10.10 and 10.56.

6.11.2 Pedestrians

Walking is the most basic form of transport and there are many environmental, health and socio-economic benefits associated with this activity. Central Statistic Office figures show that since 2006 there has been a slight decline in the numbers of people walking to work in the County. To enhance the provision for pedestrians in the town, setback reserves in accordance with the Dungarvan Smarter Travel blue print will be put in place and facilitate future traffic calming measures whilst also enhancing cyclist and pedestrian provision. Any future pedestrian developments should comply with the provisions of the Disability Act 2005 and the standards as set out in the National Disability Authorities '*Access for Everyone*' publication. Facilities for pedestrians and access facilities for people with special mobility needs will be improved in line with the aims of the European Charter of Pedestrian Rights (1988).

Policy INF 10

The Council encourages a high quality of design and layout proposals within urban areas, which strive for universal accessibility for pedestrians, to provide adequate and convenient access to public transport and reduce the dependence on the private motor car.

6.12 Water Services

Waterford County Council is responsible for maintaining, improving and extending the County's water supply, wastewater collection, treatment and drainage infrastructure whilst protecting and enhancing the natural environment.

6.12.1 Water Services Investment Programme

The Water Services Investment Programme (WSIP) 2010 – 2012 is the latest version of a rolling, multi-annual capital investment programme that commenced in 2000 for the provision of new and upgraded water supply and wastewater systems in Ireland. The WSIP is a three-year rolling funding plan for the provision of major water supply and wastewater infrastructure. Together with the Rural Water Programme, it plays a key role in:

- Preserving and protecting our water resources;
- Achieving good status in waters by 2015 and ensuring that water quality does not decline in any waters, in accordance with the Water Framework Directive;
- Meeting National and EU standards for drinking water and wastewater treatment;
- Putting critical infrastructure in place that will support economic and employment growth; and
- Prioritising water conservation works.

Scheme	Contract	RBD
Dungarvan Water Supply Scheme	Source Augmentation, Reservoir and Network	SE
Water Conservation Stage 3	Phase 3 Rehabilitation Works	SE/SW

Table 6.2 - Schemes/Contracts at Planning Stages 2010-2012

The Dungarvan Water Supply Scheme has been included for upgrading in the Needs Assessment 2009 report.

6.13 Water Supply

The Council provides a public water supply via a network of 108 water supply schemes throughout the County. The breakdown of the water volume extracted from the variety of sources is as follows:

Source	Waterford	National
Surface Water	75%	84%
Ground Water	21%	9%
Spring	4%	7%

To maintain and enhance the quality and volume of drinking water in the County (including the Town of Dungarvan), the Council continually monitors the supplies, whilst also engaging in both maintenance and capital projects.

Policy INF 11

The Council will comply with the European Communities (Drinking Water) Regulations 2007 and maintain and enhance the quality and volume of drinking water supply in the Town.

6.13.1 Water Conservation

Stages 1 & 2 of the National Water Conservation Programme have been completed by Waterford County Council and these stages introduced a Water Management System and Active Leakage Control to the water supply network on a County-wide basis. Stage 3 of the Programme relates specifically to Mains Rehabilitation for which the Council has prepared a detailed three-phase programme of works involving the upgrading and replacing of 101km of water supply mains. The Mains Rehabilitation Programme is prioritised in the Needs Assessment 2009 report. The Council will continue to implement a Water Conservation Programme and take measures to redress water leakage rates in the County and Town.

6.13.2 Water Pricing Policy

In accordance with the National Water Pricing Policy which came into effect in January 2007, the Council introduced a water supply and wastewater treatment charge for all non-domestic customers.

A major programme of metering of all non-domestic properties is now complete, and in line with the Polluter Pays Principle the full cost of the water supply and wastewater treatment service is levied on the customer. Domestic customers are exempt from the payment of such costs as this service is funded through the Local Government Fund.

Policy INF 12

To implement the Polluter Pays Principle with respect to non-domestic connections to water supply and wastewater schemes.

6.14 Wastewater Collection and Treatment

The Dungarvan and Environs Collection System and Wastewater Treatment Plant became operational in 2007 and enable the Council to conform to statutory EU/National environmental and public health standards. The WWTP at Ballinacourty has a population equivalent of 25,000 persons and treats the wastewater from Dungarvan, Abbeyside and Clonea/Ballinacourty. The plant is capable of modular expansion should the need arise.



Dungarvan & Environs and Tramore Wastewater Treatment Plants

6.15 Surface Water Drainage

Surface water run-off is the water flow which occurs when soil is soaked to full capacity and the excess water from rain or other sources flows over the land. It also occurs as rainwater run-off from roads, car parks, roofs and other non-porous surfaces. Research undertaken as part of the South Eastern River Basin District Project indicates that this run-off is a source of sporadic pressures placed on the water quality in the Region. To alleviate these water quality and flooding issues the Council will require that surface water be disposed of on site (where possible), and the on-site drainage infrastructure will subsequently regulate the rate of discharge to established water bodies.

In urban areas surface water is typically disposed of to the foul/storm sewer network. During periods of high rainfall, snow melt or high tides these networks may become overloaded and lead to incidences of flooding. To reduce the potential for overloading of these networks, the Council require that all new developments incorporate sustainable drainage systems, and adhere to current best practice in the design, construction and maintenance of same. Current best practice guidance on Sustainable Urban Drainage Systems (SUDS) is available from the Greater Dublin Strategic Drainage Study. Given the extreme flooding that has impacted many areas of Ireland in the last number of

years, it will be necessary to introduce stormwater attenuation as part of any SUDS system. It is recommended that attenuation systems be designed for a storm return period of 1-in-100 years. New developments should also minimise the areas of impermeable surfaces such as road, parking and patio surfaces and porous surface materials should be utilised where practicable.

In the case of one-off dwellings in rural areas that are unserved by a storm sewer network, or where the network has insufficient capacity to accommodate additional loading, surface water must be disposed of within the curtilage of the site through the use of appropriately sized soakpits.

Policy INF 13

The Council will require compliance with best practice guidance for the collection, reuse, treatment and disposal of surface waters for all future development proposals. Development proposals must demonstrate adequate water conservation, water quality protection, and surface water run-off rate regulation measures to prevent the increase of flooding issues in the catchment.

6.20 Waste Management

Waste management refers to the collection, transportation, processing and recycling/disposal of waste materials. The waste management issues in the South East may be, for the most part, attributed to the lack of appropriate licensed facilities, increased waste production levels, and the lack of suitable waste management behaviour. To tackle the mounting difficulties with waste in the Region a Joint Waste Management Plan for the South East Region 2006 was adopted. (Refer to Section 2.4.2 Framing Documents).



Refuse Collection Vehicle

Policy INF 14

To implement the 'Polluter Pays' principle with regard to the collection, treatment and disposal of waste.

Policy INF 15

To implement the plans, policies and objectives as set out in the Joint Waste Management Plan for the South East Region 2006, the National Waste Prevention Programme 2009-2012 and the EPA's National Hazardous Waste Management Plan at the Local Authority level.

Policy INF 16

The Council will facilitate the provision of civic amenity and bring sites in the town in co-operation with local communities as resources allow.

6.21 Telecommunications

Telecommunications development has been the key driver of the Irish economy over the last decade. The provision of a modern, efficient and reliable telecommunication network is vital for the economy to compete for jobs and investment in an increasingly global market place, and to provide the citizens with quality access to information, education and entertainment. Dungarvan Town Council recognises the importance of the continued development of the existing network, and will support and encourage a balanced spread of telecommunications infrastructure throughout the Town. In the consideration of proposals for telecommunication masts, antennae, and ancillary equipment developers will be required to submit details of:

- The potential for co-location of equipment on the existing mast infrastructure; and
- The visual impact of the proposed equipment on the natural and built environment, particularly in areas of sensitive landscape or cultural/historical importance.

Policy INF 17

The Council will facilitate proposals for the provision of telecommunication masts, antennae, underground infrastructure and ancillary equipment subject to normal planning considerations having regard to the DoEHLG publication '*Telecommunications Antennae and Support Structures - Guidelines for Planning Authorities*' (1996).

Objective INF 7

It is the objective of the Council to encourage the clustering and co-location of telecommunication masts, antennae or ancillary equipment and more favourable consideration will be given to their location near existing similar type structures.

Objective INF 8

It is the objective of the Council to ensure that where permission is granted for telecommunication masts that it will generally be for a temporary period not exceeding 5 years. This will enable the Planning Authority to review the situation considering changing technology and the effect of the

development on the amenities of the area. Subsequent applications may be for such longer periods as the Planning Authority may direct.

6.22 Broadband

Broadband is an always-on Internet connection that gives the users high-speed access and downloads for a flat rate monthly charge. Broadband infrastructure is a vital element in assisting development within Dungarvan. In this regard, a Metropolitan Area Network (MAN) has been established and is accessible within Dungarvan. To advance the economic and social development of the Town, the Council will support development proposals from both the private sector and community organisations for the provision of broadband infrastructure.

Objective INF 9

It is the objective of the Council to facilitate developers and utility providers in meeting the requirements for utility services such as telecommunications, gas and electricity. Pre-planning application discussions with providers of telecommunication and ESB structures are encouraged.

6.23 Energy

As an island nation on the periphery on Europe, Ireland requires a secure and reliable electricity supply that will support further economic development and enable us to compete for future foreign investment. Currently County Waterford is approximately 90-95% dependant on energy sourced from outside the County. In response to the greenhouse gas emission targets set for Ireland under the Kyoto Protocol, the National Climate Change Strategy 2007 – 2012 sets out a blueprint for the proposed way forward. The Council recognises that the increased utilisation of the indigenous energy resources in conjunction with the reduction in use of fossil fuels is imperative to developing a sustainable future for the people of Dungarvan. The Council's policies with regard to Renewable Energy are set out in Section 8.8 of Chapter 8: Environment and Natural Heritage.

Policy INF 18

1. To facilitate sustainable improvements in energy infrastructure.
2. To support and facilitate the future sustainable expansion of the natural gas pipeline.
3. To facilitate, where appropriate, future sustainable alternative renewable energy developments.
4. To collaborate with EirGrid in accordance with the Grid 25 Strategy to facilitate the sustainable delivery of quality connection, transmission and market services to electricity generators, suppliers and customers utilising the high voltage electricity system.