

Chapter 6 Infrastructure and Services

6.1 Introduction

One of the strategic aims of the Development Plan is to facilitate the development of County Monaghan through the provision of essential infrastructure and services, while minimising the adverse impacts of development on the environment. This aim provides the framework for the formulation of the policies and objectives set out in this section.

Improved national, regional, county and local infrastructure and services are essential to improve the economic competitiveness and quality of life within the county. Basic infrastructural development and investment in areas such as roads, water, energy, waste and telecommunications are required to promote balanced and sustainable economic development and to improve the quality of the built and natural environment, throughout the county.

Investment in infrastructure is heavily reliant upon investment at national government level. Investment in infrastructure is channelled through the National Development Plan 2007-2013, with an overall investment of €184 billion in five infrastructural sectors - national roads, public transport, environmental infrastructure, sustainable energy, housing and health facilities. However this level of investment is now uncertain given the fiscal constraints upon the state over the coming years.

County Monaghan, in common with other border counties has a deficient infrastructure. The road network, which is the only mode of transport in the county, requires additional upgrading at all levels. However, the Waste Management Strategy has resulted in major reductions in waste levels, while the county's drinking water requirements for the medium term have been secured.

It is the aim of this Plan to improve infrastructure for the county so that it will be an attractive location for new commercial and residential development.

Key to the effective provision of infrastructure and services in the county is the consolidation of new and existing development. This will minimise the need to travel, encourage a modal shift to public transport, and cycling and walking, will protect existing and proposed investment in public infrastructure and will ensure that infrastructure and services are delivered in an effective manner.

Transportation

6.2 Transportation

6.2.1 Smarter Travel

One of the five high level goals of the Department of Transport, as outlined in the Statement of Strategy 2008-2010, is to advance the development of an integrated and sustainable transport system for Ireland.

This high level goal has since been further strengthened through the development of a sustainable travel and transport policy for Ireland. The policy, *Smarter Travel - A Sustainable Transport Future*, was published in February 2009, and represents a new transport policy for Ireland for the period 2009-2020. The policy recognises the vital importance of continued investment in transport to ensure an efficient economy and continued social development, but it also sets out the necessary steps to ensure that people choose more sustainable transport modes such as walking, cycling and public transport. The policy is a response to the fact that continued growth in demand for road transport is not sustainable as it will lead to further congestion, further local air pollution, contribute to global warming, and result in negative impacts to health through promoting increasingly sedentary lifestyles.

The aims of Smarter Travel are as follows:

- To improve quality of life and accessibility to transport for all and, in particular, for people with reduced mobility and those who may experience isolation due to lack of transport.
- To improve economic competitiveness through maximising the efficiency of the transport system and alleviating congestion and infrastructural bottlenecks.
- To minimise the negative impacts of transport on the local and global environment through reducing localised air pollutants and greenhouse gas emissions.
- To reduce overall travel demand and commuting distances travelled by the private car.
- To improve security of energy supply by reducing dependency on imported fossil fuels.

These aims will be achieved through 49 specific actions, which can be broadly grouped into four key areas:

- Actions to reduce distance travelled by private car and encourage smarter travel, including focusing population growth in areas of employment and to encourage people to live in close proximity to places of employment and the use of pricing mechanisms or fiscal measures to encourage behavioural change,
- Actions aimed at ensuring that alternatives to the car are more widely available, mainly through a radically improved public transport service and through investment in cycling and walking,
- Actions aimed at improving the fuel efficiency of motorised transport through improved fleet structure, energy efficient driving and alternative technologies, and
- Actions aimed at strengthening institutional arrangements

Further information on the development and implementation of this policy is available at www.smartertravel.ie

6.2.2 Transport 21 and Sustainability

Transport 21 provides for total capital funding of over €34 billion in transport over the next ten years, with about €16 billion dedicated to investment in public transport (although the fiscal constraints upon the state over the coming years may severely

restrict this investment). The proposed level of investment in public transport will provide choice and an alternative to the private car, particularly in the major urban areas, thereby encouraging a modal shift from the private car to less polluting and less energy intensive forms of transport such as public transport.

It is proposed to significantly upgrade the national road network under Transport 21 by, removing bottlenecks, reducing congestion and improving journey times. If this level of investment remains committed to by the government, it will play an important role in improving the efficiency of the transport sector, and will be positive from an energy-use and an emissions perspective.

6.2.3 National Cycle Policy Framework 2009-2020

Reducing dependency on the car is one of the main objectives necessary for achieving more sustainable travel and transport patterns in Ireland. Public transport will play a major part in ensuring such modal shift occurs, but the full potential of walking and cycling will have to be realised to address the negative social, economic and environmental impacts of ever increasing volumes of road transport.

Ireland's First National Cycle Policy Framework (NCPF) was launched in April 2009 sets out nineteen specific objectives that will meet the vision of creating a strong culture of cycling in Ireland:-

- 1: Support the planning, development and design of towns and cities in a cycling and pedestrian friendly way.
- 2: Ensure that the urban road infrastructure (with the exception of motorways) is designed / retrofitted so as to be cyclist-friendly and that traffic management measures are also cyclist friendly.
- 3: Provide designated rural cycle networks especially for visitors and recreational cycling.
- 4: Provide cycling friendly routes to all schools, adequate cycling parking facilities within schools, and cycling training to all school pupils.
- 5: Ensure that all of the surfaces used by cyclists are maintained to a high standard and are well lit.
- 6: Ensure that all cycling networks, both urban and rural, are signposted to an agreed standard.
- 7: Provide secure parking for bikes.
- 8: Ensure proper integration between cycling and public transport.
- 9: Provide public bikes in cities.
- 10: Improve the image of cycling and promote cycling using "soft interventions" such as promotional campaigns, events etc.
- 11: Improve cyclists' cycling standards and behaviour on the roads.
- 12: Improve driver education and driving standards so that there is a greater appreciation for the safety needs of cyclists.
- 13: Support the provision of fiscal incentives to cycle.
- 14: Provide appropriate levels of, and timely, financial resources towards implementing the NCPF.
- 15: Introduce changes to legislation to improve cyclist safety.
- 16: Improve enforcement of traffic laws to enhance cyclist safety and respect for cyclists.
- 17: Develop a structure that can coordinate the implementation of activities across the many Government Departments, Agencies and Non Government Organisations.
- 18: Provide design professionals with suitable training / guidance to develop and implement the policies of the NCPF. Support the deepening of knowledge of the subject of planning for cyclists in Ireland.
- 19: Evaluate the cycling policy and monitor the success as the measures are implemented.

6.2.4 Green Schools Travel Module

The Green Schools Travel Module is funded by the Department of Transport, and is run by An Taisce through the Dublin Transportation Office (DTO). The Module aims to reduce dependency on car transport for journeys to and from school (and create a life-long culture of using alternatives to the car), and is an important element of implementing the Smarter Travel Policy and the National Cycle Policy. In 2010 the Green-Schools Travel Module involved 140,000 pupils around the country in some 450 schools.

6.2.5 Biofuels and Alternative Fuels

Biofuels offer the potential to reduce the greenhouse gas emissions associated with the transport sector, reduce Ireland's reliance on imported fossil fuels, and stimulate the agricultural sector which can potentially grow and provide the raw materials for biofuels production. The Department of Communications, Energy and Natural Resources (DCENR) is responsible for the promotion and development of Ireland's renewable energy policy.

As set out in the Energy Policy Framework, the Bioenergy Action Plan and the Programme for Government, the Government is in the process of introducing a biofuels obligation to ensure that a certain percentage of the transport fuel used in the state consists of biofuels. This obligation scheme will be a key component in achieving a 10% penetration of renewable energy in transport by 2020, to which the Government has committed under the proposed new EU Renewable Directive.

6.2.6 Electric Vehicles

One of the primary roles of the Government's electric vehicles strategy will be to ensure that Ireland is at the forefront of developments in this field. On a practical level, the most immediate reflection of this is reflected in the Government's aim to ensure that electric vehicles make up 10% of the transport fleet by 2020. Based on the current size of the national fleet, this would equate to around 230,000 vehicles by 2020.

A number of factors make Ireland ideal for the deployment of electric vehicles, such as the relatively limited distances travelled by motorists, and the ready availability of electricity generated from renewable sources. For these reasons, electric vehicles offer a real opportunity to dramatically reduce the greenhouse gas emissions from the transport sector. Moreover, they also offer the opportunity to reduce imports of fossil fuels, improving our security of supply situation. Finally, this dynamic and rapidly growing sector also offers a range of new enterprise and employment possibilities, both in terms of research and development and industrial production.

In 2009 the Government and the Electric Supply Board (ESB) both signed a Memorandum of Understanding with the Renault-Nissan alliance to promote the introduction of electric vehicles in Ireland. This will ensure that these vehicles are offered for sale here as soon as they are available, while also ensuring that Irish utilities and the Government are fully apprised of the latest developments in electric vehicle technology.

Objectives for Transportation	
TRO 1	Ensure that all plans and projects relating to the development of transportation are subject to policies AAP1-AAP5 contained within Chapter 4, Environment and Heritage, of the Monaghan County Development Plan 2013-2019.
TRO 2	Promote the integration of land use and transport, by encouraging and consolidating development in the existing network of towns and villages.
TRO 3	Promote development that reduces dependence on private vehicle transport in accordance with the principles set out in the Department of Transport's <i>Smarter Travel</i> .
TRO 4	Promote high quality, flexible and responsive local transport services in urban and rural communities.
TRO 5	Promote and facilitate the use of cycling and walking as alternative sustainable modes of transport in accordance with the provisions of the National Cycle Policy Framework 2009-2020.
TRO 6	Promote the provision of facilities for use by electric vehicles in accessible locations throughout the county.
TRO 7	Promote and support the Department of Transport's Road Safety Strategy Programmes in partnership with the National Roads Authority, National Safety Council and An Garda Síochána.
TRO 8	Secure a safe and efficient road network.
TRO 9	Promote and facilitate where possible the use of rail transport.
TRO 10	Promote the protection and conservation of the existing environment.
TRO 11	Prepare a Land Use Transportation Plan for the County.
TRO 12	Where resources permit, develop a transportation implementation plan during the lifetime of the Development Plan, which highlights priority schemes for development and improvement, and facilitates an integrated and planned approach to the improvement and development of new transportation infrastructure.

6.2.7 Public Transport

Public transport plays a key role in sustaining the vitality and viability of rural communities as well as providing essential inter-urban links.

Towns and villages along the N2 National Primary Route are well served by national bus routes operating the Dublin to Letterkenny / Derry route and private operators operating the Monaghan-Dublin route. However east-west routes and local inter-village routes are not well served by the national bus service providers.

The Rural Transport Initiative is a Department of Transport programme that encourages innovative, community-based initiatives to provide transport services in rural Ireland, with a view to addressing the issue of social inclusion, caused by lack of access to transport. Bawn and Latton Transport Initiative (BALTI) currently provides transport services to rural areas, villages and towns across the county. Monaghan County Council supports this initiative and encourages the establishment of new transport routes by public and private operators throughout the county.

Map 3.7 in Chapter 3, Settlement/Core Strategy details the public transport routes within the county.

Objectives for Public Transportation	
PTO 1	Ensure that all plans and projects relating to public transportation initiatives are subject to policies AAP1-AAP5 contained within Chapter 4, Environment and Heritage, of the Monaghan County Development Plan 2013-2019.
PTO 2	Promote the creation of new transport routes by public and private operators throughout the county.

6.2.8 Roads

The Development Plan aims to integrate transport and land use policies to provide a sustainable framework for the economic, social and cultural development of the county and its towns, within the national perspective as set out in the National Development Plan and National Spatial Strategy.

The National Spatial Strategy identifies the N2 (linked to the M1 motorway) as one of nine Strategic Radial Corridors and a strategic priority to provide “*enhanced North/South road linkages through the Midlands*”.

The Border Regional Planning Guidelines identifies four key road transport linkages in the region:-

- Northern Radial Route (M1/A1)
- Northwestern Radial Route (N2/A5)
- Central Radial Route (N3/M3/A509)
- Western Radial Route (M4/N4)

Monaghan Local Authorities recognises the key economic function that a strong, transportation network plays in providing access to ports, airports and markets and the vital role it plays in the social life of both urban and rural dwellers. County Monaghan relies on its road network as the sole method of transport serving the county. Table 6.1 shows the total length of roads in the four main urban districts in County Monaghan.

Table 6.1 Schedule of Road Distances in each Town/Engineering Area (Km)

	*NP	*NS	Regional	*LP	*LS	*LT	Total
Castleblayney	19.90	6.96	68.82	119.95	141.41	168.03	525.07
Monaghan	34.52	10.29	59.48	132.06	167.13	290.33	699.81
Clones	0	16.06	98.65	147.04	150.92	272.63	685.30
Carrickmacross	18.38	0	75.93	135.96	117.30	253.60	601.17
Overall Total	72.8	33.3	302.9	535.0	576.8	990.6	2511.4

*NP - National Primary

*NS - National Secondary

*LP - Local Primary

*LS - Local Secondary

*LT - Local Tertiary

The following National Roads cross the county;

- N2 Dublin-Derry National Primary Road
- N12/N54 Belfast – Galway (Armagh – Monaghan – Clones – Cavan)
- N53 Dundalk to Sligo, East – West (Castleblayney – Dundalk) Route

The National Road and Motorway Network provide the County's towns with fast and efficient access to Dublin and other principle towns, airports, sea ports and Northern Ireland. However these roads have severe negative impacts on the towns and villages they pass through, adding greatly to traffic congestion and environmental pollution, as well as limiting pedestrian access, business development opportunities and access in urban centres. At present national routes still pass through the settlements of Monaghan, Clones, Emyvale, Tyholland and Smithborough.

Map 3.8 in Chapter 3, Settlement/Core Strategy details the road network within the county.

6.2.9 Car Ownership and Traffic Growth in Monaghan

Traffic growth in County Monaghan increased significantly over the period 2000 to 2008. However, the recent economic down turn is likely to have slowed this increase markedly. Table 6.2 overleaf details the number of new vehicles licensed in the county and the state every year up to 2010. Although the number of new vehicles taxed every year fluctuated over the period 2000 to 2008, there was an overall net increase in numbers. This combined with improvements in the road network has resulted in more frequent traffic movements and greater distances travelled between work and home. The average daily traffic flow on the N2 had been projected to rise by 49% by 2019 from the current 7,395 vehicles per day, however given the current economic down turn, a lower projected increase in traffic numbers is likely to occur.

Table 6.2 Numbers of New Vehicles Taxed Every Year

Year	No of New Vehicles taxed in Co. Monaghan	% Increase	No of New Vehicles taxed Nationally	% Increase
2000	2,938	+ 33	274,990	+ 29
2001	2,023	- 39	207,441	- 25
2002	2,107	+ 4	193,743	- 7
2003	1,920	- 9	188,109	- 3
2004	2,019	+ 5	195,507	+ 4
2005	2,381	+ 18	219,284	+ 12
2006	2,726	+ 14	233,727	+ 7
2007	2,705	- 1	246,446	+ 5
2008	2,071	- 23	194,817	- 21
2009	719	- 65	73,125	- 62
2010	1,138	+ 58	103,076	+ 41

The increase in car ownership and the mobility it offers has impacted upon the pattern of development in the county. Carrickmacross town and the south of the county has experienced an increase in population, and demand for one-off housing is greatest in this area. Carrickmacross is located on the edge of the Greater Dublin commuter belt and is now less than an hour's distance from Dublin Airport.

The completion of the Dundalk Western Bypass on the M1 motorway, the Carrickmacross by pass, the Castleblayney by pass and the Monaghan Town by pass have improved access to Dublin and the eastern sea board from the county.

Car ownership is essential to almost everyone living in rural areas of the county. One of the effects of a car-based lifestyle is a significant increase in traffic levels. Whilst 16% of the national population travel more than 5 miles to work, school or college, 30% of County Monaghan's population travel more than 5 miles daily. This is reflected in traffic congestion leading into the towns and a need for increased car parking provision, relief roads, traffic management facilities and safety measures.

Increased congestion adds to business costs and impacts on the quality of life of car drivers, pedestrians and residents. Policies are therefore required to address these negative impacts, and improve the quality of access and use of the road network throughout the county and its towns. These policies also seek to complement those outlined in the Settlement Strategy and Land Use Zonings in the Town and Village Plans.

Objectives for Roads Network	
RNO 1	Ensure that all plans and projects relating to the development of the roads network in the county are subject to policies AAP1-AAP5 contained within Chapter 4, Environment and Heritage, of the Monaghan County Development Plan 2013-2019.
RNO 2	Provide for the safe and efficient movement of vehicles and pedestrians within the county.
RNO 3	Protect emerging or preferred routes in relation to future road schemes and land requirements for future road upgrades.
RNO 4	Facilitate programmed improvements to the road network.
RNO 5	Maintain all roads within the county to the appropriate standards.
RNO 6	Improve junction standards where necessary and appropriate.
RNO 7	Provide for cycle lanes and footpaths along the roads network where appropriate.
RNO 8	Have regard to the National Roads Authority best practice guidelines in respect of the treatment of bats, badgers, otters, trees, hedgerows, scrub, wetlands, watercourses, architectural heritage, archaeological heritage and landscaping when carrying out works to the roads network.

6.2.10 National Roads

The National Roads Authority (NRA) is the statutory agency responsible for the maintenance and improvement of national routes throughout the country. Four of these routes, amounting to 106 kilometres, traverse the county. These are as follows:

- **N2 Dublin-Derry National Primary Road**
Aclint Bridge to Moybridge 63.9 km
- **N12 Monaghan-Armagh National Primary Road**
Monaghan Town to Tamlet, Tyholland 6.9 km
- **N54 Monaghan Cavan National Secondary Road**
Monaghan Town to Drumully, Clones 25.4 km
- **N53 Castleblayney-Dundalk National Secondary Road**
Castleblayney Town to Ballinacarry Bridge 7.7 km

Monaghan County Council operates as an agent for the National Road Authority, preparing work programmes and carrying out work schemes as well as providing maintenance works on these routes.

The NRA's National Roads Needs Study, 1998 assessed the adequacy and performance of the national road network. It identified the type of road that would be appropriate for each segment of the national road system in order to cater for projected traffic flows over a 20 year period (2000-2019) and achieve an average inter-urban speed of at least 80kph. The National Roads Needs Study also set minimum criteria to determine carriageway (single or dual carriageway) types on the basis of usage (average daily traffic flows). The Study identified the specific road improvements necessary to Carrickmacross by-pass to achieve this objective as well as their timing and costs.

In March 2011 the NRA published the National Secondary Roads Needs Study which focussed on the deficiencies of National Secondary Routes, particularly Major Inter Urban (MIU) Routes between towns which were designated as gateways or hubs in the National Spatial Strategy. This study identified the routes between Monaghan and Cavan and Castleblayney and Dundalk as having significant Annual Average Daily Traffic (AADT) movements.

The National Development Plan 2007–2013 Road Investment Programme outlined the level of government investment required for the improvement of the national road network, taking account of the National Roads Needs Study and broader policy issues including regional and industrial development. The objectives of the programme relevant to County Monaghan are:

- i. Continued upgrading of road links to Northern Ireland
- ii. Targeted improvements of a number of key national secondary routes
- iii. Improvement and maintenance of the non national roads network
- iv. Investment in strategic non national roads which will compliment the national roads investment

The National Spatial Strategy identified the need to develop national transport networks to support balanced regional development in Ireland. The N2 Dublin-Derry Route through County Monaghan was identified as a strategic radial corridor in the NSS, providing road access between gateways in the North-West and Dublin and providing international access via sea and airports. Along with the A5 road in Northern Ireland, the N2 road forms part of the Northern Cross identified in the Regional Planning Guidelines 2011-2021. The realignment of the N2 road between Clontibret and the Border is a significant infrastructure objective of the Government. Monaghan Town was identified as a hub centre with a key strategic location at the intersection of two national roads, the N2 and N12/N54.

Proposed works to existing national roads passing through the county are set out in the Table 6.3 on the following page.

Table 6.3 Strategic National Road Proposals for Co. Monaghan

Road	Route	Timeframe
N2	Monaghan – Emyvale realignment (11.2km)	Currently under construction
N2	Clontibret – Border	At design stage
N2/N54	Monaghan Town-Clones Road Link	At design stage
N54	Clones By Pass	At outline stage
N53	Dundalk Road-Carrickmacross Road Link	At outline stage

The national road projects set out in Table 6.4 below should be advanced in partnership with the NRA. They represent the remaining un-realigned sections of national roads within the county that form key routes and linkages with other development centres, sea-ports and airports.

Table 6.4 Remaining Un-Realigned Sections of National Roads

Road	Route
N12	Coolshannagh–Tyholland realignment
N12	Tyholland–Border realignment
N54	Tullygrimes–Magherarney realignment
N54	Smithborough By-pass
N54	Clones Town By-pass
N53	Drumcrew–Corragarta realignment

In 2012 the Department of Environment, Community and Local Government with the Department for Transport issued the Spatial Planning and National Roads Guidelines for Planning Authorities. These guidelines set out planning policy considerations relating to development affecting national primary and secondary roads, including motorways and associated junctions, outside the 50-60 kph speed limit zones for cities, towns and villages. These guidelines state that development plans must include:-

- measurable objectives for securing more compact development that reduces overall demand for transport and encourages modal shift towards sustainable travel modes.
- policies which seek to maintain and protect the safety, capacity and efficiency of national roads and associated junctions, avoiding the creation of new accesses and the intensification of existing accesses to national roads where a speed limit greater than 50 kph applies.
- clear policies and objectives with regard to planning and reservation of new routes and/or upgrades.

Objectives for National Roads	
NRO 1	Improve traffic flows on National Roads by achieving an average inter urban journey speed of at least 80 kph.
NRO 2	Facilitate programmed improvements to the National Road network, as outlined above, in partnership with the National Roads Authority.
NRO 3	Maintain all national roads within the county to the highest standards, in partnership with the National Roads Authority.
NRO 4	Facilitate the improvement and development of the strategic routes through County Monaghan as indicated in the Border Regional Authority Planning Guidelines 2010-2022.
NRO 5	Ensure that the N2 Clontibret to Border realignment corridor is protected from development that may compromise this portion of the N2 realignment.
NRO 6	Facilitate the provision of a limited number of service areas along the N2 to provide for the needs of the private and commercial road user at appropriate locations along the N2 in accordance with the provisions of the DECLG Guidelines for Planning Authorities "Spatial Planning and National Roads" and subject to normal planning considerations.
NRO 7	Prohibit the intensification of use or creation of any new access onto the national road network outside where a reduced speed limit applies, particularly onto any portion of realigned national road where the original national road has been reclassified or downgraded, and to strictly limit the number of accesses or the intensification of use of existing accesses onto national roads where speed limits of 60kph or less apply.

6.2.11 Strategic Non National Routes

There are a number of routes within the county that are not classified as national routes but provide strategic linkages between hubs and gateways, between settlements both within and outside the county, or carry significant volumes of traffic. The following regional roads are considered to be strategic non national routes:-

Table 6.5 Strategic Non National Routes

Road	Route
R188 / R162-R190	Monaghan-Cootehill/Monaghan-Ballybay-Cootehill
R162	Monaghan-Ballybay
R178	Dundalk-Carrickmacross-Shercock
R181	Keady-Castleblayney-Lough Egish-Shercock
R183	Castleblayney-Ballybay-Clones

Objectives for Strategic Non National Routes	
NNO 1	Ensure that the traffic carrying capacity and the strategic nature of these routes is not adversely affected.
NNO 2	Carry out improvement works including specific works on bridges, signage, road markings, footpaths, public lighting and traffic management facilities to improve road safety and traffic management.

6.2.12 Regional Roads

Monaghan County Council is responsible for the improvement and upkeep of 289 kilometres of regional roads throughout the county. Regional roads provide vital links between the five towns and villages within the county, in addition to towns and villages in adjoining counties.

The regional road network provides links from smaller towns and villages. It provides essential links for access to retail, service and employment centres throughout the county and beyond. Over the past ten years, Monaghan County Council, through the Road Restoration Programme and EU Co-financed Investment Programmes, has invested heavily in improvements to the regional road network throughout the county.

It is an objective of the Council to continue to improve the regional road network, through re-alignment and reconstruction of road surfaces.

Table 6.6 Schedule of Regional Roads

No.	Description	Kms
R162	Monaghan-Ballybay-Shercock	31
R178	Dundalk-Carrickmacross-Shercock	19
R179	Culloville- Carrickmacross-Kingscourt	21
R180	Carrickmacross-Ballybay	22
R181	Keady-Castleblayney-Shercock	27
R182	Castleblayney-Oram-Newtownhamilton	10
R183	Clones-Ballybay-Castleblayney	38
R184	Clontibret-Ballybay	9.5
R185	Glaslough-Monaghan	10
R186	Monaghan-Clogher	19
R187	Monaghan-Roslea	7
R188	Monaghan-Cootehill	23
R189	Monaghan-Newbliss-Cootehill	25
R190	Ballybay-Cootehill	10
R193	Rockcorry-Anny	2.5
R212	Clones-Scotshouse-Ballyhaise	10
R213	Castleshane-Killyneil	4.3
R214	Keady Road-Derrynoose	4.2
R867	N54 junction with Market Street - N54 junction with Diamond, Monaghan	0.5
R927	Carrickmacross south-Carrickmacross north	3.7
R937	Old Cross Square - N2 By pass	1.4
R938	Castleblayney North-Dundalk Road via Main Street	3

Objective for Regional Roads	
RRO 1	Carry out improvement works including specific works on bridges, signage, road markings, footpaths, public lighting and traffic management facilities to improve road safety and traffic management.

6.2.13 Local Roads

Monaghan County Council is responsible for the improvement and upkeep of 2,082 kilometres of local roads throughout the county. Each of the four urban road authorities are responsible for the improvement and upkeep of urban roads within their towns. The local (or county) roads in County Monaghan make up 84% of the roads network and serve an important role. Local roads are classed as local primary, local secondary and local tertiary depending on levels of traffic and carriageway width.

Local roads are of critical importance to the economic and social activity within the county, given the county's low level of urbanisation, dispersed settlement pattern and high density of local roads. Local roads provide the links between and within local communities, sustaining agriculture and economic activity in rural areas. The maintenance and improvement of these roads is financed from local resources and supplemented by state grants.

The Multi Annual Roads Works Programme sets out the order of priority of improvement works, agreed at local area, to be completed by the Council.

Objectives for Local Roads	
LRO 1	Facilitate the improvement of non-public accommodation roads under the Local Improvement Scheme Programme funded by state grants and contributions from benefiting landowners.
LRO 2	Carry out improvement works including specific works on bridges, signage, road markings, footpaths, public lighting and traffic management facilities to improve road safety and traffic management.

6.2.14 Urban and Development Roads

With increases in the numbers of vehicles, traffic congestion at peak hours has become a feature of the main towns, particularly those along the N2. Anticipated increases in demands for serviced land for residential commercial and industrial uses in each of the five towns, places pressures on the existing urban road structures and requires the development of new access and relief roads.

Whilst the national and regional road infrastructure has seen significant improvement over the past ten years, traffic congestion in the main towns has increased. The completion of the by-passes along the N2 has helped to relieve the localised congestion in Monaghan, Carrickmacross and Castleblayney. Those regional roads linking towns to the N2, N53 and N54 are important in providing direct access to local road users, diverting heavy goods vehicles away from town centre streets and enabling transport-reliant commercial activity to develop in suitable locations. The development of relief roads would also facilitate the development of serviceable lands.

A number of strategic new routes have been identified in each town that would facilitate development and relieve town centre congestion. These have been identified on the zoning maps attached to each Town Development Plan (Chapters 9-13 of this document) and are listed in the table below.

Table 6.7 Roads Proposals for the Five Towns in County Monaghan

Town	Proposals
Monaghan	<ul style="list-style-type: none"> • Completion of N2/N54 link road from Clones Road to Coolshannagh • Continuation of Oriel Way to link with Ballybay/Cootehill Road at Beech Grove Lawns • Development of Link Road from Ballybay Road to N2 Dublin Road Roundabout • Development of Industrial Link Road from N12 Armagh Road at Knockaconny to N2 Dublin Road at O'Neill's Farm Roundabout • Widening of Annahagh Lane to facilitate residential development • Development of Link Road from Roosky Vale to rear of Dublin Street • Extension and up grading of Annahagh Lane (west) from Dummys Lane to Roosky Road up-grades as required and those shown on map MDP1
Carrickmacross	<ul style="list-style-type: none"> • Completion of Industrial Link Road (R-178 to R-180) • Link from Kingscourt Road (R-179) to Shercock Road (R178) • Link from Shercock Road (R-178) to Ballybay Road (R180) / Castleblayney Road (N2) • Backlands Service Road to West Main Street • Service Road to lands between Castleblayney Road and Bypass (Cloughvally Upper) • Upgrade of LP4920 from Reilly's Cross (R178) to Red Door (R179) Road up-grades as shown on map CKDP 1
Castleblayney	<ul style="list-style-type: none"> • Inner Link from Monaghan Road (R938) to Keady Road (R181) • Link from Dundalk Road (N53) directly to Clontibret-Castleblayney by-pass (N2 at roundabout) • Link roads from West Street to Bog Road • Outer Relief Road from Monaghan Road (R938) to Keady Road (R181) • Link from McGrath Road to Bog Road Road up-grades as shown on map CYDP 1
Clones	<ul style="list-style-type: none"> • Southern by pass from N54 to R183 to R212 to N54 • Link road from Cara Street (N2) to Enniskillen Road (R183) • Link from Monaghan Road (N2) to Roslea Road (LP2110) • Extension of Monaghan Road (N2) – Roslea Road link road (around St Tiernachs Park) Road up-grades as shown on map CDP1
Ballybay	<ul style="list-style-type: none"> • Link from Monaghan Road (R162) to Clones Road (R183) • Link from Clones Road (R183) to Cootehill Road (R190)

Objectives for Urban and Development Roads

URO 1	Ensure that all plans and projects relating to the development of urban and development roads are subject to policies AAP1-AAP5 contained within Chapter 4, Environment and Heritage, of the Monaghan County Development Plan 2013-2019.
URO 2	Relieve traffic congestion and facilitate the development of new roads, in partnership with benefiting landowners and developers, to improve traffic management and access in and around urban centres.
URO 3	Maintain and develop the road networks in and adjacent to urban areas in accordance with the proposals indicated on the zoning maps attached to the development plans for the five towns, and as required during the life of this Plan.
URO 4	Develop, in partnership with benefiting landowners and developers, new, safe access points to serviceable lands.
URO 5	Identify and develop safe cycle lanes within the towns of Monaghan, Carrickmacross, Castleblayney, Clones and Ballybay where possible during the lifetime of the Plan.

Water and Waste Water Services

6.3 Water and Waste Water Services

Monaghan County Council is the Water Services Authority for County Monaghan. Monaghan County Council currently operates and maintain twelve water supply schemes and twenty six wastewater treatment plants and collection systems serving industry, agriculture and 30,000 domestic users in the five towns and main villages. In addition, fourteen group water supply schemes provide a private water supply to their 18,000 members throughout the county.

In April 2012, the Minister for the Environment, Community and Local Government announced that responsibility for the water and waste water services would be transferred to Irish Water, an independent state owned subsidiary of Bord Gais Eireann, in 2013. The Minister indicated that local authorities would continue to operate water services on a contractual basis until 2017, at which point full responsibility for the operation and maintenance of the service would transfer to the new entity.

One of the main constraints to development is an adequate Waste Water Treatment Works (WWTW) facility and adequate water supply servicing the area. Development should be in areas proximate of well serviced WWTW, especially those with spare capacity. The strategic objective of the Water Services Section is to ensure that the quality, efficiency and responsiveness of our services are continually improved to comply with increasingly stringent regulatory standards and meet customer expectations, and to upgrade and improve the county's water and sewerage infrastructure to cater for existing and future demands.

6.3.1 Water Services

Water is a precious resource. Monaghan County Council's goal is to deliver quality drinking water and effectively treat wastewater consistent with sustainable development. The achievement of this goal necessitates a multi-faceted response encompassing the governing legal, policy and economic framework, the supervisory and monitoring regime, our investment strategy, as well as the combined efforts of many stakeholders who assist in protecting and conserving our valuable water resources. The classification of water as fit for human consumption is based on the European Communities (Drinking Water) (No.2) Regulations, 2007 (S.I. 278 of 2007).

The Environmental Protection Agency (EPA) has responsibility to monitor the performance of local authorities and private water suppliers and report to the Minister for the Environment, Community and Local Government.

The Minister for the Environment, Community and Local Government provides funding to Monaghan County Council for capital projects/water services infrastructure. Funding is made available through the Water Services Investment Programme and to a lesser extent through the Rural Water Programme.

Monaghan County Council adopts and submits an *Assessment of Needs Report* to the Department of Environment, Community and Local Government (DECLG) identifying the county's future public water services priorities. The purpose of this assessment is to develop an overall strategy to provide water services to the county of Monaghan for the medium to long term and to set out a programme of works to meet the identified water services needs outlined in this report. The DECLG prepares its overall investment

strategy and schedules water services capital works projects under successive Water Services Capital Investment Programmes on the basis of the Assessment of Needs Report.

The Water Services Investment Programme aims to ensure that the timing and scale of water services investment facilitates economic and other development, compliance with statutory requirements for drinking water and wastewater treatment, and the achievement of environmental sustainability objectives.

Table 6.8 County Monaghan Water Services Investment Programme 2010-2012

Scheme Name	Contract Name	Water/Sewerage	Estimated Cost €
Contracts at Construction			
Carrickmacross Sewerage Scheme	Contract 2 (Network)	Sewerage	15,140,000
Water Conservation Stages 1 & 2 Works	Water Conservation Stages 1 & 2 Works	Water	3,992,000
		Total	19,132,000
Contracts to Start			
Carrickmacross Sewerage Scheme	Contract 3 (Treatment Plan Upgrade & Outfall)	Sewerage	5,500,000
Carrickmacross Water Supply Scheme	Water Treatment Plant – BDO	Water	5,500,000
Castleblayney Sewerage Scheme Phase 1	Wastewater Treatment Plant Upgrade	Sewerage	3,927,000
Lough Egish Regional Water Supply Scheme	Contract 2 (Water Treatment Plant Upgrade)	Water	1,300,000
Monaghan Town Sewerage Scheme (H)	Contract 2 (Network)	Sewerage	3,910,000
		Total	20,137,000
Water Conservation Stage 3 Works	Watermains Rehabilitation, including lead replacement of public mains (Contract 1)	Water	2,500,000
		Total	2,500,000
		Contracts Total	41,769,000
Schemes at Planning			
Water Conservation Stage 3 Works		Water	

Stage 3 of the National Water Conservation Programme as outlined in Department Circular L6/2007 involves the rehabilitation and replacement of defective supply networks. Network rehabilitation will commence in 2013 and build on the Water Conservation Team's Stage 2 achievements. Monaghan County Council has appointed Consulting Engineers to manage Stage 3 and Works Package 1 will focus on mains replacement / rehabilitation in the following District Meter Areas (DMAs):

- Monaghan Town – MN Town Centre DMA
- Monaghan Town – MN Hospital / Milltown Road DMA
- Monaghan Town – MN Clones Road DMA
- Monaghan Town – MN Derry Road DMA

Objectives for Water Services	
WSO 1	Ensure that all plans and projects relating to the development of water services are subject to policies AAP1-AAP5 contained within Chapter 4, Environment and Heritage, of the Monaghan County Development Plan 2013-2019.
WSO 2	Complete the projects outlined in the Water Services Investment Programme and Assessment of Needs Report 2010-2012, subject to the availability of funding.
WSO 3	Improve the quality and capacity of water supply throughout the county in partnership with the all stakeholders.
WSO 4	Protect the source and raw water quality of all public and private water supply schemes throughout the county.
WSO 5	Reduce water wastage and unaccounted for water through water conservation measures and improvements to existing infrastructure, including both the public and private sector.
WSO 6	Provide an adequate supply of piped water for fire fighting.
WSO 7	Protect existing aquatic habitats in the case of surface waters.
WSO 8	Co-operate with the Federation of Group Water Schemes to improve the quality and capacity of water supply to areas served by group water schemes.

6.3.2 Waste Water Services

The quality of Ireland's water resources is a key national asset. The planning system, in tandem with building standards, water quality and waste management codes, has a vital role to play in conserving and enhancing water quality, taking into account the wider principle of proper planning and sustainable development including the prevention or reduction of waste production and its harmfulness, and the minimisation of energy use.

The Waste Management and Water Quality systems place obligations on holders of waste to properly manage those wastes and to recover or dispose of them without endangering human health, and without using processes or methods which could harm the environment.

It is a strategic objective of government to meet in full the requirements of EU Waste Water Treatment Directives, tackle serious pollution of rivers, reverse and minimise moderately and slightly polluted rivers and lakes, while providing infrastructure to facilitate economic growth and development throughout the regions

Monaghan County Council operates 26 waste water treatment plants in County Monaghan (refer to Table 6.9). The wastewater treatment plants vary in size from Monaghan Town Waste Water Treatment Works (WWTW) which has a design capacity of 44,000 population equivalent (p.e.) to plants such Drum WWTW which has a design p.e. of 150.

There are three sensitive water areas located in the county, the River Blackwater, downstream of Monaghan Town, Lough Muckno, the discharge point for Castleblayney WWTW, and the Proules River, downstream of Carrickmacross. Additional monitoring and emission control together with additional treatment are required for the discharges from the three WWTWs serving Monaghan, Castleblayney and Carrickmacross.

The Minister for the Environment, Community and Local Government provides funding to local authorities for capital projects. The Water Services Programme is essentially divided into two main elements:

1. Water Services Investment Programme (WSIP) and
2. Rural Water Programme (RWP)

The Water Services Investment Programme is a three year rolling plan for the provision of major water and sewerage schemes ie. schemes with an estimated costing over one million euro at present. The Rural Water Programme is a programme for smaller schemes and is devolved to the County Councils.

The Exchequer meets the full capital costs of providing services to domestic customers. The non-domestic sector must pay for services provided to them, which is a contribution from the private sector under the Polluter Pays Principle).

The current Water Services Investment Programme, 2010-12, provides for major investment in waste water supply infrastructure. The programme considers WWTWs according to the River Basin District (RBD) they are located within, which in the case of County Monaghan are the Neagh/Bann RBD and the North Western RBD. The contracts planned during the current programme are:

1. Carrickmacross Sewerage Scheme (Contract 3 - Treatment Plant Upgrade & Outfall) - €5,500,000
2. Castleblayney Sewerage Scheme Phase 1 (Wastewater Treatment Plant Upgrade) - €3,927,000
3. Monaghan Town Sewerage Scheme (Contract 2 - Network) - €3,910,000

The contract for Carrickmacross main drainage will complete in 2012 at cost of almost €20m, consisting of new foul water collection system and associated pumping stations, and decommission of all pumping stations.

In 2011 two Serviced Land Initiatives (SLI) for Monaghan Town to extend the existing wastewater collection systems around the town were completed. The first on the Old Armagh Road consisting of large pumping station and collection pipework, and the second consisting of three pumping stations in an area north of town namely Coolshannagh-Emyvale road area.

Many of the 500-2000 p.e. sized WWTPs in Monaghan County Council were upgraded in 2000-2010 including Emyvale, Scotstown, Ballinode, Threemilehouse, Inniskeen, Glaslough, Rockcorry and Newbliss. Current plans identify the wastewater infrastructural needs in each town/village and the Council's Water Services Section will commence a Programme of Works in 2012-2015, to meet the identified needs.

It is also planned to construct a new leachate treatment facility at Scotch Corner landfill, consisting of an Integrated Constructed Wetland (ICW). ICWs should be promoted in small towns and villages, where ample land is available for treatment, keeping running costs/energy requirement to a minimum. ICWs should also be considered for enterprises located in rural areas.

Table 6.9 Assessment of Waste Water Treatment Works Capacity in Settlements

Town/Village	Existing Design P.E.	Current Loading P.E.	Treatment Type	Proposals
Monaghan	43,833	18,500	Secondary	Subject to EPA pending Discharge Licence (DL) conditions, possible enhanced biological treatment facility and/or new outfall discharge pipeline to Blackwater 'sensitive' receiving waters. New Old Cross Square pumping station and new section of pipework collection system.
Carrickmacross	12,150	12,143	Secondary	New storm holding tank, New inlet and outlet pumping station, new 3.35km long outfall pipeline, new inlet works
Castleblayney	12,960	5,692	Secondary	Sludge handling and storage improvements and additional aerator.
Clones	4,500	3,100	Secondary	New final clarifier
Ballybay	7,283	3,135	Secondary	Improvement works to meet EPA pending Discharge Licence (DL)
Ballinode	1,000	462	Secondary	New pipework collection and pumping station to unserved area.
Scotstown	1,000	520	Secondary	New pipework collection and pumping station to unserved area.
Emyvale	2,000	1045	Secondary	No scheduled improvement
Tydavnet	350	100	Tertiary	No scheduled improvement
Glaslough	1,800	720	Tertiary	No scheduled improvement
Knockatallon	180	150	Secondary	Bioremediation of waste water through short rotation coppice (SRC) Willow plantation. Commenced in 2012, to be completed in 2013.

Town/Village	Existing Design P.E.	Current Loading P.E.	Treatment Type	Proposals
Carrickroe	150	80	Secondary	No scheduled improvement
Tyholland	150	143	Secondary	Addition of aeration and settlement facility to increase capacity by 600 P.E.
Knockaconny	1000	220	Secondary	Improvement works to meet EPA pending Discharge Licence (DL)
Clontibret	150	225	Secondary	Bioremediation of waste water through short rotation coppice (SRC) Willow plantation. Commenced in 2012, to be completed in 2013.
Annayalla	600	200	Secondary	No scheduled improvement
Oram	150	195	Secondary	Improvement works to meet pending Certificate of Authorisation (COA) grant from EPA.
Inniskeen	1750	979	Secondary	No scheduled improvement
Magheracloone	160	80	Secondary	Improvement works to meet pending Certificate of Authorisation (COA) grant from EPA.
Doohamlet	600	300	Secondary	No scheduled improvement
Rockcorry	1000	550	Secondary	No scheduled improvement
Newbliss	1000	650	Secondary	No scheduled improvement
Scotshouse	600	330	Tertiary	No scheduled improvement
Drum	150	78	Secondary	No scheduled improvement
Smithborough	750	590	Secondary	Improvement works to meet EPA pending Discharge Licence (DL)
Threemilehouse	250	133	Secondary	Improvement works to meet pending Certificate of Authorisation (COA) grant from EPA.

In addition to these planned proposals, Monaghan County Council continues to work in partnership with developers to provide or improve wastewater infrastructure in small rural villages and settlements.

Objectives for Wastewater Treatment	
WTO 1	Ensure that all plans and projects relating to the development of wastewater treatment facilities are subject to policies AAP1-AAP5 contained within Chapter 4, Environment and Heritage, of the Monaghan County Development Plan 2013-2019.
WTO 2	Ensure waste water from all sources is collected, treated, purified and discharged to the natural environment, in a clean, non polluting manner, in accordance with EU legislation and to acceptable environmental standards.
WTO 3	Facilitate those properties serviced by poorly performing on site effluent disposal systems to connect to the public sewer, by extending the sewer to service these areas within the constraints of reasonable distance and funding availability.
WTO 4	Fulfil the obligations of the Discharge Licensing granted conditions issued by the EPA under the WWD Regulations 2007, in respect of every waste water treatment plant in the county.
WTO 5	Facilitate the development of towns and villages throughout the county, directly or in partnership with local development, by improving and extending wastewater infrastructure where determined necessary.
WTO 6	Complete the proposals outlined in the Water Services Investment Programme and Assessment of Needs Report 2010-2012, subject to funding. Where new or upgrades to waste water treatment plants are proposed, these shall fully comply with the Water Framework Directive and the Urban Waste Water Directive.
WTO 7	Manage receiving waters in accordance with the EU Water Framework Directive (WFD) to protect/enhance all waters (surface and ground), achieve "good status" for all waters by December 2015, and manage water bodies based on river basins (or catchments).
WTO 8	Promote the use of SUDS (sustainable urban drainage systems) in all new developments to arrest surplus storm water into temporary holding tanks prior to release to natural water course. All such storm water from car parks or other oil spillage onto hard standings, shall be partially treated through oil/petrol interceptor on site.
WTO 9	Promote the appropriate development and use of Integrated Constructed Wetlands within the County.
WTO 10	Dispose of sludges produced in the water and waste water process according to sludge disposal regulations and in an environmentally sustainable manner.

Policies for Wastewater Treatment	
WTP 1	Development proposing to connect to the public wastewater treatment systems shall be limited or restricted in those areas where capacity is insufficient to accommodate the demands of the development and where funding is unavailable to increase the capacity of the relevant facility.
WTP 2	<p>Development shall not normally be permitted within 100 metres of the boundary of any waste water treatment works, where that development is sensitive to smell nuisance and the amenity of it is likely to be detrimentally impacted on by the operation or expansion of the plant.</p> <p>Where the 100 metre cordon has already been compromised by existing or permitted smell sensitive development, the Planning Authority may look favourably on a new development which is similar to that which exists or is permitted, and where in its opinion, the amenity of the development will not be detrimentally impacted on by the plant.</p> <p>In exceptional circumstances, this figure may be reduced where it is proven to the satisfaction of the Planning Authority, through comprehensive smell nuisance modelling, carried out by a competent professional, that the amenity of the development will not be detrimentally impacted upon either at the time of the application or following expansion of the relevant works.</p>

6.3.3 Sludge Management

Monaghan County Council adopted a Sludge Management Plan in 2002. The Plan identified the options available to deal with sludge produced by public water and wastewater facilities throughout the county and recommended that the Council investigate the options for beneficial use of biosolid production in County Monaghan.

Approximately 6,500 tonnes of sludge cake is generated from these plants per year with a sludgecake of between 7 – 14 % dry matter content. Sludge is generated in the four main wastewater treatment plants with dewatering facilities, namely, Monaghan WWTP, Carrickmacross WWTP, Castleblayney WWTP and Ballybay WWTP. Liquid sludges from smaller plants are transported to Monaghan and Carrickmacross where they are dewatered by belt presses.

The sludges produced in the county are utilised for processes such as growing non-food crops, composting (mixed with carbon source e.g. peat/bark) and the production of biomass - woodchip. Anaerobic digestion will also be considered if a facility is commissioned, but should be located within County Monaghan or a reasonable distance of the county.

Flooding

6.4 Flooding

Flooding occurs when the capacity of a watercourse to convey water through an area is exceeded. Flooding from rivers is probably best known, but prolonged and intense rainfall can also cause sewer flooding, and flooding to arise from overland flow and ponding in low lying areas.

The Department of Environment, Heritage and Local Government and the Office of Public Works (OPW) published ‘*Planning Guidelines: The Planning System and Flood Risk Management*’, in November 2009. These Guidelines introduced comprehensive mechanisms for the incorporation of flood risk identification, assessment and management into the planning process.

In line with these Guidelines, a Strategic Flood Risk Assessment (SFRA) is currently being prepared for the county. This will provide detailed information on the spatial distribution of flood risk, so as to inform and enable adoption of a sequential approach and to identify where it will be necessary to apply the justification test detailed in the Guidelines.

The council will strive to minimise flood risk by aiming to ensure that no new developments are susceptible to, cause, or exacerbate flooding.

Objectives for Flooding	
FLO 1	Ensure that all plans and projects relating to flood risk management are subject to policies AAP1-AAP5 contained within Chapter 4, Environment and Heritage, of the Monaghan County Development Plan 2013-2019. Such plans and policies should also have regard to the Water Framework Directive and associated water sensitive habitats and species.
FLO 2	Implement the DEHLG “The Planning System and Flood Risk Management Guidelines” and apply the sequential approach and justification test detailed in the document when considering development proposals.
FLO 3	Prepare a Strategic Flood Risk Assessment (SFRA) for the County, taking account of climate change so that risk is avoided where possible.
FLO 4	Recognise, secure and promote the natural role of floodplains as a form of flood defence and an important environment and social resource.
FLO 5	Promote an integrated sustainable approach to the management of development and flood risk.
FLO 6	Protect and enhance the county’s floodplains and wetland as vital green infrastructure which provides space for storage and conveyance of floodwater, enabling flood risk to be more effectively managed and reducing the need to provide flood defences in the future.

Policies for Flooding	
FLP 1	Prohibit development which would be directly exposed to flooding, or which would exacerbate flooding in areas outside of the site of the proposed development itself.
FLP 2	All run off from new developments in towns/villages shall be restricted to the pre development levels (green field) by storm water attenuation on site and use of SUDS (sustainable urban drainage systems), as a measure to assist in flood avoidance.
FLP 3	Development in areas at risk of flooding or that have the potential to cause/exacerbate flooding elsewhere, will only be permitted where it has been demonstrated to the satisfaction of the planning authority that the development is in accordance with the principles set out in Section 8.4.6 of the Monaghan County Development Plan 2013-2019 and the provisions set out in the Department of Environment, Heritage and Local Government Guidelines “The Planning System and Flood Risk Management” (2009). In all cases the onus will be on the developer to provide justification for the development in accordance with the provisions of these guidelines.

Waste Management

6.5 Waste Management

Recent years have seen a significant increase in recycling rates in the county which can be attributed to improved recycling facilities in the county coupled with increased environmental awareness. Prior to this, the increased generation of waste and low levels of recovery have led to the implementation, at EU and National level, of a more sustainable approach to waste management that follows a waste hierarchy model. This model emphasises waste prevention, minimisation, re-use/recycling, and recovery in preference to disposal to landfill, which is regarded as the least preferred option. 2011 has seen a significant fall in the volume of waste going to landfill in the county which can be attributed to a number of factors including lower economic output, more stringent EPA license conditions, an increase in recycling and the development of the thermal treatment plant in Carranstown outside Drogheda.

6.5.1 Waste Management Plan

The Waste Management Act 1996 enables several Local Authorities to come together to adopt a common waste management plan. The four local authorities in the North East Region, (Monaghan, Louth, Cavan and Meath) adopted the region's first waste management plan in 2001. The Plan identified the facilities that are required in the North East Region in order to facilitate the prevention, minimisation and re-use of waste. The most recent waste management plan is the 2005-2010 plan.

Monaghan Local Authorities' strategic objectives, supporting strategies and actions in the area of waste management, include the implementation of the Waste Management Plan. These are incorporated into the objectives and policies set out in this chapter.

6.5.2 Waste Collection

Municipal waste is collected by the private sector throughout the county and its towns. All municipal waste collection contractors are controlled by a waste permit system operated by the local authorities in the region in accordance with the Waste Management Act. The Government though, is presently giving consideration to the introduction of competitive tendering for local household waste collection services. Essentially, it is possible that, in the future, waste collectors may have to bid to provide waste collection services in a given area, for a given period of time and to a guaranteed level of service. Currently, the DECLG is consulting with householders, businesses, participants and other parties involved in the household waste collection industry to help inform the shaping of policy in this area.

6.5.3 Commercial Waste

Under the Waste Management (Packaging) Regulations 2003, commercial packaging waste may no longer be disposed of to landfill. Almost 40% of municipal (household and commercial) waste is packaging. The Regulations require businesses (manufacturers, importers, wholesalers, and retailers) to segregate specified packaging materials arising on their premises, and arrange for their collection for recycling by authorised operators.

The specified packaging materials include: glass, paper, fibreboard, steel, aluminium, plastic, sheeting and wood. Through local programmes and initiatives the Council also proposes to increase waste awareness throughout the county.

6.5.4 Construction and Demolition Waste

During the economic boom construction and demolition was one of the main sources of waste. The generation of this type of waste though has reduced considerably due to less large scale construction and infrastructural projects now taking place. In order to prevent and minimise this type of waste, it is envisaged that future development proposals will again have to specify measures for reducing waste, mitigating the impact/generation of waste, and, where possible, re using aggregates on site or in other construction projects.

6.5.5 Litter Control

Monaghan Local Authorities first adopted a Litter Management Plan in 2000. The current Litter Management Plan for the county covers the period 2010-2012. The main objectives of the Litter Management Plan 2010-2012 are as follows:

Objectives of Litter Management Plan 2010 – 2012

1. The principal objective of Monaghan Local Authorities Litter Management Plan is to eliminate litter in Co. Monaghan.
2. To raise awareness of the Litter Management Plan, its contents and its objectives.
3. To develop and continue the current programme for street cleansing for towns and villages throughout the County.
4. To continue the high level of enforcement that exists in the county under the Litter Pollution Act.
5. To develop new partnerships with various voluntary, public, and commercial bodies with the view to creating joint anti-litter initiatives.
6. To develop and implement a wide ranging public programme of anti-litter initiatives.
7. To implement a comprehensive pre-school, primary and secondary school campaign.
8. To promote the use of the Litter Hotline (1800 2000 14) and encourage the public to report offences using this mechanism.
9. To implement a programme for the selection, placement, maintenance, and emptying of bins.
10. To continue to generate awareness on the collection, segregation, storage and presentation of waste.

6.5.6 Waste Management Facilities

There are three types of waste management facilities in County Monaghan. These are bring sites, recycling sites (formerly known as civic amenity sites) and landfill sites.

There is presently only one landfill site in operation. This landfill is licensed by the EPA and is located at Scotch Corner. As the volume of waste going to landfill has fallen considerably in recent years there are no immediate plans to develop further landfill capacity at the Scotch Corner Facility. Indeed serious consideration is being given to whether it is economically viable to continue to operate the landfill as a public facility. If closed Monaghan County Council would retain responsibly for the ongoing environmental maintenance of the facility.

6.5.7 Recycling Sites

The Council currently operates two recycling sites in the County. At Scotch Corner there is a recycling site adjacent to the landfill facility. The second site is located at the Convent Lands Industrial park in Carrickmacross.

6.5.8 Bring Sites

Since 2002 the number of bring sites have increased from 7 to 29 and this has resulted in a significant increase in recycling rates over this time period.

The Waste Management Plan 2005-2010 (due to be reviewed in 2012) aims to provide bring sites with a target density of 1 per 500 households. As there are approximately 18,000 households in County Monaghan, the aim is to provide a minimum of 36 bring sites in the county. Consequently, the target is to provide a minimum of approximately 7 further bring centres at strategic locations in the county over this 5 year period.

Over the period 2013-2019, suitable locations are to be sought in other settlements and villages that have yet to be provided with a bring bank, subject to securing a suitable location in consultation with local community groups.

Objectives for Waste Management	
WMO 1	Ensure that all plans and projects relating to waste management are subject to policies AAP1-AAP5 contained within Chapter 4, Environment and Heritage, of the Monaghan County Development Plan 2013-2019.
WMO 2	Continue to implement the North East Region Waste Management Plan (NERWMP).
WMO 3	Develop waste minimisation programmes and recycling and sustainable waste disposal facilities in partnership with neighbouring local authorities and private and voluntary sectors in accordance with the Waste Management Plan.
WMO 4	Manage the Council's waste and recycling facilities so as to achieve value for money and in a sustainable manner.
WMO 5	Promote Environmental Awareness within all sectors of the Community.
WMO 6	Promote Sustainable Development and Agenda 21.
WMO 7	Continue to work with the relevant sectors to enable intensive agricultural activities to operate and develop while employing best environmental practices.
WMO 8	Continue to develop the Council's environmental and enforcement programme.
WMO 9	Encourage 'best environmental practices' and the use of bio technologies in industry, businesses and Local Authorities.
WMO 10	Implement and enforce environmental legislation.

Policies for Waste Management	
WMP 1	Implement the Litter Management Plan 2010-2012.
WMP 2	Apply the 'Polluter Pays' Principle, proximity principle, precautionary principle of shared responsibility in all waste management initiatives.
WMP 3	Adopt and use the Groundwater Protection Scheme as a planning tool.
WMP 4	Require all new developments to provide waste management facilities commensurate with their nature and scale.

Telecommunications

6.6 Telecommunications

A key factor in the determination of social and economic progress in the County is the development of the Information and Communication Technology (ICT) network. This is particularly important to attract investment and jobs and give local people quality access to information, education and entertainment.

The ongoing advances being made in ICT mean that technologies are being utilised more in improving communication and providing access to information. Increasingly, people who use these technologies can participate more fully in society than those that do not.

The provision of ubiquitous open access to high speed, high capacity broadband digital networks, is recognised in the Government's framework for sustainable economic renewal "*Building Ireland's Smart Economy*", as a key enabling infrastructure for the knowledge-intensive services and activities, on which future prosperity will increasingly depend.

The Economic and Social Research Institute (ESRI) estimates that by 2025, a large proportion of Ireland's services will be traded over digital networks. Therefore, the significant importance of continuing to develop, improve, expand and extend the availability of high capacity, high speed broadband digital networks, to underpin economic growth and employment generation opportunities, cannot be underestimated.

Recent years have seen considerable progress achieved through national and EU co-funded projects, in addressing the broadband core network and international connectivity deficits, through the implementation of the Metropolitan Area Networks Schemes (MANS). MANS are now in place in Monaghan Town, Carrickmacross, Castleblayney and Clones.

6.6.1 Project Kelvin

Businesses need access to a high capacity, secure and reliable telecommunications network. Project Kelvin is an extensive submarine and terrestrial cable deployment that provides a direct connection from Ireland to North America. This cable connects with thirteen towns and cities, including Armagh, Castleblayney, Dundalk, Drogheda and Monaghan.

The Project Kelvin cable adds much needed capacity to this region to further support both local and global companies. Local companies will have an opportunity to increase their communications and next-generation internet service offerings as well as increase their access to a larger marketplace of available service providers.

The new network is also attractive to global companies, such as leading financial houses, exchange markets, service providers and media companies, who require fast, low latency bandwidth that avoids traditionally congested routes, such as those around the New York and London. Figure 6.1 overleaf indicates the route of Project Kelvin.



This project is part financed by the European Union's European Regional Development Fund through the INTERREG IVA Cross-border Programme managed by the Special EU Programmes Body.

Figure 6.1 Project Kelvin Route

6.6.2 National Broadband Scheme (NBS)

In order to address poor broadband coverage, provision and speeds within the Region, State and EU funded initiative schemes such as the County & Group Broadband Scheme have been successfully implemented, and found to be relatively effective in extending the availability of broadband services to rural and remote communities, going a long way in bridging the digital divide. The schemes are, to the most part, reliant on fixed wireless technologies, and while geographical coverage is extensive, there are inherent limitations entailed in the use of this type of technology that prevents 100% coverage.

The National Broadband Scheme (NBS) was launched by the Department of Communications Enterprise and Natural Resources to address the very remote rural communities, not previously included in state funded initiatives. This scheme will not, however, address areas where no broadband services exist in previously funded areas, or where there is no availability of suitable telephone line services in existing broadband enabled telephone exchange areas.

6.6.3 Rural Broadband Scheme (RBS)

The Rural Broadband Scheme (RBS) has been established to enable a basic broadband service to be provided to individual rural premises which are not capable of obtaining a broadband service from existing internet service providers.

The scheme has been set up in conjunction with the Department of Agriculture as a measure under the Rural Development Plan using funding from the European Agriculture Fund for Rural Development.

The scheme aims to ensure that universal broadband access is provided in Ireland by the end of 2012. While the completion of the Government's National Broadband Scheme (NBS) means that broadband services are now available throughout the country, there are remaining un-served rural premises which could not be included in the NBS or which are difficult to reach for mainly technical reasons. The Rural Broadband Scheme is designed to identify those premises through a public application process and, ultimately, to bring a broadband service to them either through existing private sector service providers or through a service provider procured by Government.

6.6.4 Broadband Coverage in County Monaghan

In County Monaghan broadband coverage will be improved following the roll out of the National Broadband Scheme and the Rural Broadband Scheme to compliment fixed line broadband provision.

The Planning Authority will have regard to the *'Telecommunications Antennae and Support Structures - Guidelines for Planning Authorities July 1996'*, issued by the Department of the Environment, Heritage and Local Government, or any such guidelines which supersedes it, in considering proposals for telecommunication apparatus.

Objectives for Telecommunications	
TEO 1	Ensure that all plans and projects relating to the development of telecommunications are subject to policies AAP1-AAP5 contained within Chapter 4, Environment and Heritage, of the Monaghan County Development Plan 2013-2019.
TEO 2	Facilitate the delivery of a high capacity Information Communication Technology (ICT) infrastructure throughout the County.
TEO 3	Balance the benefits of telecommunications masts against associated disamenities, having regard to government guidelines and national policy.
TEO 4	Encourage the sharing of support structures for telecommunication infrastructures.
TEO 5	Consider the installation of telecommunications ducting when carrying out public infrastructure works.

Major Accidents

6.7 Major Accidents

The “Seveso II” Directive 82/96/EC is concerned with the prevention of major accidents and limiting their consequences on people and the environment. The Directive covers the presence of dangerous substances in industrial establishments, including industrial activities and the storage of dangerous chemicals. Article 12 of this Directive relates to land use planning and under this Article members are obliged to ensure that the objectives of preventing major accidents and limiting the consequences of such accidents are covered by the land-use policies and/or other relevant policies. To achieve these objectives, Article 12 states that controls shall be put on:

- The siting of new establishments.
- Modifications to existing developments.
- New developments including transport links, locations frequented by the public and residential areas in the vicinity of existing establishments, where the siting of developments are such as to increase the risk or consequences of a major accident.

Policies for Major Accidents Directive

MAP 1	Protect areas of particular natural sensitivity or interest in the vicinity of establishments covered by this Directive, through appropriate safety distances or other appropriate measures where necessary.
MAP 2	Facilitate the implementation of the “Seveso II and III” major accidents directives in respect of the siting of new establishments, modifications to existing establishments and major infrastructure projects including any proposed gas pipeline, rail links and major roads.
MAP 3	Consult the Health and Safety Authority (HSA), where appropriate, when considering proposals for new development.
MAP 4	The Council will have regard to the provision of the Fire Services Act 1981.

Protective & Emergency Services

6.8 Protective & Emergency Services

6.8.1 Fire Services

The Monaghan Fire Service is a front line emergency service charged with the task to protect its people and property from fire and accidents. The Fire Service’s key role involved fire prevention and operation of the fire-fighting service.

The fire-fighting service involves 51 part-time staff and five officers, with support staff, based in Monaghan Town, and operating in five fire stations located in each of the main towns. The fire service also manages requirements stipulated in the Building Control Regulations 1997 to 2009 which includes the administration of Commencement Notices, Fire Safety Certifications and Disability Access Certifications.

Objectives for Fire Services	
FSO 1	Ensure that all plans and projects relating to the development of fire service facilities are subject to policies AAP1-AAP5 contained within Chapter 4, Environment and Heritage, of the Monaghan County Development Plan 2013-2019.
FSO 2	Provide a new Fire Station in Castleblayney and Ballybay to facilitate accommodation of fire service vehicles and fire personnel welfare provisions in appropriate locations.
FSO 3	Provide a new Compartment Fire Behaviour training facility in the Mid Monaghan area to deliver appropriate training to fire-personnel within Monaghan and surrounding Fire Authorities.
FSO 4	Provide a new extension to Carrickmacross Fire Station for the accommodation of a Regional Command Unit vehicle.

6.8.2 Civil Defence

Monaghan Civil Defence Service provides back-up to front-line emergency services when required. Civil Defence consists of over sixty-five volunteers under the command of the County Civil Defence Officer, who provide a variety of services, including first-aid and ambulance cover, stewarding, search and rescue services (on land and water) and auxiliary Fire Services.

Objectives for Civil Defence	
CDO 1	Ensure that all plans and projects relating to the development of civil defence facilities are subject to policies AAP1-AAP5 contained within Chapter 4, Environment and Heritage, of the Monaghan County Development Plan 2013-2019.
CDO 2	Provide support and facilities to operate the various Civil Defence activities.
CDO 3	Provide a new Civil Defence Headquarters in Monaghan Town for the accommodation of vehicles, ancillary equipment and training facilities.
CDO 4	Upgrade rescue resources to cater for severe weather and flooding events in the most appropriate locations throughout the county.