

5. DEVELOPMENT POTENTIAL AND CAPACITY

5.1 Introduction

This chapter provides a brief summary of the characteristics of Waterford City and Environs in terms of environmental and infrastructural resources.

5.2 Overview of Environmental Resources

Waterford City has a stunning setting on the banks of the River Suir, some 5 miles from its confluence with the River Barrow and a further 10 miles from the sea. The City lies predominantly on the southern low-lying bank of the River while there is a steeper topography on the northern bank, which is less developed and greener, giving a unique character to the urban environment. The Rockshire hills provide a particularly distinctive and attractive ridge overlooking the City to the north.



City Heritage

Waterford City is rich in terms of cultural heritage. Fortifications dating from the Viking and Anglo-Norman periods, including six towers and long stretches of what was once the City wall, still stand within the City Centre. Heritage sites protected by DUCHAS and the Waterford City Council Development Plan include an Architectural Conservation Area and a Zone of Archaeological Potential centred on the historic core of the City. On the

north bank of the Suir, one of the main focal points is Grannagh Castle. There are also 18th Century Napoleonic watchtowers situated on the Rockshire ridge.

Some areas of the City have been subject to urban renewal, which has included pedestrianisation of a number of streets, upgrading of stretches of the South Quays and provision of better quality urban furniture. Much remains to be done however, including remediation of the Gas Works Site beside Peoples Park, and further renewal of riverside areas.

Land Uses and Natural Habitats

The City and Environs contains a wide range of land uses and habitats including areas of agricultural land, semi-natural hedgerows, areas of semi-natural wetland and small areas of woodland.

The main watercourses are the River Suir and its tributary, the John's River. Water quality in the Suir is typical of estuarine conditions and is generally good.

The main agricultural areas within the City boundary are to be found in the following areas: Gracedieu East, Bawndaw, Carrickphierish (the topography mainly consists of hilly terrain), Carrigroe, Knockboy and Willamstown (mainly flat with occasionally hilly terrain). North of the River Suir, the land mainly consists of high quality agricultural

land with small areas of broad-leaf woodland and marshland. There is also a commercial forestry situated in Slieverue and a horticulture area in Mullinabro, both of which lie to the north of the City.

Within the City there are a number of areas of woodland, most notably at Gracedieu East, adjacent to the line of the future N25 Waterford Bypass, north of Waterford Regional Hospital to the east of the City and on Little Island. These woodlands consist of a mixture of native and non-native trees especially beech, sycamore, ash and hybrid oak and hazel. Many of the trees in Waterford City are protected as laid out in the current Development Plan.

Protected Areas

There are a number of important conservation areas in the City and Environs. These include Natural Heritage Areas (NHA's), which are protected under the Wildlife (Amendment) Act 2000 and Special Protection Areas (SPA's), which are intended to protect natural habitats, fauna and flora. Special Areas of Conservation (SAC's) are designated to protect natural habitats of EU Importance.

Kilbarry Bog and Kings Channel are both designated NHA's. Kilbarry Bog is unique in that it is located within a City boundary. The Grannaghferry NHA lies just upstream of the existing N9/N24 crossing at Grannaghbridge. This site consists of the nationally rare and protected plant species, Meadow Barley. The River Suir is designated as an SAC under the Habitats Directive (94/43/EEC). The SAC extends within the City boundary along the River Suir and Kings Channel.

Grannagh Quarry, a disused limestone quarry to the north of Waterford City, is designated as an Area of Scientific Interest of Local Importance. The quarry is largely covered by dense scrub dominated by hawthorn, blackthorn, ash, gorse, grey willow and elder.

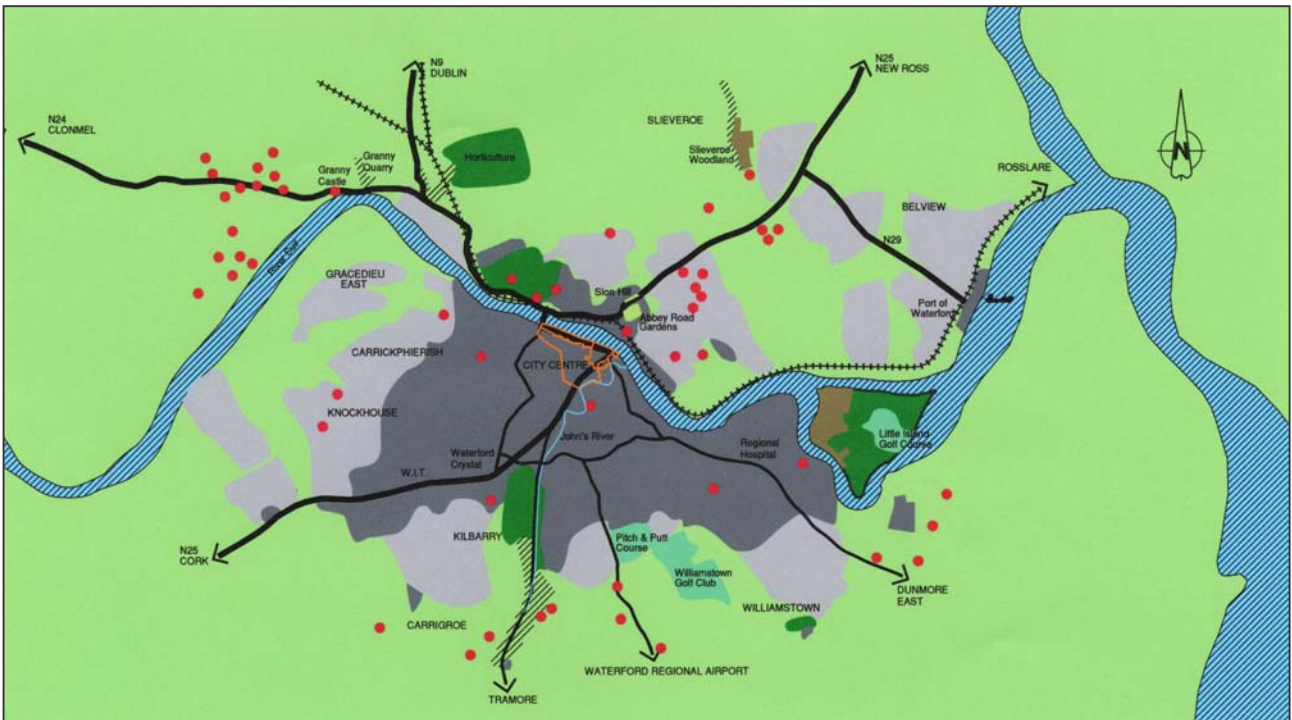
Open Space and Gardens

There are historic gardens at Sion Hill House and at Abbey Road, both of which are located north of the River Suir.

The main environmental elements and characteristics are summarised in **Figure 5.1**.



Figure 5.1 Environmental Resources



5.3 Existing Transportation Infrastructure and Systems

This section provides a summary of existing transport infrastructure and systems in Waterford. The information is presented under the headings of Public Transport, Existing Road Network, Traffic Management and Port and Airport. More detailed data relating to this chapter is given in **Appendix G**.

Public Transport

Bus

Bus Eireann and a private operator, Kenneallys, currently provide bus services in Waterford City. Bus Eireann operates a total of four scheduled services within the City. The company also provides inter-City services to various regional and national centres. Kenneallys provides one scheduled service within Waterford and one regional service to Dublin Airport from Waterford seven days a week. Details of these services are summarised in **Appendix G**.

LEGEND:-

- City Conservation Boundary
- Monuments
- Area of Nature Conservation
- Woodland Areas
- Gardens
- Golf / Pitch and Putt Club
- Open space
- Developed Land
- Land zoned or committed for Development
- National Road
- Main City Road
- Railway
- City Environs Restricted Development Zone

Historic data provided by Bus Eireann shows a decline in bus patronage on Waterford City services during the period from 1990 to 1999. This decline has been mainly attributed to a steady increase in car ownership and an increase in traffic congestion in many parts of the City. Currently, it is estimated that Bus Eireann carries between 2,100 – 2,200 passengers per day on its Waterford City services. In the absence of any bus priority measures, current levels of traffic congestion in the City Centre and along suburban roads have seriously restricted public transport providers from increasing the frequency of services, particularly during peak periods. Other problems causing disruption to existing bus services include inadequate

numbers of bus stops, side road interference with main road traffic and instances of illegal on-street parking.

Bus Eireann is currently undertaking a complete overhaul of its fleet in Waterford City. This will see the replacement of the existing fleet with the introduction of twenty 30-seat vehicles known as 'imps'. The longer-term aim is to provide a 10-12 minute service on all routes within Waterford City, subject to current and future levels of traffic congestion.

Kenneallys, currently the only private bus operator in Waterford providing city services, carries about 1,900 passengers a day on the Dunmore Road service. The operator believes there is a market in Waterford to support extended network coverage, however opportunities to improve coverage is impaired by current levels of traffic congestion. The expansion of Kenneallys' network in Waterford may also be impeded by the current legislative framework that regulates private bus operators in Ireland.

Rail

Waterford is strategically located on the rail network in the South-East of the country. **Table 5.1** summarises these connections and the frequency of weekday services.

Table 5.1: **Waterford - Current Passenger Rail Services.**

| Destination | Via (Stations within PLUTS Traffic Model Area) | Daily Frequency |
|-------------|---|-------------------------|
| Rosslare | Belview ⁽¹⁾ Campile, Ballycullane, Wellingtonbridge. | 2 services to Limerick. |
| New Ross | - | Line closed. |
| Dublin | Thomastown. (Kilkenny) | 4 services. |
| Limerick | Carrick-on-Suir, Clonmel. | 2 services |

(1) Passenger services do not stop at Belview.

Upgrading the Inter-City rail service between Dublin and Waterford is the main priority for Iarnród Éireann (IE) as regards rail transport services and Waterford. On completion, the improvements will reduce the current travel time to Dublin from 2 hours 40 minutes to 2 hours 25 minutes. This work is scheduled for completion by 2003. These improvements are seen as being essential to retain IE's current market share of passenger traffic to the capital given that the development of the M9 Motorway to Dublin is scheduled for completion by 2007.



At present, rail services from Waterford to Dublin route via Kilkenny. It is not planned to change this arrangement despite the fact that it necessitates a diversion and increases travel times. A bypass link has been constructed to the east of Kilkenny which makes it possible for trains to effectively bypass the City's station. At present, this facility is used by freight traffic only.

As regards commuter rail, IE does not plan to introduce a service between Waterford City and its surrounding hinterland. Within the national context, IE's first priority is in relation to Dublin, where forecast growth in population within the next decade alone will outstrip the resident population of Waterford. Waterford and its environs are not seen as having the population to sustain a service of this sort. Further evidence of this view is reflected in the absence of any plans to reopen the line to New Ross, despite the general perception that there is at present relatively high levels of demand for travel between these centres. Based on information provided by IE, it is estimated that to sustain a high frequency commuter service requires a current or predicted demand of approximately 1,000 (two-way) rail passengers during the peak hour. Such levels of demand are not thought to exist in Waterford, nor is it thought that there is any prospect of these levels being reached in the foreseeable future.

IE's investment programme currently sees improvements to the rail network in the South-East taking place after 2003, when the majority of new infrastructure for Dublin is scheduled to be in place. Improvements will then focus on the renewal of existing rolling stock, which dates from the 1960's. The new rolling stock will comprise diesel rail cars that will provide for significant improvements in passenger comfort. There are no plans for any significant improvements in service frequencies linked to the introduction of new rolling stock.

At present, the volume of port traffic carried by rail amounts to 2-3% of its total tonnage. IE believes there is sufficient capacity within existing services to respond to any increase in demand within the short to medium term i.e. over the next decade. As such, the company does not have plans to increase the frequency of services to the Port at present though this is under constant review in light of any changes in prevailing market conditions. Looking beyond this, there is a desire to carry an increasing tonnage of freight though it is acknowledged that improvements to the

National Road Network will significantly increase competition from private road haulage companies.

Existing Road Network

The current road network in Waterford can be broadly categorised into a hierarchical structure of primary, secondary and tertiary roads. The primary roads are the National Primary and Secondary Routes, which carry the bulk of strategic long distance traffic. Secondary roads comprise the main radial distributors while the tertiary network is characterised for the most part by residential frontages.

By comparison with many comparably sized cities, it is noticeable that Waterford does not possess a fully-developed conventional road structure comprising orbital and radial routes. There is a marked lack of orbital roads to redistribute traffic around the City Centre with the consequence that most of this traffic has to pass through this congested area. The route of the N25 along the South Quays and the Mall and the single crossing of the River Suir at the Rice Bridge further reinforce this fact. Furthermore, there are a limited number of radial routes providing access to the City Centre. In practice, most of these routes intersect with the N25, which serves as the primary route providing access to the City Centre

This pattern has contributed to an increasing amount of traffic using either Brown's Road or the R686 Ashe Rd to access the City Centre from the south and thereby to avoid the congestion and delays that have come to characterise much of the N25 Cork Road. This has led to local residents objecting to the incursion of traffic in these roads many of which pass through residential areas.

Recorded peak hour traffic flows on the Rice Bridge vary between 2,500 to 3,000 vehicles and cause fairly extensive queuing on the northern approaches to the City during the AM peak. Similar problems are commonly found on the South Quays and Bridge St during the PM peak period. These problems tend to be further accentuated during summer months when traffic flows are highest.

Proposed roads improvements that are currently forecast for completion by 2006 comprise the southern section of the Outer Ring Road and the N25 Waterford Bypass. The Bypass will serve to route long distance and heavy goods vehicle traffic away from Waterford. In addition to this, a link road is proposed to connect the southern section of the Outer Ring Road to the Bypass. This will encourage some local cross-river traffic to use the Bypass in preference to the Rice Bridge.

Traffic Management

Traffic Congestion

Traffic congestion is prevalent on many parts of the road network in Waterford City, particularly during peak periods. Those parts most prone to recurrent congestion and delays are:

- The N9 and N25 inbound to the Rice Bridge - during the morning peak hour;
- The N25 Cork Road inbound from its junction with the Tramore Rd to the Rice Bridge – during both AM and PM peak hours;
- Bridge St, Lombard St, Catherine St and Johnstown St in the vicinity of their junctions with the N25 and
- Dunmore Rd at its junction with the Outer Ring Road – during the AM peak.

Most of the delays are caused by junction capacities. In particular, this applies to the junctions of:

- Rice Bridge and the N25 on the North and South Quays;
- N25/Lombard St;
- N25/Catherine St;
- N25/Johns St;
- N25/Tramore Rd;
- IRR/Tramore Rd;
- Lower Grange/ IRR;
- Upper Grange/ IRR;
- Dunmore Rd and the Outer Ring Road.

The current distribution of traffic volumes on the road network on the main roads in Waterford City is given in **Appendix G**.

SCATS

Waterford City Council has recently invested in a SCATS area traffic control system. This system has the potential to deliver significant operational benefits to the City by the coordination of traffic signals and the regulatory control of traffic over the affected area.

SCATS is an area traffic control system which operates in real time to vary traffic signal settings in response to changes in traffic flows from minute to minute within a defined geographical area. In doing this, the system aims to control traffic on an area wide basis as distinct from the alternative arrangement where traffic signalised junctions operate independently of each other. Studies of these two means of operation have confirmed that area traffic control systems have the potential to deliver significant operational benefits over and above conventional means of operation and fixed time systems.

Further details on SCATS can be found in **Appendix G**.

Parking

At present there are over 2,500 off-street parking spaces in Waterford City. Almost 2,050 of these are within the Disc Parking Zone. Car parks on the Quays account for almost 20% of the total off-street parking provision within the City Centre. Generally speaking most of the car parks are small to medium sized with the exception of the 410 spaces in the City Square car park, which accounts for about one sixth of total off-street provision within the City Centre. The Rose Lane car park is a private facility owned by the Tower Hotel with access restricted to residents and members of the hotel sports club.



There are almost 960 on-street parking spaces within the Disc Parking Zone. Over one third of these are classified as being residential in character. Of the remaining two thirds, almost a half falls within the core area of the City and would normally be

viewed by motorists as being a highly accessible alternative to the off-street provision.

Provision for the disabled amounts to approximately 3.5% of current on-street (residential and non residential) provision within the Disc Parking Zone. With reference to current standards, this level of provision is of the correct order of magnitude for a city of this size. Normal disk parking spaces are also available free of charge to disabled persons.

The demand for car parking within the City Centre was assessed as part of the Study. Use was made of the current parking guidelines as contained within the Waterford City Development Plan. Information regarding City Centre land uses was also obtained. The results of the assessment show a general surplus of parking provision when comparing supply and demand within the City Centre. Within the residential parts of the City Centre, there appears to be little or no evidence of a serious parking problem. Within the core area, it is similarly true to say that most motorists can readily find parking spaces at most times of the day, though not necessarily in their first choice of destination.

Details of both on and off-street parking provision in Waterford City are summarised in **Appendix G**.

Port and Airport



Port of Waterford

The Port of Waterford currently tranships approximately 2 million tonnes of goods and materials annually. Current estimates indicate that the ports of Waterford, New Ross and Rosslare account for 10.6% of the total national tonnage, with Waterford accounting for 40% of this figure. This figure is forecast to rise to 12.1% by 2007 with Waterford accounting for 35% of the total. The fall

in Waterford's share of traffic is due to the higher rate of forecast growth in Rosslare's traffic, in part due to the significant proportion of passenger and roll-on/roll-off traffic handled by the port.

Access to the Port is from the N25 via the N29. The N29 route is a new route designed to accommodate the forecast increase in vehicular traffic. The only other means of access to the port is via the railway line, which forms a dedicated link from Belview to the North Quays in the City Centre. At present there has been an increasing trend for port traffic to be carried by road. The main factor influencing this has been containerisation and the relative competitiveness of road relative to rail for this form of traffic. At present the Port estimates that 97% of their tonnage is carried by road.

Waterford has recorded a high rate of annual growth in container traffic in recent years. This compares favourably with all the other ports in Ireland. The rate of growth since 1997 is an over estimate of the true situation as the 1997 figure was heavily influenced by the liquidation of Bell Lines in 1996. Bell Lines was the sole container operation in Waterford at the time with links to Southampton and Rotterdam.

Annual port tonnages and container traffic for the main ports in Ireland for the period 1997 –1999 are given in **Appendix G**.

In 1993, Waterford Port Authority (WPA) moved the majority of its operations from the North Quays to Belview. The current intention is to complete this process within the next five years thereby vacating a site of approximately 16 acres for future redevelopment. The Port Authority wishes to sell this land to raise capital for future investment in further port facilities at Belview.

The Port Authority owns the port and its infrastructure and issues licences to shipping companies who operate under the terms and conditions of the WPA licence. The last licensing arrangement expired in March 2001. The current arrangement came into force in July 2001, part of which involved the establishment of a new company - Waterford Container Terminals - to manage the container business. This company is a wholly owned subsidiary of the WPA. The advantages of this new arrangement are seen as:

- Facilitating an increased return on capital investment, and
- Further strengthening WPA's control over port operations.

Unlike the earlier container operations, which were effectively run by Bell Lines, the new arrangement comprises a consortium of shipping companies consisting of:

- Norfolk Lines,
- CTC,
- ECS, and
- BG Transport.

This arrangement has given the port a stronger commercial basis and insulates it to some extent from the varying fortunes of one or other company.

WPA estimates that one crane can tranship approximately 50,000 container units a year. The current total for 1999 of 55,379 units has the container port working at about 111% of capacity. This figures represent a fairly accurate representation of the current perception that the port is operating 'at full stretch' to accommodate this traffic. Although a linear relationship between the number of cranes and units that can be trans-shipped does not exist, the projected capacity of the container port is forecast to double when the second crane becomes operational.

In addition to the proposed expansion of the port's container handling capacity a major planning application and environmental impact statement has been submitted by WPA to Kilkenny County Council. The application is for a further 1,000 metres of quay. The planning application envisages the 1,000 metres being allocated between the following types of traffic:

| | |
|-----------|-------------|
| Container | 650 metres, |
| RO RO | 25 metres, |

| | |
|-------------|-------------|
| Bulk Liquid | 100 metres, |
| Dry Bulk | 225 metres. |

At present there are 730 metres of quay of which 450 metres are occupied by container traffic.

WPA anticipates that the application will provide sufficient quay and port facilities to accommodate the projected requirements for the next ten years. In making the application a conscious decision was taken to make one large application in preference to a series of smaller ones over the next decade. This was seen as the most efficient way of progressing this aspect of the proposed expansion of the port.

WPA's plans for the development of Belview include the provision for a new oil handling facility. It is anticipated that this will lead to the diversion of the oil trade from the Campus Oil, Marshmeadows facility at New Ross, and the Morris Oil business from Fiddown - which will become inaccessible to oil tankers once the second crossing of the River Suir is complete.

The proposed expansion of the port is reflected in a recent report prepared for the department of the Marine and Natural Resources in October 2000. Their calculations indicate, that based on a current (1999) tonnage of 1,904,000 tonnes, forecast growth will see this figure rising to 2,924,000 by 2007 - equal to a 59% increase. Their forecasts indicate that current tonnage accounts for approximately 4.2% of the 1999 national total. By 2007 this figure will be approximately 4.3%.

One option for the future development of Waterford is as part of an integrated facility comprising New Ross and Rosslare. The port authority is currently considering this as an option given that there is little duplication of business between the three ports. This is seen as one way that the port will be able to raise the necessary capital to finance its future expansion plans at Belview

The South-East Regional Airport

The South-East Regional Airport first assumed significance as a Regional Airport in 1985 when Ryanair used it for the launch of their business. From its inception, the business grew rapidly until in 1990 the Airport was handling 45,000 passenger trips a year. Its growth was seriously curtailed when Ryanair withdrew services in 1992 to pursue higher volume business using jets.

A new operator, British Regional Airlines (BRA) was introduced in 1993. This was a Manchester based operation that offered a scheduled daily service between Manchester, Stansted and Waterford. The BRA operation did not provide Waterford with access to early morning and evening (Business Class) services, which are more lucrative and therefore less reliant upon higher volumes of passenger traffic. Early morning and evening services had been a feature of Ryanair's service up until its termination in 1992.

BRA terminated operations in 2000 due to the less attractive nature of the mid-day service in/out of Waterford and the higher volume traffic that could be realised between Manchester and Stansted. The decision to cease operations out of Waterford was also influenced by the airline's introduction of wide-bodied jets that could not access Waterford.

Euroceltic Airways was the successor to BRA. As of June 2001, Euroceltic operated an early morning and evening return service between Waterford and Luton. Although, the annual number of passengers for 2002 amounted to some

31,000 people, this figure was short of the annual patronage required to break even on operations. In December 2002 the decision was taken to terminate the Euroceltic Waterford - Luton service in 2003.

At the time of consultation with Airport management, the following, in addition to retaining the then existing operator Euroceltic Airlines, were seen to be key to the future development of the Airport:

- *Extend runway length and width:* At present the length is 1433m. There is an urgent need to increase this to 2000m. Many new entrants to the air transport industry use second-generation aircraft that require longer runways to realise their full payload. Technically the runway lengthening can be performed without closing the Airport. To upgrade the runway to take wide-bodied jets would require both a lengthening and widening of the runway. The current width of 30m would have to be increased to 45m to accommodate conventional wide-bodied jet aircraft such as the Boeing 737. This would require closure of the Airport for a period of several months.
- *Develop a high frequency turboprop service:* Given the Airport's constraints it is not anticipated that wide-bodied jets will ever assume a significant proportion of passenger traffic at Waterford. Having said this, some of the smaller new generation jets such as the BAe146 currently access 30 metre runways and it would not be technically impossible for the a future operator to access Waterford with BAe146 aircraft subject to passenger demand.
- *Improve the overall regional road links:* Proposed improvements linked to the second crossing of the River Suir will facilitate access through and around Waterford. Of equal importance is the development of the M9 Motorway between Kilkenny and Waterford. This improvement could make a significant contribution to the Airport in fulfilling its regional role as a gateway to the South-East. In this respect, Kilkenny could become a key centre for the expansion of the Airport's business. There is a medium to longer-term need to consider the full realignment of the R708 Airport Road. In addition to localised improvements to the road network, it is also pertinent to consider the implications of the proposed road improvements at a national level. When the N9 is upgraded by 2007 it will bring most destinations in Dublin to within 2 hours of Waterford. This will further marginalise any prospect of there being a Waterford-Dublin service and will serve to underline the fact that the commercial future of the Airport lies in its links to Britain and Europe. It will also serve to reinforce a key commercial objective of the Airport - namely that it be seen as a regional gateway to the South-East with a credible transport system in support of this objective.
- *Diversify the role of the Airport:* There is a need to develop the tourist market and the Airport could provide a convenient gateway to the Region for this purpose. The first aim should be to develop the 'short break' or long weekend holiday with access to the South-East through The South-East Regional Airport.

5.4 Utilities

Water Supply

A review carried out of Waterford City's Water Supply in 2000 identified deficiencies in the existing system and outlined proposals for upgrading and/or replacing existing infrastructure and construction of new infrastructure. The report included mains rehabilitation and leakage control proposals to reduce the high level of leakages (estimated by Waterford City to be about 50% of the City's water supply) and an increase in treatment and source capacity. It is currently proposed that the capacity of the treatment plant at Adamstown be doubled and that water be abstracted from a fourth source, the Mahon River.

A recent study of the north-west suburbs including Gracedieu found no major constraints with regard to existing services. Kilkenny County Council anticipate that additional sources of water may be required and that at least one service reservoir will be required to serve the Belview industrial area.

Sewerage and Drainage

The existing wastewater collection system in Waterford City is a combined system and dates back to the 1800's. Major improvements have taken place in recent years (particularly since the 1970's) and broadly consist of the construction of interceptor sewers to the five main drainage areas. These interceptor sewers outfall to the River Suir at Waterpark where preliminary treatment in the form of screening and grit removal takes place. The system currently does not meet the requirements of EU and Irish Legislation.

Studies have been carried out with regard to the upgrading of wastewater treatment in Waterford City and Environs. Identified requirements include modifications to Waterpark Pumping Station (now completed), construction of a wastewater treatment plant at Gorteens and associated pumped and gravity collection sewers to the plant, drainage of the Waterford Environs north of the River Suir and drainage of the eastern suburbs to a new pumping station to be constructed at Maypark.

The Gorteens wastewater treatment plant is expected to open in late 2005 or early 2006. The plant will have the initial capacity to cater for a population equivalent (PE) of 188,000. The PE of Waterford is currently in the Region of 135,000. The wastewater treatment facility will facilitate the development of industrial lands at Belview.

Energy

The ESB is currently undertaking a major upgrading of the electricity infrastructure in the Waterford area in order to cater for anticipated developments over the next 15-20 years. They are in the process of building three major new sub-stations in the vicinity of Waterford City. Sub stations are also planned to cope with future City expansion. The ESB intends to lay ducts across the second river crossing of the Suir planned as part of the Waterford by-pass so as to enable them to supply electricity to development adjacent to the by-pass.

Regarding Gas, Waterford is served by an eight-inch diameter steel line, which branches off the main Cork – Dublin transmission line at a location north of Clonmel, Co. Tipperary. Bord Gais Eireann (BGE) are currently progressing the construction of a new national, transmission ring main, which will run between Dublin, Galway and Limerick, currently planned to be in place for October 2002.

Telecommunications

An extensive range of services provided by Eircom in Waterford City is delivered over a number of media including copper, fibre and radio. Frame relay and ATM are already provided. Business IP (Internet Protocol) network is soon to be launched. Eircom has the capability to provide resilient broadband connectivity between Waterford and the Global Crossing cable landing in Kilmore, Co. Wexford.

The provision of fibre network is currently concentrated south of the River Suir. There is a limited fibre network presence in the vicinity of The Port of Waterford at Belview but Eircom has indicated that if there were firm demand in, for example, the Belview area, the fibre network could be extended to this area.

Waterford City is part of the Broadband Programme for Ireland. This network will provide modern, low-cost telecommunications and is a critical component in the continuing development of e-commerce in the Waterford region. The project will consist of metropolitan fibre optic cable and ducts with co-location space available on an open access basis for different service providers.

The network for Waterford City will be approximately 20 km in length and will serve all the main commercial and industrial areas including the IDA Industrial Estate and the Waterford Technology Park. Also targeted for inclusion are colleges, schools, public libraries and hospitals. Advance works have already been completed in 2002, with additional advance works planned for 2003. The main contract is set to commence in the last quarter of 2003, with the network in place and operating in 2004.

A figure summarising current infrastructure provision in Waterford is given in **Appendix H**.

5.5 Tourism

Of the five counties comprising the South-East region, Waterford scored highest in attracting overseas visitors, with 447,000 visiting the county in 2000. This represents 38.8% of all overseas visitors to the Region. However, it also had the lowest per person spend amongst overseas visitors.

Waterford is under-performing in attracting longer stay visitors and the statistics support the general perception of Waterford as a 'pass-through' point rather than a destination.



The tourism issues that have been identified include those relating to product, access and quayside development. As regards product, the potency of the county's association with Waterford Crystal is widely recognised. While there are clear benefits to be accrued from the strong brand recognition that Waterford Crystal possesses, there is a danger that the strength of the association may compromise both the image and the impact of other natural and built attractions in Waterford. Other strengths include proximity to areas of scenic appeal (combining best of east and west) and historic appeal including a range of buildings and monuments with tourism potential. There is a requirement to market the sub-region on the basis of

these and other potential strengths, such as the opportunity to use the River for leisure purposes.

Waterford has excellent sea access to British and European markets. However, there are issues relating to road and air access. These are issues which tourism shares with other elements of the economic life of the City and are discussed in detail in **Section 5.3 – Existing Transportation Infrastructure and Systems**.

There has been a considerable increase in cruise ship visits to the City in recent years. The need to rejuvenate the quayside area is linked to this increase and is seen as critical to offering potential for further development of the tourism product in Waterford.