

Chapter three Transport and Infrastructure

3.1 Part A: Transport

3.1.1 Background

Improving the standard of transportation infrastructure in Athy is of primary importance. The provision of good quality infrastructure is essential to the economic, social and cultural development of the town. Athy Town Council will seek to encourage patterns of economic growth, which can be achieved with maximum transport efficiency and the least possible environmental impact.

The designation of Athy as a Moderate Growth Town within the Greater Dublin Area necessitates the improvement of links to and from Athy from the hinterland and Dublin for all trip purposes by all modes of transport. It is vital that links with Dublin and surrounding areas are maximised not only to attract business development into the town but also to provide for leisure and other trips to and from the Metropolitan area.

Goal

To develop a safer, more efficient and integrated transport system within Athy, with improvements to the road network, other forms of the transport network including public transport, cycle ways and to create a pedestrian friendly environment.

Objectives

- (1) To integrate land use and transportation to ensure that, in the future, travel to and within Athy is carried out using the most convenient and appropriate modes of travel.
- (2) To facilitate access to and from Athy from the hinterland, Dublin and centres in the adjoining South-East and Midlands Regions for all trip purposes by all modes.
- (3) To minimise car access and direct through traffic in the town centre by the development of key road links.
- (4) To maximise pedestrian and cycle movements between residential areas, the town centre, schools and the railway station.

3.1.2 *Athy Integrated Framework Plan*

The Athy Integrated Framework Plan for Land Use and Transportation (IFPLUT) was commissioned jointly by Kildare County Council and the Dublin Transportation Office in the context of Athy's designation as a secondary growth centre in the Strategic Planning Guidelines.

The purpose of this study was to set out an integrated framework plan for the future development of the town. The integration between land use and transportation is key to the development of the town to ensure that, in the future, travel to and within Athy is carried out using the most convenient and appropriate modes of travel. This can only be achieved by planning for the future provision of homes, jobs, education and social activities hand in hand with transport planning.

Integrated planning of this nature ensures that people are offered the opportunity to travel to and from these land uses by the most appropriate and sustainable modes of transport, whether by foot, bicycle, bus, car or train. Planning of this kind fundamentally addresses the future quality of life and social inclusion of the people of Athy as it builds upon the opportunities in the town to make it an attractive place to live, work and do business.

The Integrated Framework Plan sets out the preferred scenario for the development of the town up to 2016. In order to develop this preferred scenario, guiding principles and objectives were set out, upon which the strategy could be assessed. The various land use scenarios were also measured using two modelling processes. Firstly, the sustainability of each land use scenario was gauged by determining the walking distances between major trip attractions. Then each viable scenario was tested up to 2016 using two computer-modelling packages. These computer programmes model traffic behaviour around the town and assess the modal split for the various journey types. The results from this modelling are then assessed in terms of their compliance with the guiding objectives with a final preferred scenario being selected as the most beneficial to the future development of the town.

Policy Statements

Transport- General

It is the policy of the Council:

- GR 1** To have regard to the policies and recommendations as outlined in the IFPLUT for Athy town.
- GR 2** To improve road, street and town signage by undertaking, in association with other relevant bodies, a survey of existing signage to assess any proliferation, gaps and deterioration in quality and consequently to develop a signage policy to enhance the general appearance of the town.
- GR 3** To promote road safety measures in conjunction with Government departments and other agencies to avoid the creation of traffic hazards and to ensure traffic management issues are adequately addressed at pre-planning and planning application stage.
- GR 4** To ensure a safe and comprehensive roads system capable of satisfying the requirements of both vehicular traffic and pedestrian traffic within the town.
- GR 5** To carry out traffic management schemes within the town generally, and outside the built-up area as the need arises.
- GR 6** To have regard to the condition, location and accessibility of heritage items in the planning and provision of transportation services.



3.1.3 Public Transport

Athy is served by both bus and rail public transport. The rail service includes the mainline intercity service on the Carlow/ Kilkenny / Waterford line. The capacity on the line is severely restricted due to the limited number of tracks and the demand on the line beyond the Cherryville junction to Heuston Station. Iarnrod Eireann is presently carrying out major re-development works at Heuston Station to increase the number of platforms to nine. In addition, the line between Cherry Orchard and Hazelhatch is to be doubled to four tracks. This will provide for the separation of suburban and mainline services thereby substantially increasing the capacity of the line.

Athy town is served by bus transport with a range of services to centres including Carlow, Portlaoise, Dublin, Naas, Monasterevin, Kildare and Maynooth. Bus Eireann currently operate both local and expressway services through Athy. The local service operates once a day from Athy - Kilcullen – Naas. The expressway services operate five departures a day from Athy to Dublin and four departures from Dublin to Athy daily. South Kildare Community Transport Ltd was formed out of the Department of Public Enterprise Rural transport Initiative and recently began operating services between Kildare, Monasterevin and Athy providing six services per day. Private bus operators also provide commuter and general services from Clonmel via Athy and Naas to Dublin City. In addition a limited number of private bus services run through Athy to the third level colleges of NUI Maynooth and the Institute of Technology in Carlow. Athy Town Council will promote improved and more frequent rail and bus services from Athy to other urban centres in the County and elsewhere.

Policy Statements

Public Transport

It is the policy of the Council:

- PT 1 To co-operate with the relevant transport bodies and authorities to secure improvements and further developments of the public transport system.
- PT 2 To facilitate and promote the development of upgraded rail infrastructure and services on the Dublin-Waterford line through Athy.
- PT 3 To facilitate the provision of taxi and hackney services and parking in Athy.
- PT 4 To facilitate the provision of a bus-bay and quality bus waiting area in the town centre and to encourage interchange between bus and rail services.
- PT 5 To require that public transport set-down and pickup points are located such that the safety of passengers is maximised and the safety of road users is not endangered through the creation of a traffic hazard.

3.1.4 *Cycling & Walking*

In line with principles of sustainability a modal shift from the private car to public transport, walking or cycling will be encouraged. Currently cycling does not play a significant role as a mode of transportation in Athy. A number of development objectives set out in the plan will enhance the pedestrian and cycling environment for the enjoyment of Athy residents and visitors alike.

The development of the Inner Relief Street will provide major opportunities to re-develop the existing streetscape on the N78 through Duke Street and Leinster Street. The proposed one-way system offers the potential to reallocate road space to footpaths and dedicated cyclist facilities. Improvements to pedestrian safety and the pedestrianisation of certain routes will create opportunities for enhanced pedestrian movements to and through the town.

Policy Statements

Cycling & Walking

It is the policy of the Council:

- WA 1** To continue the improvements, which facilitate pedestrian safety at various locations within the town centre, and in particular at the following junctions:
- (a) N78 / Kirwans Lane
 - (b) N78 / Church Road
 - (c) N78 / Chapel Lane
 - (d) N78 / Meeting Lane
 - (e) N78 / John's Lane
 - (f) N78 / Green Alley
 - (g) N78 / Nelson Street
 - (h) Mount Hawkins / Chapel Lane
 - (i) Kirwans Lane / Mount Hawkins
 - (j) Woodstock Street / Barrack Lane
- WA 2** To encourage the extension and widening of footpaths generally within the existing built up area, and their re-paving for pedestrian use. Such works will have regard to the implementation of the roads objectives detailed above. In particular the pedestrianisation of the following routes will be carried out following the construction of the Inner Relief Street:
- (a) Emily Square and extend this to the Courthouse Square and Back Square.
 - (b) Meeting Lane from its junction with Leinster Street to its junction with the proposed Inner Relief Road.
 - (c) St. John's Lane from its junction with Duke Street to a point adjoining the pedestrian walk to Greenhills.
 - (d) Green Alley from its junction with Duke Street/William Street to its junction with the proposed Inner Relief Road.
- WA 3** To construct pedestrian bridge crossings over the River Barrow as appropriate to link schools, parks, playing fields and residential areas on both sides of the river, thereby providing safer routes to school. This bridge will be constructed to the specifications of all statutory bodies.
- WA 4** To continue to provide for and extend the system of safe pedestrian and cycle routes linking residential areas and the town centre with schools, shops, the train station and open spaces.
- WA 5** To upgrade and construct continuous walkways and cycle ways along both sides of the River Barrow, to provide attractive leisure routes and an alternative route to the town centre. (See Map 3).
- WA 6** To provide signal controlled pedestrian facilities, which have an audible signal and dished kerbs with tactile paving to assist visually and mobility-impaired persons in crossing roads.

- WA 7** To implement a one-way system on sections of Duke Street and Leinster Street and increase footpath widths and construct dedicated cycle lanes in accordance with the Inner Relief Street Scheme.
- WA 8** To ensure that all new residential developments have provision for cyclists.
- WA 9** To encourage the provision of secure bicycle parking facilities in the town centre, at public facilities such as schools, libraries, train station and in all new developments in accordance with the standards set out in development control standards.
- WA 10** To ensure that roads and footpaths are designed and constructed to cater for the needs of the physically disabled.
- WA 11** To provide footpath continuity at appropriate locations to the town boundary.
- WA 12** To improve existing lighting and seek the provision of additional lighting facilities in Athy as funding becomes available.

3.1.5 Roads

The current road hierarchy comprises the N78 national secondary road, which provides the main route through Athy and links the town to Naas and Dublin to the east and Kilkenny to the southwest. The R417 Monasterevin/Carlow Regional Road bisects Athy in a north-south direction and connects the town to Monasterevin in the north and Carlow in the south. The R428 regional road (Stradbally Road) enters the town from Portlaoise in the west and the R418 enters from Castledermot in the southeast. Numerous county roads link the town to its hinterland.

The N78 serves as the principal commercial thoroughfare and the principal vehicular route through the town. It is subject to frequent delays, which will pose an impediment to the future economic development of Athy. The proposed Athy Inner Relief Street will allow through traffic to by-pass Duke Street and Leinster Street. The proposed carriageway will be a single carriageway and will be approximately 1 km in length. It shall incorporate a bridge over the River Barrow and a drop lock and bridge on the Grand Canal. The aim of the scheme is to relieve congestion on Duke Street and Leinster Street (N78) and to facilitate easier access between residential areas in Athy town centre. In 1999 Shaffrey Associates prepared a report for the planning authority "Athy – New Street Proposals 1999." This Report contains recommendations on the development of the Athy Inner Relief Road as a new Street within Athy. It recommended an urban design approach with the creation of new civic spaces, rejuvenation of existing spaces and improvement of the pedestrian environment by careful traffic management measures, which will be facilitated by the new street. This report further states that Athy and its potential as a commercial centre has been affected by the increasing traffic congestion. The development of this street will provide opportunities to redevelop the existing streetscape of Leinster Street and Duke Street and to develop between the Inner Relief Street and Duke Street, thus expanding the town centre function and adding to the local economy.



Policy Statements

Roads Construction

It is the policy of the Council:

- M 1** To continue to co-operate with Kildare County Council in acquiring the land and completing the Inner Relief Street, as recommended in Table 8.2 "Strategic National Road Projects" of the Regional Planning Guidelines 2004. The design of the Inner Relief Bridge shall be of a design that is in harmony with the existing townscape.
- M 2** To construct a southern distributor road and preserve this route free from development. This is a priority objective of this Plan. (See map 8).
- M 3** To construct a vehicular access from the Barrack Lane to the Council owned land to serve the proposed community and mixed-use development (See Map 2).
- M 4** To preserve free from development the proposed road alignment of the Athy link road from the N9 Kilcullen – Porterstown.
- M 5** To carry out a feasibility study to the North of Athy within 12 months of the adoption of the Plan to identify a preferred route option for a transport corridor and to preserve, free from development the proposed road alignment of same.

Road Improvements

It is the policy of the Council:

- M 6** To continue the re-alignment of the R417 (Carlow Road) at Ardreich, having regard to the archaeological constraints in this area.
- M 7** To complete the improvements to the Fortbarrington Road from Blackparks to Andrew.
- M 8** To improve the junctions of the R418 (Castledermot Road) with the N78.
- M 9** To improve the junction of the Kildare Road with the N78, having regard to the constraints of nearby protected structures.
- M 10** To continue the construction of gateway features on the west-end of the N78 and to introduce gateway features on the eastern-end of the N78 to alert drivers that they are entering an urban area. This will include improved lighting, traffic calming measures, provision of higher level of signage along with road markings.
- M 11** To require the improvement of the local road from Prusselstown Cross Roads to the N78 Dublin Road.
- M 12** To ensure that adequate set back is provided adjacent to the four railway bridges in Athy (as indicated on Map 9) to allow for the upgrading of the railway in consultation with Iarnród Éireann.

Traffic Calming

It is the policy of the Council:

- M 13** To implement traffic calming and other associated measures on the R417 and R428 as part of new developments.
- M 14** To implement traffic calming measures on Stanhope Place and Mount Hawkins.
- M 15** To implement traffic calming measures on the N78 at the football club.

Car Parking & HGV's

It is the policy of the Council:

- CP 1 To require significant new industrial developments in the vicinity of Athy to incorporate designated HGV parking areas. Applicants are advised to consult with the Planning Authority at pre-planning stage to determine whether the size of the industrial development proposed requires designated HGV parking areas.
- CP 2 To ensure that car parking is generally provided in accordance with "Buildings for Everyone" 2002 published by the National Disability Authority.
- CP 3 To prepare a traffic management plan for Emily Square.
- CP 4 To prepare a car parking strategy for the town ensuring that there is a network of car parks at strategic entry points to the town centre.

3.2 Part B: Infrastructure

3.2.1 Background

The provision of adequate water supply and sewerage facilities is an integral part of the proper planning and sustainable development of any area. There have been significant changes in the operating environment in which these services are provided since 1999. The many drivers of change include new EU and national legislation, the Government's framework for water pricing, project management and service procurement approaches together with regional strategic planning and integration of services.

Plans are currently underway to link Athy's water supply to the regional network and this will be carried out during the lifetime of this Plan. Work is required to upgrade the existing foul sewer network on the Dublin Road and the Kildare Road. This will be carried out during the lifetime of the Plan so that development is not impeded.

Goal

To provide water in sufficient quantity and quality for domestic, industrial, agricultural and other uses and to provide a reliable system for the safe and adequate disposal of wastewater and solid waste in a manner which is sustainable.

Objectives

- (1) To improve the provision of wastewater services in those areas of the town where deficiencies exist at present.
- (2) To provide the necessary drainage facilities to serve the needs of all development within the town, and to prevent pollution.
- (3) To separate the disposal of foul and surface water effluents through the provision of separate sewerage networks.
- (4) To promote the changeover from septic tanks to mains connections in all cases where this is feasible.
- (5) To preserve free from development the way leaves of all public sewer and water mains.
- (6) To provide sufficient water to service all the lands zoned for development in this Plan, and to provide for future needs in the longer term.

3.2.2 Wastewater

Two major regional sewerage schemes provide facilities in the most populated areas of County Kildare. These are the Lower and Upper Liffey Valley Regional Sewerage Schemes. Athy has its own sewage treatment plant.

Policy Statements

Wastewater

It is the policy of the Council:

- WW 1** To upgrade and extend the sewer network in the town to all the lands zoned for development in this Plan.
- WW 2** To provide new sewers to serve developments located at Rathstewart, Woodstock, Ardrew, Chanterlands, Kildare Road and Dublin Road.
- WW 3** To provide the necessary drainage facilities to serve the needs of all development within the town and to prevent pollution.
- WW 4** To ensure the separation of foul and surface water effluents through the provision of separate sewerage networks.
- WW 5** To prevent/ eliminate foul discharges to surface waters and water discharges to the foul sewerage system.
- WW 6** To ensure that the siting of all Waste Water Systems have regard to the County Kildare Groundwater Protection Scheme.

3.2.3 Water Supply

Two regional water supply schemes, namely the Mid- Regional Water Supply Scheme and the North East Regional Water Supply Scheme, supply the bulk of water to settlements in County Kildare.

Athy's water supply is currently sourced from boreholes located in Athy. The Council-maintained public water supply scheme currently delivers approximately 1.8 million litres of water every day. Most of the water comes from boreholes and sources within the town. In the short-term, supply will be supplemented from the South Kildare Regional Scheme reservoir at Ardscurr and in the longer term from the River Barrow Extraction Scheme.

Policy Statements

Water Supply

It is the policy of the Council:

- WS 1** To provide a new reservoir at Ardscurr, in conjunction with Kildare County Council, which will be supplied with water from the South Kildare Regional Scheme.
- WS 2** To provide a 500 mm supply main from the new reservoir to the town main.
- WS 3** To reduce water wastage in the water supply network.
- WS 4** To co-operate in the implementation of the recommendations of the 'Water Quality Management Plan for the River Barrow'.
- WS 5** To promote water conservation measures within the Town Council and its environs.
- WS 6** To implement the 'Polluter Pays Principle' for non-domestic usage.
- WS 7** To comply with the European Union Drinking Water Directive 98/83/EC.
- WS 8** To support the recommendations outlined in the Water Strategy (c003) for County Kildare.

Flood Alleviation

It is the policy of the Council:

- FA 1** To ensure that all new development shall have regard to areas that may be at risk of flooding.

- FA 2** To ensure that all significant developments impacting on flood risk areas shall submit a Flood Impact Assessment at planning application stage to identify potential loss of flood plain storage, how it would be offset and proposals for the storage or attenuation of runoff/ discharges in order to minimise the impact on the river flood regime at application stage.
- FA 3** To ensure that Athy is provided with adequate flood alleviation measures within the limits of cost effectiveness and availability of finance and in particular where solutions are known for identified problems.
- FA 4** To ensure that all developments have regard to the policies as expressed in the Greater Dublin Drainage Study by Kildare County Council with particular reference to:
1. Infiltration and Exfiltration
 2. Climate Change
 3. Basements
 4. New Developments
 5. Environments
 6. Surface Water

3.2.4 *Solid Waste Management Strategy*

Proper waste management is a fundamental requirement for sustainable development and environmental protection and we cannot continue to rely on landfill as the principal means of waste disposal. There are a number of EU Directives that apply to the area of waste management defining the legal context within which waste must be planned and managed.

Kildare County Council adopted the Waste Management Plan for Kildare in 2005. The Plan highlights current levels of waste and sets objectives whereby overall levels will be reduced and stabilised in order to comply with both national and European legislative guidelines. The guidelines set down a hierarchy of preferential modes of waste management, focusing on prevention, minimisation, re-use/ recycle and disposal with energy recovery and disposal of residual waste.

A Civic Amenity Facility has been constructed on the Dublin Road. This facility provides for the recovery of domestic waste and recyclables. There is a bring centre in Edmund Rice Square and a domestic blue bin (recyclables) collection is in operation.



Policy Statements

Waste Management

It is the policy of Athy Town Council in conjunction with Kildare County Council:

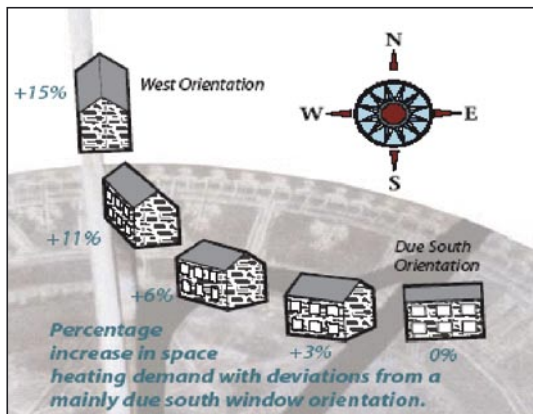
- WM 1** To promote the implementation of the Waste Management Plan (2000-2005) for Kildare together with any future Waste Management Plans.
- WM 2** To encourage waste prevention, minimisation, reuse, recycling and recovery as methods of managing waste. Where waste management is not being carried out properly, the Waste Management Acts, 1996 to 2001 will be used as a means to ensuring specific national policies and regulations are adhered to.
- WM 3** To encourage the recycling of construction and demolition waste and the reuse of aggregate and other materials.
- WM 4** To promote the 'polluter pays principle' in Athy Town Council functional area.
- WM 5** To encourage the provision of recycling facilities (i.e. bottle banks, bring centres etc.) at suitable locations in the town in order to facilitate domestic recycling initiatives.

WM 6 To promote and facilitate communities to become involved in environmental awareness activities and community-based recycling initiatives or environmental management initiatives that will lead to local sustainable waste management practices.

3.2.5 Energy Efficiency & Renewable Energy

The Council supports increased energy supply, energy efficiency and the development of renewable energy sources at optimum locations. It is important to recognise the range of new and developing technologies that can contribute to minimising greenhouse gas emissions and to securing a proportion of our energy needs from indigenous and renewable sources. Renewable energy comes from natural, inexhaustible sources such as solar, hydro, wind, biomass and geothermal. Renewable energy can also be derived from a range of waste products such as sewage, municipal and agricultural wastes.

Figure 3.1, Orientation & Space Heating



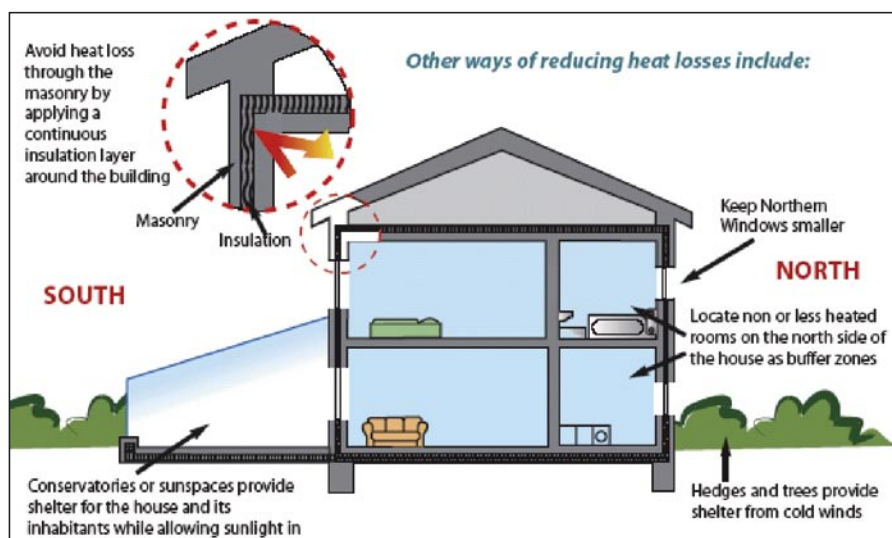
Source: Sustainable Energy Ireland, Solar homes Catch the Sun

Passive solar design principles should be incorporated into the design of individual buildings or estates in the following ways:

- Ensuring a high level of insulation in the roof, walls, floors and windows thereby reducing heat loss.
- Maximising solar gains in buildings through good orientation, layout and glazing.
- Ensuring adequate ventilation.

If passive solar design principles are taken into account in the design of a dwelling the heating will be reduced so that it is very easy to provide the remaining heat demand from a renewable energy source, such as a heat pump, wood heating system or solar water heater pump.

Figure 3.2, Reducing Heat Loss



Source: Sustainable Energy Ireland, Solar homes Catch the Sun

Policy Statements

Energy Efficiency & Renewable Energy

It is a policy of the Council:

- EN 1** To encourage applicants for planning permission to take into consideration passive solar design principles when designing an individual building or estate.
- EN 2** To support and encourage the installation of renewable energy sources such as heat pumps, wood heating systems, solar collectors or solar panels.
- EN 3** To adapt and maintain energy conservation measures within the Council's own developments and to encourage developers to implement such measures.
- EN 4** To support national and international initiatives for limiting emissions of greenhouse gases through energy efficiency and the development of renewable energy sources which makes use of the natural resources of the County in an environmentally acceptable way.

3.2.6 Telecommunications & General Infrastructure

It is the policy of the Council:

- TE 1** To support infrastructural renewal and development of electricity networks in the County, subject to amenity requirements.
- TE 2** To ensure that development, particularly dwellings, close to high tension power lines will be restricted, and that new high tension lines (110 kV and above) will not be permitted adjoining existing dwellings, except where no other alternative can be shown to exist.
- TE 3** To locate services, including electricity, telephone and TV cabling underground, where possible, and that existing overhead cables and associated equipment should progressively be located underground with future capacity considered and appropriate ducting put in place.
- TE 4** To provide orderly development of telecommunications infrastructure throughout the town in accordance with the requirements of the "Telecommunications Antennae and Support Structures – Guidelines for Planning Authorities" July 1996, whilst having regard to the policies for the Landscape Character Areas outlined in Chapter 18 of the Kildare County Development Plan 2005-2011.
- TE 5** To support the development of wide access to broadband telecommunications.

