

An Economic Overview of the Shannon Region 2009

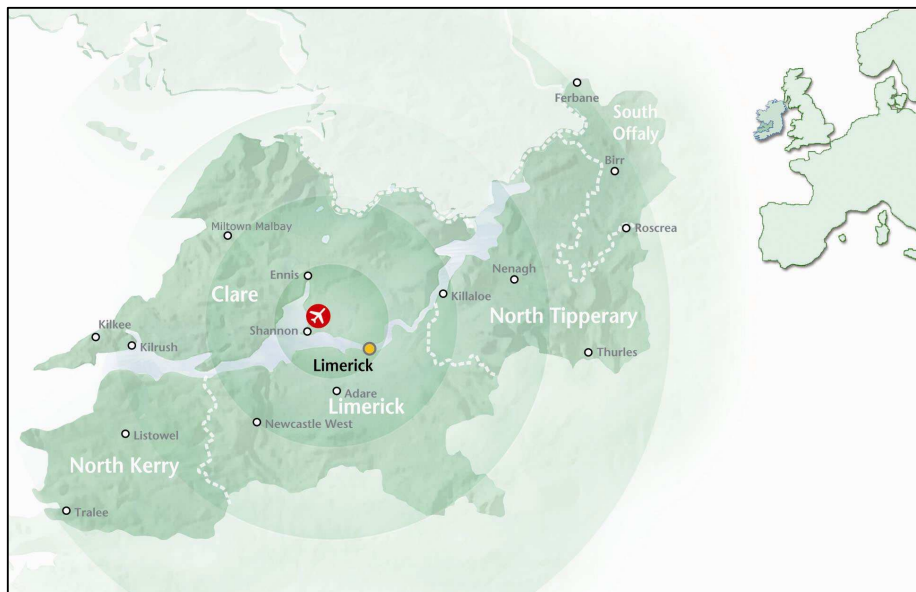
1. Introduction

The Shannon Region, for which Shannon Development has responsibility, comprises counties Limerick, Clare, North Tipperary, North Kerry and South West Offaly with a combined population of over 455,000 people (Figure 1). Shannon Development is Ireland's only dedicated regional economic development agency. The Company's vision for the Shannon Region is that the people of the Region, and its investors and visitors, will live, learn, work and play, in one of the most forward thinking and exciting places in the world. Shannon Development's goals are:

- To enable the more developed areas of the Shannon Region achieve their full development potential;
- To ensure that the potential of the less developed areas of the Shannon Region is realised; and
- To create demand for the Shannon Airport Gateway.

The Shannon Region experienced unprecedented levels of economic growth during the 1990s and early 2000s, with record levels of growth in population, employment, productivity, per capita income, skills and education. The region's infrastructure has also experienced significant improvements with ongoing investment planned for the future. However, recent changes in global economic conditions have resulted in the emergence of new challenges for the region.

Figure 1: The Shannon Region



2. Regional Economic Performance

This section describes the economic base of the Shannon Region and considers recent trends in population, employment, education attainment, output, sectoral features and tourism.

2.1 Population

The Shannon Region has a population of approximately 455,211 persons, equivalent to almost 11 per cent of the State. Over the decade to 2006, the population of the region grew by 12.3 per cent. Limerick City, which is one of the largest urban centres in the State, is the capital of the region with a population of approximately 52,000 persons in the city area alone, and a total population of 184,055.

Clare, which is the best performing county in the region in terms of population growth, currently has a population of 110,950, which increased by 18 per cent over the 10 year period to 2006. North Tipperary (13.8%), Limerick (11.5%), North Kerry (10.2%), and South West Offaly (6.8%) have all experienced considerable population growth during the period 1996 to 2006.

The Mid West region¹ currently has an extremely favourable age structure with 21 per cent of the population under the age of 15, 44 per cent under the age of 30, and 72 per cent under the age of 50. This positive demographic structure presents a window of opportunity for further economic development in the region, when the national and global economies begin to experience an upturn.

2.2 Productivity and Disposable Income

The Mid West region accounts for 7.5 per cent of national GDP². Regional output³ is driven predominantly by the services sector (57.7%), with the manufacturing and construction sector accounting for approximately 40 per cent. The agriculture sector accounts for only 2.5 per cent of regional GVA. Prosperity in the Mid West region, as measured by GVA per worker, is the third highest level of GVA (€31,855) in Ireland, after the South West (€42,952) and Dublin (€51,588). Disposable income levels are currently at 97% of the national average, behind only Dublin and the Mid East.

2.3 Employment

According to the CSO's Quarterly National Household Survey (QNHS) employment in the Mid West region totalled 167,200 in Q4 2008. The sectoral profile of employment is similar to the national picture, with the exception of the manufacturing sector, which is slightly over-represented.

¹ The Mid West region comprises counties Limerick, Clare and North Tipperary and is part of the Shannon Region. CSO estimates for 2008 suggest that the Mid West region population is 371,900.

² As measured by GVA as a proxy for GDP.

³ GVA, or Gross Value Added measures wealth creation in a country or region. It represents the value of all goods and services produced in a region, less the costs of materials and inputs.

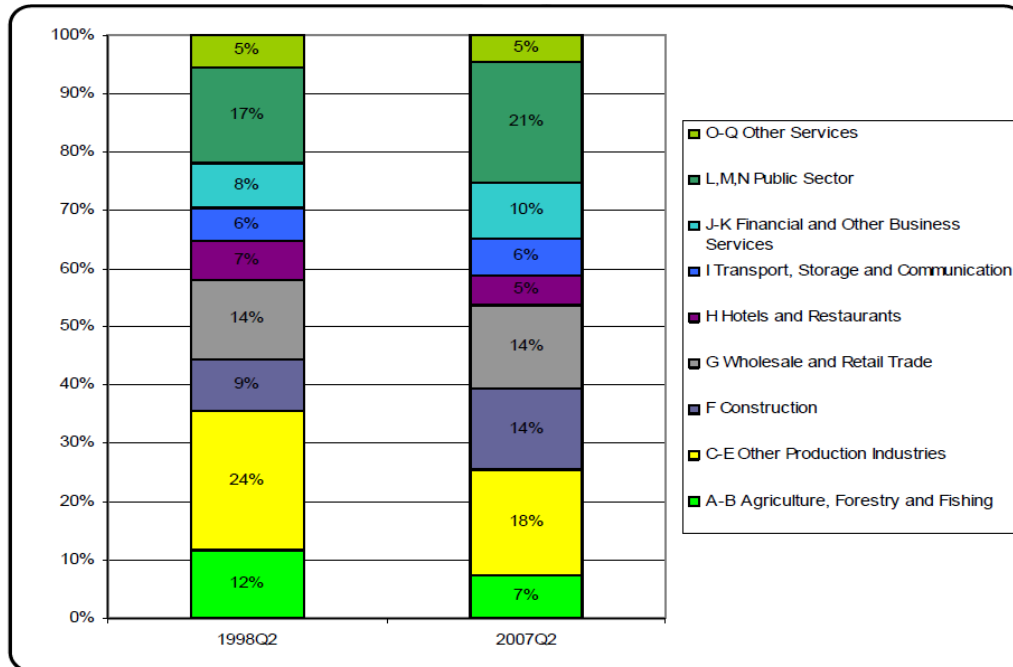
The total number of persons in the Mid West labour force⁴ was 182,700 in Q4 2008, which was an increase of over 30 per cent during the 10 year period from Q4 1998. The labour force participation rate for the region was 61.6 in Q4 2008 which is slightly behind the national average of 62.8 for the same period, and represents a slight decrease of less than 1 per cent from Q4 2006.

In terms of absolute employment levels, the largest sector in the Mid-West is the public sector which accounts for almost 36,000 jobs (or 20.6 per cent of all employment compared to 21.9 per cent nationally). Overall non-agency supported activities (e.g. public sector, domestic retail, locally traded services, construction, etc.) have grown more strongly relative to manufacturing and internationally traded services, particularly over the past five years⁵.

Comparing regional to national growth in employment, the construction, wholesale and retail and transport, storage and communication sectors were more significant sources of employment growth in the Mid West up to 2007 than they were in the state overall, while the financial, business and other services and the hotel and restaurant trade contributed less to growth in the Mid West than they did at a national level.

Figure 2 below shows how varying rates of employment growth across the different sectors have changed the sectoral composition of the region's employment. In particular it is evident that there has been a decline in the proportion of people employed in the manufacturing ('productive industries') sector, and the corresponding increase in the proportion employed in construction and public sector service activities⁶.

Figure 2: Distribution of Total Employment in the Mid West Region



Source: Forfás, 2009.

⁴ This refers to the labour force in absolute terms which includes the employed and unemployed.

⁵ Forfás, 2009.

⁶ Forfás, 2009.

2.4 Unemployment

The Shannon Region is endowed with considerable resources and has experienced significant development in recent decades. However, it also has considerable unrealised potential. In line with the rest of the world, it is now experiencing a downturn in economic activity which is exacerbated by the recent announcement by Dell that it is reducing its workforce by 1,900.

The second half of 2008 saw a rapid rise in unemployment in Ireland. The Mid West Region followed in line with this trend and as a result there has been a significant change in the Mid West regional labour market. According to the latest CSO QNHS figures, unemployment for Q4 2008 was 8.5 per cent. This figure is almost double that for Q4 2006 which was at 4.8 per cent. Moreover, it is expected that this figure has increased in Q1 2009, following a similar trend to other regions nationally.

It is evident from statistics that young males are the worse affected by the recent economic downturn, which is primarily due to the downturn in the construction sector. It is expected that further declines in employment and increases in unemployment will occur unless action is taken to counteract this. At 2.1 per cent the Mid West region has one of the highest percentages of long-term unemployed in the country. Large pockets of long-term unemployment in certain areas of Limerick City have contributed substantially to the region's high level overall.

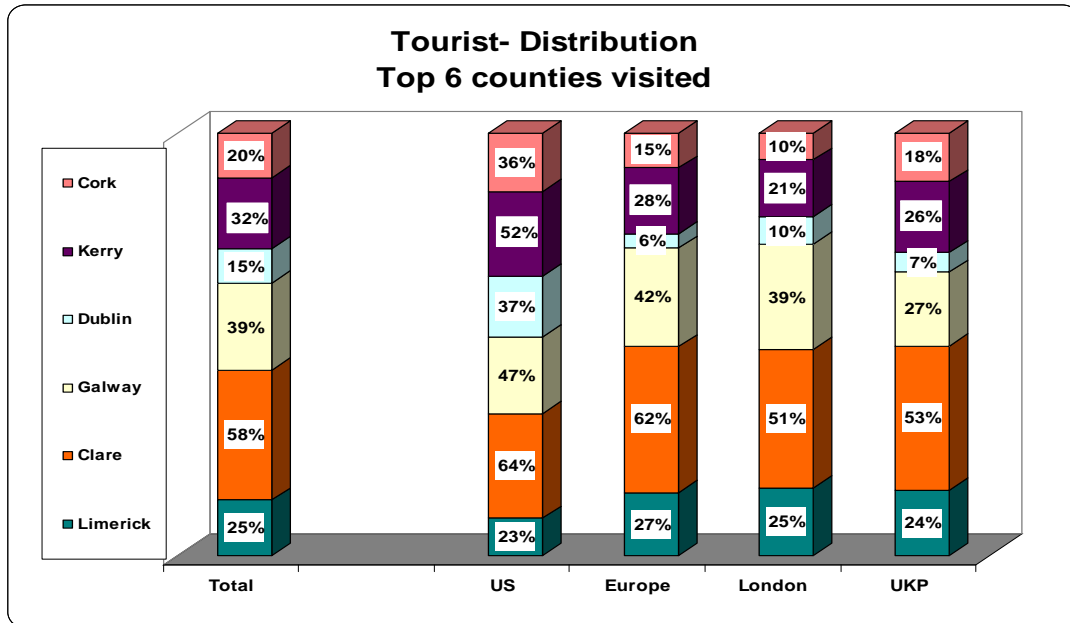
To counteract this rising trend in unemployment the Government established the Mid West Task Force in 2009 which is responsible for developing proposals with a short, medium and long term perspective to ensure that current unemployment challenges are addressed and that future potential of the Mid West region is realised. Therefore, the region will be strongly positioned to reap the benefits of the economic upturn when this occurs.

2.5 Educational Attainment

Over 26 per cent of the population (15 yrs+) in the Mid West region possessed a third level qualification in 2006. While this is below the average for the State (29.1%) the Mid West compares favourably with other regions, aside from Dublin, whose high proportion with a third level degree has also had the effect of skewing the national average upwards.

2.6 Tourism

The overall end of year forecast for 2008 for visitor numbers to the Shannon Region is 1.97m, and €461m in revenues which reflects a reduction in visitor growth of approximately 2 to 3 per cent, which is in line with other regions nationally. Figure 3 on the following page presents the top 6 counties visited in Ireland, which include counties Clare and Limerick in the Shannon Region.

Figure 3: Distribution of Tourists throughout Ireland

Source: Millward Brown IMS

3. Skills and Education⁷

The Shannon Region has a relative concentration of graduates in the workforce with qualifications in the areas of Engineering & Architecture, Medical Sciences, Education, and Business Law & Social Sciences. The region is home to one University and a two Institutes of Technology, located in Limerick and Tralee. The Tipperary Institute also provides tertiary education.

3.1 University of Limerick

The University of Limerick has a student population of approximately 11,000 full-time students (2,000 part-time) and 4 faculties;

- Business (Accounting and Finance, Economics, Marketing, Personnel and Employment Relations.)
- Science and Engineering (Chemical and Environmental Science, Life Sciences, Materials Science, Physics, Architecture, Computer Science, Electronic and Computer Engineering, Mathematics, Materials Science, Mechanical & Aeronautical Engineering, Manufacturing and Operations Engineering)
- Arts, Humanities and Social Sciences (History, Languages, Law, Politics, Arts, etc.)

⁷ Source of information: Forfás, 2009.

- Education and Health Science (Education and Professional Studies, Physical Education, Sports Sciences, Psychology, Nursing and Midwifery, Occupational Therapy, Physiotherapy, Speech and Language Therapy and the Graduate Medical School.)

The University has established a number of internationally respected research institutes, including:

- The Materials and Surface Science Institute
- The Stokes Research Institute
- The Lero Institute for Software Engineering
- The Institute for the Study of Knowledge in Society

The University also has a range of research centres covering areas such as Energy, Automation, Industrial Mathematics, Fluid Engineering, Applied Biomedical Engineering, Telecommunications, Wireless Access, etc. Many of these centres have received SFI and or EI funding for their research activities.

3.2 Limerick Institute of Technology

In recent years there has been an increasingly relevant role for Institutes of Technology in the development of the region, and the development of a knowledge-based economy with labour market demands for highly qualified graduates. The Limerick Institute of Technology (LIT) has approximately 3,600 students, the majority of which are pursuing courses in the area of Science, Engineering and IT. The Institute has four main faculties;

- Art & Design (Painting, Printing, Fashion, Visual Communications)
- Built Environment (Construction, Civil Engineering, Quantity Surveying)
- Business & Humanities (Accounting, Finance, Marketing, Management, Tourism, Social Studies)
- Science, Engineering & IT (Mechanical, Electronic, Automotive and Software Engineering, SCM, Applied Chemistry, Applied Biosciences, Biotechnology, Drug Analysis)

The Institute has identified the following centres as research priority areas:

- Bio sciences - Midwest Bioanalysis Research Centre
- Renewable Energy Control Systems – Envirosense Research Centre

3.3 Institute of Technology Tralee

The Institute of Technology Tralee (ITT) in North Kerry has a student population of approximately 3,500. ITT has three schools; Business and Social Studies, Engineering and Construction and Science and Computing. ITT shares its North Campus with the Kerry Technology Park, a business park run by Shannon Development which incorporates a large business incubation facility.

3.4 Tipperary Institute

The Tipperary Institute has campuses in both Clonmel and Thurles, offering full time degree and part time courses in the areas of Business Studies, ICT (Software Development, Multimedia and Communication), and Rural Development.

4. Industrial Infrastructure

4.1 Shannon Free Zone

Shannon Free Zone (SFZ) is a 243 hectare International Business Park adjacent to Shannon International Airport on the West Coast of Ireland. The Zone is managed and promoted by Shannon Development, who provide information and grant support to companies investing in or relocating to Shannon Ireland.

Since its establishment in 1959, over 110 overseas companies have chosen to Invest in Shannon Ireland. Shannon Free Zone is Ireland's largest cluster of North American investments and has a successful track record as a location for international companies wishing to Invest in Europe.

Employment in SFZ currently stands at 7,107 with SFZ companies creating 576 new jobs in 2008. SFZ companies generated €3.5 billion in sales, 94 per cent in exports during 2007⁸ with further sales growth predicted when 2008 results are available. In-house R&D expenditure by Shannon Free Zone companies increased significantly during 2008 to €44 million, an increase of 10 per cent on the previous year.

Shannon has been chosen by leading international corporations across a wide range of sectors including: Aerospace, International Traded Services, Financial Services, Engineering & Electronics Manufacturing, Information & Communications Technology and Medical. The current redevelopment of Shannon Free Zone provides an opportunity to build upon the existing cluster of aerospace service enterprises, as well as to attract other internationally traded service enterprises.

When the multi-national business community compares investment locations in the EU, Shannon Free Zone regularly emerges as the superior option. Global leaders such as Avocent, Digital River, GE Capital, Ingersol Rand, Intel, Lufthansa Technik, Mentor Graphics, Molex, RSA Security and Symantec have invested at Shannon Ireland. Shannon's transport infrastructure is geared towards offering fast, efficient and cost effective transport to international markets. Shannon is also centrally located on the main National Route Road Network and close to rail and seaport facilities. Powered by a good connectivity, pro-business regulatory environment and cosmopolitan work environment, Shannon is one of Ireland's stand-out business locations.

Shannon Development has recently completed a master plan for the regeneration of the SFZ, and when implemented it will result in large scale development of offices, laboratories, factories and warehouse accommodation for the next generation businesses. It will have a beneficial impact for, not only the SFZ itself, but also Shannon International Airport and the Shannon Region.

⁸ Latest available statistics.

4.2 Technology and Business Parks

The National Technology Park, beside the University of Limerick, is Ireland's first technology park. With over 80 organisations the Park has a mix of multi-national subsidiaries, Irish technology companies, R&D entities and support companies which occupy more than 30 buildings with a floor area of 1.5 million sq feet. ICT, materials and e-business are the dominant sectors.

Raheen Business Park, beside Limerick City, provides employment to almost 6,000, with concentrations in computers, electronics, food, metal products and instrumentation.

More recent infrastructure developments for industry have been the Ennis Information Age Park and the Tipperary Technology Park in Thurles.

5. Access and Connectivity Infrastructure

In terms of physical access infrastructure, Limerick and the Shannon Region are well served. Road links to Galway, Dublin and Cork have improved significantly in recent years. The region has an international airport at Shannon close to the heart of its industrial and population centres of Limerick, Ennis and Shannon Town, and the ports on the Shannon estuary provide for a variety of shipping access.

Shannon International Airport, which provides international access to the region, is a central feature of the region's transport infrastructure. The airport is a key driver for economic, tourism and industrial development for the Shannon Region and the greater West of Ireland.

The development of world class access road and rail infrastructure linking the 'Atlantic Gateways' Cork, Limerick and Galway aims to strengthen the Western Regions and drive economic growth through enabling them to increase their scale and to leverage the strategic assets in each of the regions. The 350-mile route Atlantic Corridor includes a tunnel under the River Shannon in Limerick, a minimum of five new bypasses and the upgrading of existing roads to dual carriageways and 'two plus one' roads. Figure 4 presents the Gateways along the Atlantic Corridor.

Table 1: Shannon International Airport 2009 Flight Schedule

Origin / Destination	Airline	Frequency
Alicante	Ryanair	Days 2,6*
Barcelona (Girona)	Ryanair	Days 1, 3, 5, 6
Birmingham	Ryanair	Daily
Boston	Aer Lingus	Daily
Bristol	Ryanair	Daily
Brussels (Charleroi)	Ryanair	Days 3, 5, 7
Carcassonne	Ryanair	Days 2, 4, 6,
Chicago	Aer Lingus	Days 2, 4, 6,
Dublin	Aer Lingus	Daily
Dusseldorf (Weeze)	Ryanair	Days 2, 4, 6
Edinburgh	Ryanair	Days 1, 2, 3, 4, 5, 6, 7
Faro	Ryanair	Days 1, 3, 5, 7,
Glasgow (Prestwick)	Ryanair	Days 1, 3, 5, 7,
Krakow	Ryanair	Days 2, 4,
Liverpool	Ryanair	Days 2, 4, 6,
Lodz	Ryanair	Days 1, 4
London (Gatwick)	Ryanair	2 Daily
London (Heathrow)	Aer Lingus	2 Daily
London (Stansted)	Ryanair	3 Daily
Malaga	Ryanair	Days 1, 2, 4, 6
Manchester	Ryanair	Days 1, 3, 5, 7
Milan (Bergamo)	Ryanair	Days 4, 7
Murcia	Ryanair	Days 3, 5, 7
Nantes	Ryanair	Days 2, 4, 6,
New York JFK	Aer Lingus	Days 1, 3, 5, 6, 7,
New York JFK	Delta	Days 2, 4, 6, 7
Newark	Continental	Daily
Palma De Mallorca (PMI)	Ryanair	Days 2, 6,
Paris (Beauvais)	Ryanair	Daily
Paris CDG	Cityjet	2 Daily
Philadelphia (PHL)	US Airways	Days 1, 3, 5, 6, 7
Toronto (YYZ)	Air Transat	Days 2, 5,
Tenerife	Ryanair	Day 7
Venice (TSF)	Ryanair	Days 1, 5,
Wroclaw	Ryanair	Days 2, 6,

Source: Shannon International Airport

*Note: Day 1 = Monday, 2 = Tuesday, 3 = Wednesday, etc.

In 2008 Shannon International Airport recorded a decrease in passenger throughput, similar to many European airports which were also impacted by the downturn in the global economy. In 2008 total passenger throughput in Shannon Airport was recorded at 3.1 million, a decrease of 12 per cent on the previous year. Terminal traffic was also down by 10 per cent when compared with 2007. The reduced passenger volumes reflect the impact of two significant developments on the airport

in 2007, namely the full application of the EU-US Open Skies Agreement and the termination of the Aer Lingus London Heathrow service in January 2008. The airport has mitigated the impact of these developments as well as a sharp downturn in the global economy. Transatlantic traffic also decreased by 23 per cent which was the result of Open Skies, worsening global economic conditions and the US dollar / euro exchange rate. Cargo throughput experienced a decrease of 8 per cent from the period 2007 to 2008, again which was as a result of the introduction of Open Skies.

However, the reintroduction of the Aer Lingus London Heathrow service in March 2009 and the establishment of Europe's first Customs and Border Protection⁹ (CBP) full pre-clearance facility at Shannon Airport are expected to have a positive impact on passenger numbers in 2009. The CBP pre-clearance facility has the potential for Shannon to emerge as a major transatlantic aviation gateway. It is expected that this facility will significantly increase the number of transatlantic flights daily in and out of Shannon, which will strengthen revenue through increased landing and handling charges, and support employment levels at the airport in the process.

Shannon Airport now has better global connectivity than ever before with the combination of London Heathrow and Paris CDG hub connections. The City Jet/Air France service to Paris CDG performed well during 2008 with high load factors. Both services will be developed to fully meet the needs of the business community in its requirement for global connectivity.

5.2 Port Facilities

The Shannon Estuary is Ireland's premier deepwater resource. There are 6 main facilities handling a total of 1,000 ships per year, carrying in excess of 12 million tonnes of cargo, equivalent to 20 per cent of goods tonnage handled at national ports. It is Ireland's largest bulk cargo handler by tonnage and ships over 220,000 DWT¹⁸. It is one of two ports in Ireland with the capacity for deep water vessels, the other being Ringaskiddy in Cork. Coal, bauxite, timber, fertiliser, animal feeds and oil are among the main products shipped to and from the port.¹⁰

Shannon Development owns a 240 Hectare landbank, which is located between Tarbert and Ballylongford in North Kerry. Shannon Development has retained and marketed this landbank for maritime related industry due to its close proximity to deep, sheltered, navigable waters in the Shannon Estuary.

5.3 Inter-Regional Transport Infrastructure

From an economic development perspective, links from Limerick/Shannon to other regions and Gateways are of vital importance, as they increase the mobility of labour and enable companies to access a wider range of relevant services and inputs from other companies in associated industries, sub-suppliers, universities, etc.

⁹ Shannon will be considered a 'domestic' US airport with the introduction of CBP.

¹⁰ Forfás, 2009.

5.3.1 Roads

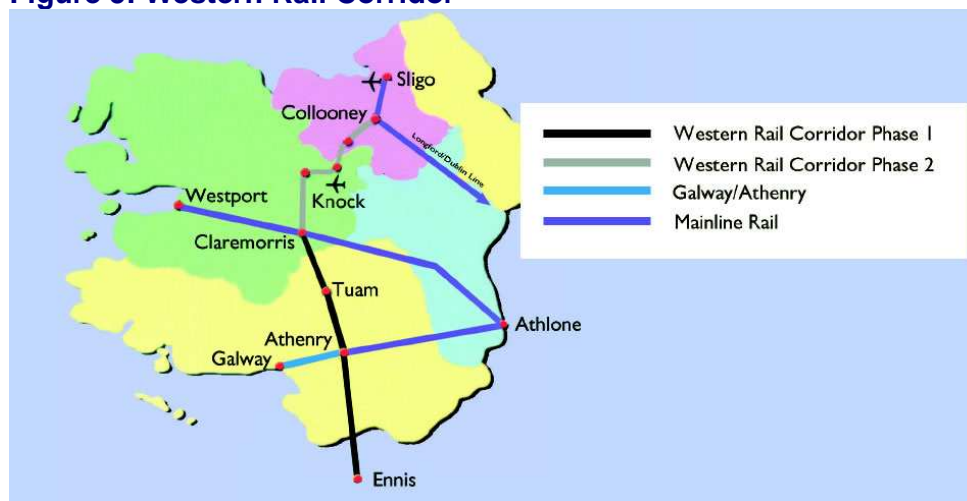
A good quality and efficient infrastructure network to and from Shannon International Airport is essential to the competitiveness of the airport and supporting tourism and industry in the greater Shannon Region. Specifically, the completion of the N18 Limerick-Galway Dual Carriageway is the number one priority as it will considerably expand the population in the catchment area of Shannon International Airport by reducing travel times. This is due for completion by 2011. The construction of the N7 route from Dublin to Limerick is currently underway, and is expected to be completed in 2010. The completion Phase II of the Limerick Southern Ring Road which includes a river crossing over Shannon in Limerick is due to be complete in Q4 2010.

5.3.2 Rail

The Shannon Region is served by rail services to Dublin and Cork from Limerick. Internal services link Limerick with Ennis and Nenagh which provide commuters from these towns with services to the regional gateway as well as linking them to the national rail network. Improvements in the national and regional rail network since 2002 have resulted in increased frequencies on the Limerick-Dublin route which provides 28 daily services between the two cities with further timetabling improvements planned. Just over half of these services operate through Limerick Junction which enables travellers from the Mid West to connect with Cork, Tralee and other towns in the South West¹¹.

In terms of specific developments in the region's rail network, the Western Rail Corridor which extends from Ennis to Sligo is to be completed, on a phased basis, by 2014 (Figure 5). Phase A of the project will link Athenry to Ennis, effectively linking Limerick with Galway by rail, which is expected to be complete in 2009. The completion of the project will provide for a rail link between the cities of Limerick and Galway with an onward connection to Claremorris on the Dublin - Westport line. The line will be reinstated on a phased basis, in the following order: Galway to Athenry commuter services (2009), Athenry to Tuam (2011) and Tuam to Claremorris (2014). The line from Claremorris to Collooney is to be preserved.

Figure 5: Western Rail Corridor



Source: Transport 21

¹¹ Forfás, 2009.

5.4 Energy

The principal electricity and gas investments in recent years in the Shannon Region have been the upgrading of the electricity transmission and distribution networks and extension of the natural gas network throughout the region. Ongoing upgrade works such as the second Tarbert to Tralee 110Kv line and refurbishment of the Portlaoise to Shannonbridge 110Kv line are essential for the region to sustain utility intensive industries.

In mid-2006 Shannon Development entered into an 'option-to-purchase' agreement with Shannon LNG, in relation to 281 acres of the 600-acre Shannon Development owned land bank between Tarbert and Ballylongford, County Kerry. The site, which has been designated by Shannon Development for deep-water projects, is approximately 25km from the national gas pipeline grid. Under the agreement, Shannon LNG, an Irish subsidiary of Hess LNG Limited, is proposing to build a €400m liquefied natural gas (LNG) receiving terminal on the Shannon Development owned land bank on the Shannon Estuary.

5.5 Telecommunications

Progress has been made on delivering broadband connectivity to all parts of the Shannon Region – urban and rural. This was achieved through Shannon Broadband, Ireland's first regional broadband company established by Shannon Development in partnership with the region's local authorities. A fibre-based metropolitan area network (MAN) has been completed in Limerick City, Nenagh, Templemore, Kilrush, Newcastle West, Abbeyfeale, Banagher, Listowel and Tralee. Coverage will also be extended to remaining areas of the region currently without broadband services.

6. Summary

The Shannon Region particularly benefits from Shannon International Airport, a strong enterprise base, excellent third level institutions, an educated and skilled workforce and good road infrastructure. While in recent decades the region has experienced strong growth in terms of population, GVA, disposable income, educational qualifications and visitor numbers, the current global economic downturn is now a significant challenge that faces the Shannon Region similar to other regions worldwide. Despite this turnaround in economic growth, the region is endowed with considerable resources and has significant unrealised potential that can be exploited with the future resurgence of the national and global economies.