

Chapter 6

Human Beings

6.1 Introduction

This chapter deals with the effects of the proposed N9 Kilcullen to Powerstown Scheme on human beings in the vicinity of the route corridor. The impacts of the scheme on human beings arise from many aspects of the proposal. These impacts are dealt with throughout the Environmental Impact Statement (EIS), in particular:

Chapter 5 Traffic Modelling, Traffic impacts and Economic Analysis;
Chapter 7.4 Noise and Vibration;
Chapter 7.5 Air Quality;
Chapter 8 Landscape;
Chapter 9 Material Assets;
Chapter 11 Construction Phase.

Human Beings form one of the most important aspects of the environment to be considered in an EIS. Any likely significant impact on human beings must therefore be comprehensively addressed. The principal concern in respect to this proposal is that human beings should experience no significant unacceptable diminution in an aspect, or aspects of “quality of life” as a consequence of the construction and operation of the proposed road scheme. Components of “quality of life” relevant to this section of the EIS include community and socio-economic aspects.

6.2 Methodology

The population of the catchment through which the proposed N9 Kilcullen to Powerstown Scheme passes and adjoins, has been defined by selecting and aggregating Electoral Divisions (EDs) (previously called District Electoral Divisions or Wards) as defined by the Central Statistics Office.

An examination is made of the key socio-economic characteristics of the resident population within the catchment area. This includes an examination of the population and employment characteristics of the area. This information is sourced from the Census of Population 1986, 1991, 1996 and preliminary results from the 2002 Census. The 2002 Census results available when undertaking the study only provide total population figures at an ED level.

With regard to community aspects three principal elements were identified:

- resident community;
- working community; and
- visiting community.

The impact of the road on resident, working and visiting communities is based on assessing the impact on parishes. This provides an approximate territory defining areas of common interest for these communities. Local communities adjacent to the proposed road were also assessed as part of this process.

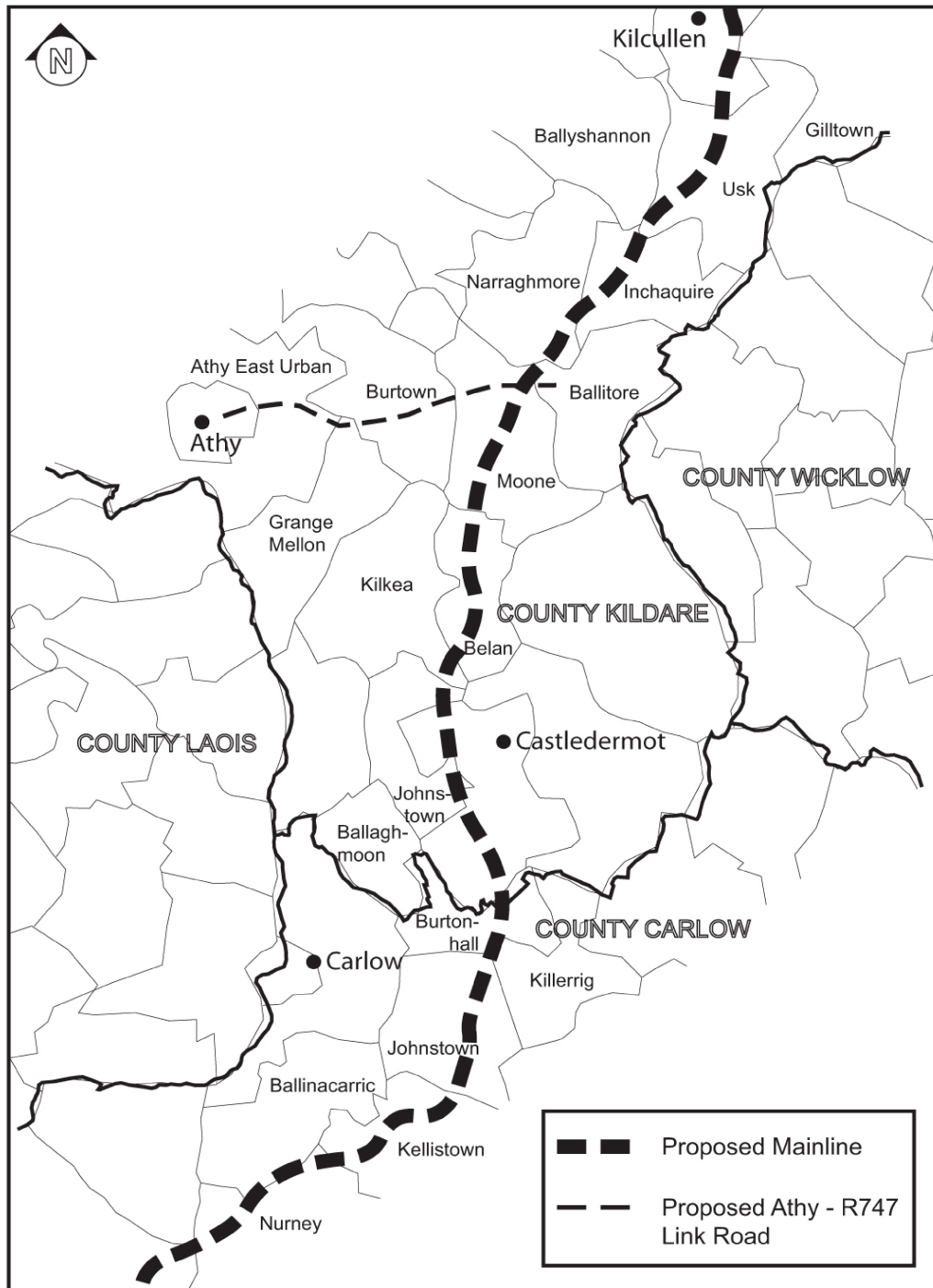
A detailed site analysis was carried out to determine the location of community facilities and the potential impact of the scheme. These are discussed where appropriate throughout this chapter.

6.3 Population

6.3.1 The Receiving Environment

In this section, recent demographic trends are examined at State, County and local level. Employment characteristics and the level of community service provision are also examined. The proposed road traverses the administrative areas of Kildare and Carlow County Councils.

Figure 6.1 Main Towns and Electoral Divisions Map Indicating Proposed Route



The catchment area for a national primary route can be extensive and diverse, given the inherent flexibility of transport vehicles that would access the road. For the purpose of this demographic analysis, the Electoral Divisions (ED's) that the proposed N9 Kilcullen to Powerstown Scheme travels through or directly adjoins define the catchment of the road. It can also be defined as an area within a broad 'watershed' between the N7 and N81 National Primary Routes. The map in Figure 6.1 indicates the location of the proposed route in relation to the ED's it passes through.

Population within the catchment was fairly stable prior to 1996 with only a 2.3% increase in the previous inter-censal period (1991 – 1996). The catchment population has however increased by approximately 8.2% between 1996 and 2002. This was slightly higher than the 8% population increase recorded throughout the State. Higher rates of 21.5% and 10.2% were experienced within the counties of Kildare and Carlow respectively. Table 6.1 summarises the growth in the population of the catchment, each county and the State over the last two inter-censal periods.

Table 6.1 Catchment Population

	1991	1996	2002	Change 1991-1996	Change 1996-2002	Change 1991-2002
Catchment population	27,051	27,663	29,919	+2.3%	+8.2%	+10.6%
County Carlow	40,942	41,616	45,845	+1.6%	+10.2%	+12.0%
County Kildare	122,656	134,992	163,995	+10.1%	+21.5%	+33.7%
State	3,525,719	3,626,087	3,917,336	+2.8%	+8.0%	11.1%

The recent and likely continued high population increases will place considerable pressure on physical and social infrastructure as well as the natural and built environment of the catchment and the respective counties. Table 6.2 provides the respective populations for the main settlements within the study area. These are currently only available to 1996 as population figures for individual towns were not available from the 2002 census at the time of this study.

Table 6.2 Population of the Main Settlements within Study Area

	1986	1991	1996	% Change 1986-1991	% Change 1991-1996	% Change 1986-1996
Kildare Town	4,268	4,196	4,278	-1.7	+2.0	+0.2
Kilcullen	1,693	1,664	1,604	-1.7	-3.6	-5.3
Athy	4,734	5,204	5,306	+9.9	+2.0	+12.1
Carlow Town	11,509	11,271	11,721	-2.1	+4.0	+1.8
Carlow Town Environs	2,307	2,756	3,258	+19.5	+18.2	+41.2
Castledermot	792	741	733	-6.4	-1.1	-7.4

Carlow Town and its environs and Athy experienced the highest population growth over the period 1986 to 1996, while conversely there was population decline in Castledermot during the same period.

The population of the Electoral District of Athy (the Town Council area) was 6,058 persons in 2002, an increase of 12.4% on the 1996 population of 5,306. This pattern of population growth, as indicated in the ED populations, is likely to have been repeated in other towns in the catchment during this period.

The Census of Population and other studies indicate that average household size is experiencing a significant decline in Ireland. The average household size in the State fell from 3.6 to 3.2 persons per household between 1986 and 1996 and is expected to have continued to decrease when the full 2002 Census is published.

This is supported by the Economic and Social Research Institute (ESRI), which estimates that the average household size will continue to decrease over the next 10 years. This process is likely to be more pronounced in urban areas, where modest population growth is accompanied by rapid new household formation. In line with national trends on declining household size, it is likely that this will have an effect on stimulating demand for new residential development as well as associated social, retail and commercial development and transportation requirements along the proposed corridor in Counties Kildare and Carlow.

6.3.2 Potential Impact of the Proposed Scheme on Human Beings

The following assessment is based on a section-by-section assessment of the impact of the proposed road on human beings within the catchment. The sections to be assessed are:

Section A – Kilcullen to Mullamast

Section B – Mullamast to Prumplestown

Section C – Prumplestown to Powerstown

Section D – Athy to R747 Link Road

The existing N9 National Primary Route, between Kilcullen and Powerstown, passes close to several settlements and through a number of communities. A number of individual properties and businesses are also located along the existing route. The following assessment of the proposed route evaluates the socio-economic break down of the catchment, the level of community severance and the general impacts on commercial activities in the area of the proposed route.

For the purposes of assessing the impact on communities the parishes have been used as the basis for the assessment. This will give an approximate territory, defining areas of common interest for dispersed rural areas, and for the hinterlands of villages. An assessment of the impact on smaller communities adjacent to the proposed route has also been undertaken.

6.3.3 Section A Kilcullen to Mullamast Ch. 78,500 – Ch. 62,000

Section A of the proposed route commences just south of Kilcullen, which is the only settlement of significant size. The proposed N9 Kilcullen to Powerstown Scheme traverses or directly adjoins the Electoral Divisions (ED's) identified in Table 6.3 in this section, which gives the respective populations of the ED's in the 1991, 1996 and 2002 Census.

Table 6.3 Section A – Electoral Divisions and Population

Electoral Division	1991	1996	2002	% Change 1991-1996	% Change 1996-2002	% Change 1991-2002
Kilcullen	1,710	1,682	1,780	-1.6	+5.8	+4.1
Usk	404	417	458	+3.2	+9.8	+13.4
Ballyshannon	619	723	997	+16.8	+37.9	+61.0
Inchaquire	170	181	186	+6.5	+2.8	+9.4
Narraghmore	411	454	481	+10.46	+5.9	+17.0
Ballitore	661	649	714	-1.8	+10.0	+8.0

There was a wide spectrum of population change within the ED's along this section in the period 1996 to 2002. The ED of Ballyshannon, which is close to the town of Newbridge, experienced the most significant population increase of 37.9% in this period. Towns in County Kildare such as Newbridge, and especially their environs, have experienced a high level of growth in recent years due to their proximity, and the ease of access via the N7, to Dublin.

The town of Kilcullen is the main settlement in this section and is located on the banks of the River Liffey in Mid Kildare. The town is primarily a service and retail centre for South Kildare and functions increasingly as a residential centre for the Greater Dublin Area. The range of community facilities includes a primary and secondary school, churches, library, community hall and other meeting places that facilitate a wide range of activities. Attractions include the Round Tower of Old Kilcullen and New Abbey as well as a 14th century bridge over the river.

The town has a thriving business sector and is host to an important livestock mart. Local industry is principally located on the Naas Road and includes Kayfoam Woolson and Renley Ltd. A new business park is proposed at the western end of the town at the M9 / N78 junction.

Kilcullen is located within the Mid–East Region and is identified as part of the Naas – Newbridge – Kilcullen primary development centre. Kilcullen is also identified in the *Strategic Planning Guidelines for the Greater Dublin Area* as being within the Dublin Hinterland Area. These Guidelines propose that future development in the hinterland be directed to such development centres. The basis for the growth of the “development centres” is that they do not become primarily dormitory towns for the Metropolitan Area, and it is envisaged that the Naas – Newbridge – Kilcullen cluster will have a high level of employment activity, high order shopping and a full range of social facilities.

The 1999 Kildare County Development Plan sets a target population for Kilcullen of 3,800 by 2006, whereas in 1996 the population of Kilcullen town was 1,682 persons. This represents a population increase of almost 136% on the 1996 population in ten years.

There were approximately 497 households within the town in 1996 with an average household size of 3.19 persons, close to the national average of 3.14 persons. The age profile of the town indicates slightly greater numbers in the 45 – 49 and 50 – 54 cohorts than average, reflecting the growth of the town in the 1970's when many young families moved in. Average household size in County Kildare is expected to decrease to 3.0 by 2006. By then, the age profile of the population is likely to have

changed due to an influx of a younger population to the area from the Dublin Metropolitan Area since the 1996 Census.

A total of 367 males and 193 females living in Kilcullen were recorded as being employed in 1996, with 69 males and 43 females unemployed. The subsequent economic boom, and the growth in employment on the western periphery of Dublin, is likely to have made a significant difference to these figures.

The route passes through the parishes of Kilmore and Narraghmore within this section. Some of the smaller settlements along Section A of the route include Yellowbogcommon, Usk Little, Narraghmore and Ballitore. The remainder of the route passes through relatively low populated areas with small groups of housing, and is characterised by a dependence on agriculture, indicating a traditional rural economy. Narraghmore is situated 8 kilometres south of Kilcullen midway between the N9 and the N78, and is a small village situated at the intersection of several County roads. It is designated in the Kildare County Development Plan 1999 as a “Special Village”. This designation is given to centres that possess an overall special amenity character and special quality.

Ballitore is located a further 4 kilometres to the south, on the west side of the existing N9, and approximately 11 km to the east of Athy, and was founded by the Quakers in the late 17th Century. Ballitore takes its name from the Gaelic “Baile” meaning a town and “Togher” meaning a marsh. Places of interest include the Quaker Museum, which was recently restored by Kildare County Council, Leadbeater House and the Shaker Store.

6.3.4 Section B Mullamast to Prumplestown Ch. 62,000 – Ch. 50,000

Section B of the proposed route traverses or directly adjoins the ED's identified in Table 6.4. This gives the respective populations and percentage inter-censal change of the ED's in the 1991, 1996 and 2002 Census.

Table 6.4 Section B – Electoral Divisions and Population

Electoral Division	1991	1996	2002	% Change 1991-1996	% Change 1996-2002	% Change 1991-2002
Moone	336	316	372	-6.0	+17.7	+10.7
Belan	179	177	187	-1.1	+5.6	+4.5
Kilkea	391	426	369	+9.0	-13.4	-5.6
Johnstown	153	161	157	+5.2	-2.5	+2.6
Castledermot	1,173	1,154	1,122	-1.6	-2.8	-4.3
Ballaghmoon	213	204	221	-4.2	+ 8.3	+3.8

Castledermot is the main settlement along this section of the route. The town is located in the extreme south of County Kildare on the N9 National Primary Route, where it is crossed by the R418 Regional Road. The town lies 32 kilometres south of Kilcullen, 10 kilometres from Carlow town and 11 kilometres from Athy.

The town primarily functions as a service centre for the surrounding rural hinterland and as a commuter town for workers in Carlow, and has experienced a small decline in population in recent years, despite its location on the existing N9.

Local attractions include Kilkea Castle Hotel, which includes a golf course as well as a health and fitness centre. Other attractions include Castledermot Round Tower and Mullaghrelan Wood.

The town had a population of 733 persons in 1996. The Kildare County Development Plan identifies the town as a Secondary Growth Centre and establishes a target population of 2,150 by 2006. This increase requires that Kildare County Council provide the necessary infrastructure in this town in the southeast of the county to cater for the planned population.

Castledermot is located within the Mid-East Region and was identified in the Strategic Planning Guidelines for the Greater Dublin Area as being within the “Strategic Greenbelt Area” outside the Metropolitan Area. The Strategy advocated in the Guidelines is to restrict development within these areas to meet local needs only.

The Guidelines call for strict control of development in greenbelt areas so as to secure a clear distinction between urban and rural areas. Concentrating local growth in Castledermot is considered the most appropriate way of reducing the pressure for one-off housing and other development in the surrounding countryside, while at the same time providing enough serviced land to satisfy local demand.

The route passes through the parishes of Castledermot and Moone within this section. Smaller settlements in this section of the proposed route include Timolin and Moone. These two villages have recently been bypassed by the Moone – Timolin Bypass. These villages are now located on the “old” N9, and will retain relatively good access to most of the main settlements. Kilkea is also located within the section.

Timolin was the location where St. Moling founded a monastery in the 7th century. An Irish Pewter centre and an associated museum are located in an old mill in the centre of the village. Moone is one of the oldest inhabited areas in County Kildare, dating back 600 years. The village includes features such as an Abbey, High Cross and the remains of the Belan House estate.

Most of this section of the route is characterised by medium population densities and relatively high levels of employment in agriculture. Much of the section is typical of strong agricultural areas adjusting to quotas imposed by the European Union and in particular the Common Agricultural Policy (CAP).

6.3.5 Section C Prumplestown to Powerstown Ch. 50,000 – Ch. 32,300

Section C of the proposed route traverses or directly adjoins the ED's identified in Table 6.5, which gives the respective populations of the ED's in the 1991, 1996 and 2002 Census.

Table 6.5 Section C – Electoral Divisions and Population

Electoral Division	1991	1996	2002	%Change 1991-1996	% Change 1996-2002	% Change 1991-2002
Burton Hall	254	241	281	-5.1	+16.6	+10.6
Johnstown	503	487	498	-3.2	+2.3	-1.0
Ballinacarrig	706	776	850	+9.9	+9.5	+20.4
Kellistown	734	768	865	+4.6	+12.6	+17.8
Nurney	751	774	822	+3.1	+6.2	+9.45
Killerrig	212	246	261	+16.0	+6.1	+23.1
Rathoran	333	353	326	+6.0	-7.6	-2.1

Carlow is the principal town in this section and the second largest settlement on the overall Kilcullen to Waterford Route. The town straddles the county boundary, with the western environs located in County Laois. The town plays a vital role in the functioning of County Carlow and is the administrative and judicial centre for the county, and a major centre of employment.

Carlow Town provides a broad range of shopping, commercial and professional services, and contains 2 major hotels and a major third level educational facility, the Carlow Institute of Technology. A business park is currently under construction on the existing N9 on the northern side of Carlow, which will improve the status of the town as an employment centre.

The town also has an extensive range of community facilities with a district/community hospital as well as a number of Health Board registered nurseries, providing day care for children. Carlow's road network is comprised of the N9 National Primary and the N80 National Secondary roads, which link the town north and south to Dublin and Waterford and eastwards to Enniscorthy and Rosslare respectively. Carlow Town is also served by the Dublin to Waterford railway line, with 8 trains a day. The journey time to Dublin by rail is just over an hour. The nearest main population centre is Kilkenny City, which is approximately 35 kilometres away.

The population of the Town Council's functional area at the 2002 Census was 13,188 persons, an increase of 1,467 or 12.5% on the 1996 population. No corresponding population figures are available for the town and environs in 2002. However the population of the town and environs grew by 14.4% in the 10 year period between 1986 and 1996.

The Carlow County Development Plan 1997 identifies that the bulk of future population growth in the County will be accommodated within Carlow Environs. However, the Plan does not provide population projections for the town or its environs.

The number at work within the Town Council area was 4,903 in 1996 (33% of the population) with 27% of those engaged in manufacturing and 23% engaged in providing commercial services, which compares with 19% and 21% respectively for the country as a whole.

The proposed N9 Kilcullen to Powerstown Scheme passes to the east of Carlow Town, through the parishes of Castledermot, Bennekerry and Tinryland within this

section. The proposed route also passes close to a number of villages and communities including Russellstown, Johnstown, Rathcrogue, Tinryland and Clonmelsh.

6.3.6 Section D Athy to R747 Link Road

Section D of the proposed route traverses or directly adjoins the Electoral Divisions identified in Table 6.6. The following table gives the respective populations of the ED's in the 1991, 1996 and 2002 Census.

Table 6.6 Section D – Electoral Divisions and Population

Electoral Division	1991	1996	2002	%Change 1991-1996	% Change 1996-2002	% Change 1991-2002
Burtown	310	300	296	-3.2	-1.3	-4.5
Grangemellon	538	525	549	-2.4	+4.6	+2.0
Athy East Urban	2,128	2,291	2,875	+7.6	+25.5	+35.10
Athy West Urban	2,260	2,171	2,395	-3.9	+10.3	+6.0
Athy Rural (part)	816	844	788	+3.4	-6.6	-3.4

Athy is the principal town along this section of the proposed route. It is situated in the south of County Kildare on the banks of the River Barrow, 65 kilometres from Dublin. The town is a thriving medium-sized settlement with supermarkets, churches, schools, hotels, pubs, entertainment and a wide range of businesses. Athy is a designated Heritage Town, and contains many buildings of interest including the Courthouse, Town Hall and Whites Castle. The Grand Canal, built in 1791, joins the River Barrow at Athy.

The N78 National Secondary road connects Athy with Kilkenny City in the south, whilst to the north it connects with the M9 and M7 motorways to Dublin. The local rail service offers 6 trains a day with a typical journey time to Dublin of approximately 1 hour. The nearest main population centre is Dublin, which provides the nearest port and airport facilities.

Athy has a traditional industrial base that has declined in recent years and it has not experienced the economic growth of many other settlements in Leinster. The population of the town was 6,058 in 2002, which represented a 14.2% increase since 1996.

The number of the population at work, at the time of the 1996 Census, was 1,672 (32% of the population) with 30% of those engaged in manufacturing and 23% in commercial services, which compares with 19% and 21% respectively for the State as a whole.

Athy is identified in the 1999 Kildare Development Plan as a primary growth centre within the county. The Plan foresees that there is ample land to accommodate the future planned expansion of the town. The Athy Development Plan 2000 establishes a target population for the town of 13,900 by 2006.

Athy is designated as a Secondary Development Centre in the Strategic Planning Guidelines for the Greater Dublin Area because of its potential and its location on a railway. However, the guidelines note that the town is not served by either an existing or planned dual carriageway. Improved road access to Athy is, therefore,

seen as critical to its future development and this should be provided by the proposed new road.

The route also passes through the parish of Moone at the eastern end of this section. There are no significant settlements elsewhere along the Athy to R747 Link Road, which passes through a relatively sparsely populated area between Athy and the N9 link.

6.4 Predicted Impacts

6.4.1 General

The mainline of the proposed N9 Kilcullen to Powerstown Scheme is 46.2 kilometres long. The length of the Athy to R747 Link Road is 11.2 kilometres and crosses over the mainline 2.5 kilometres from the existing N9 where it ties in just north of the junction with the R747. There are 5 junctions on the proposed N9 Kilcullen to Powerstown Scheme, including the Kilcullen tie-in. New junctions will be located at Mullamast, Prumplestown, Rathcrogue and Powerstown.

It should be noted initially that, regardless of the implementation of the proposed road scheme, the area is likely to continue to experience economic development and population growth. Without the proposed road scheme, this will lead to significantly increased levels of traffic on the existing road network with a consequent deterioration in the quality of amenity along the existing roads and in towns and villages not currently by-passed. These impacts would be negative and significant.

Improved transport infrastructure is recognised as a key element in ensuring the continued growth of the Irish economy. In this regard, it is pertinent to note that the National Development Plan 2000-2006 states at section 2.11:

“Roads are the dominant mode of internal transport in Ireland accounting for 90% of freight traffic and 96% of passenger traffic. Despite the investment programme under the 1994-1999 Transport Operational Programme the road network is still inadequate by reference to needs and EU standards. Rapid economic growth over recent years has put an even greater strain on this inadequate infrastructure with serious congestion now a feature of parts of the network. If this congestion is not addressed promptly in a systematic fashion the combativeness of the economy would be impaired with adverse consequences for growth and employment”.

The proposed N9 Kilcullen to Powerstown Scheme will provide for improved access to and from the study area. The scheme will thus enhance the economic potential of the area and provide opportunities both internally and through improved links to the Greater Dublin Area, to major ports and airports and elsewhere. This will be the principal overall socio-economic benefit of the scheme – a positive and significant impact.

Projected population and employment growth in the area is likely to proceed with or without the proposed road development. However, the improved accessibility afforded by the scheme may accelerate employment growth.

In addition, the improved accessibility may also increase pressure for residential development servicing long distance commuting into the Greater Dublin Area. It

may also increase pressure for residential development servicing more local commuting.

Population growth, especially accelerated growth, cannot automatically be considered to be a 'positive' impact. Population growth increases pressure on existing services such as schools, crèches, shops and other local facilities, possibly to the detriment of the existing community, and creates demand for the provision of new services.

Pressure for commercial development, especially in the immediate vicinity of the interchanges, may also arise. Commercial development, such as this, could have a significant impact on the surrounding rural areas, leading to investment and possibly employment, but could also result in an associated loss of identity, character and amenity.

Accelerated population growth, especially arising from the housing of commuters, and commercial development at the interchanges are indirect impacts of the proposed road scheme and will arise only if they are facilitated through corresponding land use policies in the relevant Development Plans.

In overall terms, the towns are likely to benefit from the scheme. In particular, their economic potential, and the associated potential for increased employment, will be enhanced through significantly improved accessibility. The removal of significant levels of through traffic from Carlow and Castledermot will enhance the environment of these centres and improve safety and amenity. The smaller centres are either not on the existing N9 or have been bypassed by earlier road schemes.

Athy will benefit in a number of ways. Whilst not directly on the new N9, the town will be well-signed and the proposed link road will afford it a level of accessibility superior to that provided by the existing road network. The scheme is likely to also remove an element of through traffic from the town. As the scheme will provide a higher quality link from Kilcullen to Athy and places south, there are likely to be a reduction in traffic levels on the N78 north of the town, with consequent benefits to the small communities along this route.

The impact of the proposed N9 Kilcullen to Powerstown Scheme on rural areas is likely to be indirect, arising from the further development of the towns, notably Athy, Castledermot and Carlow, rather than directly from the route itself. However, there may be pressure for urban generated one-off rural housing taking advantage of decreased journey times to the towns afforded by the new route. The significance of this potential impact will be dependent on the policies in the relevant Development Plans.

Where the proposed road is close to existing communities, such as at Russelstown, Johnstown and Yellowbogcommon, there is likely to be a negative impact on amenity due to visual and physical intrusion and noise caused by the proposed road and increased levels of traffic, as well as during the construction phase. The extent of these impacts is described elsewhere in the Environmental Impact Statement. To some extent, the impacts may be counterbalanced by the greater accessibility that the proposed road will offer.

Most of the resident community is likely to experience a significant reduction in congestion of the road network following the opening of scheme, particularly in Castledermot, in Carlow town centre, along the existing N9 and, to a lesser extent, the N78 north of Athy.

The predominant economic activity along the route is agriculture, and the proposed scheme will require the acquisition of land, which is primarily in agricultural use. This topic, including the severance of farm holdings, is addressed in Chapter 9 “Material Assets”.

In overall terms, the impact on business and economic activity will be positive, arising from improved accessibility. However, existing business activities such as filling stations that depend significantly on passing trade are likely to be negatively affected because of the reduced levels of passing traffic. The impact is likely to be most significant on businesses located on the existing N9 (though it may affect some businesses on the N78 also). These include petrol service stations, plant nurseries and restaurants. The impact on such businesses is likely to be greater where there is little local traffic and where they are located at a distance from proposed interchanges. At present, there are no proposals to provide service facilities along the scheme, so some traffic may be expected to divert from the new road to avail of local services.

There are a number of other businesses, such as bed and breakfast lodgings, bars and restaurants, which are located off the existing N9 and are thus less reliant on passing trade. These businesses are more reliant on local knowledge and good signage to direct visitors and are, thus, less likely to be significantly affected than businesses directly on the existing route. The impact on such businesses is likely to be less where they are located relatively close to proposed interchanges.

Tourism is likely to benefit from the scheme, which will provide improved access to the area. In addition, the improved environment arising from reductions in through traffic will assist in the further development of this industry, especially in centres such as Carlow, Athy and Castledermot.

The proposed N9 Kilcullen to Powerstown Scheme will create a sizeable amount of direct and indirect construction industry employment. In addition to the direct financial and employment benefits of the construction programme itself, it is anticipated that builders suppliers and other related services will benefit significantly during the anticipated construction programme due to an increase in trade demand. Overall, the construction programme of the N9 Kilcullen to Powerstown Scheme will be of significant benefit to the local economy due to the additional income and expenditure that will occur.

6.4.2 Community Severance

The construction of the proposed N9 Kilcullen to Powerstown Scheme will lead to an element of community severance where it passes close to or through existing communities and parishes. While the physical severance of community interaction will be limited due to the continued provision of the county road network, there may be a perceived division of existing communities due to the physical presence of the road. Some temporary road closures during the period of construction of the road may cause more acute severance to communities for a limited period of time.

The impact of the road scheme has been assessed generally in accordance with the guidelines contained in “Environmental Assessment”, Volume 11 of the Design Manual for Roads and Bridges, published by the UK Department of Transport, but with some modifications having regard to the EPA’s Advice Notes on Current Practice in the Preparation of Environmental Impact Statements (1995) and Guidelines on the Information to be Contained in Environmental Impact Statements (2002).

The criteria used for assessing the significance of community (social) impacts during operation are presented in Table 6.7.

Table 6.7 Assessment of Community Effects

Severance	
Major adverse	Considerable hindrance will be caused to people trying to make their existing journeys. People are likely to be deterred from making trips.
Moderate adverse	Trips will become longer or less attractive. Some people, particularly children and elderly people, will be dissuaded from making trips.
Minor adverse	Some hindrance is caused to current journeys. However the current journey pattern is likely to be maintained.
Not significant	No appreciable change is caused to present journeys.
Minor beneficial	Present journeys will become safer and more attractive thereby offering some relief from existing severance.
Moderate beneficial	Existing roads will be much easier to cross. Existing severance will be considerably relieved.
Major beneficial	Traffic flows will reduce to such an extent that they will no longer hinder trips and existing severance will be substantially eliminated.

Furthermore, the proposed route could give rise to some localised inconvenience at a number of locations due to rerouting or, in some cases, closure of portions of existing county roads.

In the absence of any new major junctions within the communities affected by the proposed new route, the criteria used for assessing the impacts of changes in journey distances due to rerouting or the closure of certain County roads are presented in Table 6.8.

In compiling these guidelines, the average journey speeds for pedestrians and cyclists are taken as 5km/hr and 20km/hr respectively. The average journey speed for vehicles within the affected communities is taken as 50km/hr.

Table 6.8 Assessment of the Impact on Road Users of Changes in Journey Lengths Resulting from Alterations to the Road Network

Category of Impact	Group Affected	Guidelines
Not Significant	P, C, V	- No appreciable change in journey distance.
Minor Adverse	P	- Journeys increased by 100m – 250m.
	C	- Journeys increased by 400m – 100m
	V	- Journeys increased by up to 5 minutes
Moderate Adverse	P	- Journeys increased by 250m – 500m.
	C	- Journeys increased by 1000m – 2000m.
	V	- Journeys increased by 5 – 10 minutes.
Major Adverse	P	- Journeys increased by over 500m.
	C	- Journeys increased by over 2000m.
	V	- Journeys increased by more than 10 minutes.
Key	P = Pedestrian; C = Cyclist; V = Vehicles (motorists).	

6.4.3 Section A Kilcullen to Mullamast Ch. 78,500 – Ch. 62,000

Kilcullen is well served by the existing N9 and M9 with the existing junction less than 500 metres to the southwest of the town. The proposed route will further increase the town's accessibility and improve its attractiveness for investment and development. The town may experience further pressure for residential development, especially to the south, and this may place added pressure on existing community services and resources.

The new road may also increase pressure for commercial and industrial development in the town. The Kilcullen Local Area Plan 2001 suggests that this development will occur to the east and west of the town rather than further north. The Mullamast junction with the Athy to R747 Link Road will greatly increase accessibility to Athy Town.

Narraghmore is situated distant enough from the route as to render any impacts negligible. Ballitore is also situated close to the proposed route. The town is currently bypassed by the existing N9, and is therefore unlikely to be significantly impacted by the proposed route.

Throughout Section A, the route passes through predominantly rural areas characterised by a low population density and a dependence on agriculture. There are also several riding stables close to the route, one of these at Yellowbogcommon, will be severely impacted upon due to the loss of land. It is unlikely that the route will have any significant detrimental impact on the wider community although there may be some severance of individual landholdings.

The following is an assessment of the impact of the proposed route on communities based on the Roman Catholic parishes and smaller communities adjacent to the proposed road along this section of the route.

Kilmore Parish

The northernmost part of the route passes through Kilmore parish. The parish centres on the village of Kilcullen, which is located to the north of the new road. The route will not give rise to access problems within the parish. A small number of houses to the extreme south of the parish on the existing N9 will be divided from the rest of the parish by the proposed dual carriageway road. This may cause a perceived severance from the rest of the community, though there is no actual severance, as the road will be bridged at this location.

The communities of Yellowbogcommon, Cartersbog, Usk Little and Calverstown Little are likely to be affected by the proposed road in terms of physical severance and amenity loss. This is likely to be counterbalanced in Usk Little by a reduction in traffic levels along the existing N9.

At Yellowbogcommon, the L6079 County Road will have to be closed for a period of up to 10 weeks to facilitate construction of the road realignment east of the proposed overbridge. During this period, suitable routing of pedestrians and cyclists would be provided along the edge of the works, to minimise inconvenience. Vehicular traffic will be able to use alternative routes to the north and south which will involve increased journey times of less than 5 minutes.

At Cartersbog the new N9 dual carriageway passes around the east side of the community, following close to the line of the Kilcullen Stream. As a result, the population on the east side of the stream (5 houses) will be physically separated

from the larger population to the west. To maintain a link between the 2 halves of the community, the L6089 County Road, which passes through Cartersbog, will be realigned to cross over the dual carriageway 200 metres to the north of the existing road, with connections provided from the realigned road to the existing road.

The realignment of the County Road at Cartersbog will mean that the distances that will be travelled to cross the dual carriageway could be 1000 – 1200 metres depending on origin / destination of journeys compared with 500 – 300 metres at present, an increase of 500 – 900 metres. For those most affected this represents an additional journey time of 1 minute for vehicles, 2 – 4 minutes for cyclists and 5 – 15 minutes for pedestrians. The number of residences affected is 10 on the west side of the road and 5 on the east. This represents a minor negative impact for cyclists and a major negative impact for pedestrians. This will be countered by the improved road cross-section, including verges, to facilitate pedestrians, and by the removal of through traffic from the main part of the community.

At Baronsland (Ch. 73,960) the existing L6090 County Road will be reconstructed, nearly on line, to pass over the proposed dual carriageway, and this will have minimal community impact. The existing L6091 County Road, which crosses the L6090 just east of the L6090 realignment, is to be diverted along the west side of the proposed N9, to connect to the L6090 some 800 metres south west of the crossroads, and 500 metres south west of the bridge over the N9. This will increase the journey distances between the Baronsland crossroads and the communities and school at Halverstown by almost 1 kilometre. This represents a minor negative impact for vehicular traffic and cyclists, but would be seen to be a major negative impact for pedestrians. However, this is not regarded as a pedestrian route, and therefore there are no perceived impacts on pedestrians.

The proposed N9 passes Usk Little and Calverstown Little in a cutting, crossing under the existing N9, which will be bridged over the dual carriageway. The new road also severs the existing access to a number of houses at Calverstown Little. This access is to be replaced by a bridge crossing over the N9. As a result 2 houses will be located on the west side of the N9. It is considered that any severance to the community in this area will be perceived, rather than being actual severance.

Narraghmore Parish

This parish includes the small settlements of Narraghmore, Kilmead and Ballitore. The majority of the parish is to the west of the proposed scheme. Ballitore at the southern edge of the parish is the most significant settlement to the east of the proposed new road. The settlement will retain link roads to the rest of the parish and the impact of the scheme on the community will be minimal.

Near Crookstown and Mullamast a number of houses are located on the west of the proposed route. This may cause a perceived severance from the rest of the local community but is unlikely to result in any significant impact due to the maintaining of road links.

6.4.4 Section B Mullamast to Prumplestown Ch. 62,000 – Ch. 50,000

Castledermot is already well served by the existing N9. The proposed route will increase the town's accessibility and improve its attractiveness for investment and development by reducing through traffic and improving the environment of the main street.

The location of the Prumplestown Junction on the N9 to the south west of the town may result in an increase in future pressure for development, especially for residential development in the town as it is increasingly likely to become an attractive commuter settlement for Dublin and Carlow Town.

The smaller settlements of Timolin and Moone are located off the existing N9 and will retain relatively good access. The rest of this section is characterised by low to medium population densities and relatively high levels of employment in agriculture. It is unlikely that the communities in these areas will be impacted significantly. There may however be some severance of individual landholdings along the route.

The following is an assessment of the impact of the proposed route on each individual parish and the communities through which the proposed scheme passes.

Moone Parish

The parish and local community are based around the small villages of Moone and Timolin. The proposed route splits the parish in half, with the majority of the population to the east of the proposed route. None of the routes that cross the proposed N9 Kilcullen to Powerstown Scheme will be removed and thus actual community severance will be minimal.

At Ballynamony the existing L4089-3 County Road will be diverted to the north of the village to remove the sharp bend in the current road. The community which fronts onto the existing road will be provided with a connection to the proposed realigned County Road, on the east side of the village. The new road arrangement will result in no increase in journey length for travel between Ballynamony and other communities on the L4089 County Road to the east. However, the journey from Ballynamony to the west would be increased by 600 metres. This will increase the journey time for vehicular travel by less than 1 minute, by 2 minutes for cyclists and by approximately 7 minutes for pedestrians. These increased journey times represent a minor adverse impact for cyclists and a major adverse impact for pedestrians. The impact on pedestrians could be mitigated by providing a footpath connection from the severed section of the existing County Road to the new alignment, just east of the proposed road overbridge. The adverse impacts from increased journey time will in part be compensated by removal of traffic from within the village.

Castledermot Parish

The parish centres on Castledermot village. The proposed N9 Kilcullen to Powerstown Scheme crosses the parish west of the village, with approximately half of the parish on either side. None of the county roads linking across the proposed route towards the village are to be significantly diverted and this should ensure that actual community severance is minimal.

The existing L4011 County Road at Woodlands West will be diverted and raised to cross over the proposed dual carriageway. Although houses fronting onto the existing road will be affected by the scheme, they will continue to have direct access onto the new road. There will be no increased journey lengths, and the maintenance of the road network will mitigate any physical severance.

6.4.5 Section C Prumplestown to Powerstown Ch. 50,000 – Ch. 32,300

Carlow Town is already well served by the existing N9. The proposed route will improve its accessibility and attractiveness for investment and development. This

may result in it becoming an increasingly attractive settlement for commuters to the Greater Dublin Area and also as a location for employment generating activities in the new business park and elsewhere.

The town will be served by 3 junctions, 1 at Prumplestown on the existing N9, north of Carlow, 1 at Rathcrogue on the N80 and 1 at Powerstown on the N9 south of Carlow. The provision of these junctions will increase the development potential on both the northeast and southeast edges of Carlow Town as well as around the junctions.

The proposed route and junctions do not directly assist in balancing the spatial development of Carlow Town and its environs, which at present favours the east over the west. The proposed N9 Kilcullen to Powerstown Scheme will favour development to the east of the town reinforcing the uneven development pattern that currently exists.

Throughout Section C, the route passes through predominantly rural areas characterised by a medium population density with ad hoc individual housing developed along the County roads. The community comprises a mix of commuters into Carlow and an agricultural work force. It is unlikely that the route will have any significant detrimental impact on the wider community although there may be some severance of individual landholdings.

The following is an assessment of the impact of the proposed route on each individual parish and the communities through which the road passes.

Castledermot Parish

South of the existing N9 at Prumplestown, the proposed dual carriageway passes through the parish of Castledermot. The parish centres on Castledermot, with most of the parish south of the existing N9 falling on the east side of the road. None of the county roads linking across the proposed route are to be significantly diverted and this should ensure that community severance is minimal.

The proposed new dual carriageway passes through the townlands of Ballyhade and Deerpark, and the small community on the existing L8094 County Road will be divided by the proposed scheme. The County road will be raised to pass over the proposed dual carriageway, maintaining the links between both parts of the community. The new N9 dual carriageway will run close to the community, and this may result in a perceived physical severance of the communities on both sides of the new road. No increased journey time will result from the scheme, and the maintenance of the road network will mitigate any physical severance.

Bennekerry

The road runs north-south through Bennekerry parish with the majority of the population living to the west of the proposed route. The parish includes some of the suburbs of Carlow Town and includes the small communities of Russellstown and Johnstown. The population of these smaller communities may suffer a level of physical severance and loss of visual and environmental amenity as a result of the proposed road. None of the county roads are to be closed and therefore the level of community severance caused by the route will be minimised.

The proposed new road crosses the line of the L6113 and L1009 County roads just west of Russellstown Crossroads. The northern road, the L6113, will be realigned slightly to the south of the existing road and raised slightly to cross over the

proposed dual carriageway which will be formed in cutting at this location. Existing properties fronting onto the existing County road will be connected directly to the realigned road, east of the mainline, while the 2 properties on the west side of the mainline will be connected to the realigned County road via the existing road and a short 20 metre link. There will be minimal changes to journey lengths as a result of the realignment, and any perceived severance of the community by the new road will not be significant as it passes the houses in cutting. The L1009 County Road, the southern of the 2 roads at Russelstown, will be realigned to the south of the existing road, and raised to cross over the new dual carriageway, which will be raised slightly above ground level at this location. No additional journey times will result from the road realignment, and there should be minimal sense of severance in this dispersed community.

Tinryland

The parish runs close to the southeastern edge of Carlow town and the proposed route splits the parish in a northeast to southwest direction. No county roads are to be severed by the proposed route and therefore the level of community severance will be minimised.

The parish has a dispersed population with a number of small communities such as Rathcrogue, Tinryland and Clonmelsh / Hayes Cross located adjacent to the proposed route. Rathcrogue, due to its location adjacent to Junction 4 on the N80 National Secondary road, is likely to suffer from an increase in traffic and a resultant loss in amenity. Tinryland and Clonmelsh / Hayes Cross are also likely to experience some community severance and a loss of visual and environmental amenity. This negative impact will be counterbalanced by an increase in accessibility and a greater demand for development in all the small communities. This may however have the effect of changing the environment and sense of place of these local communities. None of the county roads are to be closed and therefore the level of community severance caused by the route will be minimised.

The junction at Rathcrogue will sever the Tinryland GAA clubhouse and sports grounds, a local sports ground and Community Centre, from part of its catchment area of Tinryland village. Currently club members, particularly children, cross through fields from Tinryland village to the club, which fronts onto the N80 National Secondary road while others walk along the edge of the road carriageway. In order to provide safe access to the club, which will lie just to the east of the junction at Rathcrogue, the scheme has included pedestrian footpath and cycle lane along the south side of the realigned sections of the N80, and through the junction. This will provide safe access to the club, particularly as the road will be lit at night.

At Tinryland, the L3052 County Road, known as Linkardstown Lane, will need to be closed for a period of up to 8 weeks to facilitate construction of the road realignment east of the proposed overbridge. During this period, suitable routing of pedestrians and cyclists will be provided along the edge of the works, to minimise inconvenience. Vehicular traffic will be able to use alternative routes to the north and south, which will involve increased journey times of less than 5 minutes.

The bridge construction at Johnstown will be undertaken with passage of traffic largely unaffected by foundation works. However, temporary road closures will need to be put in place during erection of steel or pre-cast concrete beams for the super-structure.

6.4.6 Section D Athy to R747 Link Road

Athy is a relatively under developed town, with relatively high levels of unemployment and limited inward investment. The proposed Athy to R747 Link Road will significantly enhance accessibility and will undoubtedly assist in stimulating development, both within the town and as a residential location serving employment centres elsewhere.

The town is currently relatively poorly connected to the rest of the county and region and is not served by a National Primary Road. There is only 1 National Secondary, the N78, serving the town and this has not been significantly upgraded or improved in recent years, though it has received some improvement.

Moreover, Athy is perceived locally as having relatively poor connections for a town of its size and potential. The extent to which its relatively poor economic performance has been affected by the quality and designation of its road connections is difficult to estimate with any accuracy, but the proposed link road and N9 Kilcullen to Powerstown Scheme are likely to result in redressing an element of this.

The enhanced accessibility of Athy, following the implementation of the scheme, will improve the relative “identity” of the town on the national network of motorways and major dual carriageways provided there is adequate signposting and that the link road is clearly indicated on maps and literature as an integral part of the national network of major routes. Investment opportunities for Athy may also flow from increased accessibility provided by the proposed route.

The designation of Athy as a Heritage Town and its potential for tourism development based on this and on the canal and River Barrow is an important resource to be considered. The greater accessibility of the town is likely to further create opportunities for development in the tourism sector.

Throughout the length of the Athy to R747 Link Road, the route passes through a predominantly rural area with an extremely low population located adjacent to or close to the proposed route. The route will therefore not have a significant impact on local communities outside the main settlement of Athy, except where it passes along the line of an existing road between Turnerstown and Burtown, and in the vicinity of small communities such as Bray Upper and Burtown.

The Athy to R747 Link Road passes to the south of the community of Bray Upper. No community severance is caused by the proposed new link road, and the intercepted L4008 County road will be connected to the new road at a staggered junction.

The proposed Athy to R747 Link Road will be aligned along the line of the existing L4008 County road over a length of 1,500 metres in the townlands of Ballycullane, Turnerstown, Inch and Burtown Big. Several existing properties have direct access onto the existing County road, and it is proposed to reconnect these properties to the new Link Road, to mitigate any severance.

6.5 Remedial or Reductive Measures

6.5.1 Introduction

The proposed scheme is unlikely to generate any significant adverse impact on the demography and communities of the area, and has the potential to have a positive socio-economic impact; no community remedial or reductive measures are considered necessary.

6.5.2 Construction Impacts

The N9 Kilcullen to Powerstown Scheme is likely to be entirely beneficial in employment terms and no remedial or reductive measures are therefore necessary. The construction of such a major road development will have some impact upon local communities along the proposed route, e.g. noise, traffic, severance. However, the construction impact will be reduced by restricting construction working hours, including construction traffic, to minimise the impact on nearby noise sensitive locations. Refer to Chapter 11 for further details.

Some impact on communities is likely to be unavoidable during construction. However, it is expected that any nuisance will be minimised by good working practice and this would be largely offset by the immediate economic benefits of employment creation and accommodation requirements as well as the spending on local goods and services by workers.

Appropriate traffic management procedures during the construction period should ensure that any adverse potential impact arising in terms of local community severance, by reason of diversions etc. will be kept to a minimum. In this respect, the maintenance of cyclist and pedestrian routes will largely mitigate potential severance issues during construction.

6.5.3 Long Term Impacts

The proposed development is expected to have a positive impact on the urban environment of Athy, Carlow Town and Castledermot. It will facilitate the demographic growth and orderly development of these towns as well as resulting in an improvement, due to a reduction in traffic congestion, in the environment and amenity along the main streets of Carlow and Castledermot.

The proposed route will also improve accessibility to other commercial centres, as well as leisure and recreation facilities further afield. This will be of benefit to the existing resident and employment community.

The proposed N9 Kilcullen to Powerstown Scheme, including the bypass of Carlow Town, which is an existing significant bottleneck along the existing N9, will be of significant benefit to the visiting community who will utilise the route to access both Carlow and other destinations beyond the town.

The design of the overall road improvement project has specifically sought to overcome and minimise any potential community severance by maintaining the continuity of the existing road network.

Where the new road passes close to small communities and existing residences, the proposed route will result in a degree of physical severance and loss of amenity. The proposed landscaping and maintaining the continuity of the existing road network will largely mitigate this impact.

Overall, the remedial and mitigation measures set out above will ensure that any potential community severance, even those close to the proposed route, is kept to a minimum. Whilst the road development, including necessary re-alignment and improvement works to local County roads, will have some slight adverse impact on a number of individual properties arising from the need for revised entrance arrangements, the overall impact of the road works is considered to be significantly positive in terms of community issues.

The completed overall road scheme will result in a sizeable reduction in traffic movement along the existing N9, onto which a significant number of properties front. As a result, county roads will be afforded improved access to the existing N9 and the provision of interchanges onto the new road will ensure rapid access to the National Road Network for the residential, working and visiting communities of the area.

It should be noted that at strategic junctions such as the proposed N80/N9 junction at Rathcrogue, near Carlow, the local community may suffer a negative impact on their environment due to an increase in through traffic. However, this will largely be mitigated by an increase in both accessibility and economic activity.

6.5.4 Agricultural Impacts

The construction of the proposed N9 Kilcullen to Powerstown Scheme will require the acquisition of land primarily in agricultural use. This is likely to have a significant impact on some holdings in the area due to farm severance, which could directly impact upon the agricultural activities of the landowners.

Due to the necessity for land acquisition and use of this agricultural land for the overall scheme, remedial measures in this regard are limited to the payments of compensation, as well as measures for revised boundary and entrance treatment. The issue of the impact, including severance, of the proposed development on the farming community (and indeed, on residential and commercial property and recreational areas) is addressed in detail in Chapter 9 Material Assets.