

CHAPTER 5
SUSTAINABLE TRAVEL
AND TRANSPORTATION

Chapter 5 Sustainable Travel and Transportation

Aim: To maintain and improve the effectiveness of the County’s road network, supporting and providing for more sustainable modes of transport within an integrated land use and transportation framework while supporting the transitioning to a lower carbon-based climate resilient future.

5.0 Introduction

The transportation system caters for the movement of people and goods within and through the county. The delivery and maintenance of a well-functioning multi modal transport network is essential in transitioning to more sustainable modes of transport which in turn will facilitate the delivery of economic competitiveness and improved quality of life. The Council will seek to positively promote, facilitate and require the enhancement of both public transport carrying capacity and road capacity to support sustainable future development.

5.1 Policy Context

Sustainable travel and transportation are underpinned by policy at a national and regional level. The implementation of a County Development Plan which is consistent with these strategic policy documents will provide a strong framework for the delivery of more sustainable travel options further contributing to wider economic, social and environmental objectives of this Plan. Key transportation policy documents which have informed the preparation of this Plan include;

5.1.1 National Planning Framework, National Development Plan.

Project Ireland 2040 supports the provision of a well-functioning integrated public transport system, enhancing competitiveness, sustaining economic progress and enabling sustainable mobility choices for citizens. In this regard, specific National Strategic Objectives seek to achieve the foregoing through requiring compact growth in towns and villages, achieving high quality international connectivity and transitioning to a low carbon and climate resilient society. The national investment priorities that will underpin the implementation of the National Planning Framework are contained in The National Development Plan 2018-2027 and will be further supported by the publication of the forthcoming “Planning Land Use and Transport – Outlook 2040” (in preparation by The Department of Transport, Tourism and Sport). PLUTO will comprise a long-term framework to support the prioritisation of transport interventions and investment.

5.1.2 Regional Spatial and Economic Strategy for the Southern Region (RSES)

The Regional Spatial and Economic Strategy for the Southern Region seeks to build a strong, resilient sustainable region. This is to be achieved through eleven key components one of which is “*Transforming our transport systems towards well-functioning, sustainable integrated public transport, walking and cycling and electric vehicles.*” RSES principles have informed the integration of land use and transportation policies of this Plan and include supporting compact growth, strengthening inter and intra-regional road and rail connectivity, protecting the capacity of inter-

urban road connectivity, protecting the strategic capacity and safety of the region's transport network, together with providing public transport and sustainable transport mode. The RSES specifically;

- Encourages a transition towards sustainable and low carbon transport modes through the promotion of alternative modes of transport and 'walkable communities'; (i.e. 10 Minute Town Concept)
- Supports a local transport plan for Carlow Town;
- Supports the delivery of enhanced rail services;
- Supports the delivery of bus projects and the Local Link Rural Transport Programme;
- Supports the delivery of road projects e.g. N80 upgrade and Southern Relief Road;
- Encourages an increase in electric vehicles;
- Promotes mobility management and travel plans to bring about behavioral change and more sustainable transport use.

5.1.3 Climate Action Plan 2019

In 2017, transport accounted for 19.8% of Ireland's greenhouse gases and is recognised as a key challenge in Ireland's Climate Action Plan (DCCA, 2019). The objective of the plan is to enable Ireland to meet its EU targets to reduce carbon emissions by 30 percent between 2021 and 2030 and lay the foundations for achieving net zero carbon emissions by 2050. Measures to contribute to the achievement of same in the transportation sector include a significant increase in electric vehicles on the road (936,000 by 2030) improved public transport, cycling and walking infrastructure, conversion

of public fleets to zero carbon alternatives, incentives and regulation and roll out of a comprehensive national charging network together with an increased use of biofuels etc.

5.1.4 Smarter Travel – A Sustainable Transport Future – A New Transport Policy for Ireland 2009-2020 (Department of Transport, 2009)

Smarter Travel is the transport policy for Ireland that sets out how the vision of a sustainable travel and transport system can be achieved. It contains five key goals:

- i. To reduce overall travel demand.
- ii. To maximise the efficiency of the transport network.
- iii. To reduce reliance on fossil fuels.
- iv. To reduce transport emissions.
- v. To improve accessibility to transport.

This policy recognises the importance of continued investment in transport to ensure an efficient economy and continued social development. It also provides funding to improve facilities for cyclists, walkers and public transport users.

The National Cycle Policy Framework 2009-2020 (Department of Transport) which is derived from Smarter Travel, sets out a national policy for cycling, to create a stronger cycling culture, a safer environment for cycling and improved quality of life.

Ireland's Sustainability Mobility Policy (active travel and public transport) is currently under review by the Department of Transport Tourism and Sport and will inform future policy in the area of smarter travel.

5.1.5 Spatial Planning and National Roads Guidelines for Planning Authorities (DoEHLG, 2012)

The national road network is a critical enabler in facilitating a sustainable transport system. Planning policy considerations relating to development affecting National Primary and Secondary roads, including motorways and associated junctions, outside the 50-60 kmph speed limit zones for towns and villages is contained in the Spatial Planning and National Roads Guidelines for Planning Authorities.

The Guidelines seek to achieve and maintain a safe and efficient network of National Roads in the broader context of sustainable development strategies, thereby facilitating continued economic growth, while encouraging a shift towards more sustainable travel and transport in accordance with the Smarter Travel policy document.

5.1.6 Design Manual for Urban Roads and Streets

The Design Manual for Urban Roads and Streets (DMURS) prepared for the Department of the Environment, Community and Local Government and Department of Transport, Tourism and Sport (updated in 2019) provides mandatory guidance for all urban roads and streets within the 60km/h urban speed limit. The design standards for urban roads and streets seeks to balance the “place function” (i.e. the needs of residents and visitors) with the “transport function” (i.e. the needs of pedestrians, cyclists, public transport, cars and goods vehicles) while incorporating good planning and design practice with a focus on the public realm. The manual recognises the importance of assigning higher priority to pedestrians and cyclists, without unduly compromising vehicle movement in order to create secure,

connected places that work for all members of the community.

The Council acknowledges the objective of achieving a better balance in how urban roads and streets are designed and used and will actively implement the principles, approaches and standards set out in the Manual in seeking to achieve best practice design outcomes with regard to street networks and individual streets.

5.2 Integration of Land Use and Transportation

The Council acknowledges the fundamental link between transport and land use to reduce reliance on car-based travel and to ensure more sustainable patterns of travel, transportation and development. The need to consolidate and concentrate development in a manner that allows the effective provision of, and ready access to public transport is acknowledged through the appropriate zoning of lands and implementation of development management standards that support appropriate densities and mixed-use developments. Prioritisation of integrated transport and land use, supported by investment in public transport, active travel networks and shared, low carbon mobility options will improve people’s travel choices and support safe, sustainable and healthy lifestyles.

Integration of Land Use and Transportation - Policy

It is the policy of the Council to:

LT. P1: To actively support sustainable modes of transport through appropriate land use zonings and to encourage levels of development with mixed uses within walking distance of public transport nodes on well located

accessible sites in town and village centres throughout the County.

5.3 Sustainable Mobility / Modal Shift

Sustainable mobility can be described as linking people and places in a sustainable way by supporting:

- comfortable and affordable journeys to and from work, home, school, college, shops and leisure;
- travelling by cleaner and greener transport; and
- a shift away from the private car to greater use of active travel (walking and cycling) and public transport (e.g. bus, rail).

The Council will seek to influence overall travel demand and achieve a modal shift through land use planning, optimising opportunities to make sustainable travel choices, providing a high-quality transport network and system which is effective, accessible and responsive to technological change and reduces the contribution of transport to climate change. The transport sector accounts for 41% of County Carlow’s total final energy consumption (Ref: Carlow Renewable Energy Strategy Appendix VI).

Table 5.1: Modes of Travel to Work, School and College 2016

Travel Mode Share for Trips to Work, School and College	Numbers	Percentage
On foot	4,851	15.2%
Bicycle	368	1.2%
Bus, Minibus or coach	1,964	6.2%
Train, Dart or Luas	324	1%
Motorcycle or scooter	38	0.1%
Car driver	14,442	45.2%
Car passenger	8,094	25.3%
Van	1,878	5.8%
Total	31,959	100%

Source: CSO 2016

¹ Transport Demand Management, seeks to change travel patterns by a range of measures including

Table 5.1 contains details of the mode of travel to work and to school / college of people normally resident in County Carlow in 2016. The mode share for commuting by private motor vehicle to work and education in County Carlow represents 76% which is higher than the rest of the country at 68% and significantly above the national target of 45% for car commuting trips.

Table 5.2: Modes of Travel to Work, Carlow Town, Tullow and Muine Bheag

Means of Transport to Work	Carlow Town	Tullow	Muine Bheag
Other	2.9%	4.4%	2.2%
Green	12.4%	13.0%	12.0%
Public	1.1%	0.0%	0.5%
Private	83.6%	82.5%	85.3%

Source: CSO 2016

The proportions travelling to work in the top two tiers of the Settlement Hierarchy (Carlow Town, Tullow and Muine Bheag) indicate a heavy reliance on the private car (Ref: Table 5.2).

Achieving significant modal shift is dependent on a wide range of factors including government investment in public transport, active travel and shared mobility as viable alternative travel options. Given the dispersed distribution of the population in Carlow, the provision of public transport outside of the larger urban centres is a significant challenge. The Council will however, seek to support a more sustainable mode of travel through Transport Demand Management¹ in consultation with the NTA. Interventions identified in *Project Carlow 2040; A Vision for Regeneration* will support more sustainable travel patterns through public realm initiatives that aim to reduce overall car numbers and allow for more green space for walking and cycling with a focus on greater use of outdoor space and increased use of

modal shift, trip reduction, reduction in trip length, reduction in vehicle use, and increase in vehicle occupancy.

public transport. The provision of increased walking and cycling infrastructure throughout the County will be delivered through engagement in a collaborative manner with service providers, significant employers and educational facilities to support more sustainable travel patterns.

Modal Shift - Policy

It is the policy of the Council to:

MS. P1: Seek investment in sustainable transport solutions, improved walking and cycling connectivity routes, the provision of a public bus service in Carlow Town and the expansion of rural transport initiatives throughout the county.

Modal Shift - Objective

It is an objective of the Council to:

MS. O1: Support a modal shift from private vehicles to access work / school / college from circa 23% (2016) to 28% (2028).

5.4 Walking and Cycling

The proportion of persons walking and cycling to work, school and college declined between 2011 (17.5%) and 2016 (16.1%). Within Carlow Town a considerable percentage of people (22%) walk as a means of transport reflecting the concentration of services, employment and other facilities within the town. Only 2% of trips are made by bike within County Carlow significantly below the national target of 10% commuting by bike by 2020.

The Council recognises the importance of both walking and cycling in minimising environmental impacts while also contributing to improved wellbeing and quality of life.

Investment in cycling has taken place in Carlow in recent years, with the provision of cycling lanes along the N80 bypass in Carlow Town and some of the regional roads. Increasing the proportionate uptake of these sustainable modes of travel is dependent on the convenience of walking or cycling as an option which directly relates to the level of connectivity, road safety and the quality of facilities provided.

It is a key objective of Carlow County Council to seek the implementation of Project Carlow 2040; “A Vision for Regeneration” which contains a detailed walking and cycling strategy for Carlow Town. It provides for a number of new pedestrian routes within Carlow, linking residential areas to key attractions, with a focus on removing severance and improving connectivity together with improved pedestrian infrastructure (e.g. footpaths, safe crossings, junction upgrades etc.). Similarly, the cycling strategy has been prepared to address existing gaps and facilities in the network focussing on creating a series of safe and continuous segregated cycle routes, linking residential communities to places of employment, education, recreation and the town centre.

The Council will through the implementation of the Design Manual for Urban Roads and Streets (2013 and updated 2019), the Permeability Best Practice Guidelines (2013), the National Cycle Policy Framework (2013) and the National Cycle Manual (2011) seek to make walking and cycling more attractive modes of travel. The Council also supports the Toolkit for School Travel (2013) which promotes cycling and walking for trips to school and will seek to provide and facilitate the provision of safe routes to school.

The Council will, in the exercise of its functions in land use planning, development

management and provision of roads and street infrastructure, facilitate and promote high quality, convenient, pleasant and safe walking and cycling in urban and rural areas that allows for multiple direct connections between key destinations.

Walking and Cycling - Policies

It is the policy of the Council to:

- WC. P1: Prioritise and promote more sustainable and convenient modes of travel by the development of high quality walking and cycling infrastructure including greenways within a safe environment.
- WC. P2: Work with the National Trails Office, Coillte, relevant Government Departments, and other relevant stakeholders, to improve on the existing level of infrastructure and facilities for walking and cycling.
- WC. P3: Ensure that connectivity for pedestrians and cyclists is maximised in new communities and improved within existing areas particularly towns and villages throughout the county including associated infrastructure, to maximise access to local shops, educational facilities, public transport services, employment locations and other amenities.
- WC. P4: Provide for safer routes to schools within the County and promote walking and cycling as suitable modes of transport as part of the Green Schools Programme and other local traffic management improvements.

Walking and Cycling - Objectives

It is the objective of the Council to:

- WC. O1: Seek the implementation of the Walking and Cycling Strategy for Carlow Town and specific projects as contained in *Project Carlow 2040 “A Vision for Regeneration”* creating more sustainable communities, with an emphasis on encouraging active travel to reduce car dependency.
- WC. O2: Ensure that all streets and street networks seek to facilitate permeability, are designed in accordance with best practice standards including the Design Manual for Urban Roads and Streets and the National Cycle Manual which seek to prioritise the movement of pedestrians and cyclists within a safe and comfortable environment for a wide range of ages, abilities and journey types.
- WC. O3: Reduce walking and cycling distances to areas of employment, community services, schools, shops, public transport and other community facilities through implementation of the 10 Minute Town Concept, the provision and maintenance of high-quality linkages and the delivery of local permeability links within existing communities.
- WC. O4: Prioritise where required the upgrade and maintenance of footpaths, cycleways, public lighting, traffic management and public realm works and supporting signage on public roads / paths.
- WC. O5: Provide secure high-quality cycle parking facilities in public areas and strategic sites in towns and at public service destinations.
- WC. O6: Improve pedestrian and cycle connectivity to rail station locations

and other public transport interchanges within the county.

WC. O7: Secure the development of the following specific schemes :

Provide a pedestrian and cyclist footbridge to connect IT Carlow with the River Barrow Way, to improve recreational amenity opportunities and sustainable transport choices.
Improved permeability and accessibility to the residential areas of John Sweeney Park, The Laurels, Burrin Manor, Willow Park and the wider Carlow town environs / road network. The optimum solution(s) will be informed by relevant engineering and environmental studies, engagement with key stakeholders and will inform the statutory land use plan for the area.
Completion of the River Burren walk/cycle path at Ballinacarrig.
Cycling infrastructure in the vicinity of Carlow IT.
Improved accessibility to Carlow Rail Station.

5.5 Public Transport

The provision of a high quality integrated public transport system in conjunction with appropriately located land use zonings is paramount to secure a reduction in carbon emissions and in providing a viable sustainable alternative transport mode. Central to County Carlow’s future success will be the creation of a high-quality public transport network particularly within Carlow town connecting people to key destinations within the town in a reasonable travel time.

The Public Transport Strategy as contained in *Project Carlow 2040 “A Vision for Regeneration”* includes a set of

recommendations to improve accessibility for public transport, in particular to Carlow Coach Park, Carlow Railway Station, Taxis and the Carlow Proposed Town Bus Service. The integration of public transport with other modes (through the development of mobility hub facilities at the Railway Station and Coach Park) are promoted together with support for the provision of Carlow Town Bus Service as proposed by the National Transport Authority.

The Council will seek to influence the provision of sustainable bus and rail services by ensuring enabling infrastructure is provided, development is appropriately located and provided to an optimum scale and density. The Council will act where it can to implement any policy changes, guidance and actions where appropriate which support an improved and integrated public transport infrastructure / service within the county.

5.5.1 Rail

A modern, efficient and dependable passenger and freight rail network has a crucial role to play in mitigating climate impacts and in promoting County Carlow for business, industrial, residential and recreational purposes.

Carlow and Muine Bheag are serviced by the Dublin to Waterford intercity rail line. The *Rail Vision 2030: The Future of Rail Transport in Ireland* notes that the Dublin – Carlow line comprises one of high levels of demand on the mainline routes. Services from Carlow however are infrequent, with an hourly frequency at peak times and gaps of up to three hours between services during the day. Improvements to frequency and timetabling would improve Carlow’s rail connectivity with the wider Eastern and Southern Region.

The Council supports the Strategic Rail Review which will examine the rail network across Ireland to improve sustainable connectivity,

enhance regional accessibility and support balanced regional development. Any upgrade of the Dublin – Waterford rail line and any potential future redevelopment of the Limerick-Waterford- Wexford rail link would support more sustainable travel patterns within Carlow and the wider Southern Region.

5.5.2 Bus

The development of a quality bus system as an alternative to the private car is an essential element of an integrated and balanced land use transport system. Bus Eireann and private service providers operate public bus services in County Carlow. The delivery of a Carlow Town Bus Service in conjunction with the NTA is an objective of this Plan which will seek to connect the majority of residential areas within the town to the main employment, retail, health and education destinations. The provision of new direct pedestrian / cyclist paths to the bus stops from residential areas will shorten the distance, therefore improving the accessibility for residents living in these areas to the town bus network, thereby supporting the development of the ‘10 – minute Town’ concept.

Transport for Ireland Local Link provides a rural local public transport bus service. The key priorities of the Local Link Rural Transport Programme seek to address rural social exclusion and the integration of rural transport services with other public transport services. While a service is provided in County Carlow greater connectivity and service provision is required between settlements in the county and wider region.

Carlow County Council will facilitate the improvement and expansion of bus services where they strengthen linkages to other areas of the county, adjoining regions including the Greater Dublin Area, designated key towns and the rest of the country.

Public Transport- Policies

It is the policy of the Council to;

PT. P1: Promote the sustainable development of the County by supporting and guiding national agencies in delivering improvements to the public transport network / services and associated infrastructure including services and infrastructure at the rail stations at Bagenalstown and Carlow Town, thereby promoting integrated services and to seek to ensure that public transport services provide an attractive and convenient alternative to the car.

PT. P2: Support transport agencies in the provision of new public transport services and routes, enhancement of the quality, frequency and speed of existing train and bus public transport services with measures incorporated to facilitate access for all.

PT. P3: Seek to generate additional demand for public transport services through integrated land use planning and maximising access to existing and planned public transport services throughout the network.

Public Transport- Objectives

It is an objective of the Council to;

PT. O1: Prepare a Local Transport Plan for Carlow Town in accordance with the Area Based Transport Assessment Guidelines (produced by the NTA and TII) and having regard to RPO 157 of the RSES for the Southern Region. The LTP will include priorities for public transport infrastructure and services, cycle investment, improvements to the pedestrian environment and road

enhancements. The policies, objectives and measures which emerge from the LTPs will inform the Joint Urban Area Plan for the Greater Carlow Urban Area.

PT. O2: To seek the implementation of measures to improve accessibility to public transport as contained in *Project Carlow 2040 "A Vision for Regeneration"* creating more sustainable communities, with an emphasis on encouraging active travel to reduce car dependency.

PT. O3: To seek the delivery of Carlow Town Bus Service in conjunction with the National Transport Authority and to facilitate appropriately located bus stops and adequate waiting areas, real time passenger information and secure cycle parking at key bus stop locations.

PT. O4: Seek the delivery of a transport node in the immediate vicinity of Carlow Train Station facilitating integration of local bus services and private transport modes with the rail network which will facilitate easy exchange between modes and / or routes.

PT. O5: Support and encourage the improvement and expansion of rural transport initiatives and bus shelters in conjunction with other statutory and development agencies.

5.6 Park and Ride

In order to encourage more sustainable travel modes thereby facilitating greater usage of public transport, reducing congestion and carbon emissions, the provision of "park and ride" sites at appropriate locations which facilitate car commuters transferring to public transport will be encouraged.

Park and Ride - Policy

It is the policy of the Council to;

PR. P1: Promote and support the provision of "park and ride" facilities at appropriate locations with suitable charging infrastructure subject to a full appraisal of each location and in consultation where relevant with the transport authority / service providers.

5.7 Electric Vehicles and Low Emission Vehicles

Transitioning to a low carbon economy requires increased emphasis on the use of electric vehicles and low emission vehicles. To support same the provision of appropriate levels of infrastructure are required throughout the county. Public realm electric vehicle charging points are distributed throughout County Carlow, strategically located in Carlow Town, Tullow and Muine Bheag. This Plan promotes the further installation and expansion of the charging point network throughout the County.

Alternative low emission fuel infrastructure is also required for the various other low emission vehicle options including hydrogen, biofuels and natural gas. Under Article 3(4) of the Renewable Energy Directive, Ireland is committed to ensuring that at least 10% of energy consumption in the transport sector is achieved from renewable sources by 2020.

Electric Vehicles and Low Emission Vehicles - Policies

It is the policy of the Council to:

EV. P1: Support the Government's targets for electric vehicles on roads by facilitating the roll-out of Electric Powered Vehicle Recharging Parking Bays for electric vehicles in

accordance with Government requirements across the county through the planning system and on public roads.

EV. P2: Support and facilitate the roll-out of alternative low emission fuel infrastructure through the Development Management Process.

Electric Vehicles and Low Emission Vehicles - Objectives

It is an objective of the Council to;

EV. O1: Facilitate the increased provision of electric vehicle charging points throughout the public realm space, subject to availability of finances through Public Charge Point Scheme or other funding streams that may become available during the life of this Plan.

5.8 Road Infrastructure

While it is acknowledged that the provision of more sustainable transport options is a priority over the plan period, it is also recognised that roads infrastructure given the rural nature of the County will continue to maintain a central position in the overall transportation network. The road infrastructure provides intra and inter county movement of goods and services and supports rural populations and businesses who are largely reliant on private vehicular transport and the road network. (Ref: Map. No. 5.1 Road Network).As of 2021, County Carlow has approximately 1,327 kilometres of roads which are categorised as follows:

Road Type	Distance (km)	share of Carlow's Roads (%)
Motorway	24	2 %
National Roads	55	4 %
Regional Roads	186	14 %
Local Roads	1,062	80 %
Total	1,327	-----

Table 5.3: Road Type Network Co. Carlow

The Council recognises the importance of providing a safe and efficient road network throughout the County. The Council is committed to enhancing the county's international, national, regional and local connectivity in order to retain and strengthen its economic competitiveness, to attract inward investment, to further develop the local and national economy, to protect the safety of road users while safeguarding investment in their provision.

5.8.1 Motorway Network

Carlow is serviced by the M9 Motorway traversing the County, providing strategic connections to the metropolitan areas of Dublin City, Kilkenny City, Waterford City, in addition to Waterford Port and onwards.

The motorway network primarily serves long and middle-distance traffic originating in or passing through the County including the transportation of freight. This route has an important role to play in the economic development of the county. Responsibility for the future development and the operation of the motorway network rests with Transport Infrastructure Ireland.

Motorway Network - Policies

It is the policy of the Council to:

MN. P1: Work with Transport Infrastructure Ireland to develop and operate the motorway network through the County and to seek to ensure that the capacity, efficiency and safety of the

network and associated junctions is maintained in accordance with the Spatial Planning and National Roads Guidelines for Planning Authorities DECLG (2012).

MN. P2: Ensure that the capacity, efficiency and safety of the motorway route within Carlow is protected and to control development that could impact traffic safety and / or hinder the future upgrading of motorway routes and interchanges.

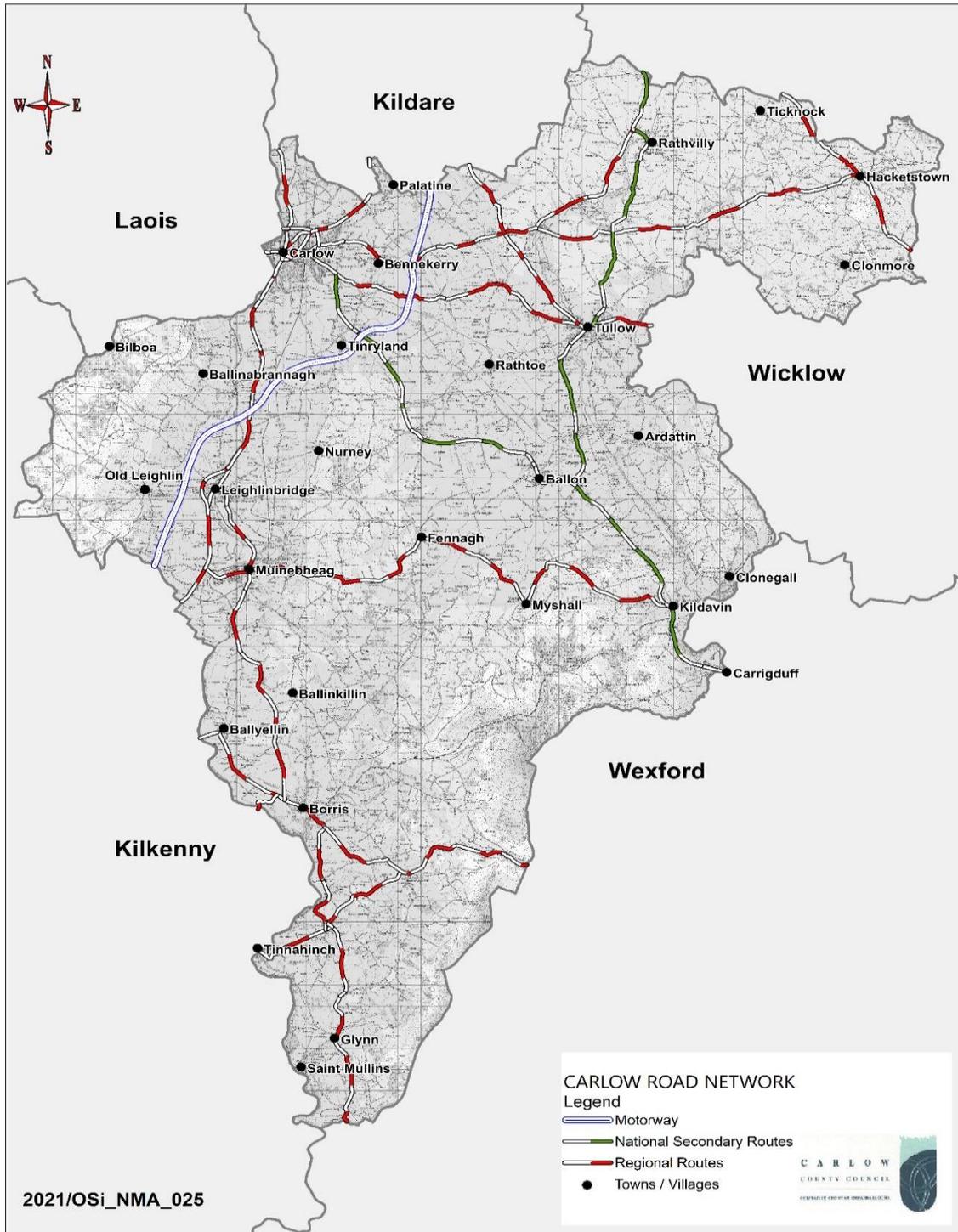
MN. P3: Support and facilitate the adequate provision of Motorway Service

Stations in accordance with the Spatial Planning and National Roads Guidelines for Planning Authorities DECLG (2012) and the NRA Motorway Service Area Policy guidance document (2014 or as maybe amended during the life of this Plan).

Motorway Network - Objectives

It is an objective of the Council to;

MN. O1: Support Transport Infrastructure Ireland to further develop and operate the motorway network through the County.



Map 5.1 County Carlow Road Network

5.8.2 National Road Network

Carlow is served by the N80 and N81 National Roads traversing the county. The N80 is a strategic link, connecting the Midlands Region to the South-East Region, serving the key towns of Tullamore, Portlaoise, Carlow and Enniscorthy, in addition to connecting with the M7 and M8 motorways providing onward connectivity with Limerick and Cork. South of the N80 via the N11 and N25 onward connectivity is provided to Wexford Town and Rosslare Europort. Extending from the N80, the N81 route provides access to Dublin City to the north-east including access to key settlements of Tullow and Blessington.

The national road network has a strategic role in catering for inter-urban and inter-regional transport requirements and has an important role to play in the economic development of the County. Responsibility for the future development and the operation of the national road network rests with Transport Infrastructure Ireland.

National Road Network - Policies

It is the policy of the Council to:

- NR. P1: Co-operate with Transport Infrastructure Ireland to maintain and develop the national road network (N80 and N81) through the county and to seek to ensure that the capacity, efficiency and safety of the network and associated junctions is maintained in accordance with the Spatial Planning and National Roads Guidelines for Planning Authorities DECLG (2012).
- NR. P2: Avoid the creation of additional access points from new development or the generation of increased traffic from existing accesses to the national road to which speed limits of greater

than 50 kph applies in accordance with the Spatial Planning and National Roads Guidelines for Planning Authorities DECLG (2012).

- NR. P3: Ensure that the capacity, efficiency and safety of the national road network within Carlow is protected and to control development that could impact traffic safety and / or hinder the future upgrading of the national road network.
- NR. P4: Regulate, control and improve signage throughout the County, in conjunction with Transport Infrastructure Ireland (TII) and other relevant agencies. The Council will have regard to TII Policy on the Provision of Tourist and Leisure Signage on National Roads and Section 3.8 of the Spatial Planning and National Road Guidelines which indicates a requirement to control the proliferation of non-road traffic signage on and adjacent to national roads.

National Road Network - Objectives

It is an objective of the Council to;

- NR. O1: Pursue the options and interventions contained in the National Secondary Roads Needs Study 2011- South East Region (or latest approved version).
- NR. O2: To seek delivery of the following improvement / works on / along the national road network;

Carlow Southern Relief Road
N80 Carlow to Ballon Re-alignment
N80 Ballon Relief Road
N80 Ballon to Bunclody Realignment

N80 Bunclody Relief Road
N81 Clish Junction to Tullow Re-alignment
N81 Tullow Relief Road
N81 Tullow to Baltinglass Re-alignment
N81 Rathvilly Relief Road

5.8.3 Regional Roads

Regional roads represent circa. 14% of the road network within the County and provide important strategic connections linking the principal towns and villages within the county and the region. They serve long, middle and short-distance traffic originating in or passing through the County. The roads serve rural development and diversification, indigenous industry, local enterprise, agriculture, agri-business and tourism.

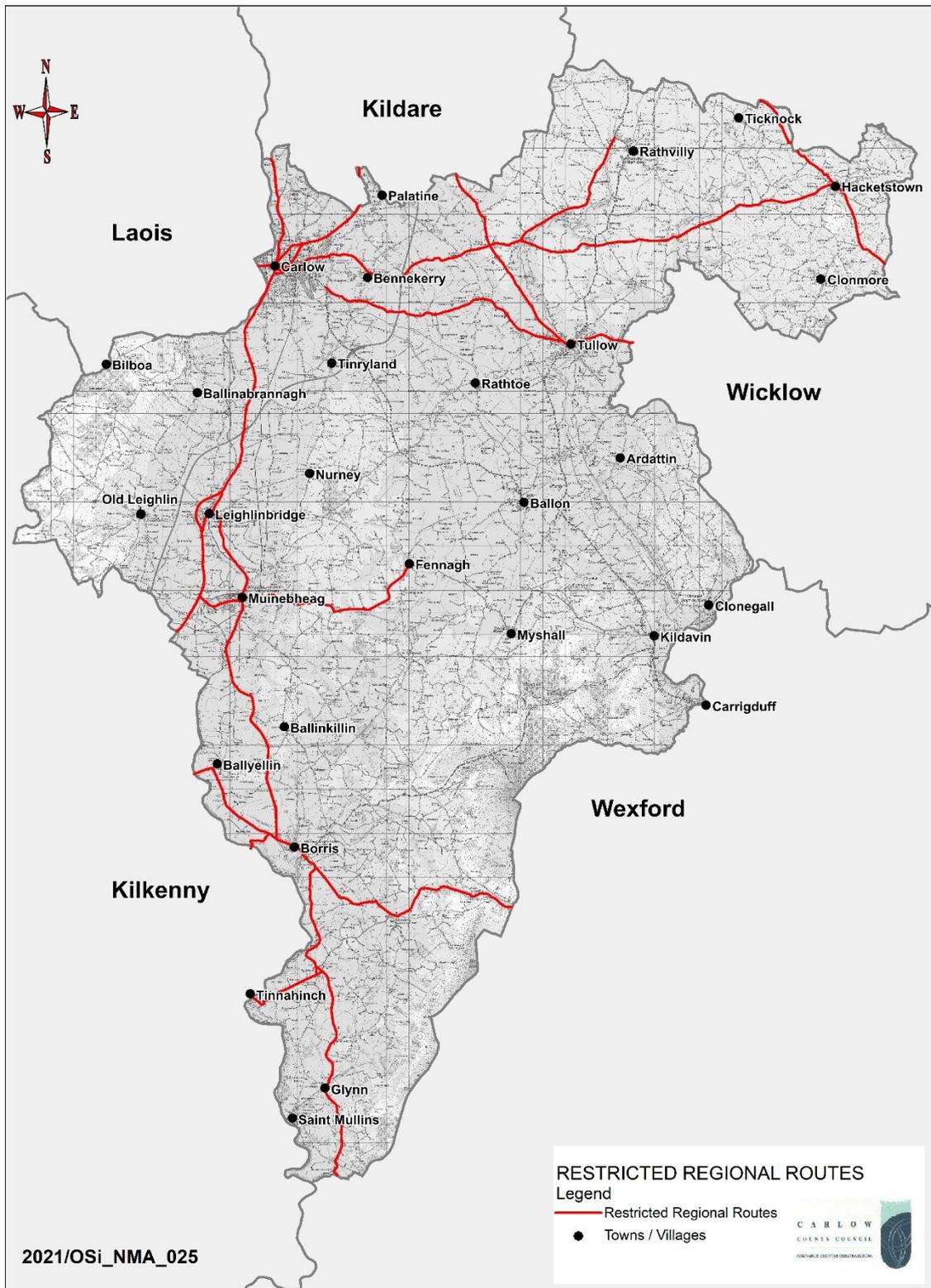
To maintain their strategic function, it will be necessary to exercise control over new development requiring access to regional roads, where the posted speed limit exceeds 50km/hr, where there are higher traffic levels and where there is a high proportion of recorded road traffic accidents.

These comprise those listed in Table 5.4 and outlined on Map 5.2.

Table 5.4: Strategic Regional Roads

Road No.	Road Location and Description
R417	Carlow Town to Kildare Border
R418	Tullow to Kildare Border
R448	Kildare border via Carlow Town, Leighlinbridge and Royal Oak Village to Kilkenny Border
R702	Kilkenny Border, via Borris and Ballymurphy to Wexford Border
R703	Coolnamara Cross to Tinnahinch Village
R705	Leighlinbridge via Bagenalstown and Borris to Kilkenny Border
R724	Royal Oak via Bagenalstown to Fenagh Village
R725	Carlow Town to Tullow Village, extending to Wicklow Border
R726	Carlow Town, via Straboe Cross to Cuckoo Corner (junction with N81)
R727	Straboe Cross to Hacketstown
R729	Borris Village, via Glynn and Drummin to Wexford Border
R747	Wicklow Border via Hacketstown to Wicklow Border

Maintaining the capacity and preservation of enhanced safety standards will be important in ensuring that regional roads can continue to perform important local and regional transportation functions.



Map 5.2 Restricted Regional Roads

Regional Roads - Policies

It is the policy of the Council to:

RR.P1: Maintain and improve the capacity, safety and function of the regional road network (as finances become available) and to ensure that it is planned for and managed to enable the sustainable economic development of the County and wider area.

RR.P2: Exercise control over new developments outside of designated settlements requiring direct access to the regional road network which could compromise the capacity, safety and efficiency of these routes.

RR.P3: Protect strategic regional roads listed in Table 5.4, against development where the posted speed limit exceeds 50km/hr applies in order to protect the carrying capacity of such roads except in exceptional circumstances;

- Where development is of strategic, local, regional or national importance, and where there is a significant gain to the county through employment creation, or other economic benefit.
- Where applicants are building on a family farm / landholding and comply with the relevant criteria for rural generated housing need, the rural house design guidelines including appropriate siting and development management standards and cannot provide access onto a nearby county road. In this instance, applicants will only be permitted to maximise the potential of an existing entrance

which meets current traffic safety standards. The onus will be on the applicant(s) to demonstrate that there are no other accesses or suitable sites within the landholding.

- Where it is proposed to demolish an existing habitable dwelling and replace with a new dwelling, where there is an existing entrance onto the regional road.
- Where a genuine need for a granny flat unit to an existing authorised habitable dwelling is proven and is designed in accordance with the Development Management Standards (Chapter 16) of this Plan and where there is an existing entrance onto the regional road.

Regional Roads - Objectives

It is an objective of the Council to;

RR.P1: Support and facilitate the planning, design and completion of the Southern Relief Route N80-R448 including a new bridging point over the River Barrow, to improve connectivity between the Midlands Region and the South-East Region and to address local traffic management considerations thereby contributing to the local economy of the Greater Carlow Graiguecullen Urban Area.²ⁱ

RR.P2: Plan for the future provision of the Tullow Outer Relief Road in consultation with the Department of Transport Tourism and Sport, Transport Infrastructure Ireland and all necessary stakeholders. A Strategic Assessment Report / Preliminary

² Phase 1 will include an objective to complete the link road from Eire Og roundabout to the roundabout at Ballinacarrig,

with a link and new roundabout to connect with the Quinnagh to Ballinacarrig local road.

Business Case for the provision of this route will be carried out during the life of this Plan to ensure alignment with government policy, the forthcoming Planning Land use and Transportation Outlook 2040, the National Planning Framework and the National Development Plan.

RR.P3: Plan for the future provision of the Bagenalstown Relief Road in consultation with the Department of Transport Tourism and Sport, Transport Infrastructure Ireland and all necessary stakeholders. A Strategic Assessment Report / Preliminary Business Case for the provision of this route will be carried out during the life of this Plan to ensure alignment with government policy, the forthcoming Planning Land use and Transportation Outlook 2040, the National Planning Framework and the National Development Plan.

RR.P4: Seek to undertake a Regional Road Needs Study to determine and prioritise road improvement projects throughout the network.

RR. P5: Seek to implement the following Regional Road Improvement Schemes:

R448 Pollerton Little Pavement Improvement Scheme
R448 Milford Pavement Improvement Scheme
R448 Cloghna Pavement Improvement Scheme
R448 Mortarstown Pavement Improvement Scheme
R448/L2020 Junction Improvement Scheme

R448/ R722 Junction Improvement Scheme
--

Given the extent of the network the Council will prioritise available resources in the annual roadworks programme, to remedy those issues found to be structurally deficient in accordance with the nationally developed Pavement Management System (PMS).

5.8.4 Local Roads

Local roads extend for 1,062km within the county and are divided into Primary, Secondary or Tertiary based on their traffic levels, width and alignment. These roads serve an important function for rural communities, agriculture and other rural based enterprises. Given the extent of this network the Council will prioritise available resources on the more heavily trafficked routes and those found to be structurally deficient in accordance with the nationally developed Pavement Management System (PMS).

Local Roads- Policy

It is the policy of the Council to:

LR.P1: Ensure that the safety and capacity of the local road network is maintained and improved where funding allows to a suitable standard to accommodate the needs of the County.

Local Roads- Objective

It is an objective of the Council to;

LR.O2: Maintain and improve all local roads in accordance with Department requirements.

5.8.5 Urban Roads and Streets

The Design Manual for Urban Roads and Streets (DMURS) issued under Section 28 of the Planning and Development Act 2000(as amended) provides guidance on how the objectives of sustainability may be achieved by putting well-designed streets at the heart of sustainable communities and supporting boarder government policies on the environment, planning and transportation. DMURS provides the practical measures to achieve:

- Highly connected streets which allow people to walk and cycle to key destinations in a direct and easy-to find manner.
- A safe and comfortable street environment for pedestrians and cyclists of all ages.
- Streets that contribute to the creation of attractive and lively communities.
- Streets that calm traffic via a range of design measures that make drivers more aware of their environment.

The design of urban streets is governed by DMURS which is mandatory for all urban roads and streets within the 60km/h urban speed limit zone except for:

- Motorways; and
- In exceptional circumstances, certain urban roads and streets with the written consent of the relevant Sanctioning Authority.

Urban Roads and Streets - Policy

It is the policy of the Council to;

UR. P1: Ensure that all urban roads and streets in our towns and villages, including residential streets in housing estates are designed in accordance

with the principles, approaches and standards set out in the 'Design Manual for Urban Roads and Streets' (2013/2019) and any further update to the Manual during the life of this Plan.

UR. P2: Consider, and, where appropriate to seek the implementation of a wider 30kph speed limit zone in urban environments in order to create a safer, calmer and more pleasant urban environment for pedestrians, cyclists and motorists, fostering opportunities for active travel and protecting vulnerable road users.

5.8.6 Bridges

Over 250 bridges are dispersed throughout the County which support the non-national network. The Council continues to adopt a pro-active role in maintaining, preserving and strengthening these bridges. Given the extent of the bridge network the Council will prioritise available resources in the annual roadworks programme, to remedy those found to be structurally deficient in accordance with the nationally developed Pavement Management System (PMS)

Bridges - Policy

It is the policy of the Council to;

BR. P1: Seek the maintenance, preservation and upgrade of bridges along the public road and to ensure that any bridges deemed of historic, architectural or cultural heritage value are maintained and upgraded in accordance with best conservation practices and are informed by ecological assessments and the requirements of the Habitats Directive regarding Appropriate Assessment.

5.9 Infrastructural Improvement Process

All National Road projects will be progressed in accordance with the “TII Project Management Guidelines, while Non-National Road Improvement projects will comply with the Department of Transport Guidance for the “Management and Appraisal of Regional and Local Strategic and Specific Road Improvement Programmes”. Compliance must also be outlined in accordance with the “Public Spending Code- A Guide to Evaluating Planning and Managing Public Investment”. In this regard and subject to available resources, the following process will be undertaken for relevant new roads infrastructure:

Stage 1 – Strategic Assessment (Scope and Pre-appraisal)

Stage 2 – Preliminary Business Case (Concept and Feasibility, Options Selection, Design and Environmental Evaluation).

Stage 3 – Final Business Case (Statutory Processes, Enabling and Procurement)

Stage 4 – Implementation (Construction)

Stage 5 – Review (Project close-out).

New roads and other transport infrastructure projects (including greenways, blueways and cycleways) referred to by this Plan that are not already provided for by plans/ programmes other than the County Development Plan or are not already permitted, are subject to the undertaking of feasibility assessment, taking into account planning need, environmental sensitivities as identified in the SEA Environmental Report and the objectives of the Plan relating to sustainable mobility. Where feasibility is established, a Corridor and Route Selection

Process will be undertaken where appropriate, for relevant new road infrastructure in two stages:

Stage 1 – Route Corridor Identification, Evaluation and Selection

- Environmental constraints (including those identified in Section 4 of the SEA Environmental Report) and opportunities (such as existing linear infrastructure) will assist in the identification of possible route corridor options;
- Potentially feasible corridors within which infrastructure could be accommodated will be identified and these corridors assessed. The selection of the preferred route corridor will avoid constraints and meet opportunities to the optimum extent, as advised by the relevant specialists; and
- In addition to the constraints identified above, site-specific field data may be required to identify the most appropriate corridors.

Stage 2 – Route Identification, Evaluation and Selection

- Potentially feasible routes within the preferred corridor will be identified and assessed. The selection of preferred routes will avoid constraints and meet opportunities to the optimum extent, as advised by the relevant specialists, taking into account project level information and potential mitigation measures that are readily achievable;
- In addition to the constraints identified above, site specific field data may be required to identify the most appropriate routes; and

- In addition to environmental considerations, the identification of route corridors and the refinement of route lines is likely to be informed by other considerations.

Infrastructural Improvement – Policy

It is the policy of the Council to:

- II. P1: Preserve corridors identified as part of the infrastructure improvement process which are informed by the route corridor identification, evaluation and selection process to enable design options for road improvements and upgrades to be advanced.

5.10 Freight

Freight transport and logistics will require a shift to more sustainable means of transport, including rail. The RSES acknowledges the network potential of Carlow and Kilkenny on the Carlow-Dublin M9/ Rail Network, along a key north-south axis through the region, linking the Waterford Metropolitan Area, Kilkenny City and Carlow Key Town with Dublin and the Eastern and Midlands Region. The M9 Motorway and rail network provide direct access from a large inland area to the Port of Waterford and Waterford Airport with potential opportunities for more sustainable freight movements to the Port.

Freight - Policy

It is the policy of the Council to;

- FR. P1: Promote the development of rail freight services and support the development of a logistical park within the County together with rail freight services in accordance with the forthcoming Regional Freight Strategy (RSES).

- FR. P2: Promote and support the provision of an appropriately located logistics park within the county subject to all planning and relevant environmental considerations.

5.11 Air Travel

The Council supports the continued operation and growth of Waterford Airport as an important element of the transport and communications infrastructure of the region.

Air Travel - Policy

It is the policy of the Council;

- AT. P1: In line with EU national and regional policy support in respect of air access from regional airports, to support the continued operation and growth of Waterford Airport, where it would contribute towards proper planning and sustainable development and comply with all environmental legislation and policies and objectives contained within this Plan and higher level planning documents, including the National Planning Framework and Southern Regional Spatial and Economic Strategy, and measures to enhance connections from County Carlow to Waterford Airport and other airports in the country.

- . AT. P2: Consider the development of air strips in locations that would not have an adverse impact on residential areas.

5.12 Travel Plans

Travel plans are required for significant new developments or expansion to developments which give rise to trip intensive developments. They are a means of promoting sustainable means of access,

reducing traffic congestion in urban areas and making more efficient use of land by reducing the need for car parking.

Travel Plans - Policy

It is the policy of the Council to;

TP. P1: Require the submission of travel plans with planning applications for all new developments or intensification of existing developments that generate significant trip demand in accordance with 'Achieving Effective Workplace Travel Plans: Guidance for Local Authorities' (NTA, 2012).

5.13 Street Lighting

Appropriate street lighting can positively contribute to road safety and increases personal safety, particularly for vulnerable road users. To ensure well lit roads, footways and cycleways, all street lighting will be provided in accordance with best practice guidelines and standards in terms of type of lighting columns, lantern types, lighting class, Lux levels and energy efficiency.

Street Lighting- Policy

It is the policy of the Council to;

SL. P1: Ensure that public lighting is provided in accordance with relevant EU Norms, National Standards or best guidance documents as appropriate, including any forthcoming Council Public Lighting Specifications and Policy documents.

Street Lighting- Objective

It is an objective of the Council to;

SL. O1: Improve the efficiency of public lighting assets in order to minimise electricity usage.

5.14 Car Parking

The Planning Authority will require car parking to be provided at the rates set out in Chapter 16 Development Management Standards. Reduced car parking provision may be considered for commercial town centre sites in order to tackle urban decline, promote investment and help sustain more sustainable travel modes.

In addition, the shift to electric vehicles requires the installation of charging points across the county and the provision of chargers in domestic dwellings. Developing the infrastructure for alternatively fueled vehicles will be a vital step in encouraging consumers to make more environmentally friendly transport choices.

Car Parking – Policy

It is the policy of the Council to:

CP. P1: Carefully consider the number of car parking spaces required to service the needs of new development.

CP. P2: Allow for the reduction in car parking requirements for commercial developments in suitable town centre locations where a detailed parking analysis demonstrates adequate supply of proximate car parking spaces thereby encouraging a modal shift away from the private car to more sustainable forms of transport, such as public transport, cycling and walking.

CP. P3: Seek to ensure that all new private car parking facilities are provided to an appropriate standard, proximate to the development which it serves.

CP. P4: Ensure that applications for surface car parking are accompanied by landscaping proposals.

CP. P5: Seek and promote the provision of Age Friendly parking arrangements and further provide for the improvement of parking arrangements for people with disabilities

CP. P6 Promote and support the development of appropriate infrastructure to accommodate a change to electrically powered vehicles by requiring all new carparks or extensions to existing carparks to include for the provision of electric car charging points, at a rate of 1:50 spaces.

5.15 Bicycle Parking Facilities

Cycling is becoming increasingly recognised for the contribution it provides as a sustainable and healthy form of transport for work, education and leisure trips within and around the County. Provision of secure cycle parking facilities is essential for supporting the promotion and development of cycling as a more sustainable mode of transport. High quality cycle parking should be regarded as an integral part of any new development.

Bicycle Parking Facilities – Policy

It is the policy of the Council to:

BP. P1: Ensure the provision of appropriate Bicycle parking facilities as part of any new applications in urban areas to assist with supporting modal shift away from private cars to more sustainable modes of transport i.e. Cycling, Walking, Public Transport.

5.16 Directional/ Information/ Waymarking Signage

Directional signage will be permitted at appropriate locations for amenities, tourist attractions, community facilities and local attractions but not for commercial

organisations. This is in order to avoid a proliferation of signs on public footways leading to street clutter.

Fingerpost signage is the preferred type of directional signage and must be erected such that it does not result in traffic hazard. Where possible and subject to Council approval existing signposts or poles should be used, in favour of the installation of new ones.

Due consideration should be given to the location of street signage, particularly in urban areas, in the interest of minimising street clutter. Due cognisance shall also be taken of the signage requirements in Section 3.8 of `Spatial Planning and National Roads, Guidelines for Planning Authorities` (2012) relating to signage along National Roads.

Where feasible and appropriate, waymarking signage will also be provided, over the period of the Plan, along cycle routes and pedestrian routes, including along Public Rights-of-Way, and Trails, Hiking and Walking Routes.

Directional/ Information/ Waymarking Signage - Policy

It is the policy of the Council to;

SG. P1: Provide or facilitate the provision of directional signage for amenities, tourist attractions and local attractions and along cycle and pedestrian routes (waymarking) at appropriate locations throughout the County in accordance with planning and traffic regulations.

5.17 Accessibility

Accessibility primarily concerns people with reduced mobility, persons with disabilities, the elderly and children. Disability legislation places obligations on public bodies to ensure their services are accessible to all vulnerable road users.

Inclusiveness and accessibility will be key elements in the design of all facilities for pedestrians, cyclists and public transport passengers, including people with disabilities

Accessibility - Policy

It is the Policy of the Council to;

AC. P1: Support suitable access for people with disabilities, including improvements to buildings, streets and public spaces.