

Regional Planning Guidelines for the Greater Dublin Area 2010-2022





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Prepared by:

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Foreword

The review period for the Regional Planning Guidelines has come at a time of change – changes in global and national economics, changes in planning and environmental legislation and changes in the political structures to deliver on national goals. This time of transition presents new challenges in the way we plan for our future and offers opportunities to examine innovative ways and means of achieving a bright future for the citizens of Greater Dublin.

The Regional Planning Guidelines set out the planned direction for growth within the Greater Dublin Area up to 2022 by giving regional effect to national planning policy under the National Spatial Strategy (NSS). These Guidelines also have a crucial role in supporting regionally important infrastructure and the investment priorities of the National Development Plan and Transport 21.

This is the second time that Regional Planning Guidelines (RPGs) have been prepared for the Dublin and Mid East Regions and cover the 12 year period from 2010 to 2022. The Regional Planning Guidelines build upon the experience and progress made under the previous Guidelines and establish new and innovative policy ideas to guide sustainable and balanced growth throughout the Greater Dublin Area.

An integrated model of policy development is a key component of the RPGs, with economic, infrastructure and settlement policies being interdependent. This is complemented by new approaches to environmental and social policy which incorporates themes of green infrastructure development, climate change, flood risk management and social inclusion. In effect, this integrated approach seeks to clearly promote sustainable growth and build sustainable communities within the Greater Dublin Area.

This regional vision for the future development of the Greater Dublin Area could not have come about without the input and experience of the relevant governmental agencies and departments, the two regional authorities and the support and cooperation of the seven local authorities within the region. The role of Forfás, in the preparation of the regional economic strategy, and consultants in preparing the environmental reports, have also been a welcome addition to the Guidelines preparation process. It is also important to recognise the valued input and broad experience of interest groups and individuals whose contributions, through the public consultation processes, helped inform the preparation of these Guidelines.

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Glossary of Terms

| AA | Appropriate Assessment (also known as HDA-Habitats Directive Assessment) |
|---------|---|
| ACA | Architectural Conservation Area |
| BAC | Bus Atha Cliath |
| BE | Bus Eireann |
| CSO | Central Statistics Office |
| CER | Commission for Energy Regulation |
| CFRAMS | Catchment Flood Risk Appraisal Management Strategies |
| DART | Dublin Area Rapid Transport (rail system) |
| DBTF | Dublin Bay Task Force |
| DoEHLG | Department of the Environment, Heritage and Local Government. (This Government Department was formerly known as the Department of Environment, and the Department of the Environment and Local Government, respectively.) |
| DoT | Department of Transport |
| DRA | Dublin Regional Authority |
| DTAA | Dublin Transport Authority Act, 2008 |
| DTO | Dublin Transport Office, which has been subsumed into the National Transport Authority |
| EIRGRID | Ireland's independent transmission system operator |
| ELC | European Landscape Convention (ETS No. 176) |
| EPA | Environmental Protection Agency |
| ESRI | Economic and Social Research Institute |
| EU | European Union |
| FDI | Foreign Direct Investment |
| FORFAS | National advisory body for enterprise and science |
| GDA | Greater Dublin Area – the area encompassing the Dublin and Mid-East Regions, respectively, comprising Dublin City and counties Dun Laoghaire-Rathdown, Fingal and South Dublin in the Dublin Region, together with the counties of Kildare, Meath and Wicklow in the Mid-East Region. |
| GDP | Gross Domestic Product |
| GDSDS | Greater Dublin Strategic Drainage Study |
| GHG | Green House Gases |
| GI | Green Infrastructure |
| GIS | Geographical Information Systems |
| GSI | Geological Survey Ireland |
| GVA | Gross Value Added, used to measure regional output. |
| HDA | Habitats Directive Assessment (as per the Habitats Directive 92/43/EEC -also referred to as AA: Appropriate Assessment & HIA: Habitat Impact Assessment) |
| ICZM | Integrated Coastal Zone Management |
| ICT | Information & Communications Technology |
| IDA | Industrial Development Agency |
| IE | larnrod Eireann |
| IEZ | Intellectual Enterprise Zone |
| LA's | Local Authorities |
| LOOR | Leinster Outer Orbital Route |
| LUAS | meaning 'speed', is the light rail transit system serving the region. |
| RPA | Railway Procurement Agency |
| MAN | Metropolitan Area Network (telecommunications system) |

| MERA | Mid East Regional Authority |
|-------------|---|
| MOLAND | $Monitoring\ Landuse/cover\ Dynamics:\ A\ regional\ development\ modelling\ system\ which\ forecasts\ land\ use\ change\ over\ time\ and\ monitoring\ tool\ for\ the\ RPG's$ |
| NATURA 2000 | European network of Special Areas of Conservation and Special Protection Areas |
| NAPS | National Anti-Poverty Strategy |
| NBP | National Biodiversity Plan |
| NCC | National Competitiveness Council- a social partnership body, which reports to the Taoiseach on key competitiveness issues facing the Irish economy |
| NCIP | National Childcare Investment Programme |
| NCPF | National Cycle Policy Framework |
| NDP | National Development Plan, Government of Ireland |
| NESC | National Economic and Social Council |
| NHA | National Heritage Area |
| NHP | National Heritage Plan |
| NIAH | National Inventory of Architectural Heritage |
| NRA | National Roads Authority |
| NSS | National Spatial Strategy 2002-2020 (November 2002) |
| NTA | National Transport Authority |
| OECD | Organisation for Economic Competitiveness & Development |
| PDA | Planning and Development Act, 2000, as amended |
| POM | Programme Of Measures within River Basin Management Plans |
| PFC | A Platform for Change, Outline of an integrated transportation strategy- Greater Dublin Area 2000 to 2016, (September 2000), Dublin Transportation Office |
| QBN | Quality Bus Network |
| QNHS | Quarterly National Household Survey |
| RAPID | Revitalising Areas by Planning Investment and Development |
| RBD | River Basin Management: The Greater Dublin Area includes the Eastern RBD, South Eastern RBD, Neagh Bann RBD and Shannon RBD. |
| RBMP | River Basin Management Plan |
| RPGs | Regional Planning Guidelines facilitated by section 21 of the Planning and Development Act, 2000 |
| RPGGDA | Dublin and Mid East Regional Authority Regional Planning Guidelines- Greater Dublin Area |
| RPGPA | Retail Planning Guidelines for Planning Authorities, (2005), Department of the Environment and Local Government |
| RPSGDA | Retail Planning Strategy for the Greater Dublin Area 2008-2016 |
| SDZs | Strategic Development Zones facilitated by the Planning and Development Act, 2000 as amended |
| SEA | Strategic Environmental Assessment. European Union Directive on the Assessment of the Effects of Certain Plans and Programmes on the Environment adopted on 5th June 2001; required to be transposed into Irish legislation by 21 July 2004 |
| SPGs | Strategic Planning Guidelines for the Greater Dublin Area , Dublin & Mid-East Regional Authorities, Dept of Environment, and GDA Local Authorities 1999. (Annual updates in 2000, 2001 and 2002) |
| SuDS | Sustainable Drainage Systems |
| WFD | Water Framework Directive (Directive 2000/60/EC) |
| SAC | Special Areas of Conservation |
| SPA | Special Protection Areas |
| T21 | Transport 21 |
| VDS | Village Design Statement |

Preamble

This is the second time that Regional Planning Guidelines (RPGs) have been prepared for the Greater Dublin Area and the 2010 to 2022 RPGs seeks to build on and extend the policies and strategy of the 2004 to 2016 RPGs – continuing and focusing on the role as implementers of the National Spatial Strategy.

This time the RPGs for the GDA have been able to make a series of recommendations to Local Authorities clearly linked to and supporting the national investment in transport, particularly public transport, under Transport 21. The RPGs seek to deliver policies integrating landuse, transport, economic growth and investment in utilities- water, broadband and energy so that the GDA can move towards becoming a sustainable high quality location for business, residents and visitors. Through this integrated model it is intended that the collective decisions made at local authority level in relation to planning policy implementing the RPGs will provide value for money on key strategic state investments, not least of which the new and planned public transport routes and major water services projects.

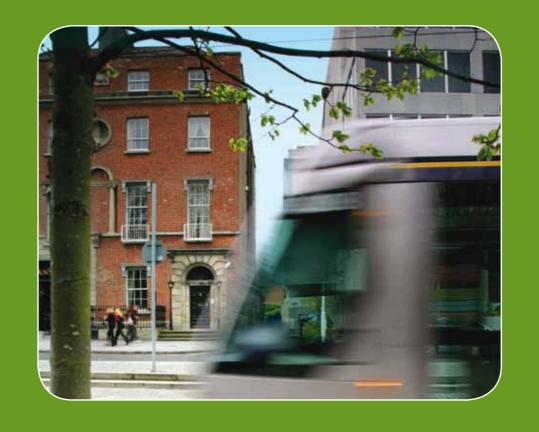
Sustainable growth is a key theme of the 2010 RPGs- in relation to economic growth for the GDA, for the location of new housing land, actively working to improve the environment, water quality, and building real sustainable communities with a range of integrated services. Also new to the Greater Dublin Area RPGs is a model for a Green Infrastructure framework for the GDA to promote a new approach to biodiversity protection.

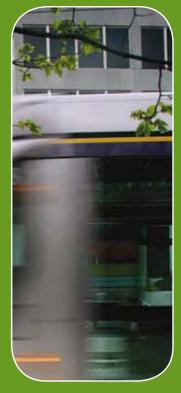
Delivery of these many aims requires a coordinated approach by local authorities, the new National Transport Authority and by a range of other key agencies, not least of which is the Department of Environment, Heritage & Local Government, Department of Education & Science, Department of Enterprise, Trade and Employment, the Department of Communications, Marine & Natural Resources and the Department of Community, Rural & Gaeltacht Affairs.

These RPG's were prepared in consultation with a significant input by state agency Forfás in the preparation of the Regional Economic Strategy contained in Chapter 3. This close working arrangement has resulted in the RPGs integrating more significantly into the overall policy and the key issues in relation to promoting economic activity in the GDA and the joined-up approach to infrastructural and other key areas of investment that is needed to allow the GDA to be a world class destination for investment and to foster local business opportunities.

Executive Summary

An Overview of the Regional Planning Guidelines





Executive Summary

The Greater Dublin Area (GDA) includes the geographical area of Dublin City, Dun Laoghaire-Rathdown, Fingal, South Dublin, Kildare, Meath, and Wicklow and incorporates the regions of both the Dublin Regional Authority and the Mid-East Regional Authority. The Planning and Development Act, 2000 requires these regional authorities to make Regional Planning Guidelines in respect of the whole of the combined area of their regions, to provide a strategic planning framework for the long-term sustainable development of the area for the 12 year period up to 2022. The Planning Act also requires the Regional Planning Guidelines to be reviewed again in 2016.

The Regional Planning Guidelines (RPGs) is a policy document which aims to direct the future growth of the Greater Dublin Area over the medium to long term and works to implement the strategic planning framework set out in the National Spatial Strategy (NSS) published in 2002. It achieves this through appraisal of the critical elements involved in ensuring sustainable and good planning, and though the protection of sensitive and environmentally important locations. The RPGs inform and direct the City and County Development Plans of each of the Councils in the Greater Dublin Area. They provide the clear policy link between national policies -the National Development Plan and the National Spatial Strategy and other national policy documents and guidance; and Local Authority planning policies and decisions. The RPGs aid each of the Councils in the Greater Dublin Area in working together for the better planning of the whole area of Dublin and the surrounding Mid-East Region.

The first RPGs for the GDA were adopted in 2004 and set out a strategic framework for planning and development for the region up to 2016. This RPG review updates the 2004 document and looks forward to 2022.

Chapter 1 describes the planning context for the preparation of the RPGs. At a national level these are identified as the Planning and Development Act 2000, the National Development Plan, the National Spatial Strategy, Smarter Travel, Transport 21, the National Climate Change Strategy and the National Energy Policy. At a regional level, identified and outlined is the Platform for Change and the River Basin Management Plans. The context of the review with a discussion on the delivery of the 2004 RPGs is outlined under the topics of population, housing growth, economic activity, public transport, roads investment, port and airports, water supply, waste water treatment, waste management, natural heritage and environment, built and cultural heritage, open space and recreation, rural development and social inclusion. Priorities for the 2010 RPGs are discussed identifying economic growth, linking of land use and public transport investment, need for investment in water services, energy, broadband and flood protection and mitigation, climate change and environmental protection. Inter-regional issues are also explored.

Chapter 2 sets out the vision for the RPGs:

The GDA by 2022 is an economically vibrant, active and sustainable international Gateway Region, with strong connectivity across the GDA Region, nationally and worldwide; a region which fosters communities living in attractive, accessible places well supported by community infrastructure and enjoying high quality leisure facilities; and promotes and protects across the GDA green corridors, active agricultural lands and protected natural areas.

The delivery of this vision is set out by listing all of the policies contained in each thematic chapter in this part of the document so that the clear linkages between the policies themselves and the policies and the vision can be seen.

Chapter 3 is the Regional Economic Strategy. It sets out the key documents which formed core elements of preparing this strategy, namely Building Irelands Smart Economy; A Framework for Sustainable Economic Renewal, Regional Competitiveness Agenda for the East, Our Cities; Drivers of National Competitiveness, *Economic Development Action Plan for Dublin City Region* and the *Mid-East Regional Authority Economic Development Strategy*.

In setting the context the factors of competitiveness are identified – enterprise dynamic, skills and education, economic infrastructure, leadership and strategic capacity, innovation and quality of life. The challenges facing the GDA in the current economic environment are outlined, including the growth in unemployment, decline in manufacturing and also regional outputs. Future trends, including importance of business and financial services, educational sector, labour supply

and skills bases, value of exports, impact of urban sprawl, balanced regional development and long distance commuting, are also considered.

Ireland is now a leading service economy and this is one of the key growth areas for the future and needs to be supported to remain attractive through skills development, attractive environment, advanced broadband and high quality transport links. Growth in high value manufacturing particularly the pharmaceutical and food & drink industries, which buck the trend as areas of manufacturing which are not in decline are also examined and the need for the GDA to remain a competitive location for these types of high value firms. The growing pattern of convergence between different elements of this sector is discussed -such as biopharma, nano-technologies, green technology and life sciences and the opportunities that such linkages offer. The Strategy element of the chapter sets out needs for enhancing the business environment; (i) leadership and governance; (ii) stimulating and supporting entrepreneurship; (iii) promoting innovation; (iv) skills and education; (v) quality of life; (vi) connectivity; and (vii) utility investment. The spatial dimension to the Strategy supports the growth of the polycentric gateway and primary economic growth towns linked by multi-modal corridors and focused on identified Core Economic Areas – Gateway Core Economic Area; Navan Core Economic Area, Drogheda Core Economic Area, Naas/Newbridge Core Economic Area, Maynooth/Leixlip Core Economic Area; Wicklow/Arklow Core Economic Area, Bray/Cherrywood/Greystones Core Economic Area, and the secondary economic growth towns of Athy, Ashbourne/Dunboyne Economic Area, Kells, Arklow, Balbriggan and Kildare.

Chapter 4 describes the Settlement Strategy for the GDA, following an examination of population targets, housing trends and the testing of future growth pattern scenarios using the MOLAND model of UCD. The chapter sets out the population and housing target for each Local Authority to be incorporated into their Development Plans through the Core Strategy, and also at a more detailed level the percentage of new housing provision to be directed towards the metropolitan areas within each Council.

The population targets issued by the DoEHLG and the housing targets for each Council are set out in the two tables in the subsequent paragraphs.

Regional Population Targets 2010, 2016 and 2022

| | 2008 | 2010 | 2016 | 2022 ¹ |
|----------|-----------|-----------|-----------|--------------------------|
| Dublin | 1,217,800 | 1,256,900 | 1,361,200 | 1,464,200 |
| Mid-East | 514,500 | 540,000 | 594,600 | 639,700 |
| State | 4,422,000 | 4,584,900 | 4,997,000 | 5,375,200 |



1 While in the original circular the DoEHLG published a low and a high range for 2022, for the RPGs, the low range is only shown and applied in the settlement strategy as directed by the Department of Environment Heritage & Local Government in their September 2009 Population and Hub Targets document.

Housing Allocation for Local Authorities

| Council | 2006 Census | 2016 | 2022 |
|------------------------|-------------|---------|-----------|
| Dublin City | 223,098 | 265,519 | 319,903 |
| Dun Laoghaire Rathdown | 77,508 | 98,023 | 117,893 |
| Fingal | 89,909 | 118,646 | 142,144 |
| South Dublin | 87,484 | 115,373 | 137,948 |
| Kildare | 68,840 | 93,748 | 112,477 |
| Meath | 61,257 | 79,729 | 95,458 |
| Wicklow | 49,088 | 68,351 | 82,012 |
| GDA Total | 657,184 | 839,389 | 1,007,835 |

The housing target for each Local Authority to achieve for their part of the metropolitan target set by the DoEHLG is described in the table below.

RPG Population and Housing Distribution Table for Target Year 2016

| Total Metropolitan Population | Metropolitan Population to be Accommodated by Each Region | Metropolitan Population Allocated to Each Council (existing & proposed) | Housing Increase Proportion of Total Allocated to Be Directed to the Metropolitan Area ² |
|----------------------------------|--|---|---|
| GDA: Minimum of 1,373,900. | Dublin: 1,287,914 | Dublin City: 563,512 | 42,421 (100%) |
| Provided For: 1,424,877. | | Dun Laoghaire Rathdown: 206,322 | 19,284 (94%) |
| | | Fingal: 236,157 | 24,426 (85%) |
| | | South Dublin: 281,923 | 27,610 (99%) |
| | Mid East: 136,963 | Kildare: 67,012 | 8,718 (35%) |
| | | Meath: 13,738 | 2,032 (11%) |
| | | Wicklow: 56,213 | 8,090 (42%) |

² Based on calculation of housing using occupancy rate for each Authority, as per Appendix A3.It also recommends that new housing support Transport 21 investment and sustainability targets by directing significant numbers of future new housing towards the towns set out in the settlement hierarchy. The hierarchy table is repeated below:

Settlement Hierarchy

| Hierarchy | Description | Locations |
|-----------------------------------|--|--|
| Gateway Core | International business core and high density population, retail & cultural activities. | Dublin City Centre & immediate suburbs |
| Metropolitan Consolidation Towns | Strong active urban places within metropolitan area with strong transport links | Swords, Blanchardstown, Lucan³, Clondalkin⁴, Tallaght, Dundrum, Dun Laoghaire Bray⁵. |
| Large Growth Towns I | Key destinations, economically active towns supporting surrounding areas, located on Multi Modal Corridor in metropolitan hinterland. | Navan, Naas, Wicklow, Drogheda ⁶ |
| Large Growth Towns II | Smaller in scale but strong active growth towns, economically vibrant with high quality transport links to larger towns/city | Newbridge, Greystones, Arklow, Cherrywood, Balbriggan, Dunboyne, Maynooth, Leixlip ⁷ . |
| Moderate Sustainable Growth Towns | (i) In Metropolitan area, strong edge of metropolitan area district service centres, high quality linkages and increased densities at nodes on public transport corridors (ii) In Hinterland areas, 10k from large town on public transport corridor, serve rural hinterland as market town | Donabate, Celbridge, Lusk, Rush, Ashbourne, Dunshaughlin ⁸ , Kells, Trim, Kildare, Monasterevin, Kilcullen, Kilcock, , Blessington Athy, Newtownmountkennedy. |
| Small Towns | Good bus or rail links; 10k from large growth towns. | To be defined by Development Plans. |
| Villages | | To be defined by Development Plans. |

The settlement strategy for the GDA supports the delivery of the hierarchy through the continuity of the policy for metropolitan and hinterland areas within the GDA, focusing new housing within the existing footprint of the metropolitan areas and planning expansion of the footprint in conjunction with new high quality public transport investment; designation of multi-modal transport corridors providing enhanced public transport linkages serving key towns and linked investment in developing these designated towns in the hinterland area.

³ Including Adamstown.

⁴ Including Clonburris.

⁵ Including Bray environs and surrounding areas of Fassaroe and Old Conna.

⁶ Drogheda forms part of the Border Regional Authority area, however due to its location the environs of Drogheda to the south of the town fall within the GDA; and the impact of the town, economically and socially on the GDA, has formed part of the consideration of the Settlement Strategy.

⁷ Including expansion area of Collinstown.

⁸ Dunshaughlin will become a Moderate Sustainable Growth Town following the granting of permission of a railway order for the Navan Rail Line Phase II, including a station at Dunshaughlin



Chapter 5 examines the area of rural development covering the topics of rural housing provision, rural services and community development and the rural economy. It makes a series of recommendations on supporting and protecting rural areas and appropriate management of rural housing, supporting agricultural activities, the need to support key rural services; rural transport, role of rural tourism, environmental issues, green and alternative energies, rural entrepreneurship and the management of aggregate resources.

Chapter 6 sets out the key physical infrastructure needs for the GDA to ensure the integrated delivery of the settlement and the economic strategy so that the RPGs provide a deliverable framework for the full integration of land use and national investment in infrastructure. The chapter lists key areas of priority investment under the different types of infrastructure - (i) Transport- public, road, airports, ports, cycling and walking; (ii) Water Supply; (iii) Waste Water and Surface Water Treatment; (iv) Energy & Communications; and (v) Waste Management.

Chapter 7 explores the areas of built and natural heritage, the environment and the emerging new approach of green infrastructure planning at a regional strategic scale. The chapter is divided into a number of sub-sections. The first is built heritage and it discusses the role and value of archaeological heritage, architectural heritage including industrial heritage and makes a series of policy and strategic recommendations. Natural heritage examines the designated heritage sites, river basin management, Water Framework Directive, integrated coastal zone management, and landscapes including soils, geology and landslide hazard. The final section of the document sets out the concept of green infrastructure, including biodiversity and climate change, and how it is developed and the importance of a regional framework in supporting the work of individual local authorities.

Chapter 8 covers the key issue of social infrastructure and the building of sustainable communities. This chapter has an important supporting role to the earlier chapter on housing and population, in that this chapter moves away from quantitative provision and looks at the softer assets that give the GDA a good quality of life for residents and visitors. Central elements of this are design quality, sustainable densities, integration of housing strategies, schools and crèche provision, leisure and recreational facilities, healthcare, community facilities, and the role of the arts and culture including the Irish language to supporting and enriching the many communities and places of the GDA. Also highlighted is the importance

of planning policy and decisions taking into account the key issue of social inclusion and the role that the Development Boards and other programmes can play in supporting local authorities in tackling social inclusion issues.

Chapter 9 meets the requirements of the Department of Environment, Heritage and Local Government new Flooding Guidance to Planning Authorities in that a regional appraisal of flood risk was undertaken as part of the process of preparing the RPGs, and makes a number of recommendations to local authorities with regard to assessment of flood risk at a more detailed level in Development and Local Area Plans.

Chapter 10 describes the legal context of the RPGs and how they will be implemented over the six year period. It highlights the role of the RPGs in described regional priority investments, and also the intention of the Regional Authorities to monitor the delivery of the RPGs through their lifetime using a series of indicators and update reports.

Separate processes of Strategic Environmental Assessment (SEA) and Habitats Directive Assessment (HDA)9 have been carried out as part of the review and preparation of the Regional Planning Guidelines. The SEA and HDA statements are contained within the appendix documents. Also appended are the background papers which informed the regional economic strategy.

⁹ The research section and divisional ecologist of the NPWS were consulted in agreeing methodology and guidance for carrying



Introduction and Context





Introduction & Context

1.1 Introduction

The Greater Dublin Area (GDA) includes the geographical area of Dublin City, Dun Laoghaire- Rathdown, Fingal, South Dublin, Kildare, Meath, and Wicklow and incorporates the regions of both the Dublin Regional Authority and the Mid-East Regional Authority. The Planning and Development Act, 2000 requires these Regional Authorities to make Regional Planning Guidelines in respect of the whole of the combined area of their regions, to provide a strategic planning framework for the long-term sustainable development of the area for the 12 year period up to 2022. The Planning Act also requires the RPGs to be reviewed in 2016.

The Regional Planning Guidelines (RPGs) is a policy document which aims to direct the future growth of the Greater Dublin Area over the medium to long term and works to implement the strategic planning framework set out in the National Spatial Strategy (NSS) published in 2002. It achieves this through appraisal of the critical elements involved in ensuring sustainable and good planning, and though the protection of sensitive and environmentally important locations. The RPGs inform and direct the City and County Development Plans of each of the Councils in the Greater Dublin Area. They provide the clear policy link between national policies -the National Development Plan and the National Spatial Strategy and other national policy documents and guidance; and Local Authority planning policies and decisions. The RPGs aid each of the Councils in the Greater Dublin Area in working together for the better planning of the whole area of Dublin and the surrounding Mid-East Region.

The first RPGs for the GDA were adopted in 2004 and set out a strategic framework for planning and development for the region up to 2016. These RPGs review and update the 2004 document and look forward to 2022.

Strategic Environmental Assessment and Habitats Directive Assessment

In accordance with EU Directives (2001/42/EC) and national legislation a formal separate process of Strategic Environmental Assessment (SEA) has been carried out as part of the preparation of the Regional Planning Guidelines. This is a formal, systematic evaluation of the RPGs prepared in accordance with the *Planning and Development (Strategic Environmental Assessment) Regulations 2004* (SI No. 436 of 2004).

The objective of the Strategic Environmental Assessment (SEA) Directive is 'to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans ... with a view to promoting sustainable development' (Article 1 SEA Directive). The SEA Directive requires that certain Plans and Programmes, prepared by statutory bodies, which are likely to have a significant impact on the environment, be subject to the SEA process.

The policies of the RPGs have been systematically assessed and where necessary avoidance and environmental mitigation measures have been included. The SEA document (including the SEA environmental report which reports on how environmental issues have been integrated into the RPGs) is a separate document which should be read and considered in parallel with this plan.

The environmental issues (including interrelationships) which are considered by the SEA are as follows:

- Biodiversity, flora and fauna;
- Population and human health
- Soils and Geology
- Water resources
- Air quality and climate
- Cultural heritage (including archaeological and architectural)
- Landscape
- Material Assets
- Flooding

The evaluation of the likely environmental consequences of a range of alternative strategies for accommodating future development in the Greater Dublin Area is part of the SEA process.

Habitats Directive Assessment (Appropriate Assessment)

The Habitats Directive Assessment (HDA) is a requirement of the EU Habitats Directive (92/43/EEC) – the Conservation of Natural Habitats and Wild Flora and Fauna - as transposed into Irish law through the European Communities (Natural Habitats) Regulations, 1997 (S.I. No. 94 of 1997). The purpose of the HDA is to determine whether the RPGs have implications for any Natura 2000 sites in the GDA and to ascertain whether there will be adverse impacts on the integrity of these sites. The HDA follows guidance from the European Commission and directions from the Department of Environment, Heritage and Local Government. The Habitats Directive Assessment follows the standard series of stages as laid out in the EU Guidance. These are:

- Stage 1: Screening;
- Stage 2: Appropriate Assessment;
- Stage 3: Assessment of alternative solutions;
- Stage 4: Assessment where no alternative solutions exist and where adverse impacts remain.

Though the HDA complements aspects of the SEA they are separate assessments. The detail of the HDA process is contained under a separate volume as an appendix to the RPGs.

1.2 National Context

Planning Authorities have a duty to implement and have regard to policies and objectives of the Government and any Minister insofar as they may affect or relate to their functions. There is a wide variety of national level policy documents that have been taken account of in the preparation of the RPGs including The National Climate Change Strategy, The National Biodiversity Plan, the National Heritage Plan, National Anti-Poverty Strategy and the National Action Plan for Social Inclusion.

In addition the following guidance documents have been issued by the Department of Environment, Heritage & Local Government-

- Best Practice Urban Design Manual 1 & 2
- Childcare Facilities Guidelines
- Design Standards for New Apartments
- Landscape & Landscape Assessment
- Provision of Schools and the Planning System
- Quarries and Ancillary Activities
- Retail Planning Guidelines
- Sustainable Rural Housing
- Sustainable Residential Development in Urban Areas
- Telecommunications Antennae and Support Structures
- Wind Energy Development
- The Planning System and Flood Risk Management
- Architectural Heritage Protection Guidelines
- Framework and Principles for the Protection of Archaeological Heritage

- Implementing Regional Planning Guidelines-Best Practice Guidance
- River Basin Management Planning A Practical Guide for Public Authorities
- Development Plans: Guidelines for Planning Authorities

The Regional Authorities must also take into account a series of EU Directives most notably the Water Framework Directive, The Floods Directive, the Habitats Directive and the Strategic Environmental Assessment Directive. The most significant Government policy documents influencing the preparation of the RPGs are outlined below.

Planning & Development Act 2000

The RPGs have been prepared in accordance with the Planning and Development Act, 2000 – 2009 and the Planning and Development (Regional Planning Guidelines) Regulations 2009. The Regional Planning Guidelines provide a framework for local authority development plans by enhancing the strategic dimension of planning at regional and local levels and building upon the approach taken by the National Spatial Strategy. The RPGs address the following matters, as required by the Act:

- Projected population trends and settlement and housing strategies
- Economic and employment trends
- The location of industrial and commercial development
- Water supply and waste water facilities
- Waste disposal
- Energy and communications networks
- The provision of educational, health care, retail and other community facilities
- The preservation and protection of the environment and its amenities including the archaeological, architectural and natural heritage
- Such other matters as may be prescribed.

Following the making of regional planning guidelines, planning authorities are required to have regard to the regional planning guidelines in force for the areas when making and adopting a development plan.

Planning & Development (Amendment) Bill 2009

The Planning & Development (Amendment) Bill published in May 2009 proposes a series of legislative changes which impact on the role of Regional Planning Guidelines. A key element of the Bill is the introduction of a requirement for an evidence based core strategy in Development Plans showing how the housing strategy is consistent with the Regional Planning Guidelines and the National Spatial Strategy. Development Plans generally under Section 13 will be required to be consistent with the RPGs in force for the area to help achieve coherence between the hierarchy of forward plans.

In anticipation of this legislation being passed this document sets out a series of policies and recommendations to planning authorities and other stakeholders. These policies and recommendations are considered for the purposes of the legislation as being required to be incorporated into future Development Plans to ensure consistency between regional and local planning.

National Development Plan

The current National Development Plan (NDP) came into effect in 2007. The NDP set out a roadmap for Ireland for a period of seven years. It is envisaged that Ireland will undergo a transformation in its economic and social make up with increased emphasis on high value added activities and industries. There are a number of challenges facing the country which the Plan aims to address including infrastructural bottlenecks, improving skills and education, creating and sustaining high value economic opportunities and redistribution of wealth. The goal of the National Development Plan is to

integrate strategic development frameworks for regional development, for rural communities, for all-island cooperation, and for protection of the environment with common economic and social goals. Funding for projects will be almost entirely sourced from national resources. It is noted however that since the NDP was published, the international and national fiscal situation has altered dramatically and it is envisaged that this will impact on the level of available funding for the projects, thus impacting on prioritisation and timing of delivery.

The Plan sets out a strong framework for the promotion of regional development with a particular focus on investment in the National Spatial Strategy (NSS) Gateway centres. Strong urban centres are directly related to regional growth and development, affecting employment, incomes and quality of life throughout the regions. The key to regional development will be efficient utilisation of NDP investment, especially in infrastructure. The Regional Planning Guidelines set out a framework for the utilisation of the funds and the identification of priorities in line with the vision for the region as set out in the National Spatial Strategy.

National Spatial Strategy

The National Spatial Strategy (NSS) was developed in 2002 as a 20 year framework to promote and direct balanced regional development and sustainable growth. The strategy emphasises continued strong growth in the Greater Dublin Area but with significant improvement in the regions outside the capital and more particularly in the nine gateway cities and nine hub towns. Balanced regional development is defined as "developing the full potential of each area to contribute to the optimal performance of the state as a whole – economically, socially and environmentally".

Key concepts from the NSS are:

- that each area should develop to its full potential through the use of its various natural, economic and social resources;
- that critical mass plays a key role in economic and social development. In effect, that size and density of population enable a location to enhance its services, economic activity and consequently, quality of life;
- and, those linkages supported by highly efficient public transport and modern Information and Communications Technologies (ICTs) are critical to enable areas of the Region to develop to their full potential.

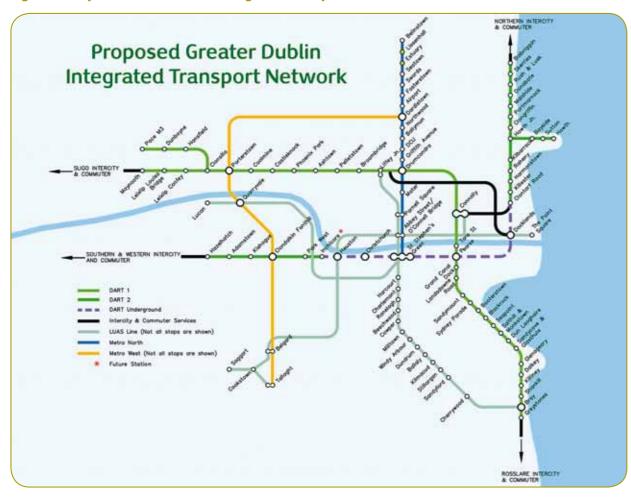
Smarter Travel and Transport 21

Transport 21 forms part of the NDP and comprises a ten year investment programme for the development of the national road network, public transport and airports. It aims to expand capacity, increase public transport use, increase accessibility and integration, enhance quality and ensure sustainability. Transport 21 identified which projects were to be developed under the NDP and the timelines for completion of each project. For the GDA Transport 21 has particular importance as a very significant portion of the Plan focuses on delivering high grade public transport within the GDA area, including expansion and development of heavy rail and new Luas and Metro lines. (See on the next page)¹⁰.



10 Source www.transport21.ie

Figure 1: Proposed Greater Dublin Integrated Transport Network



Source: Department of Transport

Smarter Travel¹¹ is a policy document which sets out a broad vision for the future and establishes objectives and targets for transportation. The document examined past trends in population and economic growth and transportation and concluded that these trends are unsustainable into the future. The main objectives are to reduce dependency on car travel and long distance commuting, increase public transport modal share and encourage walking and cycling, improve quality of life and accessibility for all, improve economic competitiveness through maximising the efficiency of the transport system, alleviating congestion and infrastructural bottlenecks, minimising the environmental impact by reducing localised air pollutants and greenhouse gasses and improving security of energy supply by reducing dependency on imported fossil fuels.

The aim is that by 2020 future population and economic growth will have to predominantly take place in sustainable compact urban and rural areas which discourage dispersed development and long commuting. The document sets out ambitious targets which involve a complete turnaround on current trends. It is envisaged that these targets will be achieved though a number of key actions which can be grouped into four main areas:

- Actions to reduce travel by private car and encourage smarter travel
- Actions to provide alternatives to the private car
- Actions aimed at improving fuel efficiency
- Actions aimed at strengthening institutional arrangements to deliver the targets.

11 Smarter Travel A Sustainable Transport Future - A New Transport Policy for Ireland 2009-2020 Department of Transport (2009).

The National Climate Change Strategy

Under the Kyoto Agreement Ireland made an agreement to reduce its greenhouse gas emissions to protect the environment. This is to be achieved through legally binding limits to the production of those gases. The National Climate Change Strategy 2007-12 sets out a programme of actions for achieving those limits. The main focus is on reducing transport emissions, encouraging renewable energy, changes in agricultural practices and changes in waste disposal policies and plans. The strategy both feeds into and is reinforced by other national level legislation and policies including Smarter Travel, the National Energy Efficiency Plan, and the NDP amongst others. The RPGs are cognisant of the need to promote measures and actions which seek to address the issue of climate change and its potential impacts on current and future planning across the GDA and further afield. The combined outcome of the integrated policy approach of these Guidelines is therefore to create a sustainable region with the capability of changing in response to stress without compromising core functions, a region which could be described in terms of climate change as flexible and adaptable.

National Energy Policy

The National Energy Efficiency Action Plan 2009 - 2020 sets out a strategy to reduce the countries dependence on imported fossil fuels, improve energy efficiency across a number of sectors and ensure a sustainable energy future. Improving Irelands energy efficiency is a key step in a sustainable energy policy. Energy efficiency is internationally recognised as the most cost-effective means of reducing dependence on fossil fuels. The Government's energy policy framework for the period 2007 - 2020 incorporates this goal at its heart and is designed to steer Ireland towards a new and sustainable energy future; one that helps increase security of supply, makes energy more affordable, improves national competitiveness and reduces our green house gas emissions. Other key policy documents which will have an input into the RPG policy on energy will be Eirgrid 25 dealing with the national network and the national Wind Energy Development guidelines published by the DoEHLG.

1.3 Regional Context

Platform For Change, Dublin Transportation Office (DTO)

A Platform for Change is the existing transportation strategy for the Greater Dublin Area. Published in 2001, it set out the strategic transport aims for the region until 2016. The Strategy was a key input in the development of the 2004 RPGs. Since the publication of the Strategy significant investment in new and improved transport facilities has been made across the region, including LUAS, Metro plans and cycling infrastructure. The National Transport Authority is currently in the process of preparing a new Transport Strategy for the GDA for the period to 2030 and it is intended to complete this work by the end of 2010. The strategy will be strongly linked with sustainable land use planning, and based on the social, cultural and environmental needs of the people of the Dublin and Mid-East regions.

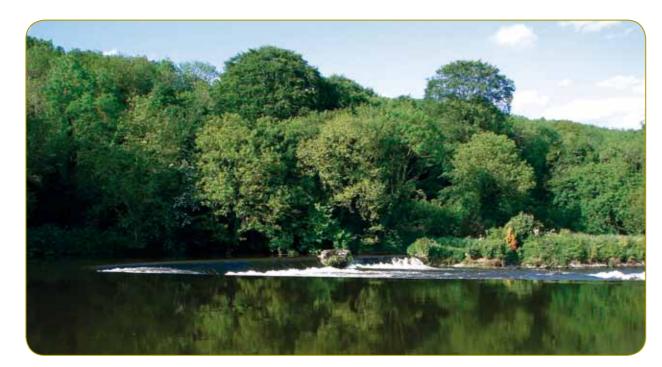
Preparation of the strategy involves the analysis of recent historical data and trends, the current situation and predictions on future changes and their impact on the quality of life of residents of the Greater Dublin Area. The 'target year' for the strategy is 2030, but in order to examine strategic transport investment in the long term, projections to 2050 have been examined. Entitled '2030 Vision' the strategy is set to provide a robust transport plan for the Greater Dublin Area for the duration of the new Regional Planning Guidelines.

River Basin Management Plans

Following the introduction of the Water Framework Directive¹², Ireland and Northern Ireland have been divided into eight river basin districts. The majority of the Dublin and Mid-East regions fall into the Eastern River Basin District, but in addition to this, parts of south west Kildare and Wicklow fall into the South Eastern River Basin District and parts of north and west Meath fall into the Neagh Bann and the Shannon River Basin Districts respectively.

12 EU Directive 2000/60/EC

The main aim of the Water Framework Directive is to maintain all water bodies; rivers, lakes, groundwater and estuaries at high status where it stands, to prevent deterioration in the existing status of water, and to achieve at least "good status" in relation to all waters by 2015. Each river basin district has a River Basin Management Plan, which describes, in detail, the status of all waters and protected areas and any objectives or problems identified. Formal *Programme of Measures* are being put in place to resolve over a set period of time the works necessary to bring water bodies in the GDA to good quality status.



Regional Waste Management Plans

For the purposes of Waste Management the counties within the RPG area fall within four waste management areas. The four Dublin Counties prepare a single plan for Dublin; Meath forms part of the North-East Region (which also includes Cavan, Monaghan and Louth) and Kildare and Wicklow both prepare individual waste management plans for their respective counties. The strategic elements of waste infrastructure to be provided in the GDA are identified in each waste management plan. These elements fall into four main areas- (i) reduction, re-use and recycling facilities and initiatives; (ii) waste to energy facilities; (iii) biological waste collection and processing facilities; and (iv) landfill facilities and collection. Each Waste Management Region updated the Waste management Plan for their area in 2005 and 2006 and the delivery of the Plan is an ongoing process.

Inter-Regional Issues

The Greater Dublin Area borders three of the other regions in the State. The maintenance of inter- regional links is decisive to the success of sustainable development patterns across the region. In a wider context, the spatial considerations for the areas adjoining and beyond the Greater Dublin Area bring forward the following key considerations:

- Recognising the potential and scale of the urban centres in Dundalk, Newry and Drogheda, there is a case for further strengthening the central portion of the Dublin-Belfast corridor in order to give that corridor greater economic integrity.
- Dundalk continues to develop the capacity to grow as a gateway within the Dublin-Belfast corridor. This gateway will expand to support a wider border area extending westwards from Dundalk. Developing Dundalk as a gateway utilises its strategic location between Dublin and Belfast to underpin cross border cooperation, particularly with neighbouring Newry.
- Building up the transport and business links between Dundalk and Newry would offer a scale of development and critical mass that can help drive development throughout the eastern part of the border region.

• The future role of towns such as Navan, Naas and Wicklow needs to take account not just of their relationship with Dublin, but also their function in the development and servicing of their own catchment areas and their relationship with other adjoining regions. Achieving the objectives of the National Spatial Strategy for balanced regional development means developing new gateways and hubs at strategic locations in other regions. This has implications for decisions on the size and growth of towns in the Greater Dublin Area.

Figure 2 : Inter-Regional issues



While Drogheda is an inherent part of the Border region its development is strongly influenced by its relative proximity to Dublin. In seeking to develop the potential future role of Drogheda, therefore, account must also be taken of:

- Drogheda's relationship with its own catchment.
- Its role within the Border region.
- Its role as a port.
- Its role in the spatial development of the Greater Dublin Area having regard to the town's close functional and physical links with the area.

Previously, housing pressures in the Greater Dublin Area and the improvements in the road and rail network radiating from Dublin continued to encourage commuter based development at some considerable distance from the Greater Dublin Area during the 2004 RPGs. As a by-product of unbalanced spatial development, this long distance commuter based development is generally unsustainable. Building up critical mass in other regions to complement Dublin and the provision of high quality, accessible and affordable housing in the GDA, is central to countering this trend.

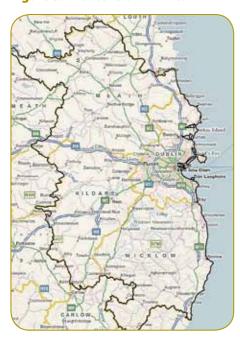
In the southern and eastern parts of the Midlands adjacent to the Greater Dublin Area a number of towns also experienced commuter-driven development. These towns must in future be developed in terms of their economic self-sufficiency to minimise the need for commuting and support the development of surrounding areas. To do this they need to sustain a good employment base and a wide range of shopping facilities and social infrastructure.

1.4 The Regions Today

The GDA is Ireland's most populous and densely populated region, and contains Ireland's only city of international scale. In 2006 the GDA had a population of 1.6 million people, accounting for 39% of the total population of the State. The most recent figures estimate population growth since then has brought the overall total to 1.7 million. Within the GDA, approximately 70% of the population live in the Dublin Region with 30% in the Mid-East. Construction of new housing since the 2004 RPGs rose to record breaking levels up to 2008. Rates of construction have declined significantly since 2008 in all Councils. From 2004 to 2008 a total of 108,700 units were completed; an average of 21,700 per annum. The percentage of housing built in the Dublin Region rose from 65% to 70% of the GDA total from 2004-2008. The levels of completions of new dwellings in the GDA for 2009 was 8,126. It is expected that this low level of construction will continue in the short-term due to the significant changes taking place in both the lending and the construction sector.

In mid-2009 approximately 798,000 people were at work in the GDA, 41% of total national employment. Increases in the levels of unemployment since 2008 have risen from 4.6% at the end of 2007¹³. Overall the public sector is the largest employer in the GDA, accounting for 22.5% of the regional workforce. Approximately 44 Foreign Direct Investment projects have been supported by the Industrial Development Authority in the GDA since 2005, with the majority of these in the area of ICT and financial services. Enterprise Ireland supported start ups also are more heavily weighted towards ICT & services. Further analysis of the economic profile of the GDA is contained within Chapter 3.

Figure 3: Greater Dublin Area





Source: National Transport Agency

13 Quarterly National Household Survey Quarter 2, 2009. Central Statistics Office (2009)

1.5 Progress in Implementing 2004 RPGs

Since 2004 thousands of planning decisions have been informed and shaped by the strategic policies of the Guidelines. The RPGs have contributed to the progression of the National Spatial Strategy and enabled essential connectivity between national and local planning policy and activities. Progress is examined by topic below.

Housing & Population

The initial delivery of the RPGs, regarding housing growth and settlement hierarchies, set a big challenge for each Council, even taking into account the levels of continuity coming from the non-Statutory (at the time) Strategic Planning Guidelines. Lands zoned in the 1990s continue to deliver new housing in many areas, and where recently built out, will continue to show population growth where households, particularly in areas popular with first-time buyers, go through the family life-cycle and occupancy levels correspondingly rise. More important than the 'number per county' to the success of the RPGs is the distribution of housing stock and provision of zoned land within each Council and how this fits with the settlement hierarchy set out in the RPGs. The Census results for growth in housing stock and population within each Council area do show that within each Council there have been active steps to direct population into the designated locations, particularly when this is compared to the previous censal period. This growing focus on directing growth into identified key towns is a mark of success of the Councils in delivering the RPGs and in some places the predecessor of the RPGs, the Strategic Planning Guidelines, as for a number of towns, their designation for growth predates 2004.

Economic Development

The years since 2004 have seen large scale economic growth in the GDA and the rise of construction as a major player in the industrial employment sector, particularly in the Mid-East. The RPGs, in 2004, predicted that the labour force would see greater participation rates by females and that the labour force would grow by approximately 154,000 up to 2012 - about 16,000 per annum. If this prediction was scaled up to 2008, the prediction gave a labour force ¹⁴ figure of approximately 845,700 people. Current figures published by the CSO in the Quarterly National Household Survey for Q2 2009 show the labour force at 891,000 and a participation rate of 64.1% for Dublin and 65.9% for the Mid-East. Unemployment stood at 10.3% in Dublin and 10.8% in the Mid-East, a rapid increase from 3.7% and 3.5% in Oct-Dec 07.

Within the Regional Economic Strategy for the GDA, the priorities identified were attracting and developing new high-tech manufacturing and internationally traded services sector inward investment; enhancing the scale and competitiveness of indigenous firms and expanding the research and technological development capacity of the regional economy as a whole.

The recommendations for inclusion in Development Plans were:

- Promotion of a balance between jobs and population in settlements
- Adoption of measures to raise the rate of occupancy in housing in mature areas with high quality public transport
- Adopt measures to increase land densities especially on high quality transport
- Take the least restrictive enterprise land use appropriate zoning (subject to good planning)
- Ensure sufficient zoned and serviced land is available for housing and industry
- Support implementation of key infrastructure projects, particularly public transport
- Promote high quality built and natural environments that is attractive to industry.

Of the list of policy recommendations above these have all been addressed by all of the Development Plans. All Development Plans in the GDA have a chapter focussed on economic growth within the county/city, setting out the key principles, policies and objectives seeking to develop the economic opportunities of the area and supporting the settlement strategy of the RPGs within this. While there have been strong efforts and a strong number of major successes over the past few years in bringing new employment opportunities to the hinterland towns, it has not matched the scale of population and housing growth experienced in these locations; increasing commuting patterns. The continuing need to address this

¹⁴ These are people available for work, not just those currently in employment.

situation within a radically changed global and local economic outlook will create further challenges for this area during the lifetime of the new RPGs.

Public Transport

At the time of writing of the 2004 RPGs, the Dublin Transportation Office had published a draft of the Platform for Change document and a number of projects coming from this Strategy were incorporated into the RPG policies seeking to integrate land use zoning and transport investment. The announcement of the Government Investment Plan under Transport 21 gave the go-ahead to a number of projects from the Platform for Change document. As a result of these investment decisions, the vast majority of the projects listed in the 2004 RPGs are now underway or going through detailed design with an intention for the service to be operational by the 2016 end date of the RPGs, resulting in much stronger integration between new areas of housing and public transport investment. Strong progress has been made in this area since 2004.

Roads

Investment by the State and Local Authorities in road infrastructure was very high during the life of the RPGs. The National Development Plan set a €13.3 billion budget for national road construction with a focus on continuing to deliver the interurban national network connecting the cities of the island. A total of 30 schemes are either complete or nearing completion, out of 42; of which a significant level of investment was within the GDA. Investment by Councils in the roads network saw a number of important upgrades and new local roads built to cater for the rapid growth in key towns and areas to manage and facilitate new developments and economic activity.

Some challenges are presented where certain schemes have not progressed beyond preliminary stages or have been temporarily postponed.

Ports & Airports

The 2004 RPGs places strong emphasis on the need to build and support key infrastructure to support the role of Dublin Airport and Port in meeting the needs of the GDA, and the State as a whole. The completion of the Dublin Port Tunnel formed a significant part of overall investment in this area during the life of the RPGs. Also for Dublin Airport, permission is now granted for the new terminal, runway and new apron facilities and construction is underway. This investment has been necessary to meet the rapid and continuing growth in the Irish economy experienced over the last decade. However, there are also some elements needed that have yet to make progress on the ground and these have been examined as part of the review.

Water Supply

The 2004 RPGs identified the key issue of limited supply and a number of key works to take place, which would improve security of supply and meet the demands over the life of the RPGs. The document also highlighted the key issue of future long term supply for the GDA and the need for a new abstraction and works to provide for the long term needs of the GDA, between 2010 and 2016. Alongside this, the 2004 RPGs highlighted the need to continue investment in water main rehabilitation over the next 10 years as a key priority, and that investment should be made in developing increased demand management measures. Progress has also been very strong on the key strategic investment of watermain renewal. Significant success has been achieved in reducing levels of leakage during the life of the RPGs with the volumes of water retained in the system solely meeting growth in demand for many locations. The last contract of pipe renewal in Dublin City reduced leakage from 46% to 28%. A second 5 year contract is now underway for the Dublin area; which is already reducing local leakage within the network. All Councils have increased their local resource through network renewal, relieving pressure on a limited and valuable resource during a time of peak growth in demand. However, across the GDA, demand and sourcing water remains a critical issue.

Waste Water

The RPGs was published at a time when the key document regarding the future of drainage for the greater Dublin area - the Greater Dublin Strategic Drainage Study (GDSDS) was not complete. The RPGs indicated that the outcomes of this study would indicate new infrastructure requirements. Including the projects identified in the GDSDS, there have

been some delays in the delivery of projects over the life of the current RPGs. The long and complex approval process and preparation of contract documents has resulted in longer lead in times than originally anticipated. However, some projects have proceeded well including Shanganagh, Balbriggan, Dunshaughlin, Ashbourne/Ratoath and Wicklow waste water treatment projects. Again, as for water supply, capacity for waste water treatment in the GDA remains a critical issue.

Water Management

The issue of surface water management and the recommendations of the GDSDS were agreed by all Councils involved and now form a code of practice document implemented by Councils - incorporating the concepts of sustainable urban drainage systems.

The Coastal Flooding Risk Assessment Study which was also referred to in the 2004 RPGs has been completed by Dublin City Council and now a full coastal early warning system has been installed and is operational.

Waste Management

In relation to waste management the 2004 RPGs recommended that:

- Interregional transfer of waste should be permitted to give flexibility in dealing with waste at a regional level and appropriate economies of scale
- Development of biological treatment facilities for organic waste, further recycling and waste to energy plants to serve the needs of the GDA
- Provision of growth in the regional capacity for integrated waste management facilities to mitigate escalating costs
- Consider the requirement for new infrastructure in the context of the GDA, rather than existing waste management regions
- Consider the examination of other viable options, including SDZs, to facilitate the development of integrated waste management facilities
- Revise waste management plans to take account of changes in demography, increases in waste volumes and improvements in waste management technology.

In relation to each of these issues, the actions delivered are listed below:

- The Minister has issued guidance under Sc.60 of the Waste Management Act, which clarifies that the inter-regional movement and treatment of waste should be provided for in appropriate circumstances, while ensuring that the facilities are provided primarily for the needs of the region in which they are located and in line with the proximity principle.
- Four biological plants are open and two facilities have been granted for Waste to Energy Plants and are under
 construction. The landfill at Tooman is granted permission and a licence, and a number of other landfill facilities
 continue to provide services in short term. Ten civic amenity sites opened since 2004.
- A number of commercial landfills and waste to energy facilities have been granted and are operational within the GDA providing competition.
- The flexibility now permissible alongside the proximity principle has facilitated the consideration of waste management issues on a region-wide basis.
- The introduction of the Strategic Infrastructure Act has made available a viable legal procedure for the consideration of key strategically important waste infrastructure which it is expected will allow for shorter lead in times for projects.
- Waste management plans have been reviewed since the adoption of the RPGs in all waste regions which cover some
 or part of the GDA, and the revisions have taken into account higher population growth expectations and advances
 in technology.

In the 2004 RPGs, a number of polices were set out which were recommended for inclusion in the relevant County Development Plans. The RPG document gave three main areas which policies should be incorporated

- protection of natural sites (protected species, designated sites, natural heritage sites);
- protection of high quality agricultural land
- protection of extraction resources.



In relation to the delivery of policy, a full review of each of the seven development plans took place as part of the ongoing monitoring of the RPGs. Each Development Plan now contains a dedicated section addressing the protection of heritage as a central part of planning policy. These sections include detailed policies on the protection of key designated sites including NHAs, SPAs and SACs.

In relation to other policies of this section of the RPGs - the protection of high quality agricultural lands and of aggregates policies and objectives are included in the Development Plans of Wicklow, Dun Laoghaire, South Dublin, Kildare, Fingal and Meath- the relevant Council areas to these issues.

Built & Cultural Heritage

The 2004 RPGs set out a range of policies which each Development Plan should contain, and areas where the authority should work to seek the preservation of important elements of the built heritage. Significant progress was made by each county in delivering the overall policies to preserve the built and cultural heritage of their county. Significant work and resources have been dedicated by each Local Authority to the protection of built heritage in their area, which has been reinforced through the strong policies included in each Development Plan. Also all Councils operated a conservation grant scheme which co-funds renovation projects on protected structures in each Council.

Actions delivered in the Councils include reviews of all Records of Protected Structures, publication of conservation guide leaflets; designation of Architectural Conservation Areas and associated publications, preparing Conservation Study and Plans, surveys of industrial heritage, historic landscape characterisation studies, village design statements, vernacular heritage studies, guides to archaeology, source materials, thatching and series of seminars on topics such as traditional building skills.

Open Space & Recreation

This is a topic which has seen major improvements to the way it is implemented though planning policy in very recent years. The growth in new play and recreation policies in each Council has resulted in a stronger more structured approach to policy for amenity which is now beginning to have an impact on the ground. Surveys of existing facilities and the

identification of gaps has taken place in a number of Council area and is seen as a key baseline from which to develop new policy directions. *Sustainable Residential Development in Urban Areas* and its accompanying design manual, published by the Department of Environment, Heritage & Local Government in 2009 also brings new impetus and options in strengthening this area of policy in the new set of Development Plans.

Rural Development

There are strong linkages between the RPGs recommendations in the text and the policies of the current Development Plans, particularly on village protection and rural housing policy, which is a good sign of clear linkages between these two levels of policy. There is a need in future plans to build further on policies regarding social infrastructure and completion of studies on aggregates and design guides which is recognised as being needed in some Councils but have yet to be completed.

Social Inclusion

The key statements and policies in the 2004 RPGs regarding addressing the issue of social inclusion as part of planning policy in Development Plans were:

- Adopt as an objective that social, community and cultural needs of all persons and communities be catered for through the provision of well dispersed and easily accessible social and community infrastructure contributing to and ensuring a high quality of life.
- Where possible future leisure and recreational facilities should be located where they can be served by public transport.
- Have regard to the policies and recommendations of the National Anti Poverty Strategy to safeguard and protect the most vulnerable in Irish society.
- Policies and objectives in Development Plans should seek to avoid increasing the extent of existing concentrations of socially disadvantaged areas and the creation of significant new areas of disadvantage.
- Assess the means by which policies included in Developments Plans for the integration of socially disadvantaged
 communities can be implemented and continue to include such policies in future plans, In addition, areas should
 be identified, and suitable zoned, in the Development Plans to facilitate the provision of targeted employment for
 areas with high levels of social exclusion.

Each of these issues has been examined against all of the Development Plans for the GDA and these issues are included and responded to in the texts. Each of the Councils have supported a range of social inclusion actions during the life of the RPGs including:

- Regeneration of Key Deprived Areas
- Dedicating community staff and/or Development Unit working in numerous locations on community and social issues and/or setting up a Social Inclusion Unit
- Implementation of Traveller Accommodation Programme and Strategies for Inter-Agency Cooperation in the Delivery of Services and Supports to Travellers
- Social Inclusion Programme as part of Action Plan of Development Boards and delivery of RAPID Projects.
- Adoption of Council Social Inclusion Strategies
- Operation of Housing Welfare Office (social work officers) and Traveller Social Work services.
- Development and implementation of Leisure Strategy for the County.
- Disability Act Implementation Plans
- Social Inclusion Networks within Development Board focusing on low income groups and older people.
- Adoption of Play Strategies

1.6 Key Planning & Development Issues in the GDA

Economic Growth

The 2004 RPGs were set during a period of economic expansion, when it was estimated that economic growth could reach 5.4% GNP towards 2010. Changed economic circumstances now see forecasts of economic contraction in the short term and lower levels of growth in the long term; with no clear trends yet visible in relation to economic recovery rates. This significant change to economic growth, employment levels and Government finances is the most critical issue in preparing the updated RPGs for 2010-2022. It is essential that this RPG takes a more focused approach to planning for future growth. Future investment by the State and various public bodies needs to be much more closely inter-linked, achieve much greater efficiencies and serve the areas most in need of investment. The clear linking of the future locations of growth with investment in public infrastructure, and the focused supply of new population growth directly linked to large-scale public transport investment is critical in an era of reduced public finances and shrinking housing construction. The need to provide existing centres of population with supporting services in terms of social infrastructure, commercial services and employment opportunities is also important issue for the 2010 RPGs.

The RPGs need to build on supporting an efficient, industry supportive environment that enables workers and goods to move easily across the GDA and beyond. Quality of life and high standards of social infrastructure work hand in hand in making the GDA Gateway a centre of international repute and a worthy place to live and work. However achieving and growing economic opportunities will prove a challenge in the current financial climate. The most recent ESRI publication - the Quarterly Economic Commentary for Winter 2009 expected GNP to fall by 10% in 2009 and by 1.5% (in volume terms) in 2010. Growth is expected to return at a more modest pace in the second half of 2010 and for exports to grow in 2010 by 1.5%. Alongside this the ESRI predict that levels of unemployment will grow close to 14%. For areas that traditionally have suffered from deprivation these figures will be much higher at local level, creating challenges and social issues within these communities.

Population & Housing

The Regional Planning Guidelines have a critical role to play regarding ensuring that the needs of future population growth is planned for and provided for within the Development Plans of each Council. The Guidelines are tasked with taking the population projections for the State which are divided up by Region by the National Spatial Strategy (and subsequent updates) and assessing the need for new housing in the Regions and then recommending the best locations for this housing in line with sustainable planning policy, availability of resources and infrastructure and environmental protection needs. New population projection figures from the National Spatial Strategy were circulated to the Regional Authorities by the Department of Environment, Heritage and Local Government on the 5th of January 2009. Whilst the RPGs take a long term view regarding demand and need, there is a need to consider the implications of the major changes the housing market has undergone in the past year and the implications such changes could have on supply. The scale of house building experienced in the Greater Dublin Area in the past number of years is unlikely to be repeated in the short or medium term. According to the latest DoEHLG Housing Statistics, commencements for 2009 were 1976 for the GDA, in comparison to 2008 which were 7,787; 2008 also saw falling numbers from just over 14,500 commencements in 2007. In delivering new areas of housing growth and supporting future populations, policies need to look beyond the physical building and at the investments needed to build good communities, including schools, play spaces, community facilities and actions to support an inclusive and engaged society. From the layout of places to ensure high quality, useable and sustainable new communities, to delivering the Traveller Accommodation Programme, the meeting of future population and housing needs extends beyond provision of land.

Landuse & Transport Integration

There is a need to encourage land use policies in this RPG that support the investments currently being made in public transport under Transport 21 to ensure that the maximum benefit is gained both economically, socially and environmentally. Landuse and transport are critical interlinked policy tools that need to work together to better realise economic success, environmental protection and quality of life. The integration of investment in transport, particularly public transport, with housing, business and leisure locations is essential to make certain the Guidelines are effective and for good returns to be gained from investment by the Government in public transport. The Government launched *Transport 21* in

2006 which sets the form of State investment in public transport up to 2015. The completion of these projects will bring significantly improved public transport to areas of the GDA and to the City Centre and will serve the GDA for the life of the Guidelines. The clarity of investment in public transport is critical and will have an impact on the draft Guidelines in looking at land use around the new or improved transport corridors and hubs. Currently the National Transport Authority is preparing a new transport Strategy for the GDA - 2030 Vision. However this will not be completed prior to the adoption of the Guidelines. The long term view of the Guidelines to 2022 will need to be considered within this context and also in the context of changing economic circumstances which could have an impact on public transport investment.

Water Services

Water supply and waste water management are one of the key issues in spatial planning and a traditional role of local authorities in maintaining public health. Investment in water services is essential in supporting economic and population growth. The past decade of high growth put significant pressure on all water resources and facilities in the Greater Dublin Area. Alongside this investment to improve water quality is the need to invest to meet future population growth; which is a major challenge in a large metropolitan area. It is also a challenge for smaller inland towns where the Water Framework Directive (see below) and other necessary environmental regulation is impacting on what can be discharged to the local rivers and/or lakes. It is vitally important that solutions are found to meet the medium and long term needs for water supply and treatment for the next decades in the GDA and to allow for consolidation of the built up areas in line with sustainable development objectives. In delivering solutions it is essential for Local Authorities to work closely together to achieve sustainable solutions.

Energy

A combination of factors including geographic location, fluctuating oil prices, a high dependence on imported gas and the related issue of security of supply, alongside the transition to a deregulated market and climate change legislation highlight the need for a greater and more sustainable mix of power sources. For the Greater Dublin Area which has the greatest level of economic activity in the State, but not necessarily the area with greatest renewable generation potential, strengthening these connections across the State and internationally is vital. In addition, strengthening of the network will facilitate demand being met by renewable powered generators located mainly in the west of the country.

Utilities

Current strong uptake of broadband points to a willingness and desire, from ordinary citizens to sole traders to SMEs, to invest in the best telecommunications available in order to gain competitive advantage. Nonetheless, value for money in terms of both cost and broadband upload and download speeds remains relatively uncompetitive in European and global terms. The European Competitive Telecommunications Association (ECTA) scorecard in December 2008 indicated broadband penetration increasing 17% in nine months to September 2008 in Ireland. Despite this Ireland at absolute penetration of 16.8% is one third below the EU average penetration of 24.5%.

Climate Change & Protecting Natural Heritage

A key issue for the RPGs is the importance of climate change and environmental issues and potential impacts at a more intrinsic level. Climate change has influence on a cross section of themes including transportation, water provision and distribution of population. There is a clear necessity for integrating climate change considerations into the strategy approach and strategic objectives. This drives the need for a strong focus on further developing policies which support sustainable development. As part of this there is a need to relate policy to the recommendations of the Government's National Climate Change Strategy 2007-2013.

The recent Environmental Protection Agency report 'Ireland's Environment, 2008' sets out the key issues regarding protecting the natural environment on a national level - of which many points apply to the GDA. Some of the key issues raised are:

 water quality problems particularly in estuaries in the east coast, some rivers and lakes and elevated levels of nitrate in groundwater in the east of the Country;

- biodiversity loss due to habitat degradation with recent research showing many important wildlife habitats have been assessed as having bad and/or dis-improving conservation status;
- adaptation to climate change through investment in flood management and better management of drinking water resources, and producing energy from climate-proof sources;
- a number of contaminated land sites across the State present a pollution threat to soil and groundwater; and
- meeting legal obligations of Kyoto and the Climate Action Plan of the EU through reduction in emissions.

These issues and how they relate to planning need to be seriously considered in the development of both environment policies and also all other policies and how they impact on the environment. The Guidelines give the opportunity to set out a range of strategic policies that can actively set steps which could bring about improvements to the natural environment.

Related to a number of issues above is the implementation of the River Basin Management Plans (RBMPs) for the GDA. The Water Framework Directive has brought in new ways of protecting the quality of waters of the Country - it seeks to maintain all water bodies¹⁵ at high status where it exists; to prevent deterioration in the existing status of water and to achieve at least "good status"¹⁶ in relation to all waters by 2015. The GDA overlaps, for the most part, with the Eastern River Basin District (ERBD). All of the seven Councils in the GDA are mostly or wholly within the ERBD. Much smaller parts of the GDA are in South Eastern River Basin District (south Kildare and South Wicklow), the Shannon River Basin District (part of west Meath) and the Neagh Bann River Basin District (part of north Meath). For each District the Councils involved have been required to prepare a river basin management plan. The Plans look at all of the issues impacting on water quality and set out a series of steps that will provide the most economically efficient way of improving water quality and bringing it to good quality status. To achieve this goal, there is a need for new approaches in how we plan for future growth and how existing assets are managed.

Inter-Regional Connections

In addition, the Regional Planning Guidelines need to take strong cognisance of inter-regional issues. In particular, the role of Dundalk, Newry and Drogheda and the overall development of the Dublin-Belfast corridor and the close relationship of Drogheda town to the Greater Dublin Area Guidelines emphasise the need for the GDA Guidelines to look at issues within the new Guidelines being prepared in adjoining Regional Authority areas.

Flood Risk

The direction by the Minister that future Plans need to include flood risk assessment or appraisals is a new element to the preparation of RPGs. At a regional level, there is a need for a high level appraisal that provides strategic direction to local authorities on flooding policy, on the need to avoid development in flood prone locations and balancing this against the delivery of sustainable development patterns through intensification of development in key towns.



- 15 Defined as rivers, lakes, groundwater and estuaries.
- 16 As defined by the River Basin Management Plans and Water Framework Directive

1.7 Climate Change and Regional Policy

Having regard to the issues and policy context outlined thus far (in particular the National Climate Change Strategy), it is an aim of the RPG's 2010-2022 to facilitate and integrate climate change issues and concerns into regional planning policy insofar as reasonably achievable within a regional milieu. It is foreseen that the policies and recommendations outlined within these Guidelines will result in a development infrastructure and built ecosystem more aware of, and in harmony with, natural ecosystems within the region and the impacts of climate change upon them.

Ideally, it will become easier to measure the extent to which policy and recommendations at regional planning level contribute to the ability of the regions to adapt to climate change occurrences. In terms of "thinking globally and acting locally" the policies and recommendations contained herein are designed to: promote settlement patterns which are sustainable, cognisant and respectful of, their surrounding environment; maximise efficiencies in water service provision, energy supply and waste management, promoting sustainable economic growth, low carbon technology and a green business focus; improve transport provision facilitating a modal change to more sustainable and climate friendly modes of transport and increase the supply and provision of renewable energies; and to bolster the robustness and integrity of local and regional ecosystems through a regional green infrastructure strategy. Combined, these policies and recommendations will a) act to bring about major positive benefits to the region in terms of its ability to adapt to future climate change and associated occurrences and b) contribute to efforts to moderate the anthropogenic causes of climate change.

It is an inherent goal of the RPGs to set a path to sustainably develop the GDA across the short, medium and long terms. In order to achieve this it is necessary to narrow the gap between sustainable development theory and practice. The policies and recommendations outlined within these Guidelines set about to strategically integrate socio-economic development with environmental preservation and enhancement, a requisite for sustainable economic survival. Climate change adaptation is a moving target with many uncertainties about impacts. The challenge lies in the ability to build a region which is cognisant of the varied impacts of climate change and which is resilient to the extremes which climate change may bring about.

Local climate change scenarios and effects for specific geographical areas and sectors and associated adaptive measures to deal with both positive and negative effects will need to be developed over time and in line with best evidence. The existing and/or potential effects are numerous, direct and indirect, will vary across regions, can appear contradictory and may include, for example: increased flooding; drinking water shortages; an increase in invasive species; failed harvests; increased agricultural yields; weather related impact on mortality rates; in the longer term a greater need for air conditioning and higher insurance premiums. Nationally, climate change mitigation and adaptation, in the context of the GDA, is an issue of central importance. The greatest concentration of population is based within the GDA which is the economic driver of national economic prosperity¹⁷.

National estimates therefore provide proxies heavily weighted towards GDA economic and social activity. The challenge, therefore, is to decouple economic growth from emissions of harmful Green House Gases (GHG). Data collated by the Sustainable Energy Authority of Ireland (SEAI), such as the National Energy Balance; the Department of Environment, Heritage and Local Government; the EPA¹⁸; COFORD¹⁹; Local Authorities; Met Eireann²⁰, academic institutions, and other related work such as C4I²¹ are all valuable resources in terms of accurately measuring our progress towards a region which provides sustainable conditions for the natural environment whilst sustaining the economy.

This is not to undermine the importance of acting locally and the role of community initiatives. Section 6.6.5 and recommendation PIR29 of these Guidelines for example, point up the need to develop Energy Action Plans at local level. These will add to the body of evidence and data required to accurately measure per capita contribution to Green

- $17\ \ The\ GDA\ contributes\ just\ under\ half\ of\ GVA\ output\ nationally\ and\ represents\ approximately\ 40\%\ of\ \ the\ national\ population$
- 18 Climate Change: Regional climate model predictions for Ireland is available for download from http://www.epa.ie
- 19 National Council for Forest Research and Development
- 20 Met Eireann plays a central role in analysing Irish climate. It was involved in the C4I project (Community Climate Change Consortium for Ireland)
- 21 C4I developed a climate change model for Ireland and a comprehensive data-base of results on the future climate of Ireland is now available on the C4I website (http://www.c4i.ie).



House Gas emissions at local and regional level. Moreover, it is envisaged that recommended policies contained within the Guidelines will bring about the necessary modal shifts and culture change to deliver a region which, from a planning perspective, are more robust in terms of adaptability and resilience to climate change impacts.

Supporting the policies of integrated land use and transport, a modal shift to sustainable forms of transport, water conservation recommendations and building a green infrastructure network all point up the importance of promoting physical infrastructure which mitigates against, and which is robust enough to adapt to, the potential impacts of climate change.

Flooding is a particularly conspicuous impact of climate change. The 2004 report of the Flood Policy Review Group recognised the need to devise a clearly defined and comprehensive policy approach to flooding nationally. In November 2009 the DoEHLG published "Planning System and Flood Risk Management" and the "Coastal Protection Strategy Study" will additionally provide an important source of data for local authorities. Consideration should be given to the European Commission White Paper on Adapting to Climate Change: Towards a European Framework for Action (COM (2009) 147). This White Paper places a significant emphasis on the Floods Directive and the WFD in adapting to climate change. The issue of Regional Flood Risk Appraisal is dealt with in Chapter 9 of these Guidelines.

Chapter 10 on Implementation, Monitoring and Evaluation points up the Integrated Policy Approach adopted by the Guidelines in order to achieve a more sustainably developed region. Allied to this section, Appendix A2, Table A1 outlines the strategic polices and recommendations and the indicators which will be used to measure their respective advancement. Moreover it adopts a simple signal system in the column titled "Policy/Recommendation." The signal system demonstrates the type of impact strategic polices and/or recommendation will have, - that is, a positive, negative or neutral effect - on climate change across two categories a) adaptability and b) mitigation (See Appendix A2).

Climate change policy

At European level the EU's current climate change policy which was adopted in December 2008 seeks a:

- 20% cut in emissions of greenhouse gases by 2020, compared with 1990 levels (possibly rising to 30%)
- 20% increase in the share of renewables in the energy mix, and
- a reduction in energy consumption of 20% through an increase in energy efficiencies.

This compares to a 40% national target for renewable generation by 2020 (See Section 6.6.5). The National Climate Change Strategy (NCCS) 2007-2012 sets out the policy direction and relative sectoral reduction rates envisaged through projects such as Transport 21, biofuels obligation, greener homes, increasing carbon sequestration, diversion of biodegradable waste, renewable energy generation. It additionally pre-empted a focus on post Kyoto commitments. Once adopted the NCCS "National Adaptation Strategy" will provide a framework for the integration of adaptation issues into decision-making at national and local level. The RPGs supports the current and/or future targets set at national level, regional and local based initiatives to achieve these targets.

Strategic Policy

CLIP1: While recognising the broad extent of processes which impact on the dynamics of climate change, planning authorities, in so far as possible, should nonetheless seek to provide for the integration of climate change considerations, based on best scientific evidence, into all policy areas relevant to them, including development plans, flood risk assessments, biodiversity and heritage plans and application of relevant particulars of associated plans and projects such as the River Basin Management Plans and ICZM. The development of Local Climate Change Strategies and/or associated Energy Action Plans by the local authorities is supported by the Regional Planning Guidelines.



Regional Strategy Vision





Regional Strategy Vision

2.1 Introduction

In developing the Vision for the RPGs three key Government policy documents directly impact on the direction of the strategy in considering the future growth, development and investment required in the GDA- i) the National Development Plan, ii) the National Spatial Strategy and iii) the 2009 national transport policy, Smarter Travel- A Sustainable Transport Future.

- i) The Government National Development Plan (NDP) sets Regional Development as a key part of the Strategic Framework on which the NDP is structured around. The Plan emphasises the high level of public investment in physical and social infrastructure that has been and will continue to be, coordinated within the spatial policy framework of the NSS. The Plan requires that regional and local authorities work together in ensuring that planning policies match and compliment public investment policy, maximising its impact; with the key example of focusing new housing on rail corridors cited.²²
- ii) The National Spatial Strategy sets a twenty year framework to achieve a better balance of social, economic, physical development and population growth. Published by Government in 2002, it sets the context of the review of the RPGs. The NSS sets the strategic direction for the RPGs and the core policy goals the RPGs must seek to achieve.
- iii) A third key Government document is the 2009 Department of Transport Smarter Travel- A Sustainable Transport Future, which contains the Government's transport policy up to 2020. It sets out a range of policy measures designed to encourage smarter travel; deliver alternative ways of travelling; improve the efficiency of motorised transport and ensure integrated policy delivery. The central aim of the Strategy is that to support sustainable travel, future population and employment growth will have to predominantly take place in sustainable compact urban areas or rural areas which discourage dispersed development and long commuting.²³

These three texts, in combination with other key policy documents referred to in Chapter 1 place the RPGs within a context to frame a clear vision and direction for growth for the spatial planning of the Greater Dublin Area.

2.2 Vision Statement

The GDA by 2022 is an economically vibrant, active and sustainable international Gateway Region, with strong connectivity across the GDA Region, nationally and worldwide; a region which fosters communities living in attractive, accessible places well supported by community infrastructure and enjoying high quality leisure facilities; and promotes and protects across the GDA green corridors, active agricultural lands and protected natural areas.

Delivering this vision within the RPGs is achieved through the integrated two mutually supporting strategies of the RPGs-The Settlement Strategy and The Economic Strategy- integrated with the Physical Infrastructure, Green Infrastructure, Social Infrastructure and Rural Development Policies and Recommendations, all of which are considered and responsive to the needs of the Strategic Environmental Assessment and the Strategic Flood Risk Appraisal. The RPGs recognise the interrelationships which exist between different topics and have harmonised strategies, policies and recommendations to reflect these linkages.

Core principles from this strategic vision for these RPGs, drawing on the 2004 RPGs are:

- Dublin as the capital city of Ireland and a major European centre shall grow and progress, competing with other cities in the EU, and serving a wide range of international, national, regional and local needs.
- The Dublin and Mid-East Regions will be attractive, vibrant locations for industry, commerce, recreation and tourism and will be a major focus for economic growth within the Country.
- The GDA, through its ports and airport connections will continue to be the most important entry/exit point for the country as a whole, and as a Gateway between the European Union and the rest of the World. Access to and through the GDA will continue to be a matter of national importance.
- Development in the GDA shall be directly related to investment in integrated high quality public transport services and focused on compact urban form.
- Development within the existing urban footprint of the Metropolitan Area²⁴ will be consolidated to achieve a more compact urban form, allowing for the accommodation of a greater population than at present, with much-enhanced public transport system, with the expansion of the built up areas providing for well designed urban environments linked to high quality public transport networks, enhancing the quality of life for residents and workers alike.
- Development in the Hinterland Area²⁵ will be focused on the high quality integrated growth and consolidation of
 development in key identified towns, separated from each other by extensive areas of strategic green belt land devoted to agriculture and similar uses. These towns will have high levels of employment activity, high order shopping
 and full range of social services, with good road and bus linkages to other towns and by high quality public transport to the City and play key roles in serving the surrounding rural communities and smaller towns and villages.

Delivery of the vision and principles requires the active support and delivery of the policies of the RPGs to achieve the potential of the GDA as the key regional driver for the State. Success depends on balanced development integrated with prioritised investment; high quality forward planning; adaptability to environmental, societal and economic change; and strong marketing of the GDA as an attractive, competitive international City-Region. All areas within the GDA shall collectively contribute to its success and in turn draw their individual strengths from the City Region.

The key policies from each key element of the RPGs are set out in the next section.



²⁴ Refer to Section 4.6 for a detailed description of the Metropolitan Area.

²² National Development Plan Transforming Ireland – A Better Quality of Life for All 2007-2013 (2007) p. 66

²³ Smarter Travel A Sustainable Transport Future – A New Transport Policy for Ireland 2009-2020 Department of Transport (2009) p.28

²⁵ Refer to Section 4.6 for a detailed description of the Hinterland Area.

2.3 Regional Planning Guidelines Policies

Climate Change

Strategic Policy CLIP1

While recognising the broad extent of processes which impact on the dynamics of climate change, planning authorities, in so far as possible, should nonetheless seek to provide for the integration of climate change considerations, based on best scientific evidence, into all policy areas relevant to them, including development plans, flood risk assessments, biodiversity and heritage plans and application of relevant particulars of associated plans and projects such as the River Basin Management Plans and ICZM. The development of Local Climate Change Strategies and/or associated Energy Action Plans by the local authorities is supported by the Regional Planning Guidelines.

Economic Strategy

Strategic Policy EP1

That the Dublin Gateway is recognised as an international driver of enterprise within the GDA and is supported by regionally designated strategic employment centres, serving the urban and rural hinterlands. These economic growth areas which take advantage of nationally important transport hubs and corridors, and shall provide the focal point for diverse regional enterprise and economic clustering activity, by: steering population growth and economic critical mass to designated RPG strategic growth centres of the identified economic areas or gateway region; capacity building in skills, innovation and education; critical infrastructural investment in ICT, public transport, water services; integrating high quality social and amenity provisions to create an attractive landscape and working environment; providing energy security supported by green and renewable technologies; rationalised planning approaches to employment based land use zoning and enterprise objectives.

Strategic Policy EP2

To seek sustainable economic growth across the GDA, by the promotion of identified core economic areas across the GDA in both the Dublin and Mid East Regions to facilitate new employment opportunities for existing populations and seek to reduce the volume of unsustainable long distance commuting.

The Settlement Strategy

Strategic Policy SP1

The delivery of new housing in the GDA shall support the NSS, Smarter Travel and the DoEHLG Guidelines on Sustainable Residential Development. The RPG Settlement Strategy encourages the focusing of new housing development on (i) consolidation within existing built footprint with particular focus on the metropolitan area; (ii) supporting the achievement of sustainable towns; (iii) supporting national investment in public transport services by focusing new development areas to key locations to achieve the integration of land use and high quality public transport provision, and (iv) build up economics of scale for services in identified growth towns.

Rural Development

Strategic Policy RP1

To protect and support rural villages and countryside through careful management of physical and environmental resources and appropriate sustainable development; recognising and responding through appropriate Development Plan policies to the strong urban driven demand for resources in rural areas of the GDA, and also the importance of protecting and encouraging the necessary social infrastructure needed to sustain rural communities.

₩ Habitats Directive Assessment Mitigation Appendix A6, Vol. II

Strategic Policy RP2

To support the continuing viability of agriculture, horticulture and other rural based enterprises within rural areas and to promote investment in facilities supporting rural innovation and enterprise with special emphasis on the green economy, within the context of sustainable development, appropriateness and the management of environmental resources.

Physical Infrastructure

Strategic Policy PIP1

Future investment in transport in the GDA shall serve the needs of the GDA by: (i) providing efficient and effective and sustainable means of moving people and goods for business, family and leisure purposes which minimises the environmental impact and the social and economic cost to users; (ii) allows for the development of a land use strategy that supports sustainable development; and (iii) supports growth and efficiencies in economic activity for both the GDA and the State.

Strategic Policy PIP2

Protect and work to improve water quality in and impacted by the GDA and seek that investment in water supply projects/programmes is prioritised to support the delivery of the economic and settlement strategy for the GDA through the coordinated and integrated delivery of all essential services supporting national investment.

Strategic Policy PIP3

Protect and work to improve water quality in and impacted by the GDA and seek that investment in waste and surface water treatment and management projects is prioritised to support the delivery of the economic and settlement strategy for the GDA through the coordinated and integrated delivery of all essential services supporting national investment.

Strategic Policy PIP4

That the ICT and energy needs of the GDA shall be delivered through the time of the RPGs though investment in new projects and corridors to allow economic and community needs to be met, and to facilitate sustainable development and growth to achieve a strong and successful international GDA Gateway.

Strategic Policy PIP5

To ensure, from environmental, business and public health needs, that waste management remains a priority for local authorities and waste management regions in continuing to invest in promoting and facilitating reuse and recycling by residential and commercial sources and that high standard options for treatment and final disposal of waste are available within the GDA.

Green Infrastructure

Strategic Policy GIP1

To ensure that all aspects of the built heritage including archaeological, industrial, and architectural heritage, and those buildings which are home to protected species, are suitably protected, enhanced, sensitively reused/ integrated into new development works and incorporated in development plans, records of protected structures, heritage plans and site specific projects & developments.

Strategic Policy GIP2

To protect and conserve the natural environment, including in particular nationally important and EU designated sites such as Special Protection Areas, Candidate Special Areas of Conservation and proposed Natural Heritage Areas, protected habitats and species, and habitats and species of local biodiversity value. This policy also includes new or extended ecological sites that are notified or designated in the lifetime of the RPGs.

₩ Habitats Directive Assessment Mitigation Appendix A6, Vol. II

Appropriate measures to protect Natura 2000 sites should be identified at the initial stages of all planning processes and included as a material consideration in order to inform future development.

Strategic Policy GIP3

To ensure alignment between the core objectives of the Water Framework Directive, (including River Basin Management Plans and POMS affecting the Greater Dublin Area) and other related plans such as County Development Plans and related Local Area Plans; Habitat and Species Protection Plans under the Habitats Directive, Water Services Investment Programme, Nitrates Action Programme; and Flood Management Plans.

Strategic Policy GIP4

Promote the development of cross boundary Integrated Coastal Zone Management with all coastal local authorities in the GDA area so that future Development Plans can be guided in relation to the management of coastal areas drawing from a mutually supported plan for marine and coastal areas which has engaged with key stakeholders.

Strategic Policy GIP5

Adopt policies and measures at county level to protect, manage and plan landscapes through the provision of Landscape Classification and Character Assessments in accordance with adopted European (and contemporary National) Landscape Guidance Documents such as 'Guidelines for the Implementation of the European Landscape Convention, February 2008'.

Strategic Policy GIP6

To ensure the protection, enhancement and maintenance of the natural environment and recognise the economic, social, environmental and physical value of green spaces through the development of and integration of Green Infrastructure (GI) planning and development in the planning process.

Social Infrastructure

Strategic Policy SIP1

That Local Authorities work with the relevant state agencies in ensuring that an integrated approach is taken to both planning for the communities who live within the GDA either in planning for growth, for change or regeneration in communities; that the needs of particular elements of society are identified and responded to and that the most vulnerable are valued as part of the community.

Strategic Policy SIP2

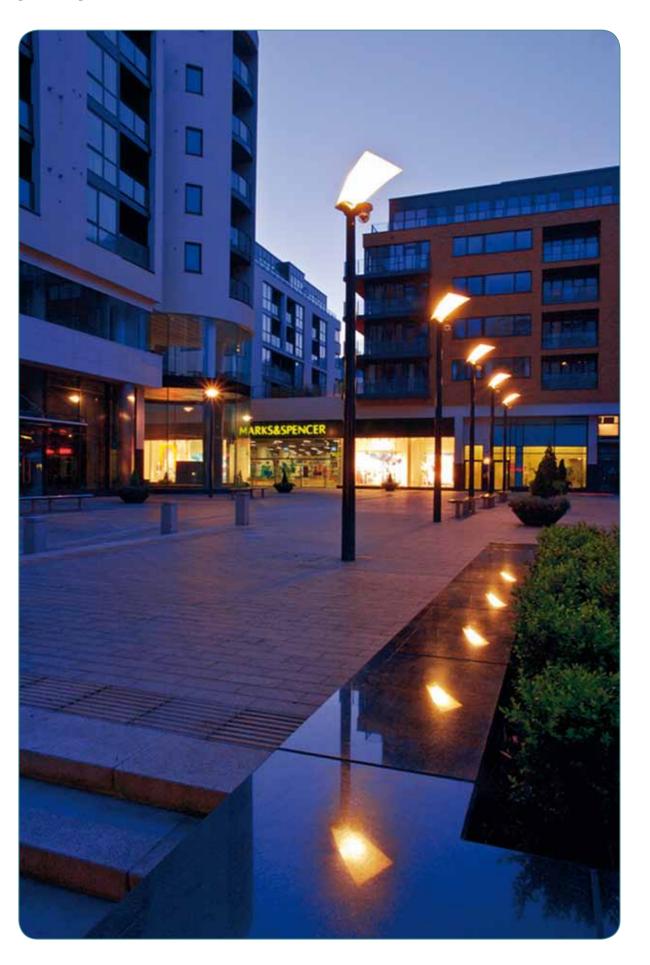
That quality of life forms a central part of planning policy in supporting good spaces, good places and that social activities and the arts form a core part in making good places.

Flood Risk Appraisal

Strategic Policy FP1

That flood risk be managed pro-actively at all stages in the planning process avoiding development in flood risk areas where possible and by reducing the risks of flooding to and from existing and future development.







Economic Development Strategy





Economic Development Strategy

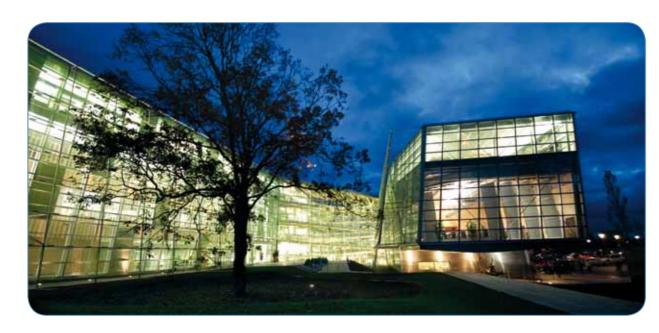
3.1 Introduction

In the intervening period between the publication of the RPG's in 2004 and this review period, there have been significant changes in the profile and performance of the Irish economy, most notably a continuation of previous growth from 2004, followed by a sharp contraction in 2007/2008 and the associated effects relating to market confidence, employment levels, credit provisions, taxation and public and private finances. It is anticipated that while immediate trends provide significant challenges for enterprise, trade and fiscal policy, it is envisaged that a recovery in economic conditions can be realised in the longer term.

The Government's 'Building the Smart Economy' document identifies the fundamental importance of returning to export-led growth, that is to stimulating growth and development of the productive sectors of the economy, and internationally trading activity. Accommodating over 40% of the population of Ireland, generating just under half of Ireland's Gross Value Added (GVA), and containing Ireland's only city of international scale, the GDA is the 'power house' of the national economy. Its economic success and in particular, the success of the metropolitan core, is critical to the future performance of the national economy and its return to growth.²⁶

In this context, the regional economic strategy for the GDA seeks to support and maximise what is effectively a multidimensional economic role for the region:

- 1. It must ensure that the GDA can continue to compete on a global stage attracting to Ireland, several types of activity for which no alternative locations exist elsewhere on the island but only in the metropolitan regions of other countries;²⁷
- 2. It needs to protect and enhance the performance of the GDA as an engine of growth for the national economy;
- 3. It needs to ensure that the GDA continues to play a leading role as a focus for knowledge generation, knowledge dissemination and innovative activity essentially what NESC (2008) have termed a 'theatre of experimentation';
- 4. Finally, the strategy must seek to ensure that the potential of the entire GDA is maximised so that the whole of the region (and the other regions in Ireland) can both contribute to and benefit from positive economic outcomes.
- 5. Promote balanced economic development within the region.



26 See NCC (2009: 7) Our Cities: Drivers of National Competitiveness 27 See NESC (2008:196) The Irish Economy in the Early 21st Century (2008:196) In line with these five objectives, and building on the 2004 RPG recommendations, the strategy identifies key areas of enterprise development potential in the GDA and focuses on enhancing strategically important aspects of the business environment so as to create the conditions for attracting investment by both foreign and indigenous companies, stimulating entrepreneurship, and enabling companies to grow and target international markets. The latest economic data and indicators have been used to inform, update and revise the economic strategy for the region and provide a planning policy focus to fostering economic development in the Dublin and Mid East Regions.

3.1.1 Key Inputs

The regional economic strategy for the GDA draws from several principal inputs and recognised data sources relating to employment, trade and enterprise²⁸ including:

- 1. **'Building Ireland's Smart Economy: A Framework for Sustainable Economic Renewal', 2008** which sets out government direction on the restructuring of the economy, building upon existing and new actions within a framework structure. The primary objective of the document is to outline a pathway to a return to sustainable growth in the medium-term. In order to achieve this, five priority Action Areas are set out:
 - a. Meeting the short term challenge: securing the enterprise economy and restoring competitiveness
 - b. Building the Ideas Economy- creating the 'innovation island'
 - c. Enhancing the Environment and securing energy supplies
 - d. Investing in critical infrastructure
 - e. Providing efficient and effective public services and smart regulation.
- 2. The work of Forfás²⁹ including the 'Regional Competitiveness Agenda for the East' (2009) which examines how the region can continue to develop its competitive environment, build from its strengths and national and international networks, and address barriers to development. In addition, the Forfás report, 'Sharing Our Future: Ireland 2025' (2009) provides a long term assessment of what is required to develop a competitive sustainable enterprise sector. It identifies the forces of change that should influence the choices we make, outlines key trends and uncertainties facing the enterprise sector in Ireland and proposes key strategic policy areas for action.
- 3. The work of the National Competitiveness Council³⁰ including 'Our Cities: Drivers of National Competitiveness', 2009 and Annual Report, This commentary recognises the role of our gateways and major cities as drivers of national competitiveness, economic development and social advancement, examines factors of competitiveness and sets out a series of recommended policy actions to support the development of our cities and enhance Ireland's competitiveness. Within this assessment the crucial role of the Dublin Gateway in the context of the national economy is also addressed. 'Getting Fit Again: Short Term Priorities to Restore Competitiveness' 2009 establishes short term policy priorities to strengthen the country's capacity for economic recovery, consistent with the medium term strategy for sustainable growth, as set out in the Smart Economy Framework.
- 4. 'Economic Development Action Plan for the Dublin City Region', July 2009 which is a collaborative plan developed by the four Dublin Local Authorities and the Dublin Regional Authority. The aim of the plan is to further develop the Dublin City region as a significant hub in the European knowledge economy and is intended as a working document by setting out a series of actions. This body of work essentially provides a working blueprint to steer economic development and policy together with ways to foster influences which can deliver on the economic buoyancy of the Dublin Region. Coupled with this is the publication 'Developing an Enterprise Strategy for the Dublin Region' 2009, which was carried out by the Dublin City and County Enterprise Boards in association with Fitzsimons Consulting on behalf of the four Dublin Local Authority Managers and the DRA. The strategy is derived from a stated action within the 'Economic Development Action Plan for the Dublin City Region' and seeks to develop a single sense of purpose and commitment towards the development of enterprise in the Dublin Region. The

²⁸ This includes NSS, CSO data, ESRI commentary and figures from official central government offices, some of which are included in or inform the referenced principal documents.

²⁹ Forfás is the national advisory body for enterprise and science.

³⁰ The National Competitiveness Council (NCC) is a social partnership body, which reports to the Taoiseach on key competitiveness issues facing the Irish economy and makes recommendations on policy actions to enhance Ireland's competitive position.

Carried out in conjunction with Forfás

strategy recognises the importance of the Dublin city-region to the economic performance of Ireland and it identifies the economic challenges it faces and addresses ways to strengthen enterprise in the Dublin region. **An Employment and Skills Strategy for the Dublin Region, 2009,** also derived from the *Economic Development Action Plan for the Dublin City Region* acts as both a background report that contains elements of the detail and evidence base on which the strategy proposed is based. It provides in-depth statistical analysis of the Dublin labour market, leading to the presentation of a distilled strategy.

5. 'Mid East Regional Authority Economic Development Strategy to inform the Review of the RPGs for the Greater Dublin Area, 2009' which is a collaborative plan developed by the three Mid East Local Authorities (Meath, Kildare and Wicklow) and the Mid East Regional Authority. The paper sets out the agreed economic priorities for the Mid East Region together with infrastructural priorities for investment. It identifies the unsustainable commuting pattern in the Region, with high flows towards Dublin and the risk that this could continue growing only unless proactive policies and actions are forthcoming to address this unsustainable pattern. It strives to reduce unsustainable commuting and provide employment opportunities locally. The geographical position of the Region adjacent to Dublin should also provide a stimulus to encourage and promote economic prosperity. It seeks to compliment the settlement strategy by developing a series of dynamic economic clusters centred on strategic economic multi-modal corridor connections across the Region; with these centres seeking to develop both local and regional economic growth. The strategy has been designed to compliment the Dublin Economic Action Plan and sets out a series of recommendations relating to economic corridor and cluster development, zoning and securing of strategic sites for economic development, infrastructure-in particular telecommunications, water and wastewater; soft measures such as training and collaboration, and developing sectoral opportunities.

This Development Strategy, along with the Forfás Report and the Action Plan for Dublin, is contained in Volume 2 of the Regional Planning Guidelines- Appendices, Environment & Habitat Reports & Key Background Papers.

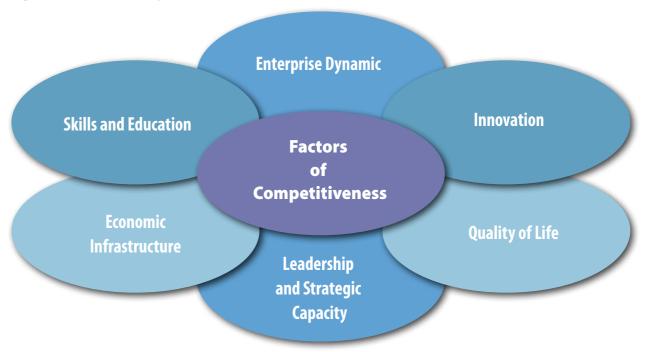
3.2 Supporting Economic Development and Regional Competitiveness

International research has been occupied extensively with understanding the factors that contribute to place and regional competitiveness, and there is considerable agreement on what the important drivers are.³¹ In this vein, the National Spatial Strategy (2002) argued that certain conditions must apply to support increased economic activity and regional competitiveness including:³²

- 1. A need for a critical mass of population, a range of skills, an innovation capacity, as well as business and transport linkages, in an environment which is attractive for people to live in.
- 2. The potential for development of economic activity must be driven by advantages derived from exchange of information, collaboration, innovation, adoption of best practices and mobilisation of finance and skills.
- 3. Strong cities and towns are needed to support a competitive business environment, working in partnership with strong rural areas and ensuring an effective supply and concentration of employment opportunities and services. This enables areas to hold on to important labour force skills, and attract more people.

Building on the NSS and various commentaries on regional competitiveness, as well as some recent applications of this work in the Irish context³³ a framework of competitiveness factors was developed by Forfás³⁴ to facilitate a comprehensive analysis of the Irish regions - to determine not just performance, but also to identify key regional assets and areas of enterprise potential (Figure 1)³⁵.

Figure 4: Factors of Competitiveness



In essence, these factors can be interpreted as essential needs for enterprise development and attraction of investment and there are a number of specific elements required at strategic locations and in a targeted way, which are vital to foster a wide range of enterprise activities and employment creation potential. These are listed in Table 1 below.

Table 1: Factors of Competitiveness

| Skills and education: | Access to skilled work-force (people and talent attraction); access to regional or national centres of learning. | | |
|---------------------------------------|---|--|--|
| Innovation: | Access to sources of research & development and innovation. | | |
| Economic Infrastructures: | Ease of access to markets and customers, both physical and electronic; ease of travel to work (effective urban transport systems); adequate zoned and serviced land banks; effective waste management structures and facilities; reliable, secure and cost-competitive energy supplies. | | |
| Enterprise Dynamic: | High growth, knowledge intensive enterprises; access to networks, inter-linkages between firms, higher education institutes and government. | | |
| Quality of Life: | Attractive to an internationally mobile workforce; access to regional cultural venues such as theatres/galleries/arts and sports centres; access to health care facilities; a high quality built environment, including parks, green spaces and other amenities. | | |
| Leadership and Strategic Capacity: | Efficient and high quality delivery of support services; vision and enthusiasm of key stakeholders locally to work collaboratively and in a co-ordinated manner; integrated strategies for physical, economic and social development and environmental protection, to guide and promote sustainable development, particularly with regard to planning, land use and transportation. | | |

Source: Adapted from NSS (2002: 35) and Forfás (2009) Regional Competitiveness Agendas

³¹ Walsh (2005) in Fitzpatrick's Associates Gateway Investment Priorities report

³² National Spatial Strategy, Section 2.6, page 35

³³ For example: Fitzpatrick Associates (2005) Gateway Investment Priorities; NCC (2009) Cities and Competitiveness; and BMW Regional Assembly (2009) Gateway Development Index

³⁴ The national policy and advisory board for enterprise, trade, science, technology and innovation.

³⁵ Forfás (2009) Regional Competitiveness Agendas: Overview, Findings and Actions

3.3 Economic Overview

The economic overview for the region examines the employment profile and performance of the region, key sectoral strengths, together with broadly anticipated future trends, and provides a context for the regional economic strategy.

3.3.1 Employment

There were approximately 797,900 people at work within the GDA in mid-2009³⁶ representing c.41% of total national employment, with a labour force participation rate of 65%, which was marginally above the national average figure of 62.5%. However the rate of growth was marginally below the national average over the 10 year period between 1998-2008.

At a regional level, the unemployment rate within the GDA in 2009 was below the national average- 10.3% in the Dublin Region and 10.8% in the Mid East Region. This may be due in part to the diversity of the employment sectors in the GDA and lesser dependence on the construction industry within the GDA in comparison to other regions.

3.3.2 Employment Distribution and Growth Sectors

The single largest sector in Dublin and the Mid-East in terms of absolute employment levels is the public sector, which employs 196,000 or 22.5% of the region's workers. The public sector was responsible for the creation of almost 31.7% of all new jobs in the region between 1998 and 2008 (compared with 33.4% nationally). Following the public sector, the sectors which contributed most to job creation in the region over the decade were financial and other business services (26.8%), construction (20.4%) and wholesale and retail sectors (12.7%). These four sectors accounted for over 90% of employment growth in the region over the period 1998 to 2008.

ICT services is the largest agency supported³⁷ sector in the GDA. Comprising companies such as Microsoft, Google and IBM, the sector employs 34% of all workers in agency supported companies in the region. As well as being the biggest sector, it has also seen the largest absolute growth in employment between 1998 and 2008, increasing employment levels by more than 10,000 in that period, or more than 33%.

The next two biggest sectors (of approximately equal size) are the financial services and the food and drink sectors. The financial services sector recorded extremely strong growth over the period 1998 to 2008, unlike the food and drink sector, which, although having recorded growth over the period (a fact which was unique among 'traditional' industries in the region), did so at a much slower rate. Apart from the food and drink and chemicals sectors, all other manufacturing sectors recorded declines in employment. Declines were greatest in the paper & publishing³⁸ and machinery and equipment sectors. Overall, 87% of net new jobs in agency supported companies in the two regions between 1998 and 2008 were created in services sectors.

In terms of the proportion of people employed, the last decade of growth saw a sharp decline in manufacturing employment in the GDA, with a corresponding increase in the relative size of the construction, public sector and financial and other business services sectors. Despite this, the manufacturing sector remains an important employment base, particularly in the Mid –East Region and in hinterland areas of the GDA.

The tourism sector also makes an important contribution to the regional economy, with the GDA region branded as an international destination which has outperformed national average tourism growth rates over the past decade.³⁹ In particular the City core has significant international cultural appeal, with an array of concert halls, stadiums, galleries and uniquely historic signature sites. The characteristics of the surrounding area suggest it can offer a uniquely different and complementary tourism package to that of the city-region in terms of natural assets and amenities, outdoor pursuits and through the strength of the equine industry. It presents opportunities to be marketed as a long stay destination with links to the City and adjoining Counties. When these contrasting attributes are combined, the GDA offers an extensive and

holistic range of attractions and experiences to visitors. A variety of visitor accommodation ranging from the prestigious to budget options, in urban and rural locations, also adds to the tourism appeal of the region. Tourism promotion is an important consideration from an economic development perspective, and one which is likely to have positive spillovers into other aspects of the region's economy and society, such as quality of life improvements for the region's permanent residents, and increasing the attractiveness of the region for inward investment.

3.3.3 Unemployment

Unemployment in the GDA increased rapidly in 2008, as was the case nationally. Between 1998 and 2007, unemployment trends in the region had been positive however, falling from an unemployment high for the period of 7.8% in 1998 to a low of 3% in 2001, this stabilised at a level between 3.6% and 4.6% for the following six years before rapidly tracking back up to 6.7% during 2008. In 2008, numbers out of work in the GDA jumped to 61,000, the highest number in more than 10 years (in the context of a greatly expanded total labour force). The early driver of the increase in unemployment nationally was a decline in domestic construction activity and international demand for manufactured goods. Recent sectoral employment figures indicate that these drivers were similarly responsible for increasing unemployment in the GDA.

3.3.4 Regional Output

For the purposes of the RPG's and in line with the approach taken by Forfás, Gross Value Added (GVA) has been used as an output indicator at regional level to measure overall economic performance in 2006⁴⁰. Based on the body of work by Forfás, the Greater Dublin Area accounted for almost half of the State's GVA with a 48.2% share. Of this, the Dublin region clearly has the most dominant influence with a 39.5% share of GVA (as shown in table 2 below). In terms of regional GVA per employment sector, services account for approximately 71%; manufacturing and construction 28% and agricultural accounts for 1%. Productivity levels⁴¹ indicate the GDA region has the second highest rate of GVA per worker, ⁴² behind the south west region.



⁴⁰ Although GVA provides an economic measure of performance, social investments are also considered essential components of the economy. Therefore appropriate investment in sectors such as education, health, housing, transport and childcare are also considered to be of regional economic importance.

³⁶ CSO: .QNHS 2009.Q2. -Persons aged 15 years and over classified by NUTS 3 Regions and ILO Economic Status'.

^{37 &#}x27;Agency Supported Employment' is employment in companies that are clients of the enterprise agencies IDA Ireland and Enterprise Ireland.

³⁸ This decline in paper & publishing employment may relate to a NACE code reclassification which saw much print activity transfer into ICT services when a move was made from paper printing to digital publishing.

³⁹ Source: Forfás Regional Competitiveness Agenda for the East 2009.

⁴¹ As measured by GVA per worker and where the State equates to 100%.

⁴² The Dublin region has the highest GVA per person, with a lower ranking for the Mid East Region. However the commuter influence distorts these figures, which is why the GDA as a whole has been cited in the main body of text.

| | Distribution of GVA across Regions (%) | GVA per Person at Basic Prices (Euro) | Region as a % of State GVA per Person (State=100) | Region as a % of EU GVA per Person (EU=100) | % Change in GVA per Person 2000- 2006 |
|------------|--|--|---|--|--|
| | 2006 | 2006 | 2006 | 2006 | |
| Border | 8% | 26,545 | 72.5% | 106.9% | 61.1% |
| Midland | 4% | 24,527 | 67% | 98.8% | 58.5% |
| West | 7.3% | 27,451 | 75% | 110.5% | 40.8% |
| Dublin | 39.5% | 51,588 | 140.9% | 207.7% | 57.4% |
| Mid-East | 8.7% | 28,366 | 77.5% | 114.2% | 38.1% |
| Mid West | 7.4% | 31,855 | 87% | 128.3% | 39.3% |
| South-East | 7.9% | 26,745 | 73.1% | 107.7% | 30.8% |
| South-West | 17.2% | 42,952 | 117.3% | 172.9% | 50.8% |
| State | 100% | 36,608 | 100% | 147.4% | 48.7% |

(Source: CSO National Accounts, Database Direct 2009)

3.3.5 Future Trends

The economic trends identified for the region are primarily drawn from the ESRI Medium Term Review (2008-2015) and patterns emerging from the enterprise dynamics. These include:

- A key driver of growth in the future is likely to be the business and financial services sector given the GDA is 'currently the most influential contributor in this sector in terms of employment and regional output, supported by high levels of educational attainment'44.
- The educational sector, third and fourth level education attainment and innovation are important for developing the knowledge based economy.
- · A decline in the growth and influence of manufacturing, and the changing nature of regional employment to higher value-adding activities is likely to give rise to challenges for industrial policy, R&D policy, land use zoning and hu-
- The supply of labour with appropriate skills for services activities will be important for future growth.
- Despite a reduction in the demand in the global export market, the value of exports at a national and regional level has remained robust and is likely to remain so. Given the influence of the GDA in the Irish export market, the regional competitiveness of the export market is considered essential, not only to the GDA but the national economy.
- The metropolitan area of the GDA and its hinterland suffers from patterns of urban sprawl, and dispersal of population which adversely affects competitiveness. Sustainable and balanced spatial planning and targeted infrastructure, supported by Central Government funding, is therefore essential to support regional enterprise and economic activity.

• In the longer term, (post 2020) the dependency rate in Ireland is likely to become an issue particularly in relation to population age structure and effects on the labour market and public finances. This is likely to have implications for the GDA, if regional trends fall in line with that of national trends.

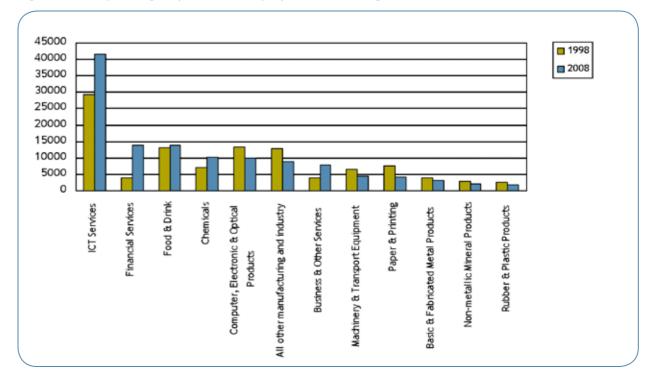
3.3.6 Economic Strategy – Enterprise Dynamics & Potential

The GDA has a distinctive economic profile and enterprise dynamic within Ireland, reflective of its role as the key driver within the national economy. It is vital that investments are prioritised that enhance the competitiveness of the region to ensure that it plays a leading role in Ireland's return to sustainable economic growth.

As noted earlier, growing international trade is the only sustainable basis for growth in the long term, requiring measures that will help to drive expansion in the productive sectors of the economy. The enterprise agencies will play a key role encouraging new enterprise development and investment. However, actions that can be taken to stimulate investment from companies are directly intertwined with the quality of the business environment – one cannot happen without the other. In the case of the GDA, its business environment needs to support an enterprise base both within and beyond its confines - as the City fulfils its dual role, that of national capital and international gateway for the remainder of the country, and as a self sustaining functional global City and region.

The purpose of this strategy is to provide a focus on the strategically important aspects of the business environment that need to be supported by these Regional Planning Guidelines so that the optimum conditions are present to realise the full enterprise potential within the region. To achieve Ireland's ambition as outlined in the Smart Economy, the business environment needs to continuously evolve to meet the changing needs of companies – it needs to be a dynamic environment that is supportive of early start-ups and entrepreneurial activity, that stimulates company engagement in innovation and R&D, and which ensures that companies have access to the high quality skills and supports they require.

Figure 5: Enterprise Agency Assisted Employment - GDA Region, 1998 & 2008



(Source: Annual Employment Survey, 2008)

⁴³ Extract from 'Regional Competitiveness Report for the East Region by Forfás 2009.

⁴⁴ ESRI Medium Term Review 2008-2015.

3.4 The growing importance of services

Ireland's enterprise structure is shifting where services take on a greater role as a contributor to overall economic growth. Indeed Ireland has now established itself as one of the world's leading services economies and it is well understood that services will be the most likely avenue to sustainable growth in the future.⁴⁵ International evidence shows that high-value added services are attracted primarily to cities.⁴⁶ The GDA is already playing a critical role in this context; as host to Ireland's capital city, and providing a supportive environment facilitating the rapid growth of international financial services and ICT services in particular. More than three-quarters of employment provided in the region is now in various services activities and growth in services employment accounted for almost 90% of overall growth in employment in the region over the past 10 years. Services activity in the GDA contributed circa 56 % to overall output (as measured by GVA) contributed by services in the State in 2006. A key challenge for the city region is to enhance its attractiveness and competitiveness that will continue to drive growth in a wide range of advanced international services activities.

The Services Strategy Group underlined the importance of continuing to support the key exporting services activities in Ireland at the present time (in ICT and Financial Services) and also suggested that there is potential for further diversifying that export base, across a range of sectors and into a broader set of activities, such as e-commerce, supply chain management, shared and outsourced business processes, European headquarters and electronic data management. A good example of how current global trends within sectors are presenting new opportunities is in the area of ICT/software development – see box 1).

Existing strengths in the GDA's enterprise base will be the platform for further development and diversification of services, and Dublin city will host many of the leading players. However, there is no room for complacency. Dublin is a small city by international standards (the second smallest out of 78 cities examined in the 2006 OECD review⁴⁷) and is competing with these cities for FDI and for services exports.

Within the food sector, an increased focus by individuals on overall 'wellness' has led to a growing demand for lifestyle related products including health enhancing 'functional foods' and nutraceuticals. Such products range from isolated nutrients and dietary supplements through to products that reduce cholesterol, improve bone health or aid the digestive system. The research disciplines, processes and standards are similar to those of the biopharma sector.

The enterprise agencies will continue to focus on developing opportunities in new areas of the services economy and there have been a number of important studies undertaken to inform policy development in support of those endeavours⁴⁸. However, future success depends on how well the business environment in the region and the metropolitan core also evolves to keep apace with the needs of the most advanced services activities. The following are especially pertinent to the services sector:

- i. Skills availability (see box 2)
- ii. An environment conducive to innovation
- iii. Advanced broadband connectivity (next generation networks)
- iv. Excellent transport networks both internationally, city and region-wide.

These and other business environment essentials of relevance to the services sector are discussed in Section 3.5 on the following pages.

Box 1: Software Development & Services – Global trends

A very new environment is emerging for software companies globally in what has been called 'The New Software Economy'. This new context sees a number of key trends and structural changes that provides both opportunities and challenges for software companies, and small to medium sized companies and start-ups in particular. Some of these trends and changes include:

- Increasing end-user demand for less expensive, more efficient ways of paying for software, for example through seeking best of breed, plug-compatible solutions
- Vendors responding to these demands by embracing new delivery and pricing models, such as software as a service (SaaS), infrastructure as a service (laaS), platform as a service (PaaS); and software on demand
- The emergence of the networked value chain, a distributed business model where different value adding activities are carried out where they can be done most efficiently and cost-effectively
- The emergence of new software technologies (such as Services Oriented Architecture SOA, Open Source, Web 2.0 and Mash-ups) are continuing to drive the development of new applications and bus ness models.

An over-riding feature of the new software economy is the shift in computing activity towards being a utility-like system, underpinned by the internet. This shift is most widely referred to as 'cloud computing' – a reference to the ever-shifting cloud of data, software and devices that make up a global computer network.

Box 2: Services - Skills requirements

The changing nature of services in an increasingly globalised economy brings with it changing skills requirements. In all service industries, the proportion of high-skill employment has increased significantly. The challenge for the GDA will be to generate, attract and retain appropriately skilled people who can support the needs of the internationally traded sector and global business models into the future. The recent Report of the Services Strategy Group highlighted the range of skills and skills combinations that are now in high demand from the sector:

- Generic skills (personal/inter-personal skills team-working, customer service, problem solving, planning etc.)
- Humanities (including languages) and social science skills
- Science, Technology and Innovation Skills
- Creative skills, design skills, and skills for innovation
- Hybrid technical and business skills (combining discipline-specific technical knowledge (ICT, financial services etc. with entrepreneurial skills)
- Mathematics

⁴⁵ Forfás/Services Strategy Group (2008) Catching the Wave – A Services Strategy for Ireland.

⁴⁶ OECD, "Competitive Cities in the Global Economy", 2006.

⁴⁷ OECD, "Competitive Cities in the Global Economy", Territorial Review, 2006.

⁴⁸ For example: the above referenced Services Strategy Report (2008), The various Expert Group on Future Skills Needs (EGFSN) reports including: High Level ICT Skills (2008), International Financial Services Industry (2007) and National Skills Strategy (2007); the Forfás/INI (2008) Report on 'Environmental Goods & Services Sector on the Island of Ireland'; and Enterprise Ireland's (2009) software strategy, 'Best Connected – Software from Ireland'.

Box 3: Food Sector – Global Trends

The dynamic for the food industry has changed significantly in recent years, transitioning from being largely production-led, to now being led by market demands. As well as the growing demand for health enhancing functional foods identified above, the aspects of standards, quality and traceability are paramount. Branding and labelling play a particularly important role as consumers look for products they feel they can trust. There is an increasing focus by leading retailers and manufacturers on the issue of sustainability which in turn informs more environmentally friendly requirements they set for their suppliers. Retailers too are consolidating and there is evidence of moves to international structures and centralised procurement.

The sector runs to very tight margins and increasing efficiencies and productivity are key objectives for the sector in Ireland, as is the El supported agenda to broaden access to a wider range of eurozone markets.

Box 4: Life Sciences – Global Trends

The Life Sciences sector is operating within a fast changing global environment where aging demographics and increases in chronic illnesses, more informed consumers, and a focus on 'wellness' provide high growth opportunities. Technological advances and convergence across the life sciences sub-sectors and with other sectors such as engineering and ICT are enabling a shift towards convergent medical products and personalised healthcare. The Pharmachemicals sector in particular is challenged by the fact that a number of products are due to come off patent protection over the coming years, and the pipeline for new products is relatively low. Biopharma is an emerging phenomenon, which presents a more complex and dynamic production process. In this context, manufacturing processes will become increasingly complex coupled with the need for firms to focus on continuous improvement and engage in process R&D. Expertise in the area of Quality by Design (QbD), Process Analytical Technology (PAT) and Quality Risk Management (QRM) are critical if Ireland is to build on its track record in high value added production. The future lifesciences manufacturing environment will require inter-disciplinary approaches to problem solving and will require flexible approaches that deliver on smaller batch sizes and product variations in multi-product manufacturing facilities. Process design and development for new and innovative products requires a greater understanding of the range of potential delivery mechanisms and package design, interactions between different materials under different environments, testing and quality control and validation processes. Core skills need to be complemented so that people are equipped with multi-disciplinary skills, or at the very minimum, demonstrate an ability to work effectively and proactively in multi-disciplinary teams.

Over time, although large scale single-product sites will still exist, there will be an increasing emphasis within the industry globally on manufacturing facilities and processes that can be adapted and/or retooled to facilitate new products. Multinational companies in the sector are now tending to focus on activities where they have strengths and to outsource non-core activities (such as late stage manufacturing, clinical trials processes etc) to contract research organisations (CROs) and contract manufacturing organisations (CMOs). The increased disaggregation of value chain activities is creating opportunities for smaller companies to position themselves within the global supply chain with innovative, technology intensive solutions and partnering opportunities.

3.4.1 Sustaining high value manufacturing

The regional economic profile has highlighted the decline in manufacturing employment in the GDA over the past 10 years, which has substantially reduced the scale of the activity relative to other sectors in the overall employment base of the region – down from 17% in 1998 to just under 11% in 2008. The trend is also present in agency supported employment where, apart from food and drink production and life sciences (i.e. pharmaceuticals and medical technologies), all other sectors of manufacturing activity recorded employment declines (incl. ICT hardware, engineering/metal fabrication, paper and printing). While net job losses over time have been concentrated mainly in more traditional sectors and reflect on-going restructuring in the economy and increased competition from lower cost locations, the current down-turn will also lead to further consolidation and reviews of global operations by multinational corporations across a range of sectors with possible implications for Irish based subsidiaries.⁴⁹

Acknowledging that there are immediate term issues and competitiveness challenges (which are well documented and currently being pursued through other mainly national level interventions),⁵⁰ there are key issues to be considered and influenced at the regional level. Key to this is to recognise the changing nature of manufacturing globally, placing new challenges on locations in relation to the competition for new investment by both indigenous and foreign firms and their subsequent growth and development. The boxes summarise some of the key global trends in the GDA's most prominent internationally trading manufacturing sectors; Life Sciences and the Food Sector.

The High Level Group on Manufacturing (2008) summarised the key elements that constitute a supportive business environment for high value manufacturing firms:

'The availability of a highly skilled and innovative work-force, an environment that encourages and stimulates investment in research and development, entrepreneurship and continuous learning, a cost base that is in line with other developed economies, an agile and responsive Government, supportive fiscal and regulatory structures and a high quality of life are all factors that will position Ireland as a 'good place to do business'.⁵¹

The GDA by virtue of its location offers many advantages for high value manufacturing: access to a large skilled workforce; international accessibility; proximity to leading third level education institutes and research organisations; a critical mass of economic activity allowing the emergence of business networks; and concentrations of activity across a range of sectors. The critical issues for regional stakeholders in enhancing the business environment for manufacturing in the GDA must include:

- Optimising the knowledge resources that are available in the region to support the increasingly diverse array of
 activities carried on by high value manufacturing, to drive increased levels of productivity; and to stimulate and
 drive new innovation based business start-ups;
- 2) Good land-use planning, incorporating transport systems/accessibility; residential development, adequate and serviced land banks for future development; and necessary physical / social infrastructure.
- 3) A constructive approach to local authority development charges in the context of the increasingly competitive global environment;
- 4) Advanced broadband connectivity (next generation networks).

⁴⁹ National Competitiveness Council (2008:8) Annual Competitiveness Report Vol 2: The National Competitiveness Challenge.

⁵⁰ Refer to NCC Annual Competitiveness Report 2008 (www.ncc.ie).

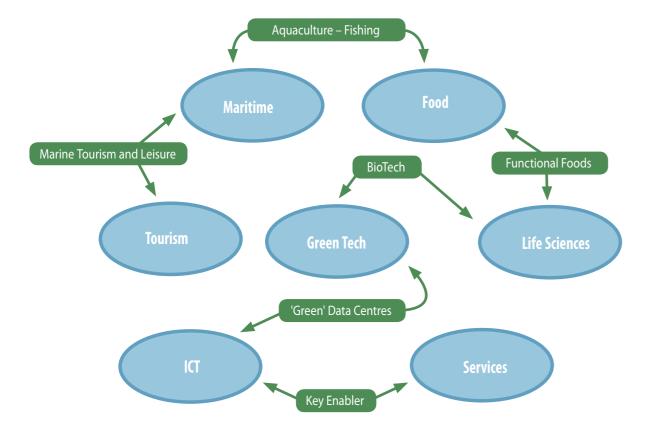
⁵¹ The Report of the High Level Group on Manufacturing (2008).

3.4.2 Convergence

With a strong base of companies and research capabilities across a number of key sectors and activities, the GDA is well positioned to take advantage of the increasing convergence of technologies. This convergence is leading to new opportunities, new types of business, new products and services, an increased blurring between formerly discrete sectors and new customer markets for many of the more traditional sectors. Advances in the food sector toward functional foods bring the clinical trial and production processes closer to those in the biopharmaceutical sector. Electronics, micro- and nanotechnologies will play a stronger role in the life sciences sector as new drug delivery mechanisms are developed. The use of sensors embedded in construction materials and wireless communications creates a very different environment for new buildings, energy efficiencies, and facilities management.

Capabilities in mathematics, sciences, engineering and electronics are relevant across a range of sectors and activities. A depth in these core capabilities, coupled with an ability to work in multi-disciplinary teams, would prepare Ireland and the GDA to take advantage of emerging trends.

Figure 6: Increasing Sectoral Convergence and Blurring



3.5 Economic Strategy - Enhancing the Business Environment

From an enterprise perspective, the development of the GDA region and particularly that of its gateway city, Dublin is in large measure, self perpetuating. As has been demonstrated over many years, the performance and ambition of the enterprise sector in the region over time has acted as a powerful reinforcement and reference seller for new investment. The key issue is to maintain a supportive business environment (both hard and soft) that can facilitate the sustainable growth and development of key sectors. The indigenous and foreign firms that constitute those sectors must be able to develop and respond to global trends, as well as play a central part as drivers of innovation on a global platform in their own right.

3.5.1 Leadership and Governance

Strong leadership and effective governance mechanisms are an integral part of achieving competitive regions. From an enterprise development and competitiveness perspective, key challenges for the GDA which will require strong governance mechanisms and clear leadership are:

- 1. Facilitating sustainable growth of the metropolitan core, while arresting urban sprawl, easing congestion and implementing effective land-use and transportation plans region-wide in an integrated manner together with promoting compact employment/population settlement in RPG identified areas in the hinterland and
- 2. Adopting collaborative approaches to strengthening the 'softer' aspects of the business environment, by optimising the impact of many drivers and sources of innovation in the region, education providers, enterprise support agencies and others (see further detail in sections below).

In the Irish context, long established local authority structures and administrative boundaries have been superseded by the growth of our cities and an evolving enterprise dynamic. As regards the GDA, Dublin's four local authorities share responsibility for Dublin City's development and success with neighbouring Meath, Kildare, Wicklow and surrounding counties in adjoining Regions, particularly Louth, requiring coordination and collaborative approaches amongst relevant stakeholders and underlying the key importance of the Regional Planning Guidelines process.

The proposed introduction of a directly elected mayor for Dublin by 2011 presents an opportunity to strengthen leader-ship structures and enhance coordination in the development of the metropolitan area. Alongside this change is the establishment of the National Transport Authority, into which the new Mayor will have a key function; and which will have a central role in coordinating investment in transport across the GDA, and will prepare a Transport Strategy which will input into all planning documents in the GDA. The RPGs themselves provide a framework for enhanced region-wide coordination and to build on emerging collaborative initiatives such as the Creative Dublin Alliance.

The National Competitiveness Council has recently highlighted the importance of adopting a more 'entrepreneurial' approach to governance, in contrast to the traditional 'managerial' model which is primarily focussed on effective provision of services. In the entrepreneurial system, policy-makers from different administrative institutions work in partnership with each other and a range of public and private stakeholders to promote economic development and drive competitiveness. The RPGs represent a call to action in this respect.

3.5.2 Stimulating and Supporting Entrepreneurship

The GDA generates the largest number of Enterprise Ireland supported high potential start-ups (HPSU)⁵² of all the regions in Ireland (33 out of a total of 72 nationally in 2008). The vast majority of these emerge in Co. Dublin (30 out of 33 in 2008). While this is reflective of its share of the national population and concentration of HEIs and enterprise generally, there is capacity for increased levels. The GEM Entrepreneurship Monitor⁵³ notes that the relative proportion of the adult population in Co. Dublin engaged in entrepreneurial activity is below the average across all the regions, and in this regard is out of step with trends typically seen in city regions worldwide. In relation to the remainder of the GDA, the GEM report describes a more positive performance and entrepreneurial potential in Meath, Kildare & Wicklow. However, as the HPSU data appears to indicate, scaling-up appears to be a challenge.

A strengthened focus on entrepreneurship and on enabling indigenous industries to access international markets takes on heightened importance if we are to increase the contribution from indigenous enterprises to Ireland's future economic growth. The current economic environment, while difficult, can also serve to increase interest by individuals in starting their own companies, and indeed EI and the CEBs record intensified activity in this regard.

⁵² A HPSU is defined by Enterprise Ireland as a business that is (i)Manufacturing an export focused product or offering an internationally tradable service; (ii) Based on a technical advantage or a pioneering or innovative idea; (iii)Likely to realise annual sales of €1m and employ 10 or more within three years of start-up; and (iv) Headquartered or controlled in Ireland. Source: www.enterpriseireland.com

⁵³ Fitzsimons & O'Gorman (2008) Entrepreneurship in Ireland 2008 – Global Entrepreneurship Monitor (GEM)

There are a number of factors that can influence where new companies establish:

Physical infrastructures

- 1) The availability of competitively priced properties and attractive business, accessible CDB type facilities, and industrial parks that accommodate mixed-use businesses in a planned, strategic and discerning way that recognises the different needs of business activities (eg office, industrial, warehousing, accessibility)
- 2) Serviced office / business locations, that enable companies to access core support services such as reception, secretariat, accounting, HR, facilities management etc.
- 3) Effective public transport networks and/or car parking
- 4) Broadband capacity, competitive pricing structures and availability in business premises and in the home
- 5) Quality of life housing infrastructure, travel to work times etc.

'Softer' factors

- 6) Access to regionally based skills
- 7) Business management development, mentoring support and training
- 8) Facility to harness the capabilities of HEIs and support to invest in in-firm innovation
- 9) Access to markets and to market intelligence
- 10) Facilitated networking, introductions and access to shared learning opportunities (e.g. through business networks, workshops, seminars).

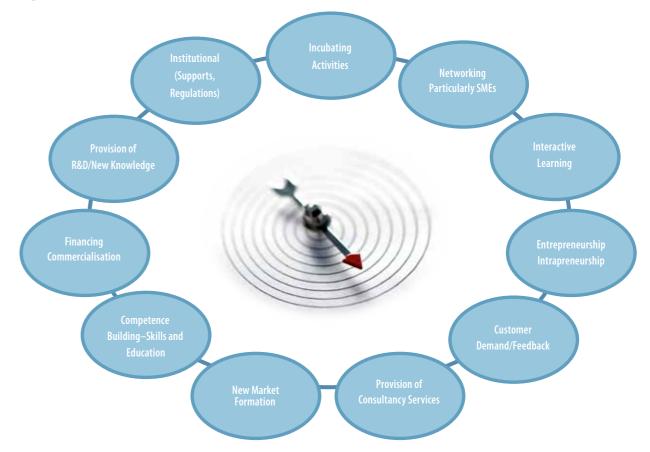
There is a multiplicity of agencies involved in providing supports to small enterprises and potential entrepreneurs in the GDA, including Enterprise Ireland, the County Enterprise Boards, Board of Irish Colleges, Higher Education Institutes (Campus Incubation) and Economic Development Officers with Local Authorities. From an individual/company perspective this is a crowded space and may result in confusion as to which agency to approach. In order to maximise the impact of the supports available, increased levels of coordination are required. The Dublin City Enterprise Board, together with Dublin City Council, has produced an information manual outlining the roles and functions of the various organisations providing supports to SMEs and entrepreneurs in the city. While this is a very useful and practical aid for business, it also demonstrates the challenge for the city and the Region's to develop effective collaborative initiatives and information sharing.

3.5.3 Promoting Innovation

Innovation is about applying knowledge to translate ideas into high-value products and services. Innovative thinking and creativity is stimulated in an environment that is dynamic, interactive and collaborative. Innovation can range from incremental (particularly in services) to radical or disruptive.

There are many sources of innovation, including end customers, firms with complementary products and/or services, and research institutes. Innovation within the regional context is based on the effective interaction between elements and, in particular, engagement by firms. Successful regions do not operate in isolation, but within a wider national and global context - interactions at both the national and international level therefore play an important role.

Figure 7: Activities that stimulate Innovation



There is limited data available to accurately assess the innovative capacity of a region in Ireland, but what evidence there is demonstrates that the GDA has a number of critical building blocks in place including:

- 1. An attractive city and region accommodating diversity and creativity;
- 2. A high proportion of holders of third level qualifications; Leading Higher Level Education Institutes with a strong track record in attracting substantial research funding and leading world class research centres/initiatives;
- 3. A range of incubation centres and innovation centres at different scales and with varying degrees of focus throughout the region;
- 4. A number of active and impactful industry networks and collaborative initiatives.

There is also a range of supports available through the enterprise development agencies which have attracted the involvement of many GDA based companies and research institutes; including: Industry-Led Research Platforms, Competence Centres; Strategic Research Clusters; TechSearch, Innovation Vouchers, supports for Innovation Partnerships and investments in Incubation and Innovation Centres, the Applied Research Enhancement Programme (operated by EI).

Locally driven efforts are being made to stimulate increased innovation in the region, for example through the initiatives being pursued by the Creative Dublin Alliance.⁵⁴ The collaborative approach taken through the CDA is a very positive development. There is also proactive involvement by NUIM in technology related research and an ambition to commercialise that research. Local government bodies and agencies can also play a role in embracing innovation in service delivery, which in turn builds capability and stimulates engagement by end customers.

⁵⁴ The CDA is a collaborative initiative involving the Dublin Local Authorities, Universities, State Agencies, Business Community and not for profit sector focused on developing a competitive city region. Please refer to the 'Economic Development Action Plan for the Dublin City Region, 2009' for more details.



3.5.4 Skills and Education

The National Skills Strategy, published in 2007, remains relevant today, particularly in the context of continued re-skilling and up-skilling of people within the workforce as well as preparing those who have found themselves unemployed to take advantage of new opportunities when the economy recovers.

Employees in all jobs will increasingly be required to acquire a range of generic and transferable skills including people-related and conceptual/thinking skills. Work will be less routine, with requirement for flexibility, continuous learning and individual initiative and judgement. The core skills of science, engineering, electronics and R&D related skills are relevant to a wide range of sectors, based on strong capabilities in maths and literacy, and are fundamental to the Smart Economy.

The GDA has a highly educated population, with the largest proportion of third level attainment in the country. The metropolitan region boasts wide ranging and diverse number of centres for learning and innovation, including universities (two of which are ranked in the world's top 100, with one of these being in the top 50), institutes of technology and specialist 3^{rd} level institutes, which attract high levels of R&D investment and includes the highest levels of research activity by any region.

With the support of various bodies such as Science Foundation Ireland, the Higher Education Authority, Enterprise Ireland and IDA Ireland, the higher education institutes (HEIs) are forming strong partnerships with industry and other HEIs (in Ireland and internationally) in the commercialisation of world class research. Such collaborative ventures continually refresh and advance the skills capabilities within the region and are a powerful magnet for increased levels of innovation and further investment. Sustained momentum in this area will rely on the region's attractiveness to a wide diversity of people/skill-sets from within Ireland and from overseas, as well as those originating and educated within the region.

In tandem with developing opportunities within third and fourth level institutes, investment in human resources, training, up-skilling and re-skilling are required to ensure opportunities for access to employment for all sectors of the labour force. This is perhaps even more urgent, given trends which have prevailed in the jobs market in recent times. The current economic downturn has resulted in a significant increase in unemployment nationally, although the impact has been less severe

within the GDA than in other regions. Similar to the pattern across the country, the sectors particularly affected within the GDA are construction, manufacturing and retailing. The cohort of unemployed also includes many highly skilled people, for example those involved in providing professional services related to the previously buoyant construction industry.

While national interventions will be required and may have greatest impact in the medium term, it will be important that consideration is given by agencies in the region to identifying critical short-term needs, and the speedy implementation of national policy in the regional context.

3.5.5 Quality of Life

Quality of life is a subjective and relative concept and can therefore be difficult to define, particularly in terms of regional economic dynamics – its different facets hold varying levels of significance for individuals depending on their individual tastes, disposable incomes, practical /fundamental needs etc. Quality of life is the extent to which a person or group enjoy the important aspects of their life. The quality of life of the region may be described as a function and outcome of policy decisions, the natural environment, health, education, entertainment and retail services, leisure activities and facilities, accessibility, living standards and social inclusion.

From an enterprise development perspective quality of life considerations are imperative in seeking to attract and retain investment and talent diversity. For example, poor health across the regional labour force can affect output, while the annual financial costs of lost productivity due to sick days/absences are well documented. By improving the health of the population, this can prolong participation in employment & education, therefore providing opportunities to address disparities in income levels.

The NCC in their commentary on competitive cities and drawing on a wide body of research in the area note:

'Competitive cities are attractive and inclusive and these characteristics are nurtured when disparities are minimised and social exclusion is avoided. A cohesive society enables all of its members to be active participants and contributors, enabling individuals to achieve their goals and communities to exploit their economic and social potential. It also reduces criminality and negative reputational effects'.55

This sets a wide-ranging agenda which is relevant not only to the metropolitan core as suggested in the above extract, but also for the entire region. In the case of the GDA however, there are many strengths that can be supported, protected and effectively promoted.⁵⁶

3.5.6 Connectivity Infrastructures - Transport

Economic Growth and Transport 21

Connectivity between strategic employment centres, ports and airports are necessary to support business, having an impact on both product and labour markets. Investment in linkages between these centres is therefore important as improved transport infrastructure can have benefits to outputs, costs and productivity. The radial routes and multi-modal corridors emanating from the gateway region offer access to larger indigenous and foreign markets by providing linkages to economic hubs such as Dublin port, the central portal of export activity in the country. This 'spoke' formation of multimodal corridors and orbital routes (which may be extended pending the provision of the Leinster Outer Orbital Route), allows for the movement of goods, services and labour between gateways and major employment centres, thus providing attractive locations for businesses.

Given the capital intensive nature of transport projects, such as motorway construction and rail development, it is important that investment in transport infrastructure is prioritised and targeted to locations whereby optimal long term gains can be achieved. Transport 21 (T21) sets out the national capital investment programme for transport up to the

⁵⁵ NCC (2009) Our Cities: Drivers of National Competitiveness (p31)

⁵⁶ Such strengths can include diverse architecture, cultural facilities and housing stock, distinct built and natural environments, high quality educational and learning facilities, and access to natural amenities.

The improvements and projects established in T21, in tandem with other economic growth factors, provide the opportunity for the region to be competitive within the international marketplace and to strengthen the regional economy. As such the delivery of T21 projects is considered to be essential for the sustainable economic growth of the GDA.

Transport infrastructure in the GDA

Dublin city is Ireland's main national and international transport hub. National road and rail services radiate from Dublin through the GDA, and Dublin Port and Airport represent the gateways through which the majority of international traffic entering Ireland passes. Despite significant investment in transport, barriers to enterprise include urban sprawl, road congestion and long travel times, the need for greater integration of public transport services, and meeting future port capacity requirements. Priority targets for investment in transport infrastructure, at locations which can support economic and critical mass, support structures and ease of access to do business is therefore essential to the economic success of the region.

For local transport, many parts of the GDA are car dependant, but have significant and growing public transport options in bus and rail. Major investments have occurred in Dublin and the Mid East region's transport infrastructure in recent years, but significant short-comings remain, especially in terms of the overall region's local transport connections, evidenced by congestion and lack of adequate connectivity across certain parts of the metropolitan area. This document identifies further investment and land use policy direction needed to achieve more integrated land use, transport planning and infrastructure planning.

The National Transport Authority have an important remit to fill in this regard, and one which must be considered a key factor for the city and the region's success or failure in the future – congestion and poor transport networks are considered internationally as one of Dublin and the wider region's main competitiveness weaknesses (Dublin was ranked 19th out of 34 European cities surveyed for quality of internal transport connections, and 25 out of 34 for external transport connections by Cushman and Wakefield in their European Cities Monitor 2008). It is crucial that the infrastructure investment priorities identified within the RPGs are delivered to ensure that future regional growth and economic sustainability are attained.



Δi

An efficiently functioning, well connected airport is a key competitiveness factor for Dublin, the wider region and the state. With major investments taking place, passenger facilities at Dublin Airport will be greatly enhanced. An area which requires urgent attention however is the airport's connections to the city and the region. The through-put of passengers from the airport to their final destinations in the city, region and country via local and national transport networks is an area of key consideration for future development.

Transport connections to the airport have improved with the development of the M1, the port tunnel (which provides a rapid route from the airport to the city centre) and the M50, which connects the airport with the national motorway system. Road connections to the airport could be further improved however if alternative access and transport options were provided which would relieve pressure on the M50 and M1. The cost and efficiencies of these transport options need to be weighed against alternatives to determine the optimal approach.

Public transport connections to the airport require significant development. Regular bus services and taxis serve the airport at present. The airport is intended as one of the principal stops on the proposed Metro which is planned to link Swords in north County Dublin to Stephen's Green in the City centre. This service would provide a high capacity, high speed connection from the airport to the city centre, feeding local, regional and national public transport hubs, improving the connectivity and operation of the airport.

Sea

Dublin port, like its airport, is the largest on the island. Large scale growth in trade through the port has resulted in capacity constraints being experienced, necessitating the requirement for an expansion of port facilities. Various possibilities for the expansion of port facilities serving the region (and the country) have been suggested, including land reclamation at Dublin port, the entire relocation of the port to a new facility to the north, or the development of additional capacity at other points on the coast. A decision should be made as soon as possible as to which course the development of port facilities is to follow, so as to prevent capacity constraints from hampering growth in the export sector. The efficient connection of port facilities to regional and national markets is a vital consideration in this regard, through high quality road connections to the national road network.

The provision of additional port capacity and development, whether at the existing Dublin Port, at a new location further north along the GDA coastline or other equivalent has the potential to confer significant economic benefits to the region and the future competitiveness of Irish ports.

Roads

Dublin is the hub of a radial national motorway network. The major inter-urban (MIU) motorway network will, when completed in 2010, connect Dublin and the region with Belfast, the Midlands Gateway, Galway, Limerick, Cork and Waterford. High quality road links to the North West (Sligo and Letterkenny) and the South East (Rosslare) are also undergoing development.

The proposed Leinster Outer Orbital Route (LOOR) project and connection through to Arklow will have important implications for strategic planning and economic opportunity in the mid East counties. Route selection and design should continue in order that planning authorities can evaluate implications and capitalise on the benefits and potential arising if this project is progressed⁵⁷ from what is likely to be a significant national investment.

Local congestion in the GDA represents the biggest road transport issue for the area. Possible solutions to this congestion include more sophisticated traffic management to maximise the use of existing road infrastructure, travel demand management, new road infrastructure to relieve constraints and the development and promotion of public transport alternatives to road usage. Investment is also required in the sub-national roads serving the region to improve connectivity to and between growth towns.

⁵⁷ Subject to planning, environmental and habitat assessment processes as prescribed in the Planning Acts and EU Directives.

Rail

National rail services radiate from Dublin's two main rail stations, Connolly and Heuston. Investment is ongoing to add additional capacity to local rail lines out of Heuston to alleviate current congestion and to allow greater speed on national connections. Capacity has been freed up by the addition of a new terminus at the Docklands Rail Station, but services to Belfast continue to share track with commuter services on the Belfast line serving northern suburbs and western suburbs on the approach to Connolly, constraining capacity for all services.

Trains from Heuston to other national gateways face similar problems with congestion on the line. This will be alleviated to a large degree by the doubling of track between Heuston and Hazelhatch in Kildare which will allow for the separation of intercity trains from regional / commuter trains and allow for expanded commuter services to important residential centres in West Dublin and Kildare. The imminent completion of the Kildare Route Project Phase 1 between Cherry Orchard and Hazelhatch will further enhance connectivity along the route connecting Kildare, South Dublin and the City areas. An imminent improvement for suburban commuter rail is the reopening of the railway to Dunboyne in 2010. (Phase 1 of the re-opening of the Navan rail line.)

National and commuter rail services, as well as city centre transport, will be improved by the provision of the DART Underground, a tunnel from Inchicore Station to Spencer Dock (linking to the existing north Mainline) via Heuston, Christchurch, St Stephen's Green and Pearse, with interfaces to the Luas and proposed Metro services. This project seeks to integrate the various rail infrastructures operating across the city and region, and to increase capacity on same. This will enable an increase in capacity on the DART and an expansion of DART services to other commuter lines.

In addition to the DART interconnector, two Metro lines have been proposed for the city. Metro North is planned to follow a northerly route from Stephen's Green to Swords via O'Connell St, Ballymun and the Airport. It is planned for use by 35 million passengers per year and to deliver a journey time of approximately 20 minutes between Stephen's Green and the Airport. Metro West, the second phase of the Metro project, is planned to link the Western suburbs of the city (Tallaght, Clondalkin and Blanchardstown), and to interconnect with Metro North at Dardistown (just south of the Airport).

The Luas came into service in 2004. It is undergoing significant expansion at present, with further expansions planned. The extension of the Green Line from Sandyford to Cherrywood/Bridesglen is ongoing and due to be finished by 2010, the Red Line extension from Connolly Station to the Docklands was recently completed, and the Red Line spur from Cookstown to Saggart is due in 2011. Transport 21 includes a project to extend the Luas Green Line from Stephens Green to Broadstone and Broombridge on the Maynooth line; a link from Cherrywood/Bridesglen to Bray and a new Luas line from the Lucan area to the south city centre are also planned.

Bus

Dublin Bus is the main public transport provider for the Greater Dublin Area (extending as far as Balbriggan, Newcastle, Dunboyne and Kilcock) carrying 150 million passengers each year and transporting 70% of all public transport commuters into Dublin during peak times. 58 Bus Éireann also plays a very important role in providing bus services to the GDA outside the metropolitan area. However, changes are required to improve the efficiency and effectiveness of bus services in the city and region. These include service changes to meet changing passenger demands, passenger information, greater connectivity/interlinking of services and ticketing improvements.

3.5.7 Connectivity Infrastructures - Telecommunications

Advanced telecommunications services are critical for the attraction of foreign direct investment, for the development of indigenous industry and the promotion of the knowledge economy. The increasing importance of services to the economy, in particular those that are structured around electronic transactions and information flows, makes it essential that the region has access to advanced and cost competitive communications services. For SMEs, effective use of ICT allows them to compete more effectively with their counterparts in other markets, for example by reducing costs and improving the quality of services to their customer base.

58 Information sourced at www.dublinbus.ie

Better use of ICT has been identified as one of the key factors required to improve Ireland's productivity performance. Broadband can enable higher productivity growth by allowing firms to cast their net wider when looking for suppliers or seeking new market opportunities to increase their customer-base or to more effectively link business functions e.g. sales, design, manufacturing, supply chain, stock control and accounts.

Currently, Ireland experiences poor broadband performance in relative European terms which is an impediment to regional enterprise and performance. The rate of roll-out in some areas is also seen as an obstacle to enterprise. Within the GDA, while wireless connections permeate much of the region, wireline provisions are more confined e.g. parts of the hinterland and in particular areas of Counties Meath, Kildare and Wicklow have limited wireline connections.

The broadband offering in the GDA needs to be dramatically improved to reflect the importance of the Capital city and its hinterland as an ICT hub of European and global significance, and to keep pace with the needs of businesses and individuals. Continual future investment in connectivity and telecommunication infrastructure is required - with focus required on uptake, performance and availability. An emphasis on fibre connections, high performance infrastructure and improving existing performance in terms of speeds, costs and coverage should be prioritised in order to provide opportunities to compete with international competitors.⁵⁹

3.5.8 Utilities

Economic development within the GDA is dependent on the availability and quality of services and utilities relating to water supply, waste, electricity, gas, broadband and other communication technologies. Being the most populated region within the country, this places significant pressures and demands on finite resources.

Power Infrastructure

The demand for electricity in the GDA region is expected to increase by over 80% by 2025 and will then be 30% of the demand of the island. Up to 240 MW of wind generation is expected to be connected to the Grid in this region. Improvements are necessary in regional power infrastructure in order to maintain security of supply, to attract additional industry, and to allow for the connection of renewable energy sources to the grid.



⁵⁹ Chapter 6 of this document sets out details regarding telecommunication infrastructure and related policy recommendations.

Eirgrid, the agency responsible for the management of the national power grid, have stated that the following developments are necessary to cater for forecast demand in the region:

- An additional investment of approximately €800m through upgrading approximately 450 km of the existing network and building new circuits;
- Strengthening of network into and out of the region to allow the demand to be met by renewable generators located mainly in the west of the country;
- Strengthening of network serving Dublin City load;
- Development to allow north-south flows to by-pass the network serving the Dublin load;
- Construction and connection of new 220 kV stations in north and west Dublin to cater for the rapidly growing developments in these areas;
- Reinforcement of the network to cater for strong growth in Kildare and North Wicklow.

Eirgrid state that, if no action is taken;

- In the medium term, there will be no capacity in the network to cater for new customers and the reliability of supply to existing customers will fall below normal international standards;
- There will not be adequate capacity in the network to allow for excess renewable generation to be exported over the
 planned East-West interconnector; this will curtail renewable generation at times, reducing the commerciality of
 renewable developments and consequently the likelihood of necessary progression.⁶⁰

Waste Management

The quality, availability and cost of waste management solutions continue to be a key competitiveness issue for enterprise in Ireland. Enterprises continue to have concerns in relation to the cost of waste management services and the lack of adequate waste infrastructure and services in Ireland to meet the demands from industrial, commercial and household waste generation.

There is currently some uncertainty about the future direction of Irish waste policy. This uncertainty has implications for the provision of new services and infrastructure by the private sector and also the role of public sector projects. The review of waste management policy has been completed and a cabinet decision on the Governments new policy on waste management (prepared by the Department of the Environment, Heritage and Local Government, and is due to be completed in 2010), will assist in resolving this issue and setting future direction during the life of the RPGs. Regional waste management plans should be re-examined at national level to attract investment in waste infrastructure in a way that maximises potential economies of scale, competition and enables the market to pass on the benefits to businesses and households.⁶¹

Water and Waste-water

The provision of adequate and affordable water and waste water services is crucial to ensure the sustained growth and development of enterprise in the region. Access to secure and competitively priced water supplies, at appropriate quality levels, is core to the delivery of these services. Adequate waste water treatment capacity is essential for environmental sustainability. In several parts of the GDA this has now become a critical issue requiring an early resolution. As part of this resolution, the provision of adequate and affordable water and waste water services also needs to be matched with appropriate water conservation and demand control measures.

At present, treated water supply and sewage treatment in Dublin and the Mid East is primarily undertaken at a sub regional and local level. Substantial investment in the region's water and waste water infrastructure has been undertaken in recent years through the individual local authorities, acting in a co-ordinated manner in cross boundary areas. Continued investment in water services under the current NDP aims to address remaining capacity shortages.

In the recent Forfás (2008) assessment of water and waste water services, from an enterprise perspective a number of issues were highlighted for Dublin and the Mid-East, including insufficient water and waste water capacity in the metropolitan area in the medium term. It is expected that planned water and waste water infrastructure projects identified in this document will address these deficits.

Energy Security and Green Economy

In economic terms, rising fuel costs and social, environmental and financial costs of climate change require change in consumption patterns and use of resources.

In order to do secure long term energy security, focus on alternatives to non-renewable and finite resources such as oil and gas supplies should be prioritised. The Green Economy offers opportunities for job creation and employment, while providing long term solutions to the security of our energy supply. In recent years changes in planning legislation have been introduced in order to aid in the timely processing, assessment and operation of green energy resources and technologies. For example, the Planning and Development (Strategic Infrastructure) Act 2006 was introduced in order to streamline the planning process for strategic infrastructural developments including those relating to major energy developments such as gas infrastructure development, major power stations, wind farms, liquified natural gas (LNG) facilities and gas storage facilities, while the planning regulations have been amended to take account of some forms of green structures as exempted development. Additionally, the Wind Energy Development Guidelines for planning authorities 2006 are designed to ensure consistency of approach to wind energy developments and provide clarity to developers and local communities. The RPGs support these developments in statutory and policy planning processes.

3.6 Economic Strategy - Retailing

The retail sector has continued to be a significant employer within the GDA since the 2004 RPGs were adopted with a number of new developments coming on stream across the GDA. Retailing is important both from an employment perspective and also in its key role in making attractive vibrant destinations and, as part of new developments, playing a key role in revitalising areas. As a key attractor it facilitates the building of strong towns, villages and centres by framing spaces for interaction and leisure activities as well as providing a range of shopping options and choice to consumers.

Since the 2004 RPGs a new Retail Strategy for the GDA was published by the Dublin & Mid-East Regional Authorities in July 2008. The new Strategy updated key information on retail growth and economic trends and also the retail hierarchy and strengthened the policies recommended for Development Plans. The guidance contained within the retail strategy, including the retail hierarchy, complements, supports and recognises the primacy of the settlement strategy hierarchy and the spatial dimension of the economic strategy of the RPGs. This approach, which is essential to the sustainable economic viability of settlements, is supported by the Regional Planning Guidelines.

The vision from the Retail Strategy seeks to promote the vitality and viability of towns centres by

- 1. Planning for the growth and development of existing centres;
- 2. Promoting and enhancing existing centres, by focusing development in such centres and encouraging a wide range of services in good environments which are accessible to all;
- 3. Integrating the provision of high quality retail with mixed use in towns and centres to create attractive, active places;
- 4. Supporting the role of towns centres as places to visit that have strong community and civic functions and role to the surrounding population;
- 5. Enhancing consumer choice by making provision for a range of shopping, leisure and local services, which generally allow choice to meet the needs of the entire community, including partially excluded groups and new areas of population growth;

⁶⁰ Chapter 6 of this document sets out details and recommendations in relation to power supply.

⁶¹ Forfás (2008) Waste Management Benchmarking and Priorities Report.

⁶² Forfás (2009) Statement on Infrastructure – Issues and policy priorities for enterprise development.



- 6. Supporting high-quality, well designed efficient, competitive and innovative retail in town centres and an overarching objective in local/town plans, mixed with leisure, tourism, culture, business and other sectors and;
- 7. Improving accessibility, ensuring that existing and new development is, or will be, accessible and well served by a choice of means of transport and where possible within walking distance.

The Strategy clearly recognises the primacy of Dublin City Centre as a national destination for retail with a range of higher order and specialist retail uses and the importance of ensuring that this position is maintained through continued renewal and improvement to facilitate competition and choice within the city retail sector, and this policy is supported by the RPGs. As the most accessible location in the GDA, Dublin City Centre should remain the largest retail destination in the GDA. The Strategy identifies within the hierarchy the key towns for future growth in retail across the GDA consisting of Dublin City as the primary Retail Centre (Level 1); major town centres and county towns (level 2); and sub-county town and district centres (level 3). The policy outlines the role of level 2 centres as important places where retail is one element of their role as multi-functional places and that they are supported by a necklace of spatially balanced lower order centres providing for more frequent regular needs. The retail hierarchy of the Retail Strategy for the Greater Dublin Area is shown in Figure 8.

The retail strategy seeks to provide important local retail facilities proximate and/or within the catchment population reducing outflows from catchment areas of key towns; sited at accessible locations by public transport and walking and cycling as much as possible and reducing outflows from catchment areas to removed destinations impacting on carbon emissions and traffic congestion. The RPGs recognise the role of the Retail Strategy for the Greater Dublin Area in supporting a coordinated and integrated approach to retail and commercial developments; particularly in relation to supporting the key functions of growth towns and making places lively and attractive places to work, visit and live.

Figure 8: The retail hierarchy of the Retail Strategy for the Greater Dublin Area 2008-2016

| Retail Hierarchy for the GDA | | | | |
|------------------------------|--|--|--|--|
| LEVEL 1 | METROPOLITAN CENTRE | | | |
| | Dublin City Centre | | | |
| LEVEL 2 | MAJOR TOWN CENTRES & COUNTY TOWN CENTRES | | | |
| | Fingal: Swords, Blanchardstown | | | |
| | South Dublin: Tallaght, Liffey Valley | | | |
| | Dun Laoghaire: Dun Laoghaire, Dundrum | | | |
| | Wicklow: Bray, Wicklow | | | |
| | Meath: Navan | | | |
| | Kildare: Naas / Newbridge, Leixlip (including Collinstown*) | | | |
| LEVEL 3 | TOWN AND/OR DISTRICT CENTRES & SUB-COUNTY TOWN CENTRES (Not definitive list, see 2008 GDA Retail Strategy) | | | |
| | Dublin City: Finglas, Northside Shopping Centre, Ballyfermot, Rathmines, Crumlin Shopping Centre, Donaghmede Shopping Centre, Omni, Ballymun, Point Village and Poolbeg | | | |
| | Fingal: Malahide, Balbriggan, Skerries, Charlestown. | | | |
| | South Dublin : Adamstown, Crumlin (Ashleaf), Clonburris/Balgaddy, Clondalkin, Fortunestown, Kilnamanagh, Lucan, Rathfarnham | | | |
| | Dun Laoghaire Rathdown: Stillorgan, Blackrock, Cornelscourt, Nutgrove, Cherrywood. | | | |
| | Wicklow: Greystones, Arklow, Blessington, Baltinglass | | | |
| | Meath : Ashbourne, Dunboyne**, Dunshaughlin, Kells, Trim, Laytown/Bettystown, Enfield. | | | |
| | Kildare: Celbridge, Kilcock, and Maynooth, Kilcullen, Athy, Kildare, Monasterevin, Clane. | | | |
| LEVEL 4 | NEIGHBOURHOOD CENTRES, LOCAL CENTRES-SMALL TOWNS AND VILLAGES | | | |
| LEVEL 5 | CORNER SHOPS/SMALL VILLAGES | | | |

^{*}Leixlip and the Collinstown area will develop along a 20 year time period reaching level 2 status.

^{**}Dunboyne will gradually develop over the next 20 years towards level 2 status

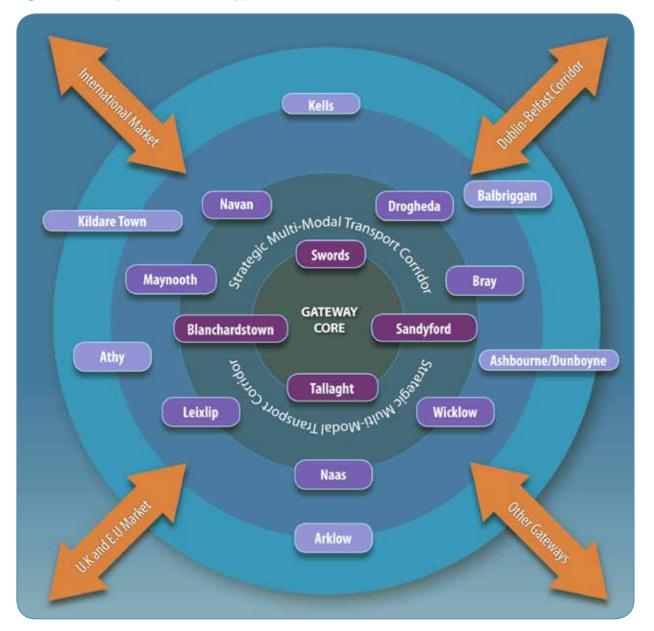
3.7 Economic Strategy – The Spatial Dimension

The Regional Planning Guidelines set out the regional policy parameters and key principles for the direction of economic growth in the GDA. The core elements of these have been explored in the sections above.

In seeking to support these principles, the RPGs sets out a series of recommendations to Local Authorities and key bodies which will assist in progressing economic growth within the GDA so that it is both sustaining and sustainable. As a spatial policy, the RPG economic strategy is described by the graphic map below, demonstrating:

- 1) The continued development of the Gateway as an international focus for economic activity.
- 2) Development of economic clusters, centred on strategic economic growth centres and supporting economic growth towns.
- 3) Focusing growth on the multi-modal transport corridors of the GDA, which connect the economic growth centres within the region i.e. the Dublin City-region Gateway and beyond to other key towns and NSS gateways in adjoining regions, benefiting from national investment on these corridors.

Figure 9: Strategic Economic Strategy for the GDA



3.7.1 Supporting the Polycentric Gateway and Primary Economic Growth Towns

The Dublin city region and a number of growth centres within the polycentric gateway- Swords, Blanchardstown, Sandyford and Tallaght- have been identified as drivers within the core of the GDA, for sustained international and regional economic development and growth.

Outside of the Gateway core area, the Primary Economic Growth Towns of Navan, Naas, Bray, Wicklow, Drogheda, ⁶³ Maynooth/ Leixlip, should be promoted as anchors for regional enterprise. These growth centres are also important in delivering balanced regional development by serving their urban and rural hinterland areas and should be prioritised for economic development and investment to redress the imbalance of residential development and jobs and emergence of dormitory areas.

In order to deliver the GDA as an attractive international destination for business it is imperative the city region and identified strategic economic growth centres continue to be a focal point for regional population growth and employment in order to sustain and attract economic activity and build upon the significant investments made to date in these areas. In achieving this, the 'critical mass' concept should be a core objective, supported by density levels which support competitiveness, sustainability and create opportunities for economies of scale to justify first class and strategic infrastructure provisions and to take full advantage of international transport hubs such as Dublin Airport and Dublin Port.



Opportunities also exist for Planning Authorities and Enterprise agencies, together with other relevant stakeholders, to take a proactive role in identifying appropriate locations for strategic development zones for employment and develop planning schemes to deliver these areas for economic development. These strategic locations should be supported by existing or planned multi-modal public transport infrastructure and/or international transport hubs, adequate water services, broadband and next generation of communication technology, sustainable energy supplies. The creation and support of a high-quality urban and natural environment, supported by a broad range of retail, professional and tertiary services, access to second and third level education, childcare and health services are also essential components in creating an attractive environment to live and work.

⁶³ While Drogheda Borough area is within the Border Regional Authority area, the surrounding environs and connections extend into the GDA.

Regeneration programmes also provide an opportunity to develop and implement new approaches to planning and enterprise and attract new investment, within the existing footprint of the metropolitan area and growth towns. Good physical planning can promote these urban centres as innovative and attractive places to do business as well as meet the property and service needs of prospective clients. All these measures are important to support the GDA as a frontrunner in attracting FDI and value added employment sectors, and building upon existing employment sectors.

3.7.2 Promoting Economic Convergence and Clustering Effects in the GDA

To realise the economic potential of the gateway and identified strategic employment centres, sectoral strengths should be developed and promoted. In this regard a number of thematic development economic areas have been identified, the core of which are pivoted around the main growth settlements, with smaller settlements in each cluster providing a supporting function.

3.7.3 Gateway Core Economic Area

Box 4: Gateway Core Economic Area

City Region including Primary Economic Growth Towns of Swords, Blanchardstown Tallaght and Sandyford

The development of a high class transport system is being developed in the region including metro, luas, rail lines and national roads, which are required to support the attractiveness and competitiveness of the Gateway region. The role of existing economic corridors and connections within Economic Core Areas is also recognised as being important in promoting and developing sectoral opportunities, for example, the M1/Dublin Belfast rail corridor is a well established economic corridor linking the two largest cities on the island, taking in a number of port and airport locations. Other multi modal corridors developed within the country provide strategic linkages between the Dublin Gateway and other Gateways. Within the Gateway core area the delivery of Metro North may also provide opportunities to develop new integrated economic development areas or regenerate existing sites and to broaden sectoral business opportunities at strategic locations, taking advantage of fast access to the Airport and the City centre.

Within the gateway core, the city centre has an important role as a location for attracting international investment, creating synergies and multipliers and promoting the wider GDA.

Into the future, the GDA should promote itself as a SMART region, with the Dublin Gateway, and particularly the city centre as a 'SMART City', building upon the strengths of the highly educated workforce and well developed research ecosystem and develop centres of excellence in knowledge based and higher value added sectors such as Pharma and Biotechnology, Internationally Traded Services and ICT- all of which are key sectors for attracting FDI. Advanced producer services, such a legal, accounting, actuary and marketing and other such sectors are important areas for generating high value added employment, as well as communications networks and broadband.

The development of these clusters and sectors is dependent on the effectiveness of the education sector together with skills retention being aligned with, or imputing into industry and commerce. Therefore establishing business relationships between universities, third level institutes and firms should form part of the objectives in developing the SMART economy and cluster development. The Gateway Cluster also includes 'traditional' employment sectors such as manufacturing, heavy and light industry and maritime business. The development and diversification of existing manufacturing sectors and traditional industries, together with promotion of higher order retail provisions and domestically traded services should also be enabled as they have an essential employment role in the Gateway.

Box 4: Gateway Core Economic Area -(CONTINUED)

In competing with other international cities and markets for FDI, image is everything. In this regard the further development of the cultural sectors, tourism brand, recreational strengths and natural amenity areas should be promoted.

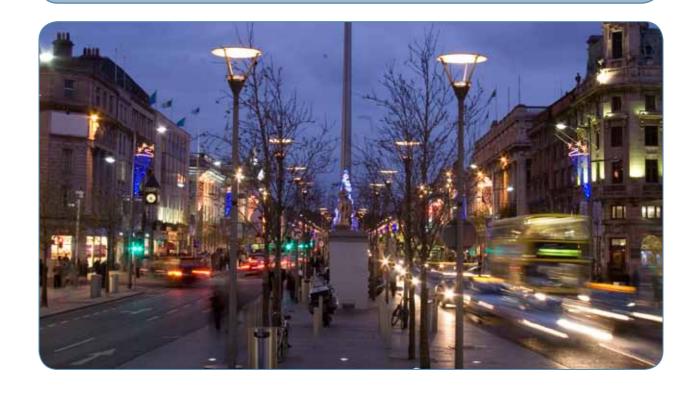
The City core area is central to this Economic Area, with a national and international role for Government, business, legal activities, finance, media and ICT, and is highly connected within the Gateway and beyond.

Swords, together with the Airport has established cluster activity in aviation infrastructure & airport related services, and transport & logistics. Further north, sectoral strengths exist in agri- food production. Future opportunities should be explored in high-tech manufacturing and high-value services and science and technology.

Blanchardstown includes sectoral strength in its higher order comparison shopping at its core while Blanchardstown Institute of Technology forms part of an emergent cluster for knowledge based industry given the number of I.T. related companies existing in the area. The latter provides an opportunity to add to the 'SMART City' region by building relationships between educational institutes, enterprise authorities and employers.

In Tallaght, opportunities exist to promote intellectual development zones and clustering activities in relation to knowledge based business, research and development, health sector and convergence opportunities within these sectors.

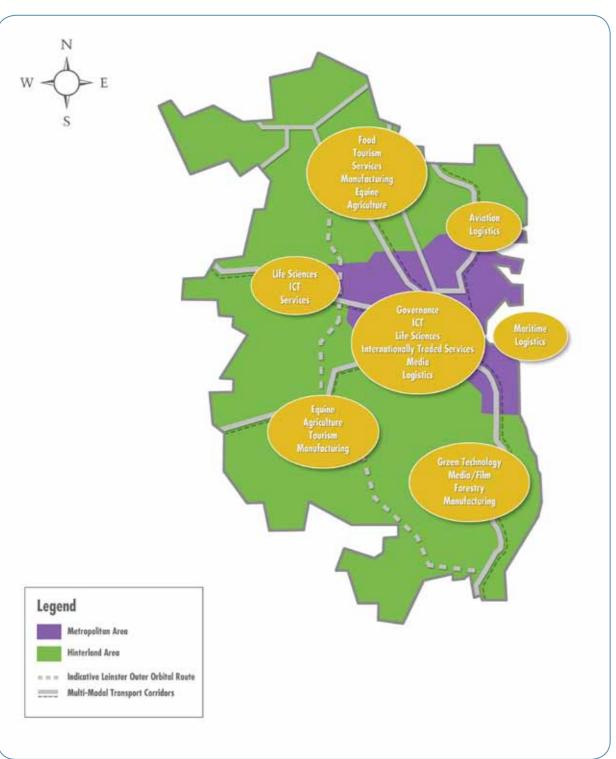
Sandyford has experienced rapid growth in high value business services and opportunities exist to build upon high value added jobs and development. While the role of manufacturing has declined, it remains a strong component of employment in the area, and diversification options should be explored in accordance with relevant departmental planning guidance documents.



3.7.4 Primary Economic Growth Towns

The primary economic growth towns are the main centres of economic activity outside the city region. These have been prioritised for regional population growth and serve a pivitol role in serving their urban areas and wider suburban and rural hinterlands in terms of employment and provision of goods and services. These growth towns are located on multimodal growth corridors which provide locational advantages in terms of access to strategic rail and road networks to gateways, ports, airports. Targeted investment in physical, green and social infrastructure into these areas also provides the most efficient and effective long term use of resources to develop enterprise, retain and develop talent, and attract new economic activity and business.

Figure 10: Existing Sectoral Convergence and Clustering Effects



Box 5: Navan Core Economic Area

Navan is the county town in Meath, and principal economic growth town in this core economic area. Kells and Trim are also within this core economic area. Locational strengths include ever improving multi-modal growth corridor linkages such as the M3 and Navan Rail Line, providing essential linkages to the gateways and other primary economic hubs, which support business flows and attractive locations for investment. The Leinster Outer Orbital Route, if developed, would also provide strategic economic linkages to the other parts of the Mid East Region and the primary economic growth centres in this sub region.

It has a diverse employment profile with one of the largest employment sectors being the public service. Manufacturing, retail, health services construction and other service sectors also make an important contribution to employment, together with Tara Mines. Potential remains in developing and expanding business and technology such as manufacturing, international services and higher order retail in the town and its environs. Health and medical services together with the development of a digital economy also have potential as strong economic sectors in the region. The 100 acre IDA business park and SDZ at Clonmagadden provide opportunities to cater for future clustering activities. Collaboration and the building of strong relationships between Enterprise agencies and Meath County Council, to ensure targeted employment opportunities are suitably marketed, facilitated and developed, appropriate to relevant planning policy is strongly advocated.

Within the Navan core economic area, one of the supporting towns is Kells, also located on the same multi modal growth corridor. This settlement is identified in the RPG's as a secondary economic growth town and it is envisaged this town will provide a supporting and complimentary role to Navan. Potential exists to develop Kells as part of a tourism cluster and supporting the service and manufacturing role of the County Town and northwest region of the county. The Meath Data Base should be used to inform sectoral opportunities in tandem with targeted investment.

Box 6: Drogheda Core Economic Area

Drogheda, one of the largest towns in Ireland, is a designated primary growth centre within national and regional spatial policy. Locational advantages include multi regional location, proximity to coast and ports and position along M1 Belfast to Dublin Economic Corridor. Though primarily located within the Border Region, the settlement extends into parts of Meath and has a notable economic sphere of influence within the GDA in terms of service provisions and attracting labour supply from areas such as Meath, Louth and Northern Ireland. Wholesale and retail trade, together with health and manufacturing have been prominent employment sectors in the town (Lourdes Hospital is a large employment sector in Drogheda and a number of individual firms also make a significant contribution to employment in the areas of food processing, beverages and medical instrument production). In recent years the retail base offer has been expanded, consequent of developments such as Scotch Hall. IDA supported businesses, in a number of business parks located on the edge of the settlement are key elements. Continued growth and employment opportunities for the town and its environs, availing of its multi-modal transport connections, as befitting its primary economic growth centre status, is desirable in order to strengthen the opportunities and benefits to the GDA of the E1 International economic corridor from Drogheda, through Meath, Fingal and to Dublin City and Wicklow. The development and diversification of existing traditional employment sectors, together with taking advantage of the growing pattern of convergence and clustering, provide sectoral opportunities in the areas of high value added employment manufacturing and traded services. Higher order retail is also a strength for this core economic area. Building upon the historic settlement patterns and heritage of the area could also be used as part of a branding exercise for the area as part of developing the tourism sector.

Box 7: Naas / Newbridge Core Economic Area

Naas is the county town in Kildare, and principal economic growth town in the Core Economic Area. As part of this Core Economic Area the town of Kilcullen has a supporting role in terms of linked economic activity with Naas and Newbridge and with a labour force to serve economic growth. Locational advantages of the Naas/Newbridge Core Economic Area include its location on a multi modal corridor including the N7/M7 and rail service from Dublin to Galway (with a commuter train service to Dublin from Sallins). Its proximity to Dublin however has seen it take on a dormitory function in recent years. The largest employment sectors include manufacturing and commercial services. Within the core economic area, Togher Business Park and Millennium Park are being developed as areas for commercial, logistical and industrial enterprises. Office based development, such as public administrative functions are also a notable employment area. The area also has a strong agri food sector. Newbridge, which has a large wholesale and retail employment sector, is served by rail transport and has close linkages and interactions with Naas in terms of employment flows, with both towns having feeder and destination movements. Blessington, as a smaller town in a rural catchment, can connect with Naas and Newbridge and have an employment role in this core economic area, serving a large catchment area.

The Naas/Newbridge Core Economic Area also benefits from being located beside the Curragh and established premier bloodstock industry. In order to support Naas as a self sustaining growth town and the Core Economic Area as a viable employment centre, sectoral opportunities in high tech manufacturing, ICT, food production, tourism and bloodstock should be promoted and developed. An emerging sectoral theme, for Naas in particular, is also in the area of private healthcare.

Box 8: Maynooth/Leixlip Core Economic Area

The towns of Maynooth and Leixlip have been identified on equal footing as the principal economic growth centres in this cluster, with both having interconnecting sectoral strengths. The cluster also includes two additional supporting towns. Kilcock and Celbridge have supporting roles in this core economic area.

Locational strengths include the location of the cluster on a multimodal transport corridor, served by improving rail and national road networks. The future provision of other projects such as the LOOR would further enhance the transport linkages.

At the Intel Campus at Leixlip, in addition to manufacturing, the campus includes the Intel Innovation Centre, for researching and developing leading-edge IT solutions and technology. The centre, in partnership with NUI Maynooth, has set up the Innovation Value Institute, a multi-disciplinary research and education institute which is designed to help achieve sustainable economic value from IT and quantify and understand the true business value of strategic IT investments. Hewlett Packard HQ is also located in Leixlip and in addition to its manufacturing operations, the campus includes a Strategic Research and Development Centre at its site. In March 2006, Hewlett-Packard Financial Services announced the expansion of its headquarters in Leixlip, in the high value financial services jobs sector, adding to the existing HP Financial Services in Leixlip.

This cluster has already established synergies between the education sector (NUI Maynooth) and major employers (The C-Set approach may further enhance this). Building upon this, the focus of employment cluster activity should be within the hi-tech/bio tech sectors, research and development, ICT and manufacturing- all of which should be used to brand the cluster as a centre of excellence in the knowledge based economy.

Box 9: Wicklow/Arklow Core Economic Area

Wicklow Town is the primary centre in this core economic area, however, the sphere of influence extends to a large hinterland and affects areas such as Rathnew, Ashford and Rathdrum. Arklow, a large growth town, is located at the most southern part of the county, and is on the same multi modal corridor on the east coast axis as Wicklow. Arklow is designated as a secondary economic growth town within the Wicklow/Arklow Core Economic Area. Locational strengths include the location of this core economic area on a strategic European designated transport corridor (EO1) with this road linking port provisions along the east coast such as Dublin, Wicklow Port and Rosslare, important entry points to the region and the rail service along the east coast of the county, leading to Rosslare. Wicklow town has seen a shift in employment growth from traditional manufacturing and transport/logistics to professional services, public administration and commerce, financial and business services. Despite the fact that warehouse and distribution activities have experienced a relative decline, they continue to be a significant source of employment in Wicklow Town, supported by the Port. While Fishing, Agriculture and Forestry make up a small sector of the overall economic profile of the town and its environs, it has shown growth over the last census period⁶⁴, in contrast to national trends. Within Arklow, there has traditionally been a high dependence on manufacturing and construction, however employment in these sectors has been affected by the economic fluctuations of recent times. The town also has a strong commuter based workforce, travelling to Dublin.

The Core Economic Area should seek to develop Smart business which can collaborate and develop through relationships with other such centres in the GDA and adjoining regions. The ongoing collaboration between Wicklow Co. Co. and Carlow IT at Clermont College at Rathnew to develop the facility as a centre of excellence in technology development is supported in the RPG's. Other sectoral areas with potential for further development includes the pharma and transnational corporation (TNC) enterprises.

A shift of emphasis to high value added manufacturing, in tandem with strengthening transport and business links between the port and other ports in the GDA, such as Dublin Port and exploitation of tourism potential from the existing man made and natural assets of the area should also be considered. Promotion of the key transport corridors as economic drivers and improvements to support economic growth and competitiveness is also recommended.

Box 10: Bray/Cherrywood/Greystones Core Economic Area

Bray is the primary town in this Core Economic Area and includes Fassaroe within its environs. Cherrywood, located on the intended Luas line to Bray and Greystones, also forms part of the identified economic area. Locational strengths of this economic area include the developing LUAS connections, location within the metropolitan area of the gateway region and access to strategic national road corridors such as the N11 and M50.

Bray town has a broad number of employment sectors, with manufacturing, wholesale and retail, real estate and business activities and education, health and social work accounting for the largest employment sectors. Due to its proximity to the city, Bray has a large commuter based workforce however the employment catchment of the town extends as far as Wicklow Arklow and Gorey. Fassaroe is considered a suitable location to facilitate long term and large scale economic growth and should be developed in tandem with consolidation of Bray town and necessary transport and access linkages to the wider area. Further development potential also exists in the Film & TV Production sector and expansion of the pharmaceutical sector.

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Secondary economic growth centres have an important supporting and complimentary role in developing economic growth and sectoral strengths in tandem with the primary economic growth towns, within their respective core economic areas and large hinterland areas. In developing secondary economic growth centres, particularly those which are not aligned with primary economic growth towns in a core economic area, these areas should be developed cognisant of their supporting role and settlement character within the region and relative to supporting physical, social, technical requirements and investments.

Athy

Athy heritage town and its environs serves a wide catchment area along the south eastern part of the GDA, and has close linkages and interactions with the adjoining south east region settlements, including the county town of Carlow. The consolidation of Athy town's employment and service sectors is supported. The development of high value added manufacturing sectors and internationally traded sectors in tandem with I.D.A support around transport corridors and routes such as the rail station are also supported together with continued investment in education and skills development.

Ashbourne/Dunboyne

Ashbourne is the second largest town in County Meath and has experienced significant economic growth since the 2004 RPGs. This has included the construction of a new town centre scheme comprising both office and significant retail floorspace, the expansion of the Ashbourne Industrial Estate and development of Ashbourne Business Park. Growth in the town has undoubtedly been influenced by proximity to the Metropolitan Area of Dublin and the Dublin International Airport. This move towards more holistic and sustainable development is illustrative of the transitioning of Ashbourne away from a dormitory hinterland context towards a more urbanised, metropolitan character. As a moderate sustainable growth town, Ashbourne has an important role in service provision for its large catchment. It is thus expected that enterprise and employment will continue to expand to meet the requirements of the population of the town and adjoining areas. The base conditions for a strong enterprise sector are present in Ashbourne and developments in recent years are illustrative of the entrepreneurial spirit in the town. In the short term, existing businesses should be supported and opportunities to further expand economic development in the town should be fostered. In particular, Ashbourne's location in proximity to the metropolitan area of the city and Dublin airport and its high quality transport links should be capitalised upon in attracting new industry. The future development of the adjoining settlement of Ratoath will be linked to that of Ashbourne and Dunshaughlin and should aim to capitalise on the synergy with those settlements. In particular, Ratoath has a large, well educated commuter labour force which is a valuable resource for future local economic development in a sustainable manner. It is important that Ratoath should become more self sustaining in terms of providing employment opportunities locally. Therefore, sustainable higher end economic investment opportunities consistent with the size of the town should be supported. Dunboyne, a large growth town II in the metropolitan area, has yet to realise its long term potential but plays an important role in this economic growth area given its status and location on a developing rail line. It is also located strategically on the edge of the Gateway Core in an area with a high FDI presence. The designation of Dunboyne within the GDA retail hierarchy illustrates the economic potential of the town over a designated time span. This economic growth area experiences high levels of outward commuting patterns to the Dublin area, and it is important that economic stimuli measures are underpinned by necessary infrastructure investment, particularly in relation to water and waste water services.

Kells

(See Navan Cluster above)

Arklow

(See Wicklow Cluster above)

Balbriggan

Balbriggan has been identified as a secondary economic growth town having regard to the important local employment role of the settlement in the north of Fingal County Council Area. A number of employment areas exist which can support future enterprise. In particular, Stephenstown Industrial Estate, an industrial park west of Balbriggan, has the ability to cater for high quality science and technology related enterprise in proximity to a large residential catchment area, subject to necessary infrastructural provisions.

Kildare

Kildare town has a number of unique assets which sets it out as a major international tourism destination; particularly in relation to its signficant heritage and cultural features within the town and in the surrounding districts including the Curragh, Pollardstown Fen, the Irish National Stud, Japanese Gardens, Curragh Racecourse (home to the 2,000 Guineas and Irish Derby) as well as a thriving town centre with a strong retail offer, which has been improved with the development of a large outlet centre. Kildare town has the opportunity to develop and promote its economic base to improve employment opportunities within the town for the surrounding population through capitalising as a tourism destination and as attractive centre as a base for business, particularly bearing in mind its excellent transportation links to the M7 and M8 and with a high quality rail service alongside the strong heritage of the bloodstock industry and in providing a key economic and cultural centre for the Defence Forces in the GDA. This opportunity shall be framed through sustainable local area plans to improve the town, promoting new opportunity sites for rejuvenation and revitalisation; prepared in the context of protecting the rich ecological and environmental diversity and carrying capacity and the cultural assets which make this town a unique and attractive place to live, work and visit.

3.7.6 Dublin-Belfast Economic Corridor

The 2007 National Development Plan identifies the Dublin-Belfast Economic Corridor as a key gateway corridor for the island of Ireland, complimented by the emerging "Atlantic Corridor" consisting of the Gateways of Cork, Limerick, Galway, Waterford & Sligo. The importance of these corridors for promotion and collaborative planning is emphasised by the NDP.

The NSS highlights the importance of the strategic connection of this corridor as a significant asset, in line with the European trend of increased cooperation between cities to enhance competitiveness; and that this interaction has major potential benefits. The NSS highlights the need to secure and enhance the role of towns strategically placed between these two major centres. It is important that the economic strategies in each Council area recognise the role of the Corridor in stimulating investment opportunities, engaging in branding and international promotional link-ups and in working with State agencies; and in encouraging cooperation with other research and business bases located within the corridor area. Such existing business bases, located in the existing urban areas of the Corridor, including (but not limited to) South Drogheda environs, Swords, Balbriggan and Dublin City will play a key role in the future economic development of this international multi-modal corridor.



3.8 Strategic Policy and Recommendations

Strategic Policy EP1

That the Dublin Gateway is recognised as an international driver of enterprise within the GDA and is supported by regionally designated strategic employment centres, serving the urban and rural hinterlands. These economic growth areas which take advantage of nationally important transport hubs and corridors, shall provide the focal point for diverse regional enterprise and economic clustering activity, by: steering population growth and economic critical mass to designated RPG strategic growth centres of the identified economic areas or gateway region; capacity building in skills, innovation and education; critical infrastructural investment in ICT, public transport, water services; integrating high quality social and amenity provisions to create an attractive landscape and working environment; providing energy security supported by green and renewable technologies; rationalised planning approaches to employment based land use zoning and enterprise objectives.

Strategic Policy EP2

To seek sustainable economic growth across the GDA, by the promotion of identified core economic areas across the GDA in both the Dublin and Mid East Regions to facilitate new employment opportunities for existing populations and seek to reduce the volume of unsustainable long distance commuting.

Strategic Recommendations

- Deliver the GDA as an attractive international destination for business, with the city region and identified strategic economic growth centres as focal points for regional critical massing and employment growth, in order to sustain, promote, develop and attract economic activity.
- Support the development of linkages between strategic urban employment centres and rural based settlements in terms of skills, promotion of business links, communications infrastructure and transport corridors to ensure balanced regional development and employment opportunities for dispersed settlements.
- ER3 Encourage mixed use settlement forms and sustainable centres, in which employment and residency are located in close proximity to each other and strategic multi-modal transport corridors, which promote a choice of sustainable travel modes, green travel choices and to arrest long distance commuter trends and congestion.
- Support entrepreneurship and enterprise at appropriate locations which incorporate best practices in reducing greenhouse gas emissions and which endorse responsible environmental and social practices.
- ER5 Develop the GDA as regional leader in the 'Smart Economy' and the Dublin Gateway as a 'SMART City' by:
 - Supporting the recommendations of the *Economic Development Action Plan for the Dublin City Region* and related 'strands' of the Action Plan.
 - Supporting the provision of a Mid East Economic Development Action Plan, developed and branded in association with the local authorities and national and local enterprise agencies, taking account of the locational behaviour and requirements of the next generation of FDI projects, infrastructure capabilities, and importance of critical massing and capacity building in skills and education.
 - Supporting innovations in knowledge and technology flows through such initiatives developed between NUIM and Intel; the UCD/Trinity Innovative Alliance, and Enterprise Irelands Technology Transfer Strengthening Initiative and other forums.
 - Developing and promoting regional specialisms and centres of excellence with the Gateway region and in the primary economic growth towns and their clusters.
 - Support the social economy in the areas of arts, culture and tourism, together with community enterprise, which contribute to the quality of life of the GDA population.

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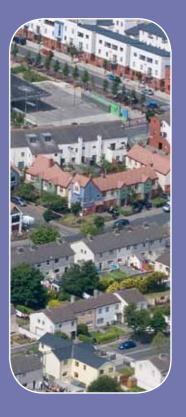
- Support the development of economic clusters and sectoral opportunities around the RPG strategic growth towns and core economic areas and support policies which facilitate opportunities for clustering activities which have a tangible locational requirement outside these centres including those relating to green economy projects such as renewable energies e.g. wind energy and bio fuel crop production; innovation and eco parks; food production and agri-business; horticulture and rural based tourism.
- Promote and support the role of Dublin Airport as the primary gateway to Ireland and the GDA and as an important employment hub and business location in the region through land use planning which facilitates future airport capacity needs and by improved transport linkages to the city and region.
- Develop policies which support opportunities within the Green Economy, consistent with best planning practices. 65 M
- Promote factors of competitiveness and exploit opportunities and mechanisms for the realisation of entrepreneurship and sustainable businesses including diversification of services and manufacturing sectors through the provision of suitably zoned, serviced lands and soft and hard infrastructural investments in a planned and strategic manner.
- Work with employment and enterprise agencies to identify and deliver strategic employment sites for development at suitably identified locations as advocated in this strategy, such as Intellectual Enterprise Zones, SDZ's and IDA supported sites and examine regional consistencies in land use zoning for enterprise. Current employment related land use objectives in Development Plans should be reviewed to take account of the RPG economic strategy.
- ER11 Continue emphasis on enhancing sustainable transport connectivity through the region and the city, including the operational programme of works advocated under Transport 21.
- ER12 Continue emphasis on the development of broadband infrastructure and services in conjunction with DCENR and the private sector for the GDA.
- ER13 Recognise that ports have an important role in supporting export led growth. In order to ensure that port capacity constraints do not hamper growth in the export sector, sufficient port capacity, associated facilities and port related services are required.
- Direct new retail floor space into existing centres with significant population bases and those centres selected for additional population growth. Future provision of significant retail developments within the GDA should be consistent with the policies and recommendations of the Retail Planning Guidelines for Planning Authorities and with the Retail Planning Strategy for the Greater Dublin Area 2008 (and as updated).
- ER15 Promote sustainable tourism practices and leisure activities at appropriate locations and the delivery of a high quality built environment to support the attractiveness of the region for commerce.
- Seek proactively the delivery of new sustainable water supply, waste water treatment and waste management infrastructure without which the future development of the GDA will be impossible.
- Encourage and facilitate new employment opportunities within hinterland towns with high levels of long distance commuting amongst the existing population to a) provide new local employment opportunities and assist in reducing long distance commuting patterns and b) build up the local economy to a more locally sustainable level and generate a better balance of employment opportunities across the GDA region as a whole.
- ER18 In achieving sustainable and balanced employment within the GDA, the Regional Planning Guidelines support the improvement of jobs ratio levels in each of the constituent local authorities of the region and each local authority should include an objective or series of measures, compliant with the RPG economic strategy, to foster employment creation and maximise the jobs potential in growth towns. The RPGs also support opportunities to promote the growth of service employment and enterprise in designated economic growth centres complementary to the role of the Dublin Gateway.

⁶⁵ Including opportunities for low carbon in terms of energy, low water consumption etc.

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Settlement Strategy, Population and Housing





Settlement Strategy, Population & Housing

4.1 Introduction

This chapter sets out the Settlement Strategy for the RPGs, guiding the future direction of growth and investment by setting and defining the settlement hierarchy and the identification of key growth areas within the GDA. Within this chapter, the housing and population needs of the GDA are examined in detail with guidance for each Local Authority regarding targets and distribution for future Development Plans. This Strategy is driven by the spatial settlement policies of the *National Spatial Strategy*, and the recommendations contained in *Smarter Travel- A New Transport Policy for Ireland*. The Settlement Strategy seeks to achieve the Vision for the RPGs though the policies and recommendations contained below.

Since the introduction of the first RPGs in 2004 and their non-statutory⁶⁶ predecessor the Strategic Planning Guidelines of 1999, growth in the Greater Dublin Area has moved steadily towards a more coherent and cohesive land use form, and the move to direct growth towards designated towns has been, in general, quite successful. In reviewing and revising the 2004 RPGs, the 2010 Guidelines aim to consolidate further this coordinated pattern of settlement and continue to direct growth into compact, sustainable urban forms. It is essential to the success of the RPGs that the approach adopted in the provision of new housing over the next 12 years supports comprehensively the Settlement Strategy and thus key public transport investment and existing assets, to achieve a stronger integration of land use and transport across the Regions.

This RPG seeks to build on the policy direction adopted by the 2004 RPGs and the investment decisions of Transport 21 by focusing on the importance of coupling investment in new housing and associated services to investment in public transport infrastructure. The success of this direct link is critical, both as an economic benefit to the State and to business in the GDA, to the people who need new homes to live, and the global environment by reducing the carbon cost by ensuring sustainable travel patterns. In setting the regional policy recommendations to achieve these goals, it is recognised that there are significant challenges, but it is imperative that local authority plans in the future implement the recommendations, targets and direction set out in this chapter to achieve the vision of the RPGs and the NSS.



66 At the time of publication in 1999 the SPGs were a non-statutory document. The adoption of the 2000 Planning Act gave retrospective statutory recognition to the SPGs.

4.2 Population & Housing Trends

The 2006 Census results show that population growth experienced in the GDA has been at a very high level in the last decade. The most recent Census, 2006, gave a population figure for the GDA of 1,662,536. This is an increase of 127,090 in the four years since 2002 and an increase of 258,514 since 1996. The table below sets out in summary the population change by Council from 2002 to 2006.

Table 3: Population Change, 2002 to 2006 Census.

| Population | 2002 | 2006 | Increase | % Increase |
|----------------|-----------|-----------|----------|------------|
| City | 495,781 | 506,211 | 10,430 | 2.1 |
| DLR | 191,792 | 194,038 | 2,246 | 1.2 |
| Fingal | 196,413 | 239,992 | 43,579 | 22.2 |
| South Dublin | 238,835 | 246,935 | 8,100 | 3.4 |
| Total Dublin | 1,122,821 | 1,187,176 | 64,355 | 5.7 |
| Kildare | 163,944 | 186,335 | 22,391 | 13.7 |
| Meath | 134,005 | 162,831 | 28,826 | 21.5 |
| Wicklow | 114,676 | 126,194 | 11,518 | 10.0 |
| Total Mid-East | 412,625 | 478,360 | 65,735 | 15.9 |
| TOTAL | 1,535,446 | 1,666,536 | 131,090 | 8.5 |

Population change in the GDA is a complex topic. High growth in population occurred in areas of new housing development such as Fingal and Meath and factors such as falling occupancy rates within more mature areas has resulted in losses of population in some locations as houses pass through the family life cycle. Population growth also occurred in areas of no new housing since in the 1990s and the early part of this decade as the "baby-boom" part of the population cycle increased occupancy in existing housing stock. The impact of migration has also increased population in various locations across the GDA, chiefly in strong employment centres at key towns in both the metropolitan and hinterland areas, particularly within Dublin City.

In relation to housing completions in the GDA the pattern from development of new housing also shows the influence of the 2004 RPGs. Through increased focus on consolidation, the Dublin Region now represents approximately 70% of all house completions for 2008, up from a low of 58% in 2001. The delivery of the 2004 RPGs in the first years regarding housing growth and settlement hierarchies was a significant challenge set for each Council. For many Planning Authorities lands zoned in the 1990s continued to deliver new housing in many areas; some of these not necessarily within RPG designated growth locations. The original figures published set ambitious targets in seeking to deliver a much higher percentage of new houses within Dublin than was the trend at the time, with a flip-side implication that the Mid-East counties would no longer be central in meeting demand for housing emanating from the Dublin Region. Alongside this, the lower level outlook adopted (reflecting a slowdown at the time) has proven to be conservative, as the level of economic growth and immigration experienced was much higher than projected, creating higher demand for housing across the GDA. The revised RPG figures adopted in 2007 rectified this issue by changing the population projections to higher levels, using the results of the 2006 Census.

4.3 Population & Housing Targets for the GDA

4.3.1 Introduction – population targets

This section sets out the requirements of each Council with regard to housing land provision and describes the methodologies used in the analysis of population targets and the allocation of future housing to key locations.

In moving forward into the period 2010 to 2022 the RPGs re-examined the population and housing targets for each Council area. The population and housing policy of the NSS is translated through the RPGs to the Council level. The NSS prescribes a population growth target figure for each Region within the State which the RPGs analyse and set out the future population and housing targets for each County and City Development Plan, in line with NSS spatial policy. Alongside this regional target, the DoEHLG have also prescribed target figures for each Gateway. The figure for the Dublin Gateway covers the area defined by the Metropolitan area. The minimum requirement for population allocation for this area for 2016 is 1,373,900 and for 2022 is 1,488,700. These figures, issued in combination, form the core framework for the development of population and housing targets for each Council contained in this document. The RPG targets inform Development Plans of the seven Planning Authorities in the GDA through the Core Strategy and also the Housing Strategy. The population targets for this period for the GDA RPGs are set out below in Table 4, which also shows the figures for the State.

Table 4: Regional Population Targets 2010, 2016 and 2022

| | 2008 | 2010 | 2016 | 2022 ⁶⁸ |
|----------|-----------|-----------|-----------|--------------------|
| Dublin | 1,217,800 | 1,256,900 | 1,361,200 | 1,464,200 |
| Mid-East | 514,500 | 540,000 | 594,600 | 639,700 |
| State | 4,422,000 | 4,584,900 | 4,997,000 | 5,375,200 |

It is important to recognise that alongside any mid-term review between 2010 and 2016 that the 2016 RPG Review will fully consider the population and housing targets and hierarchy in the context of the new Census, emerging economic trends, the National Transport Authority strategy and Government policy regarding vacancy levels, and housing policies; including policies in relation to the current legacy of unfinished estates.

4.3.2 Household Formation & Housing Demand

In 2006 the Census showed very high levels of vacancy in the housing stock across the State. The GDA was lower than the national average; however in examining the figures in more detail high proportions were experienced in the GDA within areas of new housing development. Vacancy rates averaged 9.9% for the total GDA area. This level of vacancy is considered unsustainable, and the market overhang experienced since the Census has most likely maintained if not increased this level of vacancy. In relation to calculating an appropriate level of vacancy within the housing stock a standardised vacancy rate of 6.5% has been applied. This vacancy level reflects the need for the market to operate efficiently and normal turnover of stock. This figure has been chosen on the basis of research drawing on experiences within the EU and USA. This vacancy

67 Regional Planning Guidelines Review Population and Hub Targets September 2009, Department of Environment, Heritage & Local Government. 68 While in the original circular the DoEHLG published a low and a high range for 2022, for the RPGs the low

range is only shown and applied in the settlement strategy as directed by the Department of Environment

Heritage & Local Government in their September 2009 Population and Hub Targets document.

In relation to the longer-term projection of 2022, a range of projections is given to take into consideration different trends that may emerge, depending on the extent and the period of recovery of the national and international economies and their consequent impact on population growth patterns. Key assumptions on which the NSS regional population targets are based is that within the Greater Dublin Area (GDA) there will be (i) a re-balancing of future growth which will take place with a slow-down in the decline in recent years in the Dublin region's relative share of GDA growth and (ii) the rapid relative growth in the Mid-East region will continue to be strong but will moderate over time to more sustainable levels. Whilst the volume of future housing built in the GDA is very much impacted by changing economic circumstances over time, the location, focusing and careful phasing of growth is critical to successfully delivering the RPGs through the Development and Local Area Plans.

rate includes an obsolescence factor of 0.5% per annum, which could be considered low range but reflects the fact that almost 40% of the housing stock in the State is under 10 years old.

The excess of housing stock not currently occupied has had a significant impact in calculating the need for future housing for the RPGs, particularly in the short term up to 2016. It is expected that the current market conditions of over supply will extend into the coming years, impacted by further injections of supply as larger housing schemes are completed for sale in the immediate future; alongside declining rates of in-migration and a slow economic recovery in the short term.

In the short term therefore, it is not planned for or expected that housing completions will be significant. The figures for 2016 may prove unachievable in the short-term as the housing market is likely to be slow to recover. Some of the 2016 target for most of the Councils will be deferred to the 2016-2022 time period. It is important however that Councils are well placed for an economic recovery and that adequate provision is made, even if the uptake is slower. The 2022 figures are included to allow for a more long term perspective to be taken in calculating future needs in Development Plans. It should be borne in mind in relation to the 2022 figures that these will be revised in the new RPGs of 2016 and all figures may be adjusted mid-review as part of the ongoing monitoring of the RPGs.⁶⁹ Central to the RPG policy, particularly in a scaled down market, is that the land use policy of each Council should ensure where there is reduced demand for new housing that it is focused to the most sustainable locations within the Council area.

Table 5: Population Target for Local Authorities

| Council | 2006 Census | 2016 | 2022 |
|------------------------|-------------|-----------|-----------|
| Dublin City | 506,211 | 563,512 | 606,110 |
| Dun Laoghaire Rathdown | 194,038 | 222,800 | 240,338 |
| Fingal | 239,992 | 287,547 | 309,285 |
| South Dublin | 246,935 | 287,341 | 308,467 |
| Kildare | 186,335 | 234,422 | 252,640 |
| Meath | 162,831 | 195,898 | 210,260 |
| Wicklow | 126,194 | 164,280 | 176,800 |
| GDA Total | 1,662,536 | 1,955,800 | 2,103,900 |



⁶⁹ The Department of Environment, Heritage & Local Government may issue revisions to regional population projections which would require the RPGs to update the population and housing figures for each Local Authority, as occurred in 2007 with regard to the 2004 RPGs.

Table 6: Housing Allocation for Local Authorities

| Council | 2006 Census | 2016 | 2022 |
|------------------------|-------------|---------|-----------|
| Dublin City | 223,098 | 265,519 | 319,903 |
| Dun Laoghaire Rathdown | 77,508 | 98,023 | 117,893 |
| Fingal | 89,909 | 118,646 | 142,144 |
| South Dublin | 87,484 | 115,373 | 137,948 |
| Kildare | 68,840 | 93,748 | 112,477 |
| Meath | 61,257 | 79,729 | 95,458 |
| Wicklow | 49,088 | 68,351 | 82,012 |
| GDA Total | 657,184 | 839,389 | 1,007,835 |

Individual occupancy levels were applied to each Council, showing gradual decline from the 2006 Census result to 2016 and a slightly faster pace from 2016 to 2022. The GDA as a whole declines from 2.82 in the 2006 Census to 2.58 in 2022. ⁷⁰

The second key part to the allocation of future housing and population is the balancing of growth within Council areas to comply with the NSS and the RPG Settlement Strategy for Gateways and Hubs. The table below sets out for each Local Authority how it is proposed in these RPGs to ensure that the figure allocated for the GDA for the metropolitan area shall be accommodated by each Local Authority within their portion of the Metropolitan area. This figure should be regarded as a minimum requirement by Councils and where possible should be exceeded. 71



⁷⁰ A table showing each Council occupied Dwelling ratio is included in Appendix A3.

Table 7: RPG Population and Housing Distribution Table for Target Year 2016.

| Total Metropolitan Population | Metropolitan Population to be Accommodated by Each Region | Metropolitan Population Allocated to Each Council (existing & proposed) | Housing Increase Proportion of Total Allocated to Be Directed to the Metropolitan Area ⁷² |
|----------------------------------|---|---|---|
| GDA: Minimum of 1,373,900. | Dublin: 1,287,914 | Dublin City: 563,512 | 42,421 (100%) |
| Provided For: 1,424,877. | | Dun Laoghaire Rathdown: 206,322 | 19,284 (94%) |
| | | Fingal: 236,157 | 24,426 (85%) |
| | | South Dublin: 281,923 | 27,610 (99%) |
| | Mid East: 136,963 | Kildare: 67,012 | 8,718 (35%) |
| | | Meath: 13,738 | 2,032 (11%) |
| | | Wicklow: 56,213 | 8,090 (42%) |

Where population or housing numbers are revised the proportion splits to the metropolitan area shall continue to be a minimum requirement for each Authority. It is essential to the success of Transport 21 and subsequent transport and carbon reduction strategies that the proportion in the metropolitan area required by each Council increases in subsequent reviews of the RPGs. A breakdown of housing distribution for 2022 for each Council shall be provided following future updates of population targets subsequent to 2010 following an assessment of recent trends in policy and in housing delivery in the GDA.

Role of Regional Planning Guidelines and Local Authority Core Strategies

Current draft legislation amending the Planning & Development Act is currently being considered by the Houses of the Oireachtas. One key element of the current Planning Bill is the introduction into City and County Development Plans of a new requirement to prepare evidence based "Core Strategies". The Core Strategy will provide relevant information as to how the Development Plan and the housing strategy it contains are consistent with Regional Planning Guidelines and the National Spatial Strategy. The information required includes the location, quantum, and phasing of proposed development that must be shown, as well as growth scenarios, details of transport plans, and retail development, and proposals for development in rural areas.

The Core Strategy will be required to take account of any policy of the Minister in relation to national and regional population targets and shall strengthen further the development plan as the fundamental link with national, regional, county/ city and local policies. The core strategy shall also provide the policy framework for Local Area Plans (LAPs), particularly in relation to zoning at LAP level. The key objective of the proposed legislative changes is to secure a strategic and phased approach to zoning which will facilitate infrastructure provision.

For each of the Local Authorities in the GDA, each Development Plan will therefore need to incorporate the hierarchy, prioritisation and targets set out in this chapter as described in the settlement hierarchy and the population and housing targets included in tables 8, 9 and 10.

⁷¹ It is recognised that individual rural housing construction is led by local needs and linked to economic activity in the rural economy and cannot be fully measured. It is recommended that Councils estimate likely construction levels from Census trends for the purposes of preparing Core Strategies whilst recognising that final figures may vary.

⁷² Based on calculation of housing using occupancy rate for each Authority, as per Appendix A3.

4.4 Developing the RPGs Settlement Strategy

A key part of developing the Settlement Strategy was the examination of alternatives and approaches as part of the Strategic Environmental Assessment. The process of developing the new Strategy is explored through a modelling exercise, using the European Commission Joint Research Centre's MOLAND model applied to the Greater Dublin Region by the Urban Environment Project at UCD, to model the impact of different policy approaches to accommodating growth in the GDA.

MOLAND is a regional development model which forecasts land use change over time. The model operates at macro level –regional demographic and economic characteristics and micro level where the fate of land parcels is based on the characteristics of neighbouring land parcels. Accessibility to the transport network; ecological appropriateness to support a land use function; zoning status; and the reality on the ground are factors in determination of land use function. It has been employed for the review process of the RPGs as a communication and decision making tool to inform the SEA process and to visually represent policy scenarios up to and including 2026. It can also be utilised as a monitoring tool during the lifetime of the RPGs 2010-2022, providing that new data is inputted into an available model.

The advantages of using a model such as MOLAND is that while it does not give a definitive answer on where exactly development would go in the future it provides a strategic level impact of future change and growth within the GDA, so that impact of strategic approaches can be evaluated and assessed in an evidence based form.

The RPGs are framed within the NSS policy and in considering which alternative strategy approaches to assess, the options were framed within the direction given by the NSS for the GDA. Three alternative scenarios were proposed for consideration, and a fourth "continued trends" approach was also developed for comparative purposes. The four scenarios evaluated were:

- 1. Baseline/Continued Trends
- 2. Finger Expansion of the Metropolitan Area
- 3. Consolidation of Growth in Metropolitan Area and Key Towns
- 4. Consolidation of Growth in Metropolitan area and Key Towns alongside expansion at nodes/towns on key transport corridors.

Within these scenarios a number of sub-options were also examined. For each scenario the MOLAND model was run based on the population targets set by the Departmental circular for 2022; extrapolated to 2026. From a visual assessment, the different settlement patterns results from each scenario were clearly visible. (see Figure 11 showing the comparison with Scenario 1 and 4).

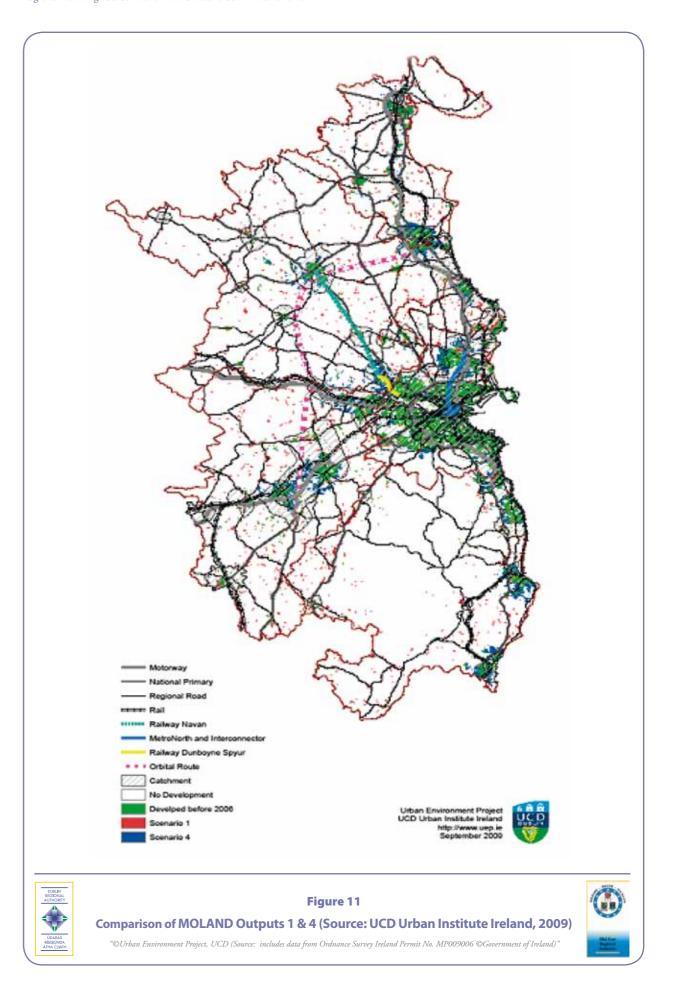
In assessing the outputs and possible impacts of each scenario from the MOLAND model, a number of indicators were identified (i) encroachment on habitat protected areas⁷³; (ii) development proximity to public transport corridors; (iii) growth of the metropolitan area population.

The results show that if the region was to continue to sprawl in terms of its growth pattern as predicated by Scenario 1 that the likely impacts would include an increase in mean commuting distances and less accessibility to transport access points; possible inefficiencies in infrastructure and service delivery; and intrusion upon protected conservation areas leading to disruption of, and disconnects between, green corridors.

Scenario 2 is a consolidation scenario placing growth in the metropolitan area and along transport corridors and nodes and performs best in terms of population access to public transport. There is some increased impact on coastal habitats but overall there is less impact on Natura 2000 areas than under Scenario 1.

Scenario 3 is a consolidation scenario with a focus on growth in key towns. Its impact on Natura 2000 areas is least with levels of accessibility to transport nodes lower than Scenario 2 but on a par with Scenario 4.

73 Special Protected Area (SPA), Special Area of Conservation (SAC), National Heritage Area (NHA) .



Scenario 4 is the "equitable" scenario distributing growth across the region, focusing on the Metropolitan Area and distributing controlled growth between key towns and transport nodes, representative of settlement position within settlement hierarchy and in line with future provision of transport infrastructure. It clearly outperforms Scenario 1 with indicator analysis of access to transport, and encroachment on protected areas showing that the Scenario settlement pattern is a substantial improvement on continued trends (Scenario1) with development in both the Metropolitan Area and Hinterland adopting a denser form.

Further detail of this research and the outputs are contained with the Environmental Report on the Strategic Environmental Assessment process. (See Figures 6.1 to 6.6 of SEA environmental report for MOLAND alternative growth scenario maps).

4.5 Settlement Strategy for the GDA

As outlined in the introduction, cornerstone documents for the settlement strategy are the *National Spatial Strategy* and *Smarter Travel*. From the NSS the key for the settlement strategy of the GDA is enhancing the competitiveness of the GDA so it continues to perform at the international level as a driver of national development, physically consolidating the growth of the metropolitan area; and that development in the hinterland of the metropolitan area needs to be concentrated in strategically placed, strong and dynamic urban centres. From *Smarter Travel- A Sustainable Transport Future*, the RPGs are given a clear direction to deliver greater integration of land use and transportation planning, including the setting of targets. Central to this is the need for the RPGs to include policies on focusing housing in cities and towns with good public transport connections. This approach will deliver benefits to the economy, to society, to the health of individuals, and to reducing the carbon footprint of the GDA.

The Settlement Strategy for the RPGs is focused on achieving key principles contained within the RPG vision as set out in Chapter 2:

- Achieving the potential of the GDA as an international Gateway
- Consolidated and sustainable cities and towns
- Supporting high quality public transport, and increase opportunities for walking and cycling.

The development of the future direction for the GDA was driven by these three principles along with the spatial direction of the NSS and Smarter Travel. The Settlement Strategy outlined in this Chapter seeks to achieve and deliver the planning direction needed to meet these key principles.

The settlement strategy takes the form of the spatial plan set out in Figure 12. It consists of four spatial policy concepts:

- 1) Continuation of the settlement policy of the GDA divided into the metropolitan and hinterland areas and the setting out of a settlement hierarchy which designates the key growth towns and districts to be consolidated, developed and supported within a sustainable form.
- 2) Focusing of new housing within the existing built up footprint of Dublin City and suburbs within the metropolitan area of Dublin; and that large scale⁷⁴ expansion of this footprint only occurring as part of an integrated plan where there are strong linkages between the lands in question and existing or planned high quality public transport creating opportunity and suitability to expand the built up area.
- 3) Designation of multi-modal growth corridors extending across the metropolitan and hinterland and beyond into other regions, which have high quality new or enhanced public transport serving key towns along the route and maximise opportunities in these towns.
- 4) Investment in developing designated towns in the metropolitan hinterland to achieve critical mass and activity which can serve the surrounding areas through growth to revitalise town cores and through phased, well designed and integrated expansions to the town.

Wicklow Legend Metropolitan Area Settlement Hierarchy Metropolitan Consolidation Town Large Growth Town I Large Growth Town II Moderate Sustainable Growth Town Indicative Leinster Outer Orbital Route Multi-Modal Transport Corridors Figure 12 **Settlement Strategy for the GDA** t Proiect. UCD (Source: includes data from Ordnance Survey Ireland Permit No. MP009006 ©Government of Ireland

 $74\,$ i.e. Lands capable of accommodating over 1,000 new units

The Settlement Hierarchy and Typology is a critical part of the Settlement Strategy. The Hierarchy for the RPGs is shown in Table 8. The table is sub-divided to reflect the different approaches needed within either the Metropolitan or Hinterland areas for towns within the hierarchy. Full descriptions and strategy direction for each category is set out in the following section of text. The future growth of towns in the hierarchy is dependent on the provision of and investment in adequate infrastructure, as described in Chapter 6. Growth of towns needs to be in line with the ability of water services to suitably accommodate any expansion; and also where significant expansion is planned in association with new public transport, should only take place following clear commitment of delivery of the project(s) within a reasonable timeframe. Where infrastructure cannot be completed Councils should encourage growth in other serviced towns within the upper range of the settlement hierarchy to ensure full provision is made for housing in line with the hierarchy. The RPGs are not recommending that any new towns are developed during the lifetime of the RPGs and all future housing expansion should be directly connected to existing settlements within the GDA.

The settlement typology forms the basis of the Strategy for the future development of the GDA and has been developed and progressed from the 2004 RPGs, the 2002 NSS and the 1999 Strategic Planning Guidelines.

It is critical in developing settlement strategies in future Development Plans that Councils have due regard to the hierarchy of towns in the table, and carefully consider the phasing of housing land to ensure that towns grow at a suitable and sustainable scale, appropriate to their position in the hierarchy. Distribution of future population should be directed towards the upper 4 tiers in the hierarchy, and any upward revisions to housing and population targets need to be targeted to these growth towns. Towns in the lower tiers should grow at a sustainable scale in line with natural increase, growth in economic activity in the area and the quality and capacity of public transport available to existing and future populations. Towns not named in the table are at small town level or lower in the RPG hierarchy.



Table 8: Settlement Typology and Hierarchy

| Hierarchy | Description | Locations |
|-----------------------------------|--|---|
| Gateway Core | International business core and high density population, retail & cultural activities. | Dublin City Centre & immediate suburbs |
| Metropolitan Consolidation Towns | Strong active urban places within metropolitan area with strong transport links | Swords, Blanchardstown, Lucan ⁷⁵ , Clondalkin ⁷⁶ , Tallaght, Dundrum, Dun Laoghaire, Bray ⁷⁷ . |
| Large Growth Towns I | Key destinations, economically active towns supporting surrounding areas, located on Multi Modal Corridor in metropolitan hinterland. | Navan, Naas, Wicklow, Drogheda ⁷⁸ |
| Large Growth Towns II | Smaller in scale but strong active growth towns, economically vibrant with high quality transport links to larger towns/city | Newbridge, Greystones, Cherrywood, Arklow, Balbriggan, Dunboyne, Maynooth, Leixlip. ⁷⁹ |
| Moderate Sustainable Growth Towns | (i) In Metropolitan area, strong edge of metropolitan area district service centres, high quality linkages and increased densities at nodes on public transport corridors (ii) In Hinterland areas,10k from large town on public transport corridor, serve rural hinterland as market town | Donabate, Celbridge, Lusk, Rush, Ashbourne, Kells, Trim, Dunshaughlin, ⁸⁰ Kildare, Monasterevin, Kilcullen, Kilcock, Athy, Newtownmountkennedy, Blessington. |
| Small Towns | Good bus or rail links; 10k from large growth towns. | To be defined by Development Plans. |
| Villages | | To be defined by Development Plans. |

4.5.1 Role of the RPG Settlement Strategy and the National Transportation Authority

The 2008 Dublin Transport Authority Act establishes the Dublin Transport Authority (DTA), herein referred to as the National Transport Authority (NTA), with a remit to achieve the provision and development of an integrated transport system; to achieve improved access and use of public transport systems; increased use of cycling and walking and value for money. One of the principal functions of the NTA relating to the RPGs is the undertaking of strategic planning of transport which shall have regard to the NSS and the RPGs in force for the GDA. The NTA will be closely engaged in each

⁷⁵ Including Adamstown.

⁷6 Including Clonburris

⁷⁷ Including Bray environs and surrounding areas of Fassaroe and Old Conna.

⁷⁸ Drogheda forms part of the Border Regional Authority area, however due to its location the environs of Drogheda to the south of the town fall within the GDA; and the impact of the town, economically and socially on the GDA, has formed part of the consideration of the Settlement Strategy.

⁷⁹ Including expansion area of Collinstown.

⁸⁰ Dunshaughlin will become a Moderate Sustainable Growth Town following the granting of permission of a railway order for the Navan Rail Line Phase II, including a station at Dunshaughlin.

stage of the planning process i.e. from the Regional Planning Guidelines through City and County Development Plans to Local Area Plans, in order to ensure the fullest possible consistency between the Authority's transport strategy and the land use planning process. The NTA transport strategy will have to be consistent with the Regional Planning Guidelines in the Greater Dublin Area. The 2008 Act places an onus on the Dublin and Mid-East Regional Authorities to consult with the NTA when making RPGs and requires the Dublin and Mid-East Regional Authorities to ensure that the RPGs are consistent with the NTA transport strategy. It also requires the Dublin and Mid-East Regional Authorities to include a statement in the draft and final RPGs explaining how there will be effective integration of transport and land use planning. A statement outlining how this consistency has been provided for in the RPGs is included in Appendix A1 of the RPGs.

4.6 Defining the Key Elements of the Strategy

Metropolitan Area

The Metropolitan Area is defined as Dublin City Centre, its immediate suburbs and the built-up areas outside of Dublin City centre, including a number of proximate major existing towns which are strongly integrated and connected with the built up area of Dublin. Within the existing Metropolitan area are some agricultural lands which function as localised green belts and in some locations as amenity lands. The Metropolitan area, by containing both the built up footprint and key towns, contains large areas of lands at the fringes of the City and such towns. The policy emphasis for the Metropolitan area is to gain maximum benefit from existing assets – public transport, social, infrastructural- through the continuation of consolidation and increasing densities within the exiting built footprint of the City, suburbs and Consolidation & Large Growth towns. This is particularly important as falling occupancy levels are reducing population across the metropolitan area. Future expansion of the existing built footprint though zoning for housing or mixed uses within the Metropolitan area should only happen in tandem with planned, committed development of high quality heavy or light rail based public transport projects and within carefully considered phased, high standard, integrated local area plans or Strategic Development Zones where new housing and public transport and other services are delivered in tandem. During the life of these RPGs the expansion of the built up area shall only take place to support the delivery of Transport 21 public transport service investments.⁸¹

Rural areas within the metropolitan area shall remain as active agricultural, horticultural and equestrian farmlands or as amenity facilities, both public and private, serving and capitalising on the opportunities from the large population areas adjacent. Such areas that divide the built up areas of towns from each other or the city shall be identified as long term green belt lands to avoid their future coalescence and the loss of definition between rural and urban places.

Hinterland Area

The Hinterland Area is defined as the lands between the edge of the Metropolitan areas and the outer boundary of the GDA. It includes a range of towns from large busy towns to small rural focused villages and large areas of agricultural and natural lands and amenity locations, and contains large and active rural communities. These towns, located on key destination points form part of dynamic connections with Dublin City and with other major towns and Gateways in the State and beyond. The GDA metropolitan hinterland is traversed by multi-modal corridors linking Dublin city with key growth towns in the GDA and beyond to other Gateways and Hubs in the State and internationally. The Large Growth towns designated within these corridors shall absorb most new population growth in the county area and act as key centres for surrounding smaller towns in rural areas for the provision of services, with all other towns and village growing at a sustainable and self-sustaining scale. The continued promotion and successful development of improved or new public transport links from Large Growth towns shall be supported by achieving economies of scale through focused development of these towns economically and demographically. Where towns are proximate and/or form part of a cluster, the linkages between such towns should be improved to support economic activity and expand the labour market available to industry and commerce in these towns. The GDA contains large tracts of both valuable agricultural lands and amenity lands which have significant value, both as important agricultural enterprise, food sources or nature reserves and also as green belt between towns and the built up metropolitan area. These key resources should be carefully managed to ensure that their primary use (be it as farms, studs, forestry, leisure or natural areas) is protected from encroachment, fragmentation and urban

driven development. Linkages between open countryside and protected areas into urban areas and connecting to green corridors should be encouraged and developed within new Local or Development Plans.

Multi Modal Transport Corridors

Overlaid upon these two concentric policy zones is a special policy zone corresponding to lands within the reach of a multi-modal transport corridor. These corridors, a key part of the economic strategy, contain the main growth areas, both regarding settlement and economic activity, radiating from the Gateway core along parallel rail and motorway corridors linking up towns and key areas of activity and providing strong inter-linkage, clustering opportunities and economies of scale to support both infrastructure investment and economic opportunities. Multi-modal corridors are served by very high quality road and rail links which provide strong connectivity from the nodes/towns in the corridor to Gateways and Hubs across the State and beyond. They contain the Large Growth towns that are connected by high quality rail links to the City and other Gateways in the State. The corridors are now served by the nearly complete inter-urban motorway network encircling Dublin Gateway and spanning in a spoke formation from the M50. This dual capacity interconnectivity places the towns within the corridor in very strong economic position to support growth in industry and commerce as they can avail of high quality, and relatively short distance and time trade, connections both to Dublin City and other Gateways as well as to shipping ports and Dublin Airport. Designated growth towns in these corridors, supported by investment in services, can be promoted as future locations for growth and act as economic drivers for the region. Such initiatives need to be supported by Local Area Plans and/or Integrated Landuse and Transport Plans which identify opportunity sites that are well served and well connected and easily accessible to the towns. Developments should ensure that all significant origins and destinations of travel are located as close as possible to population centres and public transport. The transport corridor and its route should be protected from encroachment with development focused within and sequentially expanding from growth towns to protect against sprawl, haphazard development patterns and erosion of the economic value of the corridor.

Gateway Core

The NSS designates Dublin as the pre-eminent Gateway in Ireland, and as the key international gateway for the State. Gateways are strategically located and have a key role to play nationally and relative to their surrounding areas by virtue of their existing economic and social attributes. The RPGs support the growth of the Gateway with a significant portion of anticipated population and economic growth of the GDA accommodated in the Metropolitan area and confer wider economic benefits arising from its growth and development to the Hinterland Area. At the heart of the Gateway is the core- located within the Canal ring of the City, containing the seat of central Government, national and international headquarters and cultural facilities and large legal, banking and business districts. Within this core are also the main retail centres, and the destination point for most key public transport networks. This high intensity centre needs to continue to be actively managed to ensure it remains an attractive international destination for business and provides the key linkages and economic interactions with the rest of the GDA, along key growth corridors into the rest of the State, and internationally. Population growth should continue, with high quality new housing promoted, with emphasis placed in policy documents on the role of good urban design, brownfield redevelopment and urban renewal and regeneration.

Metropolitan Consolidation Towns

Dublin Regional Authority and Mid-East Regional Authority

These towns are located close to Dublin City and function as part of the Gateway. These towns should continue to be developed at a relatively large scale as part of the consolidation of the metropolitan area, and to continue to support key public transport corridors connecting these locations to the City, each other and the Large Growth Towns in the hinterland. As key destination (and interchange) points on public transport corridors and important locations for services, retail and economic activity, these towns are important foci within the metropolitan area. They present opportunities for intensive development and activity and to focus growth around dynamic urban quarters within the fabric of the Gateway and for opportunities for employment and services proximate to high population densities. These towns should assess, specify and plan for the long term growth of these centres -up to 100,000 population, to take place over a series of Development Plans, so that the planning of new infrastructure fully takes into account the long term growth role of these centres; ensuring for the future the coordinated integration of all new services to serve future expansion.

⁸¹ Or any successor to Transport 21.

Large Growth Towns

These towns, located both within and outside of the Metropolitan Area are, in addition to the Gateway, critical to the success of the RPGs. They will accommodate significant new investment in transport, in economic and commercial activity and in housing. These towns act as important self sustaining regional economic drivers for the GDA, capitalising on their international connectivity and high quality connections to Dublin City Centre, whilst also supporting and servicing a wider local economy, and for some this extends beyond the GDA into surrounding Regions. They are important centres for delivery of public services, with hospitals, Courts, Local Authority and Civil Service offices located within the town; alongside IDA promoted companies, high order retail businesses, supported enterprise centres and active Chambers of Commerce providing a strong commercial hub within the town and environs. This category is sub-divided into two layers, with Large Growth Towns II distinct from the Large Growth Towns I. This recognises the smaller population base and a lesser range of facilities provided within the town, and the division allows for growth to develop in category II towns in line with their scale, with new facilities and services provided as the town expands. It is envisaged that Large Growth Towns I would plan for growth up to 50,000 persons in scale with level II planning with a range suitable to the scale of the town – approximately 15-30,000 persons. It is essential to the achievement of the delivery of the RPG settlement strategy that new and appropriate mechanisms are developed to deliver enabling infrastructure to allow the planned development and consolidation of these towns to take place, particularly for key non-national roads, bus services and investment in water services.

Moderate Sustainable Growth Towns

These towns are sub-county town level, with lesser levels of economic activity beyond that required to service the local population. Commuting from here to Large Growth towns and the Gateway is currently a significant element for both hinterland and metropolitan towns in this category, with connections by bus to a number of destinations and the City (where available by rail) meeting such needs. Most of these towns are envisaged as having an interacting and supporting role to their adjacent higher order town in hinterland areas or as part of the City within the metropolitan area. A minority of these towns are smaller in size, but have a higher level servicing function to smaller towns, villages and undeveloped rural/amenity lands in their catchments, due to their remoteness from larger towns.

It is critical that in the future Moderate Growth Towns in the hinterland area develop in a self-sufficient manner in the longer term and that continued basis for growth is that they do not become dormitory towns. These towns should provide a full range of local services adequate to meet local needs at district level and for the surrounding rural areas, but not attract long distance travel patterns. Strong social infrastructure should be a feature of such towns, with growth in population happening in tandem with ability of the community to support such growth, particularly in relation to schools and leisure facilities. Economic opportunities through good road connections, good social infrastructure and strong local labour market should be capitalised on to attract a range of enterprises. Key sites and facilities should be identified that are fully serviceable and available for encouragement of economic investment opportunities. Servicing and phasing of housing lands in these towns should aim to ensure that housing growth levels are sustainable, in that they are clearly linked to levels of natural increase or economic expansion within the town, and do not create significant increases in long distance commuting patterns, particularly for those served only by bus.

For Moderate Sustainable Growth Towns within the Metropolitan area, they will continue to have a strong role as commuter locations within the fabric of continued consolidation of the metropolitan area. Growth in these towns needs to ensure that expansion is based on and related to the capacity of high quality public transport connections and the capacity of social infrastructure. Emphasis should be placed on encouraging good local connections to adjoining suburbs and towns and employment locations within the metropolitan area through bus corridors and good cycling and walking connections.

Small Towns

The classification of small towns is, as previously in the 2004 Regional Planning Guidelines, largely synonymous with the centres identified by the NSS as yielding population between 1,500-5,000 people and are located within the Hinterland area. Planning authorities shall designate towns appropriate to this category within the Development Plan for the County. Relatively small and locally financed businesses are expected to locate in Small Towns; however, other economic investment opportunities should be considered and supported where sustainable and in keeping with the size and services of the town. Retail is likely to be mainly in the convenience category, with a small supermarket and possible local centres

serving only the town and its local catchment area. Small Towns would likely contain facilities such as a primary schools, secondary school, health clinic and sports facilities.

Within this category of settlement are a range of types, with local commuter type towns located close to other larger centres and small commercial towns, remote from core commuter areas and having strong trading tradition serving a large rural hinterland. Such economically active independent towns, with less dependence on commuting for population growth, should be recognised in the Development Plans for their key local importance and be supported in this role. Towns of this type include Baltinglass, Co. Wicklow, Oldcastle in County Meath and Enfield/Johnstown Bridge in Kildare. It is important that the investment in social infrastructure in such locally significant towns is at a higher level, equivalent to larger size centres in recognition of their role as key centres for a very large rural hinterland and for surrounding smaller villages and towns.

Levels of growth in all small towns shall be managed in line with the ability of local services to cater for any growth, responding to local demand and in line with the recommendations for small towns described in the DoEHLG Guidelines -Sustainable Residential Development in Urban Areas.

Villages

Within both the hinterland area and the rural part of the metropolitan area are a large number of villages set within a rural landscape. These villages, with a population of up to 1,000 people, serve smaller rural catchment areas and provide local services, with some smaller scale rural enterprises in a number of such villages. Such villages need levels of growth to be managed so that they cater for local need and do not expand rapidly, putting pressure on services and the environment and creating the potential for higher levels of commuting. For the GDA there are two sub types of villages-commuter villages and key villages and Development or Local Plans should evaluate and recognise the type of villages contained within a particular area. Commuter villages tend to be located close to Dublin or close to major routes to the City or other major growth towns. The nature of development to date reflects their status and many experience the pressures of sudden growth. The future growth of these villages should be curtailed or safeguarded so that they do not act as catalyst to facilitate continuing expansion of unsustainable growth patterns. Key villages should be considered as 'rural service centres'. These types of villages tend to be located remote from major towns or centres and play a key local role for services for the local rural and adjoining village populations. The future development of such villages as a key local centre for services and local enterprise development should be supported, without resulting in growth beyond local need or creating unsustainable commuting patterns.



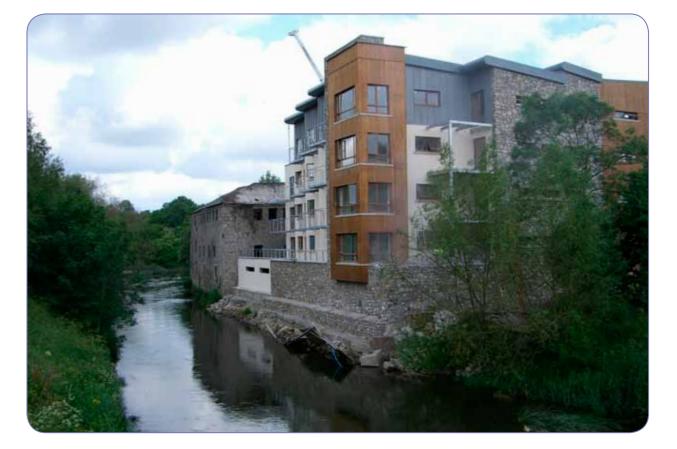
Strategic Policies & Recommendations

Strategic Policy SP1

The delivery of new housing in the GDA shall support the NSS, Smarter Travel and the DoEHLG Guidelines on Sustainable Residential Development. The RPG Settlement Strategy encourages the focusing of new housing development on (i) consolidation within existing built footprint with particular focus on the metropolitan area; (ii) supporting the achievement of sustainable towns; (iii) supporting national investment in public transport services by focusing new development areas to key locations to achieve the integration of land use and high quality public transport provision, and (iv) build up economics of scale for services in identified growth towns.

Strategic Recommendations:

- Each Council shall address through the Core Strategy and associated tables and text how the Development Plan meets the housing requirements described in the RPGs. This may involve the prioritisation of lands within Local Area Plans and Towns Plans in phasing arrangements to ensure that development is prioritised in its delivery in line within RPG policies.
- Future expansion in housing land areas in all towns should follow a clear sequential approach in accordance with the Development Plan Guidelines and the Sustainable Residential Development in Urban Area Guidelines⁸², with options and opportunities for brownfield/regeneration sites prioritised, and any large designation of new housing lands expanding the current built up footprint of the Metropolitan Area should be directly linked to provision of new, existing or upgraded high quality rail based public transport services.
- The allocation and prioritisation of future housing lands provided though the life of the Development Plan and sub-ordinate Local Area Plans shall ensure that the required provision of lands is made in the metropolitan areas of each Council as set out in the Table 7. For the hinterland areas each Council should aim for the majority of new housing provided for through zoning and policies to be directed towards the Growth Towns, weighted towards the Large Growth towns in the settlement hierarchy and also particularly towards towns with rail based public transport, to achieve the identified vision and policy of the RPGs. It is the aim of the RPGs that during the life of the RPGs that this percentage of lands directed to the upper tiers of the hierarchy increases by 20% by 2022.
- Towns and lands zoned outside of key priority locations shall be managed through phasing policies in Local/Town/County Development Plans to ensure that limited amounts over a longer time period are developed to allow for natural increase and local needs, without undermining the settlement strategy of the RPGs and to ensure that focused growth in designated growth towns can be achieved during the life of the County Development Plan.
- The expansion and growth of towns in the GDA is predicated on the delivery of suitable and necessary infrastructure. Local Area and Developments Plans need to take into account the current and future infrastructure needs of zoned lands and ensure that future development is only permitted where necessary water services have been provided to avoid causing a risk to the environment and is in accordance with existing and future discharge licences for waste water facilities.
- Plans and projects associated with zoned expansions needed to meet Economic Development and satisfy the Settlement Strategy that have the potential to negatively impact on Natura 2000 sites will be subject to HDA according to Article 6 of the Habitats Directive and in accordance with best practice and guidance.
- SR7 Local Authorities should assess the levels of brownfield land potential as part of the Development Plan review process, and in preparing Core Strategies, include suitable brownfield lands as part of the provision of lands to meet future housing needs.



Recommendations for Development Plans & Core Strategies

Dublin City

A core element of the RPGs is the importance of integration of land use, employment and transport. Within the City, as the national hub of employment and transport, it is critical that the policy of encouraging high quality new housing within the core of the gateway continues. The City, with a large young population inflated by students, migration and a young mobile workforce, has lower occupancy rates, particularly in the inner City; which drives higher housing demand per head of new population. The importance of the detailed urban plans and guidelines in setting clearly the template for successful infill and regeneration development needs to continue, taking the long term perspective. New transport hubs at metro stations and along the interconnector route line give these locations high accessibility and mobility and this needs to be capitalised on where possible.

Dun Laoghaire Rathdown

As mostly a metropolitan county, housing delivery should focus on strengthening the urban form of the county through building up town and district centres at public transport nodes; continuing sensitive infill to counteract falling population and declining services, and supporting new housing growth along the key new public transport services of the Luas extension from Sandyford to Bray/Fassaroe (in two phases) and upgrades to the DART route through the County.

Finga

Fingal contains both a large metropolitan area and a strong rural hinterland containing a number of towns which have grown significantly in the last decade. For the future, Fingal has two key new public transport corridors which provide new opportunities to strengthen the integration between high quality, high capacity public transport and housing growth. Future housing in the Fingal area should strongly focus on supporting these two new corridors with the large majority of new housing occurring within their catchment, and phasing for towns outside of these corridors allowing for lower levels of growth at natural increase levels.

⁸² Published by the Department of Environment, Heritage and Local Government in 2007 and 2009 respectively, see www.environ.ie.

Habitats Directive Assessment Mitigation Appendix A6, Vol. II



South Dublin

South Dublin as a county is dominated by the built up extent of the metropolitan area covering all but the south and south west of the County, and many areas built from the 1960s to 1990s were built at low densities. The Council has two high profile and critical SDZ areas providing for new housing, as well as areas with significant potential for brownfield redevelopment which support the consolidation of the metropolitan area, particularly along the Luas and Kildare Route corridor. Housing policy in the Development Plan needs to continue to focus housing growth into the existing built envelope to support falling population in existing services suburbs and to achieve success for the SDZs.

Kildare

Kildare has a diverse Council with four vibrant towns- Maynooth, Leixlip, Celbridge and Kilcock - within the Metropolitan area and to the south the strong growth cluster around the County town of Naas. Kildare should see continued strengthening of the metropolitan area strongly associated with upgrades to the train services on this corridor and supporting investment in the rail interconnector and associated service upgrades on this line. Alongside this, the continuing support of growth within Naas-Newbridge as the key driver for the South Kildare area associated with the promotion of the towns as employment centres and building good public transport connections to the rail line. Growth in important rural market towns of Kildare, Athy and Monasterevin should take place at a locally sustainable level associated with creating new employment opportunities creating new local demand.

Meath

With a strong network of urban centres, a vibrant rural area, well developed transport system and a rich and varied built and natural heritage, County Meath has the opportunity to make a key contribution to the achievement of the vision statement of the RPGs. The key foci for the county over the lifetime of these guidelines will be to utilise the recent investments in transport and related infrastructure as a basis for sustainable development and to encourage investment in community, recreational, commercial and economic development to support the population of the county. In particular,

opportunities to focus growth in association with the construction of the rail line to Dunboyne will allow for a sustainable pattern of housing development and other key related services in social, retail, employment and community in the existing metropolitan area. Alongside this is the continuing development of policies which utilise the increased connectivity brought about by improvements in the road and rail systems to enhance the economic profile of the county by building upon its strong strategic competitiveness arising from this enhanced accessibility; to further strengthen rural areas and the network of smaller towns and villages which act as valuable local service providers; and which support the extension of the rail line to Navan which will facilitate the sustainable expansion of both Navan and Dunshaughlin. In particular the strategic location of Dunshaughlin on the future Navan-Dublin rail line, with its resulting multi modal transport links, will facilitate the development of the town based on best sustainability principles.

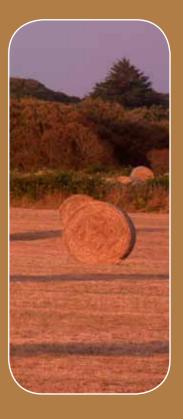
Wicklow

The extension of the Luas line into Wicklow from Cherrywood opens up new opportunities for both new housing areas and supporting consolidation of the urban area of Bray and its environs. The recommended examination of possible improvements to the Wicklow rail route by the RPGs will assist in supporting economic and housing activity in the key towns of Greystones, Wicklow and Arklow; as well as the smaller rail served towns of Rathdrum and Kilcoole, and support the continued delivery of a strong defined settlement pattern for the County. The rural and particular landscape qualities of the County, which see a large rural hinterland to the south west more focused towards Carlow allows the town of Baltinglass to grow in a sustainable manner, meeting the needs of the local community and surrounding districts, and playing critical local role.



Rural Development





Rural Development

5.1 Introduction

This section of the Regional Planning Guidelines examines recent trends, challenges and areas for policy focus in relation to rural housing, rural community and service provision and rural enterprise, while taking account of best practices, funding issues and current guidance documentation. A regional response to these issues includes a series of factors to consider in formulating rural development policy and sets out recommendations for local authorities, relevant agencies and stakeholders.

5.2 Rural Housing

5.2.1 Recent Trends

The 2006 Census results have provided the opportunity to assess current trends in rural housing in the GDA. There were approximately 396,000 one off rural dwellings within the country in 2006, with nearly one in four built since 1996.⁸³ Between 2002 and 2006, there has been a modest decline in the percentage (circa. 1%) of one off rural housing ⁸⁴ relative to overall housing in Ireland. In real terms however, there has been an increase of over 35,700 new rural dwellings in the country between 2002 and 2006. Within the GDA, there has been an increase of over 3,200 new rural dwellings, a 7.6% increase in rural housing stock over the last census period.

As would be expected from the spatial distribution and settlement hierarchy of the GDA, the Mid East Region counties - Kildare, Wicklow and Meath- have the highest numbers of one off houses in rural areas proportionate to overall housing in each of the counties, accounting for just over 21% of housing in counties Kildare and Wicklow and just over 34% of overall housing in Meath. 85 Overall growth rate in aggregate rural areas in the Mid East and Dublin region was lower than that of the aggregate town areas, suggesting an urban focus for growth in the GDA. 86

Within the Dublin and Mid East regions there was a reduction in the share of one off rural housing from approximately 8.9% in 2002 to 7.9% in 2006, reflecting the high rates of house construction in towns and the metropolitan area during this period.

In order to ensure continued compliance with NSS aims and the settlement strategy for the Region (as set out at Chapter 4), it is important that the urban focus for growth within the metropolitan area and at strategically identified sites, served by public transport, remains a central feature of spatial policy but that the needs and traditions of rural based communities, through sustainable rural development practices, are also suitably recognised and addressed as part of this regional growth.

5.2.2 Rural Housing Management

In addition to the four broad rural settlement and housing framework objectives set out in the National Spatial Strategy 2002- 2020 (NSS),⁸⁸ local authority policies need to take account of the differing types of rural housing demands in varying rural contexts and be tailored accordingly. This requires different responses to managing housing in a) rural areas under strong urban influence, b) rural areas in strong rural areas and c) rural areas which are structurally weak and/or dispersed settlement areas.

In this context it is important that a differentiation is made between 'urban generated housing' and 'rural generated housing' (as defined in the NSS) and that rural housing strategies and policies are tailored accordingly in Development



Plans. In general, urban generated rural housing needs should be directed to existing settlements, built up areas or identified lands (such as zoned lands), through a plan led process. Where local needs assessment criteria has been satisfied, and subject to satisfying good practices or stated requirements in relation to site location, landscape /environmental sensitivities, design and layout, access, drainage and impacts on soils, water table and water quality, rural generated housing needs should be accommodated where they arise.

It is considered necessary that local needs assessment criteria be provided in order to manage the demands for housing in rural locations (particularly in those areas under increasing development pressure) and that this criteria is included in relevant Development Plans. Local need assessment criteria should conform with the guidance provided in relevant ministerial guidelines relating to rural housing and any relevant DoEHLG updates or circulars (such as Circular SP 5/08.89)

In addition there is a need for renewed focus on quality in design. In order to avoid poor design or inappropriate siting and location of rural dwellings, rural design guidelines should be provided by each of the relevant local authorities for their administrative area. These guidelines should provide clear assistance in the preparation and determination of planning applications for rural housing. Village Design Statements or other plan led initiatives should be provided to steer and assist development within small settlements. Also the sensitive reuse and reinstatement of existing building stock should be encouraged where such opportunities exist, in lieu of new builds. The removal of existing vernacular housing stock and its replacement with new housing stock should be discouraged.

Areas identified within Development Plans for the supply of aggregates and other such deposits, and which have importance at a regional or county level should also influence decision making and policy approaches to rural housing to protect key assets.

⁸³ CSO 'Census of Population-Volume 6-Housing Publication, 2007.

⁸⁴ A rural house is defined as a detached dwelling in an aggregate rural area, defined by specified effluent treatment system.

⁸⁵ Figures are approximate.

⁸⁶ NSS State of the Regions Report, DoEHLG April 2009, Section 1.7

⁸⁷ Derived from selected CSO data for purposes of RPG's.

⁸⁸ Section 5.3.2 of the NSS 2002- 2020, p.105.

⁸⁹ Circular SP5/08 - Rural Housing Policies and Local Need Criteria in Development Plans: Conformity with Articles 43 and 56 (Freedom of Establishment and Free Movement of Capital) of the European Community Treaty, DoEHLG 30th September 2008.

⁹⁰ Not applicable to administrative areas which are urban in nature such as city and borough authority areas.

Policies need to comply with River Basin District Management Plans and avoid development in catchment areas of high ecological status. The provision of adequate infrastructure and the impact on river basin management plans in rural based settlements (small towns, villages, clusters) to service proposed new housing needs to be considered in developing rural village policy. This can include water supply, waste water treatment facilities, broadband and telecommunications, local amenities and services, and transport network.

Applications in relation to individual houses should comply with the requirements of the EPA publication "Code of Practice Wastewater Treatment Systems Serving Single Houses (P.E. \leq 10) 2009 and any other relevant EPA guidance for waste water treatment and waste water treatment systems that serve dwellings.

The level of significance and locations where Groundwater Protection Schemes impact on site suitability of individual waste water treatment schemes should be considered and referenced in Development Plans.

5.2.3 Holiday Homes

Second homes and holiday homes can have a positive or negative impact on rural areas. For example, suitably located and appropriately scaled second homes/holiday home development can revitalize structurally weak rural areas in economic terms but the cumulative effect of this type of housing development can also have an incremental adverse effect on rural character and affordability of housing in rural areas for permanent rural dwellers. A balanced approach to catering for second homes, (which can include individual holiday homes, housing schemes/clusters or resort type accommodation) should be reflected in development plans, taking account of the following:

- Identification of potential and preferred locations for appropriately scaled holiday homes, with an emphasis on clustering
 of holiday home development in or adjacent to small towns and villages, at an appropriate scale such that it would not be
 detrimental to the receiving landscape or settlement.
- Environmental sensitivities which may limit the capacity to accommodate certain types of development, together with areas
 of high demand and low demand, and the cumulative impact of holiday home development on the receiving environment.
- Other planning criteria including scale, siting and design, access and availability of necessary infrastructure and services.

5.3 Rural Services and Community Development

Meeting the accommodation needs of the rural based community is only one element of providing for the long term prosperity of rural communities. In tandem with facilitating rural housing through a plan led system, vital services and community facilities are considered to be necessary. This is recognized both within the National Development Plan 2007 –2013 and the National Spatial Strategy. In order to ensure the continuing viability of the rural community and enhanced quality of life, the following should be considered in the development of rural areas:

- Enhanced rural amenities and services such as a local shop, public house, post office, play parks, sports club and playing fields, community centre, childcare, day centres nursing home and sheltered housing schemes, religious spaces and burial grounds all within walking distance of local centres/villages.
- Provision of, and access to, high quality health care.
- Provision of, and access to, high quality education, including pre-schools.
- Community support structures for vulnerable groups such as the elderly, immobile and those with special needs, particularly those living in isolated areas.

- Local employment and training opportunities.
- Outreach programmes and mobile services (to support the issues in the previous points above).
- Efficient use and management of existing services, improvement of roads, footpaths, cycle routes, water supply, waste water treatment, broadband penetration, and public lighting.
- Village enhancement and environmental upgrading programmes.
- Easy access to bottlebank facilities and recycling centres, segregated bin provision.
- Rural public transport and connectivity to larger urban settlements and higher tier services.

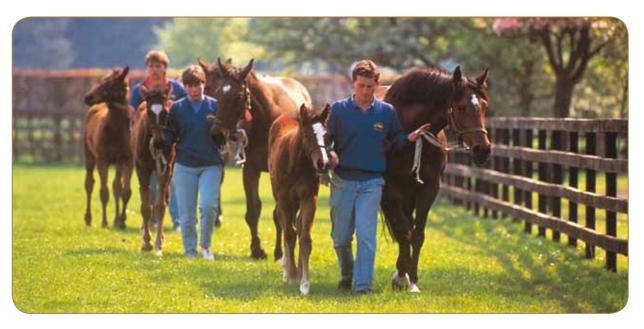
It is acknowledged that addressing some of the social issues relating to rural living may be beyond the scope of spatial and physical planning, however the planning system, through settlement structure, rural development and housing policies, development management and grant schemes, can compliment and support other agencies and programmes which are responsible for the delivery of essential services and facilities.

5.4 Rural Economy

5.4.1 Introduction and Background

Rural areas, including villages, support and sustain a wide variety of rural based economic activity, both traditional and modern. Agriculture has traditionally been the mainstay of rural economies, and this sector has in recent times experienced significant restructuring. This process of change is likely to continue through the life of the current RPGs. These changes have seen the numbers employed directly in farming in the GDA decline as well as increasing proportions of those operating farms moving into part-time farming. Agricultural workers in the GDA declined from 14,979 in 2002 to 10,436 in 2006; a fall of 29%. Also EU Common Agricultural Policy (CAP) reform will necessitate that farmers are able to vary their production activities to cater for European and global market needs as market signals become stronger. In order to do this, farms will need to become more viable entities, adaptable to change.

An area of rural enterprise that has seen growth has been the specialist sector of food production giving added value to agricultural products supplying the demand from the large populations in the metropolitan and surrounding areas. The GDA hinterland, with its history of dairy, grain and horticulture supplying the Dublin market, is well placed to continue to capitalise on the resurgence of interest in fresh local produce. Farm units located within the GDA have the benefit of being located in close proximity to Ireland's largest urban market and around 40% of the national population. Farmers have the opportunity to exploit specific opportunities which arise from their proximity to urban areas.



Within the GDA the equestrian enterprise sector experienced expansion in the past decade; building on already well established traditional stud farming and sport/race horse industry, all of which have strong associations with the rural parts of the GDA particularly. Growth in the racing, sport and leisure equestrian sector has supported stud farms, hunt, schooling and jumping yards as well as livery and riding schools, and associated employment, with a strong focus on international connections and trade and supporting tourism.

The two other key traditional rural/land based activities- forestry and extraction- have also seen growth in the past decade in the scale of activity, with increased construction and grants supporting expansion. Further growth in forestry plantation will need to take into account potential impacts on water quality and biodiversity.

As employment in rural areas has changed from a highly labour intensive agricultural base, rural employment has diversified, new enterprises have developed and opportunities sought. In seeking to facilitate improved rural development it is necessary to improve the overall viability of the rural economy. Improving ICT (particularly broadband) provision will make rural areas less isolated. Issues of cost, availability and speed factors for broadband, in comparison to urban areas, can impact negatively on rural enterprise, increasing rather than reducing rural isolation. The establishment of wider broadband connectivity across the GDA represents a crucial step towards maintaining healthy rural communities and will in time greatly reduce economic barriers of remoteness and lack of connectivity. (Section 6.6 refers). As rural development activities diversify into new activities such as green energy the need to link the smart economy with the green economy within rural areas is not only an opportunity but a core necessity to ensure viable and progressive rural economies.

Peri-urban areas and green belt zoned lands across the fringe of metropolitan Dublin represent a particular type of rural area which can exploit markets through offerings in specialised green oriented activities, rural tourism and leisure for both international and local markets alongside more traditional rural activities capitalising on strong connectivity to urban populations and markets.

The promotion of locally produced food, improvement of accessibility to markets, development of allotments and urban gardens, supply of fresh food, amongst other related activities all have the potential to lower the ecological footprint of the region, encourage healthy lifestyles, boost rural economies and improve overall quality of life. In seeking to build urban-rural bridges where possible, rural activities such as markets should be located in proximity to sustainable transport routes for the enhancement of the overall environment, contribute to reduction of per capita footprint and to bring about benefits to human health.

5.4.2 Rural Tourism

Rural tourism can play a strong role in stimulating rural economies. Rural development policies should accommodate rural tourism needs through development of walks, water based activities, tourism infrastructure (such as, amongst other activities, eco, agri and equestrian related tourism, open farms, pet farms and farmhouse accommodation) and rural led activities. These actions will stimulate local and wider markets, spreading the benefits and increasing citizen awareness and appreciation of their natural environment. Alongside this it is critical to ensure that increasing pressures of commercialisation and development do not serve to undermine rural ecosystems, landscapes and conservation areas thus losing what



makes such destinations attractive and special places to visit. The agriculture sector as the trustees of most of the rural landscape already play an important role in environmental management and landscape protection and can play a central role in maintaining and enhancing the quality of the rural countryside. It is important that national and local policies recognise and support this important role.

The RPGs recognise the important role Integrated Coastal Zone Management amongst other processes can play in sustainably developing coastal and rural tourism. The opportunities for sharing of Geographical Information System (GIS) databases between local authorities in relation to tourism and tertiary services should be developed.

5.4.3 Quarrying & Extraction

Extractive industries are essential to the economy in terms of supply of aggregate materials for the construction sector, delivering transport infrastructure projects, and for the export market. There is, however, potential for conflict in the operation of these industries with wider environmental considerations. The role of the planning system is therefore to regulate, promote or control the exploitation of natural resources taking into account these other issues. *Preventing and Recycling Waste – Delivering Change* (March 2002) calls for the re-use or recycling of 85% Construction and Demolition (C and D) waste by 2013 and if achieved, this together with other national level sustainable development objectives, and a levelling off of construction activity, is likely to have a steadying influence on the rate of extraction of aggregates in the future.

In planning policy terms and in order to strategically plan for future needs, there is a need to take stock of existing aggregate resources and other valuable minerals/ores and identifying potential sources which have major deposits of regional and county importance. Local authorities should engage with GSI, in so far as feasible, in mapping exercises designed to identify aggregate potential within their respective county and across a wider regional scale. Suitable protection measures for such sites should be considered to ensure their potential may be realised. Planning, heritage and environmental guidance together with legislative requirements should be used to frame policies for extractive industries. In assessing applications for extractive industries, considerations and impacts as they relate to the objectives of the Water Framework Directive (and therefore River Basin Management Plans) and other EU Directives (such as those regarding wildlife and habitats) should be central to the decision making process. Secondary impacts such as increased HGV traffic on adjoining communities and screening are key issues, and the use of levies to compensate the surrounding areas through investment in local social and other infrastructure is supported. (See also figure 3.4 of the Strategic Environmental Assessment Report regarding geological strata).

5.4.4 Green Economy & Climate Change

The National Climate Change Strategy 2007-2012 sets the agenda for necessary actions and reductions in emissions required to meet or exceed Kyoto protocol targets. Fural development initiatives are inextricably linked to our ability to achieve these targets and goals. Rural areas provide one medium through which renewable and biofuel targets can be met and offer the potential with advancement in technologies such as lignocellulose technology to provide a proportion of the energy crops required. Reduction in fertiliser usage, the maintenance of hedgerows and afforestation such as through the Forestry Environment Programme Scheme provide additional carbon sinks. Wind Farm technology also provides a new source of income for farmers with turbines within farms both serving the farms needs and also exporting to the national grid where feasible. Development of new turbines needs to take place within the context of clear Development Plan policies

⁹¹ As set out at section 3 of the DoEHLG publication 'Quarries and Ancillary Activities: Guidelines for Planning Authorities, 2004 and DOELG guidelines regarding Environmental Impact Assessments.

⁹² Geological Survey Ireland (GSI) should be consulted in this respect, having completed a range of surveys for the GDA.

⁹³ Guidance documents for Local Authorities and stakeholders includes: DoEHLG publication 'Quarries and Ancillary Activities: Guidelines for Planning Authorities, 2004; Geological Heritage Guidelines for the Extractive Industry- Geological Survey Ireland and Irish Concrete Federation 2007 Environmental Protection Agency (EPA) guidelines "Environmental Management in the Extractive Industry; ICF Environmental Code (2005); NPWS Guidance on biodiversity in the extractive sector; The "Archaeological Code of Practice" between ICF and National Monuments Service (DoEHLG); Recommended Collection, Presentation and Interpretation of Geological and Hydrogeological Information for Quarry Development, Institute of Geologists 2007; Geology in EIS—A guide" Institute of Geologists of Ireland, 2002

⁹⁴ As set out in planning legislation and other relevant statutory provisions relevant to extractive industries.

⁹⁵ Ireland must limit the growth in emissions to 13% above the 1990 levels in the 2008- 2012 period.

5.4.5 Forestry

Forests and woodlands have an important role within the GDA in terms of supporting rural employment and rural diversity, climate change and carbon sequestration, biodiversity, as a source of renewable/alternative energy sources and recreation and amenity value. At a national level, forestry accounts for approximately 10% of land cover with ongoing efforts to grow this percentage. At a regional level, approximately 9% of land cover by forestry exists in the GDA. Of note, County Wicklow is the primary contributor to forest coverage, having the highest percentage of land area under forest in the country at just over 21%.97

and the DoEHLG Guidelines on Wind Energy Development. Sustainable, low carbon and environmentally conscious

management practices provide not only a means to reduce GHG emissions associated with agricultural production but

also to increase adaptability to, and absorption of, extreme weather events. It is equally important to recognise the positive

To ensure the sustainable development of forests and woodlands within the GDA, it is important that issues such as species composition, forest eco-systems and sustainable timber yields are included as part of management considerations and delivery of forestry programmes and initiatives. The RPGs support sustainable forestry development (in line with sustainable forestry management principles) in the region, including state and private afforestation, at appropriate locations subject to environmental impacts and compatibilities.

(Chapter 7 of this Plan also recognises the role of forestry in relation to biodiversity, climate change and green infrastructure development).

5.5 Strategic Policy & Recommendations

Strategic Policy RP1

To protect and support rural villages and countryside through careful management of physical and environmental resources and appropriate sustainable development; recognising and responding through appropriate Development Plan policies to the strong urban driven demand for resources in rural areas of the GDA, and also the importance of protecting and encouraging the necessary social infrastructure needed to sustain rural communities.

Strategic Policy RP2

To support the continuing viability of agriculture, horticulture and other rural based enterprises within rural areas and to promote investment in facilities supporting rural innovation and enterprise with special emphasis on the green economy, within the context of sustainable development, appropriateness and the management of environmental resources.

Strategic Recommendations:

Rural housing policies within Development Plans and Local Area Plans take account of and are tailored to meet the differing types of rural housing demands and management needs in varying rural contexts such as rural areas under strong urban influence, rural areas in strong rural areas and rural areas which are structurally weak and/or dispersed settlement areas, and to distinguish between urban and rural generated housing demands as defined in the Sustainable Rural Housing Guidelines for Planning Authorities' April, 2005.

- Local Authorities produce policy documents promoting high quality design and layout for rural development through the provision of rural housing guidelines, village design statements and clear guidance within Development Plans regarding infrastructural and other technical requirements and through the development management and enforcement procedures.
- Development plans should include and promote proactive measures and policies to address infrastructural deficits and to support rural based communities in terms of access to and provision of: education, employment, health care, local retail provision, childcare, day care, public transport, targeted or specific community facilities aimed at the vulnerable and other necessary services to ensure the continued longevity of rural living. The EPA Code Of Practice For Wastewater Treatment And Disposal Systems For Single Houses (P.E. 10 Or Less) 2009 should also be adhered to in order to safeguard individual and group water schemes.
- Rural public transport and connectivity to larger urban settlements and higher tier services should be considered as part of the sustainable development of rural areas.
- Needs of leisure and rural tourism be addressed in a multi-disciplinary manner in high pressure locations, taking into account natural, economic, social and cultural policy objectives and plans. Balance is required between the need to preserve the natural environment; the needs of modern farming and also making the countryside and natural areas accessible to those who wish to avail of it. Feasibility studies and best scientific evidence can be utilised to ensure that this balance is achieved.
- Rural development planning must continue to incorporate wider environmental issues into decision making such as ecosystem functioning; water management, as outlined through the Water Framework Directive and associated Plans; soil quality; the growing of crops for the production of biomass fuels; other alternative energies; and, sustainable transport options. In particular, there is need to protect, maintain and enhance the quality of groundwater and surface water across the river basins districts within the GDA, predominantly the ERBD and SERBD. It is consequently important that monitoring data is consulted wherever possible to ensure that development in rural areas does not negatively impact on the quality of groundwater and its subsequent extraction as drinking water, and on areas of rivers with pristine water quality.
- Development plan policies to be supportive towards rural entrepreneurship and the development of microbusinesses where environmental impact is minimal, and does not generate significant or undue traffic. This action will need to be supported through improved ICT provision, uptake, training and assistance.
- Development Plans map key natural aggregate resources and protect these where feasible from inappropriate development; and include policies regarding requirements for assessing applications for aggregate extraction which require the addressing of key environmental, traffic and social impacts and details of rehabilitation.
- Plans and projects associated with rural development, including the provision of housing and associated infrastructure and resource exploitation, which have the potential to negatively impact on Natura 2000 sites, will be subject to a Habitats Directive Assessment (HDA) according to Article 6 of the habitats directive and in accordance with best practice and guidance.

W Habitats Directive Assessment Mitigation Appendix A6, Vol. II

⁹⁶ Farm to Fork - A Sustainability Enhancement Programme for the Irish Agri Food Industry, Institute of International and European Affairs, 2009.

⁹⁷ Source: Forestry and Timber Yearbook Statistics 2010. Forestry Service.

[₩] Habitats Directive Assessment Mitigation Appendix A6, Vol. II



Physical Infrastructure



Physical Infrastructure

6.1 Introduction

This chapter examines the key infrastructure needs across the GDA to support the delivery of the RPG settlement and economic strategies and key environmental and sustainability targets of the State. This chapter examines these needs by type and seeks to identify key priority areas for investment to ensure that the overall vision for the RPGs can be delivered, and by direct policy linkage, assist in achieving the delivery of the NSS. The RPGs will not succeed in their goal of integrated spatial planning and resource management without the delivery of essential services and engineering works to allow growth to happen in the most appropriate locations. Failure to invest and prioritise key strategic infrastructure will also result in the failure to achieve best value for key investments already being made by the State by the lack of integration and resulting loss of new housing and economic activity in locations where it is needed. The RPGs, by identifying the main growth areas in the GDA, set out the priority locations for future investment and by delivering this investment, create the opportunities for sustained and sustainable growth.

6.2 Infrastructure Investment and Habitat Impact

The Habitats Directive Assessment (HDA), also known as Habitat Impact Assessment or Appropriate Assessment, is a requirement under the Habitats Directive 92/43/EEC. The directive indicates the need for plans and projects to be subject to Habitats Directive Assessment if the plan or project is not directly connected with or necessary to the management of a Natura 2000 site, but is likely to have a significant effect either individually or in combination with other plans or projects on a site.

The RPGs are strategic by nature, and give broad guidance in relation to a range of issues, including infrastructure investment. The detailing of the strategic objectives is implemented through the county and city development plans, local area plans and at project level. Due to the regional scale of the projects identified within this document, many of which have yet to undergo detailed route/site selection and options, it is considered that a Habitats Directive Assessment should take place at each stage of the development process from County Development Plan, Local Area Plans to the individual plan or project level to ensure that there is no negative impact on the integrity (defined by the structure and function and conservation objectives) of the Natura 2000 site and that the requirements of Article 6 (3) and (4) of the EU Habitats Directive 92/43/EEC are fully satisfied.



The Habitats Directive promotes a hierarchy of avoidance/protection, mitigation and compensatory measures and this method should be adopted in the development of all individual plans and projects and at each stage in the development process. Each individual plan or project should therefore seek to achieve the following:

- Avoid any negative impacts on Natura 2000 sites by identifying possible impacts early in the plan/project making, and designing the plan/project in order to avoid such impacts.
- Mitigation measures should be applied, during the appropriate assessment process to ensure that there are no adverse impacts on the sites.
- If the proposal is still likely to result in adverse effects, and no further practicable mitigation is possible, then it is rejected. If no alternative solutions are identified and the plan is required for imperative reasons of overriding public interest (IROPI test) under Article 6(4) of the Habitats Directive, then compensation measures are required for any remaining adverse effect.

Due to the regional scale of investment and the impact of development and delivery of the settlement and economic strategies it is critical to the protection of Natura 2000 sites that development takes place in tandem with the provision of appropriate services - be it transport, water supply or treatment. Development in the absence of investment in infrastructure will have negative consequences on the environment, and in line with sustainable development policy promoted by the RPGs, should be avoided.

A number of regional scale projects of inter-county and/or inter-regional consideration have been identified within the Regional Planning Guidelines (RPGs). Over the lifetime of the RPGs it will be necessary for these and other similar projects as they may arise to undergo the necessary checks and assessments under Article 6 (namely Article 6 (3) and Article 6 (4)) of the Habitats Directive 92/43/EEC which sets out the provisions that govern the conservation and management of Natura 2000 sites.

It is imperative on the proponents of the plan or project to have the Natura Impact Statement prepared for submission to the relevant competent authority thus following the stated Habitats Directive objectives to avoid, mitigate or examine alternatives in that order of preference. Competent authorities are obliged to screen projects inside and outside Natura 2000 sites for their potential impacts on those sites, and unless such impacts can be ruled out, to carry out an appropriate assessment (AA) under Article 6.3 of the Habitats Directive. Only having ascertained that a plan or project will not adversely affect the integrity of the site concerned may the plan or project be approved. In exceptional circumstances the provisions of Article 6.4 of the Habitats Directive (including the identification of compensatory measures) may need to be considered.

Potential issues for consideration at plan or project level currently identified include the following plans or projects in relation to areas that are clearly ecologically sensitive:

- the concept of an Eastern Bypass which has the potential to impact on Natura 2000 sites in Dublin Bay whereby a Natura Impact Statement (NIS) will need to accompany future route selection examination
- the GDA Water Supply project which has undergone screening for AA which points up the potential impacts on Natura 2000 sites, including the River Shannon and its Lakes, of the various options (Options A-H) being explored within that project undertaking
- the S2S Promenade and Cycleway which has the potential to impact on Natura 2000 sites in Dublin Bay whereby at site level an appropriate NIS will need to accompany future route selection examination
- the 'Greater Dublin Regional Drainage Project- Regional Waste Water Treatment Plant, Marine Outfall and Orbital Drainage System' which may discharge to sea in North County Dublin where a number of Natura 2000 sites are located, where upon site selection an appropriate NIS will need to be developed
- the 2030 Vision for Transport in GDA, which is undergoing NIS, in particular in relation to a possible Dublin Eastern bypass.
- Any Dublin Port extension which has the potential to impact on Natura 2000 sites in Dublin Bay with an appropriate NIS.

As any of the proposals outlined above progress for consideration towards detailed planning stages, the proponents of the aforementioned shall be aware of their responsibility to ensure that Habitats Assessment is carried out on each plan or project respectively, as required.

With regard to the strategic policies and strategic recommendations of these RPGs, mitigation is identified in each case where deemed appropriate and necessary. These are intrinsically linked to the Habitats Directive Assessment of the Greater Dublin Area Regional Planning Guidelines 2010-2022. In doing so it is ensured that any plan or project associated with any given issue, as identified, which has the potential to have a significant effect on a Natura 2000 site is fully assessed, at the appropriate level, in order to avoid adverse impacts on the integrity of that Natura 2000 site.

6.3 Transport

Transport policy and prioritised infrastructure investment are critical to the success of the Greater Dublin Area in terms of connectivity to international and indigenous markets, the movement of people and goods and providing a range of transport modes to ensure efficient and sustainable travel patterns and which provide value for money. The integration of investment in transport, particularly public transport, with housing, business and leisure locations is therefore considered to be essential to ensure the RPGs are effective and that full value is gained from investment by the Government in public transport.

Since 2004 notable progress has been made in the delivery of transport infrastructure serving the GDA and providing connectivity to other parts of the country and beyond. The completion of the Port Tunnel, together with Luas transport and its extensions, Quality Bus Corridors, improvement and upgrade works to national roads and motorways and expansion of airport capacity are but a few of these projects. A range of other ongoing transport infrastructure projects are also due for completion in the short term, such as construction of terminal two at Dublin Airport, the City West and Sandyford to Cherrywood Luas Line Extensions, the M3, N9, N4 and M50 road projects, and the development of the Navan rail line and the upgrade of the Kildare rail line. A series of other transport projects identified in national policy for the future include metro line development, rail interconnector in the City Centre and extending the Luas network. These projects are currently at either planning or design stages. While there has been visible progress in the development and delivery of transport infrastructure, trends in population growth and spatial distribution, together with car ownership, the housing market, settlement and work patterns and travel patterns provide a series of ongoing challenges for transport planning within the region.

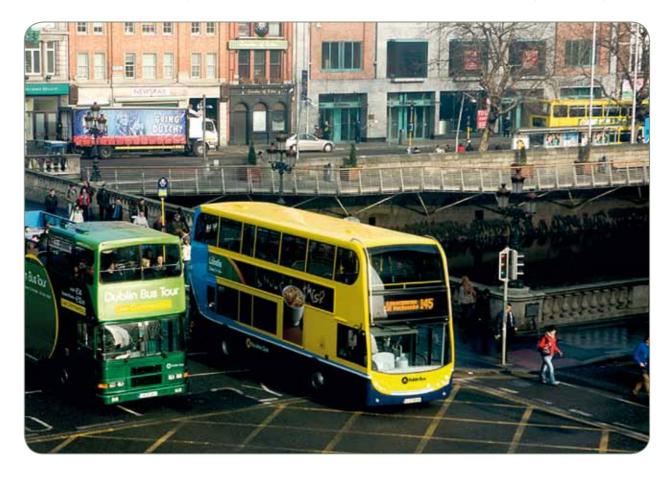
In 2008, new legislation affecting the governance of transport policy was adopted in the form of the Dublin Transport Authority (DTA) Act 2008. Under the Act the Dublin Transport Authority (now National Transport Authority (NTA) on foot of Public Transport Regulation Act 2009) will become the principle agent for delivery of transport policy and development in the GDA. The DTA Act, which gives the NTA a role in the planning process for the GDA, sets requirements regarding integrated planning for transport and land use at regional and county level to achieve mutual consistency between NTA strategies, Regional Planning Guidelines and Development Plans.

A range of transport policy documents and projects exist which have relevance to the GDA, with the key documents playing a central role being:

- A Platform for Change (2001), published by the Dublin Transportation Office. This document provided a strategic transport framework for 2000-2016 and informed the 2004 RPGs.
- Transport 21 & National Development Plan (2006/2007)- Transport 21 is the government's national capital investment framework for transport infrastructure, covering the period 2006 to 2015. The National Development Plan (2007-13) supports Transport 21 (T21) planned investments as part of the overall State strategy. It seeks to 'deliver a radically upgraded public transport system in line with the timetable in Transport 21 especially in the Greater Dublin Area (GDA), but with significant impacts in other areas. 98

- Smarter Travel (2009) The strategy supports greater integration between spatial planning and transport policy and sets a target to reduce car based commuting from 65% to 45% by 2020. The strategy includes five key goals -reducing overall travel demand; maximise transport efficiency, reduce emissions and fuel consumption and improve transport accessibility. It seeks greater integration between population and employment growth in sustainable compact urban areas or rural areas, and sets a range of clear targets to achieve by 2020. It places a direct requirement on the Regional Planning Guidelines to focus policy and establish targets which promote the consolidation of regional population growth and employment in areas best served by public transport and a range of sustainable transport modes, and which support the transport initiatives under T21 and the National Transport Authority (NTA) strategy.
- National Cycle Policy Framework (NCPF) (2009) The NCPF sets out a national policy for cycling up to 2020, in order to create a stronger cycling culture, a more friendly environment for cycling and improved quality of life. The policy document sets a target of 10% of all trips by bicycle by 2020 and places emphasis on promoting and integrating cycle networks.
- **2030 Vision** (under preparation) NTA. Work has commenced on developing a new Transport Strategy for the Greater Dublin Area for the period 2010 to 2030. An associated implementation plan is also intended, and it is the aim of the NTA to have both the new Strategy and its implementation plan adopted by the end of 2010.

The clear message from these documents for the RPGs is that within the GDA there is a need to implement land use policies that support and protect the investments currently being made in public transport to ensure that the maximum benefit is gained economically, socially, environmentally and in relation to overall health. The vision for RPG transport policy and development in the GDA is steered by the convergence of national policy towards greater consistency in transport planning, spatial planning and land use management. This places a requirement on both the RPG transport strategy and settlement strategy (as set out in Chapter 4 of this document) to be mutually consistent, not only with each other, but with national direction as per the NSS, Transport 21, the Smarter Travel Strategies and NTA transport strategies. Additionally it is important that regional transport policy dovetails readily with the objectives of other policy areas such as employment, sustainability, climate change, and the environment. In doing so, the direction for the development of transport priority for the region is based around five broad headings: 1) Public Transport, 2) Roads, 3) Airports, 4) Ports and 5) Cycling and Walking.



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6.3.1 Public Transport

National transport and planning policy sets ambitious targets for modal shifts in travel patterns to 'greener transport' and a requirement for shorter travel and more sustainable commuting patterns. In order to achieve this, a number of measures are identified to direct and integrate land use with investment in public transport:

- 1) Focusing new development into sustainable compact urban areas served by high capacity and well developed public transport systems;
- 2) Integration of both systems and services across public transport networks;
- 3) Improving choice and opportunities for reduced car travel by rural communities;
- 4) Promotion of higher densities for employment uses around public transport nodes;
- 5) Protection of identified and future possible public transport corridors;

The RPG's seek to reinforce the aims, goals and targets established under *Smarter Travel- A Sustainable Transport Future 2009-2020* by focusing the expansion of housing development, employment and associated zoned lands in close proximity to key high capacity planned or existing public transport. It is essential that critical mass is built up in suitable locations to support the capacity requirements that make particular public transport investments feasible, sustainable and cost effective. In order to achieve this within the GDA, the main focus of growth should be in line with T21 investment areas and key growth areas identified in the settlement strategy. This includes the Dublin gateway, metropolitan consolidation areas such as Swords and Lucan/Adamstown, the major growth towns of Navan, Drogheda Environs⁹⁹, Wicklow and Naas and other identified developing areas which will benefit from high capacity rail services. This includes areas such as Bray Environs which will benefit from the proposed new Luas extension and Dunboyne, Dunshaughlin and Newbridge which will benefit from rail corridor development.

Such investment will complement the densification of population and services in strategic growth areas within the metropolitan area and also provide greater connectivity to the hinterlands and primary growth centres. (See Figure 3.9 for Map of Public Transport Infrastructure – SEA Environmental Report.)

Integration of both systems and services across public transport networks

Investment in bus services in the development of inter-regional intercity links and between the growth towns of the GDA is also important and should complement and link with existing and planned transport corridors. There is a need to strengthen the public transport connections between identified key growth towns in the Mid East region¹⁰⁰ with those of the nearest hubs and gateways, both within the GDA and the adjoining regions outside the GDA to ensure ease of access to avail of labour pools, education, regional and acute health facilities, goods and services and tourism development. A holistic approach to QBC provisions, and in particular the potential for development and integration of such corridors outside the GDA with existing QBC's should also be explored. In all cases, public transport projects such as metro and rail development should be complemented by feeder services. The integration of cycle and pedestian routes and cycle parking facilities should be planned with transport and adjoining land use developments.

A number of 'soft measures' are also supported in tandem with the development of physical transport infrastructure. These include integrated ticketing and an integrated public transport information system, addressing peak period travel times through demand management measures, ensuring high levels of comfort on bus and rail services, interchange options which allow ease of transfer within the public transport system and compatibility between various bus, train, metro and luas, port and airport services to allow for easier journey planning and usability. Initiatives from the Smarter Travel Policy document, such as the Green Schools Travel Initiative and Workplace Travel Plan programmes are also supported.

Improving choice and opportunities for reduced car travel by rural communities

For rural areas, transport demands may differ from those of the metropolitan and major growth areas, and there will be variation in travel demand within the rural areas themselves due to rural character types e.g. weak rural areas and those in proximity to larger service towns (all of which may affect prioritisation of cost intensive and cost effective transport investment). In order to expand the rural transport network, at a spatial level, focus for development should be within established settlements served by inter-urban transport corridors, in order to ensure greater accessibility to services and to arrest social exclusion. The targeting of rural transport investment which provides options to those who would otherwise have difficulty accessing services, access to employment and other key provisions should be considered. If a modal shift and greater choice of transport options are to be achieved in rural locations, bus services and routes should support connectivity between dispersed rural areas, service towns and train stations. These issues, mentioned above, are also relevant to suburban and peri-urban areas that are not well served by public transport, which can also affect the quality of life of people living in these areas in terms of access to essential facilities and important services.

Promotion of higher densities for employment uses around public transport

If the consolidation of population growth within existing identified growth areas of the GDA and real alternatives to the private car use are to be achieved, these areas need to be well served by public transport. Trip intensive land use planning and high density residential development at appropriate transport nodes, can support public transport, walking and cycling. The provision of integrated land use and transport plans for developing zoned and brownfield/regeneration lands of strategic importance are a means of managing growth and investment in the medium to long term and should be prepared.

With regard to employment areas and employment clusters near to existing or planned priority public transport nodes, land extensive uses with low intensity trip requirements should be discouraged, in lieu of more trip intensive land uses. The travel patterns of freight traffic (including port traffic and rail freight) to distribution centres, logistics centres and final destinations should also inform transport planning at city and county level. For example distribution and logistics parks can benefit from short transport links to ports, airports and the national motorway network.

Protection of corridors for identified public transport projects

Transport 21 identifies a number of public transport investment projects, however the delivery of some identified proposals may not be achievable in the short term due to budgetary constraints. Therefore, there may be requirements to protect transport corridors for future longer term public transport development which will facilitate future population and employment demands and travel patterns. Also the new NTA Transport Strategy, currently being developed as part of Vision 2030, may identify future investment proposals which will also need route corridor protection to ensure that opportunities to increase public transport availability are not lost. Local authorities should liaise with the NTA, relevant Transport agencies and the Department of Transport during Development and Local Area Plan preparation.

6.3.2 Road Transport

From the period 1997-2008 an investment in excess of €4.3 billion has been made in the national road network in the Greater Dublin Area. While investment in public transport development is the main priority in the GDA, it is recognised that future transport demands cannot be delivered solely by the public transport rail system, and that the road network will continue to be critical to transport management and the efficient movement of buses, people, goods and other services in the GDA and beyond. It is national policy that the carrying capacity and efficient operation of the strategic road network within the GDA is safeguarded to ensure the investment in the road network returns value for money and longevity of the infrastructure provided. Also some regional and local roads have strategic importance in delivering the targets and goals set out within the NSS policies and should be included in Development Plans to protect the continuation of their strategic function.

Strategic national corridors function as national and regional arterial routes for the movement of goods, services and people between larger settlement areas within and outside the GDA. Development of a limited number of key nodes

⁹⁹ Drogheda, identified as a primary development centre in the NSS, is located within the Border Region however part of its environs is located within the GDA and the settlement therefore has a functional role within the GDA.100 As defined within the National Spatial Strategy and settlement hierarchy table of the regional planning guidelines, chapter 4, Section 4.5.

¹⁰¹ Source: NRA submission paper to the RPG review process.

¹⁰² Strategic national road corridors in the GDA include the N1, N/M2, N/M3, N/M4, N/M6, N/M7, N9, N/M11, N31, N32, M50, N52, N78, N81 and N82.

along a strategic corridor may be appropriate at some locations within and abutting key growth towns and development areas in the RPG hierarchy and which are consistent with national and regional development and the RPG economic and settlement strategy. To optimise the use of strategic road corridors, Local Authorities should follow the recommendations contained in *Spatial Planning and National Roads- Guidelines for Planning Authorities* 2010¹⁰³; *Policy for the Provision of Service Areas on Motorways and High Quality Dual Carriageways*¹⁰⁴ and the *Traffic Management Guidelines*¹⁰⁵, and any subsequent national guidance. Local Authorities should liaise with the relevant transport authorities as part of the preparation of any future plans examining this issue and assess possible impacts. Regional roads and local roads are also important for the GDA, serving local enterprise, tourism, agriculture and providing essential access for communities to core services and goods. Policies for sustainable investment in upgrading the existing local road network and improving safety for vehicles, cyclists and pedestrians are strongly supported.

For the GDA only two major new regional scale road projects are under consideration by the Department of Transportthe Leinster Outer Orbital Route (LOOR) and the Eastern By-Pass. The Orbital route through the Mid-East linking the growth towns was identified in the 1999 Strategic Planning Guidelines for the GDA and was subsequently supported in the 2004 RPGs. The route has an important role in providing improved accessibility and connectivity between the towns in the hinterland of the GDA. However, the RPGs also recognise that this road has the potential to undermine the core consolidating strategy of the guidelines. Accordingly, the scale and capacity of the road must be calibrated to limit the potential for sprawl while improving connectivity between towns in the Mid-East and reduce the impact of the land take reservations on the areas around the corridor. A feasibility study was undertaken as part of Transport 21 and a protection corridor study has been issued by the NRA to relevant councils to protect potential junctions. Similarly to the LOOR, the NRA undertook a feasibility and corridor study in relation to an eastern bypass from Dublin Port with the N11. No route selection has been finalised or approved. The corridor study should inform future decisions for the relevant Development and Local Area or Master Plans and development management purposes. ¹⁰⁶ The NTA will examine both of these corridors as part of preparing the new Strategy- Vision 2030. Until this process is completed and decisions are made in relation to planned transport investment for the GDA is it important that the corridors are protected to ensure future options remain viable.

The RPGs recognise the long term possible strategic importance these road projects could have in meeting future transport needs and economic growth. Until these future routes are examined in detail and considered in relation to the impact of such projects on the environment and protected habitats, and clarity regarding their suitability or viability of more suitable alternatives are identified, in the interim, it is recommended the various relevant Local and Transport Authorities liaise to ensure suitable lands are reserved. This will allow for the possible future delivery of these transport infrastructure projects in the form outlined in the completed studies.

In addition to the above, it is recommended that relevant Local Authorities and transport departments undertake, as part of an overall strategy developed as part of the NTA Vision document, a range of actions to improve the functioning of the M50/M-N11 area including measures such as traffic management and upgrade works, expansion of road capacity, bus priority, improved rail services and other identified options.

A holistic approach should be taken to the design and retro fitting of the existing road network, together with planned road projects, where suitable and appropriate, to cater for sustainable transport modes. Where there are competing modes on a route corridor, a greater weighting should be given to the more sustainable mode of travel.¹⁰⁷ At concept and design stages of road projects, contingencies for additional infrastructure such as provisions for green bridges/eco ducts, connections for communications infrastructure and other services which may be required over the next 10-20 years, should be included. Road design should promote high quality layout, safety and design measures which integrate technical, functional and aesthetic requirements with urban design measures to ensure safe integration of people with spaces and in order to avoid vehicle dominated responses to development challenges.

6.3.3 Airports

Aviation and air transport are essential to economic trade, international competitiveness and movement of people. The GDA contains the unique asset of Dublin Airport which is a primary international air access point for the State. Dublin Airport has grown from 10 million passengers per year in 1997, to 23.5 million in 2008 and the Airport Authority forecast by 2020 that 30 million passenger numbers may be using the airport. Construction of Terminal Two and related facilities is nearing completion and planning permission for a new runway has been granted. It is anticipated these developments will assist in meeting existing and future airport demand.

In order to ensure the continued viability of Dublin Airport as an international transport hub it is important that:

- A high capacity public transport system between the city area and the airport is developed
- Protection is given to linkages to the high quality and high capacity road network surrounding the Airport Area
- That lands are reserved to cater for possible long term future passenger/cargo growth and airport expansion
- The Inner and Outer Airport Noise and Public Safety Zones and Approach Zones are suitably protected through Development Plan and Local Area Plans policies and zoning.

¹⁰³ Spatial Planning and National Roads- Guidelines for Planning Authorities, Draft for Consultation, June 2010

¹⁰⁴ National Roads Authority, 2007.

¹⁰⁵ Published in partnership between the DTO, Department of Transport and DoEHLG in 2003

¹⁰⁶ Dublin Docklands prepare a Master Plan for the Docklands Area setting out a detailed development framework for their area.

¹⁰⁷ As referred to under Action 25, page 47 of Smarter Travel- A Sustainable Transport Future 2009 published by the Department of Transport.



6.3.4 Ports

The GDA has in Dublin Port the largest port in the country in terms of throughput, access and economic contribution. It is the largest provider of LoLo and RoRo, ¹⁰⁸ and also an important provider of liquid bulk fuels. ¹⁰⁹ A number of studies have been done in recent years ¹¹⁰ on behalf of the Government to assess future port capacity needs, the most recent of which is the 2009 report by Indecon ¹¹¹ entitled 'Dublin Port National Development Plan Study'. This study provides a cost-benefit analysis of investment scenarios for the provision of port capacity, with particular reference to the GDA and Dublin Port. One of the key conclusions is that there is a requirement for increased port capacity in Ireland by 2025-2030. It recommends that the short term priority focus on the improvement of capacity utilisation of existing ports. To meet envisaged port capacity in the long term, the report advises that this would require either the a) expansion of Dublin Port, b) provision of a new port at Bremore or c) an equivalent alternative. At a policy level, the report recommends "Nothing should be done at a policy level to block either the proposed expansion of Dublin Port or the proposed development of Bremore at this stage". The RPGs support the examination of the expansion of Dublin Port and/or a new Port facility ¹¹² on the East coast of the GDA through the environmental and planning processes (i) in line with the above to make provision for envisaged long term needs in capacity, (ii) clarify viable options available and (iii) address the impact of future development on Natura 2000 sites, landscapes and biodiversity impacts.

In addition to Dublin Port, the ports/harbours of Arklow, Wicklow, and Dun Laoghaire. have a role to play in port capacity at a smaller scale and in relation to specialist needs. Drogheda port, has a wide catchment area with its sphere of influence extending to the GDA. It is important that Development Plans recognise their role and support future options to promote economic activity that is sustainable, integrated and suitable for the ports and surrounding areas.

6.3.5 Freight Transport

The freight industry has an important role in supporting the economic performance of the region through the movement of goods and services. Road freight is by far the dominant mode of freight transport (accounting for 95% of all goods moved 113), however congestion has become a significant barrier to this type of activity, while associated CO_2 emission levels have negative implications for the environment.

Given that both the national airport and port are located within the GDA, the focus on international freight transport remains essential for the region. The RPGs also recognise the role of freight activity at a regional level and support measures which will improve efficiency, reduce travel times and reduce emissions.

In this regard, a menu of options should be explored by transport operators, local authorities and freight industries-including improved transport linkages between logistics, increased emphasis on sustainable rail and sea freight, priority freight routes, use of more efficient technologies in freight vehicles, timetabling and scheduling to avoid peak use of traffic networks, joint ventures/pilot schemes between transport infrastructure operators, freight companies and businesses, and consideration of freight planning in Local Area Plans.

6.3.6 Cycling and Walking

The integration of cycle and pedestrian routes and cycle parking facilities is considered a central component of the delivery of greener transport travel patterns. While the NCPF sets a national target of 10% of all trips by bicyle by 2020, within the GDA this should be viewed as a target to be exceeded. Within the metropolitan area in particular, there is scope for exceeding the 2020 national modal share target for cycling given that the spatial integration of higher tier population settlements with high capacity transport systems and employment areas within a relatively compact urban form allows for safe and functional cycle and walking routes from one to the other and may be more cost effective than within the more dispersed hinterland areas.

Speed limits in residential areas and core urban areas, greater levels of priority in terms of street space and signals, education programmes in schools and increasing the public profile of walking and cycling as green modes of transport should be explored throughout the GDA in order to create a culture of cycling and walking in line with the National Cycle Policy Framework vision.

The design of pedestrian movements and spaces and how they interact with the surrounding environment should make places inviting, attractive and well utilised for pedestrians. In the adaptation or creation of spaces and places within the GDA, pedestrian movements (including the needs of the disabled, mobility impaired and children) should therefore be planned and catered for, with issues of function, safety, legibility, and permeability in mind. (The European Charter of Pedestrian Rights, amongst other reference sources, provides important guidance on such matters). Walking and cycling tourism also has the potential to benefit from improvements to the cycle and footpath networks within the GDA.

6.3.7 Strategic Policy & Recommendations - Transport

When preparing the 2010 RPGs the NTA Transport Strategy for the GDA (NTA Strategy) and Implementation Plan for the GDA were not yet complete but work to date has influenced the preparation of the RPGs. When finalised, the NTA Strategy will have included a robust analysis of a range of strategic transport options for the GDA and set out the future direction of investment in the GDA to achieve a range of goals consistent with the RPGs. The legislation establishing the NTA and amending the Planning Acts clearly emphasise the importance of integrating the RPGs and the NTA Strategy to achieve integrated land use and transport planning. The NTA Strategy will take into account the adopted spatial planning policy direction of the RPGs.

The completion of the NTA Strategy and the subsequent Implementation Plan, will detail the projects to be delivered during the lifetime of the RPGs, in the context of current economic circumstances, value for money, supporting integration of transport services, and meeting the goals of both national and regional policy regarding sustainability, community, and economic activity. In setting out the transport projects for the RPGs as required, the list is based on current Government policy as described in Transport 21 and the agreed regional scale priorities of the Regional Authorities.

¹⁰⁸ LoLo- Lift On/Lift Off & RoRo- Roll On/Roll Off.

¹⁰⁹ Dublin Port National Development Plan Study.

¹¹⁰ In addition to an Indecon report, other publications on port requirements include the Forfás' (2009) publication, "Assessment of Port Services Issues for Enterprise" and The Fisher Associates report (2006).

¹¹¹ The report was prepared for the Department of Transport by Indecon Economic Consultants in association with MDS Transmodal, Jones Lang LaSalle and Adams Hendry Consultants, 24th July 2009.

¹¹² The potential for a new facility for port development along the east coast, would require a environmental & habitat impact feasibility study and would be subject to relevant statutory requirements including Environmental Impact Assessment, Strategic Environmental Assessment and Habitats Directive Assessment.

¹¹³ Smarter Transport- A sustainable Transport Future: A New Transport Policy For Ireland 2009-2020 p.36.

Strategic Policy PIP1

Future investment in transport in the GDA shall serve the needs of the GDA by: (i) providing efficient and effective and sustainable means of moving people and goods for business, family and leisure purposes which minimises the environmental impact and the social and economic cost to users; (ii) allows for the development of a land use strategy that supports sustainable development; and (iii) supports growth and efficiencies in economic activity for both the GDA and the State.

The proposals listed below, prior to being fully assessed by the NTA Strategy, support the delivery of the economic and settlement strategy of the RPGs.

Table 9: Proposed Strategic Transport Investment for the GDA¹¹⁴

| Туре | Transport Investment Proposal ¹¹⁵ | Supporting Services for: | Current Status |
|------------|---|---|--|
| Metro | Metro North | Swords, part of Metropolitan area | Planning |
| | Metro West | Metropolitan Area-Tallaght, Clondalkin, Lucan, Blanchardstown | Pre-Application |
| Light Rail | Luas City Centre linkup, link to Broombridge Station (BX) | Increased connectivity in Gateway core & metropolitan area network | Planning |
| | Luas Extension Cherrywood to Bray (B2) | Cherrywood, Old Conna, Fassaroe, Bray | Pre-Application |
| | Luas City Centre to Lucan (F) | Lucan & part of metropolitan area | Pre-Application |
| Heavy Rail | DART Underground/ Interconnector linking Connolly & Heuston lines | M1 & M3 Corridor- Drogheda, Balbriggan, Maynooth, Leixlip, inner Metropolitan Area and M7 Corridor- Naas, Newbridge, | Pre-Application |
| | Navan Rail Line (Phase 2) | Navan, Dunshaughlin | Pre -application |
| | Electrification & new rolling Stock | Selected routes | On going |
| | Completion of Resignalling Project | Selected routes | On going |
| | Opportunities to expand the role of the Phoenix Park rail tunnel should be examined. | GDA, Metropolitan area. | Pre-feasibility and environmental and habitat assessment |
| Road | The Leinster Outer Orbital Route/ Corridor, pending completion of the NTA Strategy and associated decisions regarding this project | Mid- East Growth Towns | Pre-feasibility and environmental and habitat assessment |
| | Completion of Motorway for Euro Route EO1 from Dublin through Wicklow. | East Corridor, Wicklow, Arklow connectivity. | Ongoing on phased basis |

¹¹⁴ This list is likely to be revised following the completion of the NTA Strategy and associated Strategic Environmental Assessment and Habitats Assessment

| Туре | Transport Investment Proposal ¹¹⁵ | Supporting Services for: | Current Status |
|---------|---|-----------------------------------|--|
| | Undertake, as part of an overall strategy developed by relevant stakeholders a solution and range of actions and works to improve the functionality of the strategic road network, including the M50/N-M11 area,consistent with the NTA Strategy. | East Corridor, Dublin, Wicklow | Pre feasibility and environmental and habitat assessment. |
| | Continued reservation of corridor for the Dublin Eastern By-Pass pending completion of NTA strategy and associated decisions regarding this project. | Dublin Port, metropolitan area. | Pre-feasibility and environmental and habitat assessment |
| | Identification of Park & Ride opportunities. | All areas | Planning |
| | Delivery of range of demand management measures. | All areas | Planning |
| | That the NTA and relevant authorities undertake a Freight Study as part of overall Transport Strategy and Implementation Plan for GDA | All areas | Planning |
| Ports | Examination of suitable opportunity site to meet long term needs for shipping port development in the GDA on the coast. | State and GDA | Two strands consisting of 1) Possible Dublin Port extension and 2) Pre-feasibility and environmental and habitat assessment underway for new port facility on north east coast |
| | Improvements to Dublin Port to facilitate growth needs. | Dublin Port and GDA | Ongoing and future internal re-organisation and also application with ABP for Dublin Port extension |
| Cycling | Continuous development and delivery of Regional & Local Cycle network. | All areas | Planning |
| Walking | Improvements to walking routes & paths in GDA to improve accessibility and increase percentage of people walking for journeys | All areas | Planning |

[#] These projects are subject to a habitats assessment being carried out in compliance with EU legislation. See also section 6.2 of these Guidelines.

¹¹⁵ Subject to completion of the NTA Strategy.

[₩] Habitats Directive Assessment Mitigation Appendix A6, Vol. II

These projects are subject to a habitats assessment being carried out in compliance with EU legislation. See also section 6.2 of these Guidelines.

Strategic Recommendations

- PIR1 Local Authorities should continue to develop further the policy of consolidation of regional population growth and employment in areas best served by public transport and a range of transport modes which support the transport initiatives indicated within 'Transport 21' and the National Transport Authority Strategy for the Greater Dublin Area and to promote higher densities/trip intensive uses in such areas, subject to normal planning criteria.
- PIR2 Development Plans should include policies and provisions which are consistent with and facilitate the implementation of the Smarter Travel Documents 'A Sustainable Transport Future A -New Transport Policy for Ireland 2009 2020' and 'National Cycle Policy Framework (NCPF) 2009 –2020'.
- PIR3 That Land Use and Transport Strategies (LUTS),¹¹⁶ where completed for towns in the GDA, inform future planning decisions for sustainable future growth in key development areas.
- PIR4 Local Authorities shall abide with the recommendations of the National Transport Authority (NTA) and other relevant transport bodies in relation to the preparation of future Development and Local Area Plans. Local Authorities should, in consultation with the NTA, identify and reserve lands and corridors for future transport needs to facilitate the delivery of strategic transport infrastructure required to serve the GDA.
- PIR5 Plans and policies should identify and protect strategic road corridors and their principle function as arterial routes for the movement of goods, services and people between settlement areas within and outside the GDA. Long term junction capacity and carrying capacity should not be adversely affected by inappropriate and dispersed development. Plans and policies need also to be cognisant of the challenges and needs where such roads bisect urban areas identified for growth in the RPGs and the need for strong connectivity within the urban fabric.
- PIR6 Councils should encourage the targeting of sustainable transport investment towards those who would otherwise have difficulty accessing services, access to employment and other key provisions by supporting measures such as those outlined in the Rural Transport Programme.
- PIR7 Relevant Local Authorities should include provisions and zoning policies which support the delivery of high quality transport links to Dublin Airport; ensure that suitable lands are appropriately zoned to allow future expansion and restrict (and where appropriate, prohibit) development in public safety zones and approach zones of all GDA airports and airfields, and in noise zones associated with airport flight operations.
- PIR8 To make provisions in future Plans that examine the growth of Dublin Port and the possibility of a new Port and associated facilities and infrastructure on the coast of the GDA to facilitate future long term growth needs of the State, in accordance with the planning and environmental processes. Authorities should liaise with Port and Harbour Authorities in their area to identify key issues and support the role of smaller ports and harbours in the GDA in an integrated manner.
- Support through policies, development management and actions of the Council a culture for walking and cycling in the GDA through a series of proactive, sustainable, ecologically conscious measures including infrastructure and design provisions which support and encourage walking and cycling, priority provisions within urban areas and education programmes. Furthermore the national target of 10% of all trips by bicyle by 2020 within the National Cycle Policy Framework (NCPF) 2009 –2020 should be viewed as a minimum standard to be exceeded, particularly within the metropolitan area of the GDA.
- PIR10 Plans and projects associated with the provision of transport, airport or port development, leisure or recreation that have the potential to negatively impact on Natura 2000 sites will be subject to a Habitats Directive Assessment (HDA) according to Article 6 of the habitats directive and in accordance with best practice and guidance.



6.4 Water Supply

Water supply for the GDA is a complex network, with facilities serving a number of different councils and the network connections and storage reservoirs connected in a number of locations across Council boundaries. The Liffey River plays a central role in serving the GDA; alongside other key rivers such as the Boyne and the Barrow also supplying key towns. Many of these rivers are both water abstraction sources and also receiving waters for discharge from public and private sources, creating possible pressure on water flows and quality if not managed. The Water Framework Directive will play a central role in the future planning of water supply for the GDA during the life of these RPGs. In addition to the Eastern River Basin Management Plan it may be that some of the other River Basin Management Plans¹¹⁷ could impact on Dublin Region Water Supply Planning in this period. Also relevant to the RPGs in the future will be the new Water Services Strategic Plans required under the Water Services Act 2007.

Water supply in the GDA came under severe pressure from the population and economic growth experienced in the previous decade, and has been an issue of concern since the early 1990s. A study was commissioned on long term water supply issues by Dublin City on behalf of the seven local authorities in the GDA and the DoEHLG in 1996, and updated in 2000 and 2006. This study indicated that there was a need for a new supply for the GDA capable of providing 300 megalitres per day by 2030 which would, when established, meet the needs on the network up to approximately 2050. Alongside this long term proposal, a series of upgrades and improvements were identified in the study and in subsequent studies to improve supply in the shorter term for areas served by the Liffey, and also for the other towns in the GDA drawing on other sources.

¹¹⁷ The GDA is affected by the Eastern River Basin District, Shannon River Basin District, Neagh Bann River Basin District and South Eastern River Basin District and respective river basin management plans.

During the life of the 2004 RPGs significant investment has taken place in a number of areas namely:

- Reduction of leakage across the network which has significantly increased supply in the network
- Linking and covering of major reservoirs in the Dublin area network
- Upgrade and expansion of facilities at Leixlip, Ballymore Eustace and Navan water treatment plants
- Metering of commercial properties which has improved resource management and reduced level of demand
- New local sources to meet local growth through developing new well fields in Kildare, Wicklow and Meath
- Investment in water conservation publicity and programmes to reduce demand (such as http://www.taptips.ie and schools liaison programmes).

Leakage reduction in particular has been critical in meeting the high demand of recent years and has proven to be a highly successful and effective and sustainable investment. Currently a number of water projects are under construction- an extension to Leixlip Waterworks, Ballymore Eustace; the development of new wellfields in mid Kildare, Meath and Wicklow, new reservoir at Malahide, and Sandyford High Level Scheme which will improve overall supply needs and allow development in the short and medium term when completed.

Water is a finite resource and as the GDA is the most populous region and the economic hub of the country, rate of demand is likely to continue to increase during the life of the RPGs, even with continued investment in demand management and leakage protection. The ability to continue to extract water from the Liffey particularly beyond that currently planned is limited by the volume of water in the Liffey, protection of flows and habitats and possible future impact of climate change (future climate change modelling will need to address all potential impacts on sources of water supply including aquifer recharge rates). For this reason, Dublin City Council on behalf of the seven local authorities has continued to examine the options available to source a new long term future water source for the Dublin Water Region¹¹⁸ of the GDA. Based on trends and policy at the time of the water supply study, the modelling undertaken showed that the new supply will need to be available by approximately 2018. It is noted that changes to predicted population and economic growth or the introduction of domestic water metering on a large scale are likely to impact on this predicted date, however this will not obviate the need for a new long term supply. Currently in the Dublin Water Region spare capacity stands at 1%, against best practice of 10% minimum availability. Committed investment and plant expansion will meet needs for approximately 6-8 years. Investment in long term solutions needs to take place during the life of these RPGs and is critical for facilitating economic growth in the GDA. In addition to growth in requirements for water consumption and domestic use; within the GDA key investments and growth has taken place particularly in ICT and Bio-Technological and food industries, which often require access to large amounts of high quality treated water. To allow opportunities for economic expansion it is essential that capacity is available to meet future needs. Future development in the GDA is dependent on the provision of an adequate and high quality water supply with spare capacity to cater for fluctuating weather and demands. Moreover, Plans/ Programmes/ Projects associated with water supply will need to be assessed against climate change scenarios to ensure their long term effectiveness in the context of a changing environment.

Delivering the RPG Strategy & Meeting Future Needs

The RPGs identify key areas of investment in public water supply for the GDA to allow future growth to happen in a sustainable, integrated manner (see Table 10). The investment needs are directly associated with identified growth areas in the settlement and economic strategy and are considered essential to the RPGs. In light of the current low levels of spare capacity particularly in the Dublin Water Region, it is essential that significant investment is funded and continued in network renewal to actively reduce and prevent high leakage levels from ageing pipes and to resolve weather impacts; improving available capacity in the short term. The very low level of storage capacity for treated water, resulting from infrastructural deficits, also needs to be addressed. All future projects/programmes and options progressed will need to go through a rigorous process of option assessment and examination of environmental impacts so that the most suitable approach is identified that avoids negative impact on Natura sites and also ensures the continued delivery of the policies of the Water Framework Directive and the associated River Basin Management Plans. This balancing of need for clean, safe, secure water and environmental protection will be met both through careful selection and scaling of new sources and facilities as well as improving how we manage this limited resource.

118 This area encompasses all of the four Dublin Authorities, large areas of Kildare, and smaller geographical areas of Wicklow and Meath.

Investments needed to deliver the RPGs are listed below, with the areas such investment will serve identified; thus high-lighting the linkage between these priority needs, the Settlement and Economic strategy and public transport investment and priorities. Each programme has been carefully considered and has been included only on the basis that serving the area identified forms a critical part of the RPG Strategy. Other water projects and related measures should be implemented in a timely manner at a local level having regard to the strategic regional priorities. An agreed protocol should be put in place between local authorities in the GDA to ensure the optimum allocation of sanitary and other services for priority investments.

6.4.1 Strategic Policy & Recommendations – Water Supply

Strategic Policy PIP2

Protect and work to improve water quality in, and impacted by, the GDA and seek that investment in water supply projects/programmes is prioritised to support the delivery of the economic and settlement strategy for the GDA through the coordinated and integrated delivery of all essential services supporting national investment.

Table 10: Critical Strategic Programmes- Water Supply

| Water Supply Investment Priority | Supporting Services for: | Principal Agencies |
|---|--|---|
| (1) Continuation of investment in pipe renewal and conservation across all growth GDA towns, to increase available supply and meet growth in demand. | All growth areas | All Councils, DoEHLG |
| (2) Investment in improved demand management from business, agriculture and domestic users though metering, monitoring, education and support services, reducing levels of water wastage. | All growth areas | All Councils, DoEHLG |
| (3) Identification of new future long-term supply for Dublin Water Region, which will allow for increased supply to the area. ** | Dublin Water Region | DCC (on behalf of 7 Local Authorities), DoEHLG |
| (4) Dublin Region Storage Study completion of works including building new reservoir at suitable locations in Saggart and completion of reservoir covering at Stillorgan. | Greater Dublin Area | DCC DoEHLG |
| (5) Provision of a new reservoir in south west Dun Laoghaire. | Facilitate Cherrywood, Rathmichael & Glenamuck | DLR, DoEHLG |
| (6) Provision of new watermain from Ballycoolin to Swords.** | Swords | FCC, DoEHLG |
| (7) Upgrade and expansion of abstraction of Navan Water Treatment Plant to increase supply. ** | Navan | MCC, DoEHLG |
| (8) Old Connaught/Woodbrook & Bray Water Supply Scheme, Phase 2. | South East Dun Laoghaire Rathdown | DLR DoEHLG |
| (9) New water source for South Kildare to expand supply in south Kildare area. ** | Serve Athy, and allowing rebalancing of Ballymore supply to growth areas at Naas & Newbridge | KCC, Carlow CC, DoEHLG |
| (10) East Meath, Drogheda & South Louth Water Supply Scheme. | Drogheda, part of (Meath) | MCC, Louth Authorities, DoEHLG |
| (11) Wicklow & Arklow Water Supply Scheme | Wicklow Town and Arklow | WCC, DoEHLG. |

[₩] Habitats Directive Assessment Mitigation Appendix A6, Vol. II

[#] These projects are subject to a habitats assessment being carried out in compliance with EU legislation. See also section 6.2 of the these RPGs

Strategic Recommendations:

- PIR11 GDA Local Authorities and the DoEHLG continue and prioritise investment in the identification of a sustainable major new long term source of water for the GDA, and planning and development for the required infrastructure to store and distribute large volumes of water in the Dublin Water Region continues.
- PIR12 All Councils, supported by the DoEHLG, continue rolling programmes of investment in water conservation and demand management so that the short term needs can be met through better use of existing resources and to sustain a continuing policy of achieving long term goals of water conservation and environmental good practice. This will involve (i) significant additional investment in pipe renewal and repair to increase available capacity by reducing water leakage and (ii) support and promote integration and retro-fitting of water management measures, including increasing the use of grey or rain water as a substitute for use of treated water in suitable buildings and settings.
- PIR13 Investment is made in improving water storage, distribution, supply and quality in all locations across the GDA where required to ensure that public health is maintained and that lack of water does not restrict the expansion and development of identified growth towns in the GDA, and so that the future needs of industry can be met.
- PIR14 Plans and projects associated with water supply and water management that have the potential to negatively impact on Natura 2000 sites will be subject to a Habitats Directive Assessment (HDA) according to Article 6 of the habitats directive and in accordance with best practice and guidance.

6.5 Waste Water & Surface Water Treatment

Water treatment and management has seen large-scale investment across the GDA since 2004. Since the adoption of the first RPGs the Greater Dublin Strategic Drainage Study (GDSDS) was completed and published and significant progress was made in implementing a number of its recommendations. Following the work of the GDSDS, decisions were taken to make significant investment to expand a number of waste water treatment plants across the GDA, to ensure that adequate capacity was available in the short and medium term to meet the high levels of growth and environmental standards on this key service. The GDSDS recommendations have undergone a Strategic Environmental Assessment and one key recommendation, the development of the new Greater Dublin Regional Drainage Project- Regional Waste Water Treatment Plant, Marine Outfall and Orbital Drainage System on the north coast of the GDA, is now being examined in more detail; with a detailed SEA and Habitats Assessment taking place on a number of options and possible solutions. The waste water treatment network in the GDA is a mix of one major facility (at Ringsend) serving an area mostly comprised of the metropolitan area, and a range of other facilities at a large scale serving a number of towns (such as Osberstown) and smaller facilities serving towns across the Regions (e.g. Balbriggan/Skerries, Dunshaughlin). In many locations the scale of investment in new facilities has only just kept pace with the levels of growth experienced, necessitating the need for the development of further facilities to meet the RPG Strategy. As a result the need for investment in new treatment facilities to serve the GDA is both pressing and immediate as key existing facilities and networks are reaching capacity. Considering the complex issues and significant lead in times for new infrastructure the failure to move forward on this issue in the immediate future will severely curtail the ability of Authorities to deliver the RPGs for the GDA and by consequence the NSS. Continued investment in waste water treatment is needed during the life of the RPGs to (i) ensure high water quality standards and meet the Water Framework Directive targets, and that (ii) necessary new economic and housing developments can take place in the most optimal locations, particularly the continued consolidation of the Gateway and major growth towns.

Delivering the RPG Strategy & Meeting Future Needs

To meet the future needs of the GDA and to deliver the Strategy of the RPGs, supporting the NSS, key strategic investment priorities in relation to waste water infrastructure are identified below. The need for investment in a particular or range of solutions is predicated on the relevant authorities ensuring that such works or developments will not have a negative or adverse affect on the integrity of the Natura 2000 sites, and should actively seek to enhance and protect the water quality by providing modern, effective treatment facilities which cater for the needs of large populations. Where new facilities cannot be provided during the RPGs timescale, the scale of population growth permitted in such catchments will need to be managed to recognise

₩ Habitats Directive Assessment Mitigation Appendix A6, Vol. II

the limited levels of capacity possible. Through Development and/or Local Area Plan policy, Authorities will need to ensure that growth is commensurate to available capacity and that priority is given to economic development and as such that capacity is reserved to facilitate new economic opportunities. An agreed protocol should be put in place between local authorities in the GDA to ensure the optimum allocation of sanitary and other services for priority investments. Plans, Programmes and Projects associated with wastewater supply and treatment will need to be assessed against climate change scenarios to ensure their long term effectiveness in the context of a changing environment. It would be desirable that the design of future waste water treatment systems and associated technologies include provisions for tertiary treatment and that discharge from any new regional waste water treatment plant be considered for re-use, subject to licencing requirements and environmental considerations.

6.5.1 Strategic Policy & Recommendations – Waste Water

Strategic Policy PIP3

Protect and work to improve water quality in, and impacted by, the GDA and seek that investment in waste and surface water treatment and management projects is prioritised to support the delivery of the economic and settlement strategy for the GDA through the coordinated and integrated delivery of all essential services supporting national investment.

Table 11: Critical Strategic Projects-Waste Water & Surface Water

| Water Treatment Investment Priority | Supporting Services for: | Principal Agencies |
|--|---|--|
| (1) Expansion of the Ringsend Waste Water Treatment Plant to ultimate capacity. | Metropolitan Area. | All Councils, DoEHLG |
| (2) Identification of suitable site for the new Greater Dublin Regional Drainage Project- Regional Waste Water Treatment Plant, Marine Outfall and Orbital Drainage System and development of plant and network connections. | Metropolitan Area and large areas of Kildare, Fingal, Meath as network expands. | FCC (on behalf of 6 Councils), DoEHLG |
| (3) Improvement of 9B and 9C Sewers including duplication and additional storage facilities. | Metropolitan Area including lands associated with Dunboyne Spur. | All Councils, DoEHLG |
| (4) Delivery of expansion of Osberstown plant and/or other possible solutions for Osberstown catchment.** | Naas, Newbridge, Kilcullen. | KCC, DoEHLG |
| (5) Identification of suitable servicing solution to allow for future growth of Swords. ** | Swords. | FCC, DoEHLG |
| (6) Development of a high quality treatment plant for Arklow town. | Arklow. | WCC, DoEHLG |
| (7)Shanganagh network upgrade. | Rathmichael, Old Connaught, Woodbrook, Cherrywood. | DLR, CC, DoEHLG |
| (8) Upgrade and expansion of Waste Water treatment at Greystones and associated upgrade at Newtownmountkennedy to create additional capacity at Greystones. | Greystones. | WCC, DoEHLG |
| (9) Upgrading of sewer systems to provide adequate capacity against flooding risk and to mitigate discharges from Combined Sewer Overflows in networks to acceptable environmental standards. | Improved water quality to meet WFD. | All Councils, DoEHLG |
| (10) Completion of expansion of Leixlip Waste Water Treatment Plant. | North Kildare | KCC, DoEHLG |

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^{*} These projects are subject to a habitats assessment being carried out in compliance with EU legislation. See also section 6.2 of the these RPGs

Strategic Recommendations:

- PIR15 Seek continued investment in Waste Water Treatment facilities and networks to meet the needs of the River Basin Management Plans and to achieve the targets for good water status for river, coastal and transitional waters in the Water Framework Directive.
- PIR16 Ensure that future capacity is provided in growth towns through expansion and upgrading of facilities where necessary and/or exploration of alternatives such as connecting to adjoining drainage systems or changes to catchments to enable growth towns to provide for the population growth envisaged in the settlement strategy and thus enable a more sustainable settlement pattern to be supported.
- PIR17 Identification and development of a suitable site for the Greater Dublin Regional Drainage Project Regional Waste Water Treatment, Marine Outfall and Orbital Drainage System in the north coast of the GDA to enable the continued population and economic growth and the physical consolidation of the metropolitan area, by reducing the catchment size for Ringsend and providing new treatment capacity through network connections. ▶
- PIR18 The management of land use and policies of Development Plans, Local Area Plans and Development Management decisions shall ensure that the scale of development is managed to achieve compliance with the waste water discharge licences of waste water treatment facilities. Breach of compliance is now a criminal offence under the EU Directives 2006/11/EC and 2000/60/EC given effect in the Waste Water Discharge Regulations 2007.¹¹⁹
- PIR19 Plans and projects associated with all waste water and/or surface water treatments that have the potential to negatively impact on Natura 2000 sites will be subject to a Habitats Directive Assessment (HDA) according to Article 6 of the habitats directive and in accordance with best practice and guidance.

6.5.2 Surface Water and Groundwater

The management of surface water traditionally takes one of two forms in built up areas-combined or separate from the foul sewer network. In older urban areas combined sewers collect both storm water and foul flows in a common pipe and rely on combined sewer overflows (CSOs) to divert excess flows to receiving rivers and streams when the downstream capacity of the pipe system is exceeded. Such combined systems have the potential to collect significant polluting material, which when discharged, can cause environmental degradation to the receiving water environment. Separate storm water drainage provides for the collection of storm water flows primarily from paved areas (roofs, paths, roads) and these are generally conveyed to streams, rivers or coastal waters.

Local Authorities should, during the life of these RPGs, continue to assess existing systems on a catchment basis and develop and identify funding for the renewal, upgrading and replacement of surface water infrastructure, where needed, to meet existing and future demands. Local authorities should additionally be aware of the potential impacts of climate change in relation to changes in rainfall volume, surface and groundwater levels and more extreme seasonal events. They will have a central role in shaping the adaptive capacity of wastewater and drainage systems to climate change.

On the basis of various analyses which may be currently or later become available to the local authorities such as cost effectiveness measurement, hydrological analysis, geomorphology and ecological studies, and river and breach modelling, consideration will need to be afforded to the necessary measures available to ensure a more sustainable future.

The primary measure for urban storm drainage now established in the GDA and introduced on the foot of the GDSDS¹²⁰ recommendations, is the comprehensive use of Sustainable Drainage Systems (SuDS) for all new development. This requires the provision of infiltration systems, storage, and regional attenuation storage to moderate local runoff volumes and ensure that polluting sediments are trapped and removed before ultimate discharge. At the same time, the implementation of these policies and works to protect river and stream channels from development in the riparian strip will also conserve and protect the existing stream/river environment and minimise risk of accidental pollution from paved area discharges and minimise risk on flood plains.

In rural areas, impacts such as agricultural run-off, new land drainage systems, increased forestry or deforestation and removal/drainage of bogland can also have significant impact on surface water management. A related and interdependent issue to surface water management is that of ground water management. Ground water resources- protected under EU¹²¹ and national legislation- are a source for public drinking water and significantly play an important role in the maintenance of wetlands and river flows, particularly through dry periods. In turn the quality of water may affect the attractiveness of a location to live, visit or work and can have significant impacts on human and animal health. It is therefore important that sustainable groundwater protection and management measures are provided at county and city level, through ground water protection schemes, ¹²² vulnerability mapping, development management (particularly in relation to rural development) and licensing processes. See also figure 3.6 and 3.7 of the SEA –surface water and ground water mapping.

Councils need to consider applications and address policies for such developments in future plans that ensure that downstream impacts and cumulative effects are considered, particularly in relation to flood impacts.

Strategic Recommendations:

- PIR20 Full implementation of new development and environmental management policies developed in the GDSDS project, including Sustainable Drainage Systems (SuDS).
- PIR21 Integration within urban areas of pluvial and drainage models to achieve an integrated response and mutually supportive actions to prevent pluvial flooding¹²³ and pollution of receiving waters.
- PIR22 Provision of ground water protection schemes/plans in accordance with Groundwater Protection Schemes Guidelines and other necessary measures in order to maintain and where appropriate, improve the quality of ground water.¹²⁴
- PIR23 Policies within Development Plans must address the relationship between significant land, arterial drainage and navigation and other works or changes in use and the possible impact to protect and where appropriate, minimise possible impact on both large scale flood risk, aquatic habitats and Natura 2000 sites from individual works and also cumulative effects from a number of developments within a river catchment.
- PIR24 All water management plans should take account of the possible impact of climate change in the future in relation to changes to volumes of rainfall, river flows, sea level rise, drought events and frequency of storm events.



¹²¹ Groundwater Directive, 2006/118/EC and Water Framework Directive.

¹¹⁹ SI No.684 of 2007, Circular PD7/09

¹²⁰ Greater Dublin Strategic Drainage Study.

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¹²² *The Groundwater Protection Schemes*' document by DoEHLG/EPA/GSI, provides guidance on ground water protection to Local Authorities, Licensing Bodies and other relevant stakeholders carrying out activities that have the potential to threaten ground waters.

¹²³ Pluvial flooding is flooding that results from rainfall generated overland before the runoff enters watercourses, water bodies or sewers.

¹²⁴ In cooperation with the Geological Survey of Ireland.

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6.6 Energy & Communications

6.6.1 Introduction

The maintenance, adequate provision of, reinforcement and expansion of energy and communication networks is a critical part of securing the region's future. The successful functioning of these networks is a key determinant in attracting foreign investment, ensuring affordable energy and communication provision for all citizens, bolstering regional economies and indigenous businesses and is a key component of regional infrastructural requirements. The provision of advanced telecommunication networks and services, including Next Generation Networks, is critical to ensuring that the GDA places itself in the right position to capitalise on emerging markets, business opportunities and to attract skilled workers. Access to advanced and cost competitive telecommunication services will help the GDA region become more competitive within global markets.

Nationally there is a need to fully exploit renewable energy potential such as wind and wave energies and reduce national dependency on imported fuels for energy provision, to the benefit of the economy as well as the environment. The transformation to a high technology, energy secure region and country is an ongoing and dynamic process. It is imperative for future economic growth and success that this transformation is facilitated in every means possible and that we plan for the energy requirements of an advanced information society, locally, regionally and through a whole government approach recognising the interdependency of a range of factors such as Kyoto; the development of renewable resources to meet renewable energy targets; and development and reinforcement of the Grid.

6.6.2 Electricity Transmission Networks

The RPGs for the GDA 2004-2016 noted the marked increase in consumption of energy since the late 1990s. This increase in consumption correlated with a similar scale increase in economic growth. Whilst there is a current slowdown in economic growth the long term trend is towards growth. Also during the life of the RPGs other major sources of demand may arise such as expansion of electric based transport or webfarms. Demand in the 'East' is estimated by Eirgrid¹²⁵ to increase significantly by 2025. The appropriate reinforcement and adequate provision of infrastructure is therefore vitally important to meet regional demand and to facilitate the transmission of renewable energy to main demand centres.

Geographic location, fluctuating oil prices, a high dependence on imported gas (approximately 93% in 2008) and the transition to a deregulated market and climate change legislation point up the need for a more diversified power generation portfolio in the State. National policy such as the White Paper on Energy seeks to significantly increase the supply of power from renewable energies which have important implications regarding network investment.

Some areas of the country are better situated for the generation of renewable supplies of energy and creates a need to reinforce grid structures to efficiently distribute supply so that economic prosperity can be enhanced throughout the country. The GDA as the economic engine for the country has significant demand but is not an area with the greatest renewable generation potential. Capacity for renewable energies as a percentage of national renewable energy production in the "East", 127 Grid 25 Region, is 4%. In this area potential wind resources are largely offshore and up to 240 MW of wind generation is expected to be connected to the grid. Strengthening of the network will facilitate demand being met by renewable powered generators located mainly in the west of the country.

"GRID25", the Transmission Strategy of EirGrid -the national Transmission System Operator, recognises the need to strike up a sustainable balance between cost, reliability, security, and environmental impact. ¹²⁸ The €800m pinpointed for

the GDA will be spent on upgrading 450 km of the existing network and building new circuits. It is expected that these upgrades will cater for projected increases in population and demand and will help attract and maintain industry within the region. Examples of these include transmission projects in and around Inchicore, Carrickmines, Balgriffin, Adamstown, Finglas, Naas (Kilteel) and the Woodland station.

The strategy contains a number of planned investments within and extending beyond the GDA- reflecting the transregional dimension of the electricity network. The development of these projects will be required in many cases to undergo environmental assessment and in some cases a habitats assessment. Final options selected should ensure that negative impacts on Natura 2000 sites and protected species are avoided. Key projects identified by Eirgrid are:

- The construction of new transmission circuits and associated 220/110kV substations in west and north Dublin to cater for additional demands within these locations.
- Strengthening the network into and out of the region to allow demand to be met by renewable and conventional generators across an all-island market.
- Reinforcement works on the network will cater for expected growth in Kildare and North Wicklow.
- Development of a new 400/110kV station near Portlaoise, Co Laois which will reinforce the Network in Kildare and will be connected into a planned 110kV line between Portlaoise and Athy.
- The East-West interconnector to provide 500 MW of capacity increasing competition and security of supply.
- The North-South interconnector and the Woodland (Meath)-Kingscourt (Cavan) 400 kV line are expected to provide long term capacity between the Republic of Ireland and Northern Ireland (NI) systems and security of supply to the North East¹²⁹ and provide essential reinforcement to the transmission grid in the North East.

Future development of the grid and provision of infrastructure to transmit energy from existing and new generators is of vital strategic importance to the GDA, as the primary demand centre in the country. Individual elements of grid development as they are planned may be subject to environmental impact assessment and habitats directive assessment and significant issues arising shall be addressed within these processes, including changes to routes and locations of new infrastructure. Account will also need to be taken at regional level of the National Landscape Strategy and the report "The Comparative Merits of Overhead Electricity Transmission Lines Versus Underground Cables", the need to facilitate other local and regional policies and appropriate channels of consultation. It is critical in developing and maintaining the GDA as an ICT and traded services global city region and hub that the scenario that any expectations that the Dublin network could be highly stressed and likely to experience faults by 2014 should be avoided.

6.6.3 Telecommunications

Significant investment since the 1980s in telecommunications through the 1990s has intensified in more recent times. Broadband infrastructure development remains an area which requires continuing ongoing investment. Broadband and in particular next generation connectivity are integral to further developing the competitiveness of the Irish economy. In 2008, Ireland ranked 25th amongst 28 OECD countries in terms of its readiness to support next generation video and web services.

Whereas, the previous RPGs considered the rollout of broadband and the need to provide infrastructure and services on a balanced regional basis within three years; the new wave of advancements focus on broadband uptake, performance and availability. Ireland and the GDA continue to have poor broadband performance in relative European terms. Advancement in telecommunication infrastructure and performance represents one of the most critical steps in creating a more competitive regional and national economy. As a relatively remote and currently high cost location Ireland and the GDA needs to take advantage of best available broadband technologies. The strong uptake of broadband services points up a willingness and desire across all sectors to invest in the best telecommunications available in order to gain competitive advantage. For SMEs, effective use of ICT will allow them to compete with counterparts in global markets, increase customer base and link business functions.

¹²⁵ EirGrid is Ireland's Independent Transmission System Operator (TSO) and operator of the wholesale power market.

¹²⁶ EirGrid are currently in the process of re-examining an initial prediction of an 80% increase in demand which would have equated to 30% of national demand.

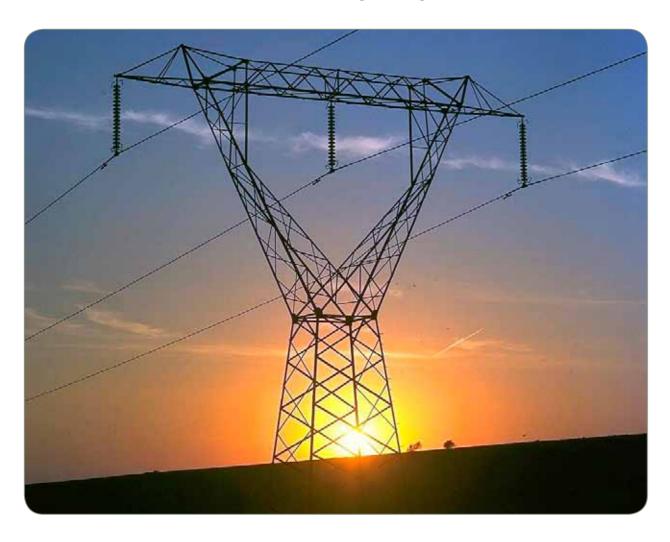
¹²⁷ The majority of the Dublin and Mid East Regions are within the East EirGrid Region. Central and North Meath and a smaller part of North Dublin are in the North East EirGrid region.

¹²⁸ GRID25 covers the entire country. The contexts and statutory basis for GRID 25 are EU directives on energy and environment, the National Climate Change Strategy, and the White Paper on sustainable energy. It was published in October 2008 as a strategy for the development of Ireland's transmission grid to ensure adequate infrastructure is in place to stimulate reductions in CO2 and other greenhouse gas emissions and to ensure that renewable energy targets are met. EirGrid is statutorily obliged to carry out an SEA of this plan. As part of the mitigation measures from the SEA process it will be undertaken to put in place regional constraint studies and procedures to ensure that environmental considerations are part of all project and development activities.

¹²⁹ In November 2007, a Single Electricity Market (SEM) was established between the Republic of Ireland and Northern Ireland.

¹³⁰ Forfás, "Annual Competitiveness Report 2008", 2009, p10.

¹³¹ Forfás, "Annual Competitiveness Report 2008", 2009, p18, p98.



Currently for this sector, value for money in terms of both cost and broadband upload and download speeds remains relatively uncompetitive in European and global terms, and this needs to be addressed. Within the GDA, in order to promote the development of super broadband connection speeds, alternative parallel networks such as fibre will need to be further developed. Wireline connections rather than wireless currently provide the most feasible opportunity to propagate super broadband connection speeds. Effective access to existing lines needs to be continually ensured with a fair return for incumbent line owners. The importance of developing Local Loop Unbundling (LLU)¹³² is demonstrated by the recurring pattern across Europe whereby incumbent operators are less likely at present to offer high performance broadband connection (>10Mbits/sec) than new entrants (competitors/"altnets"). Metropolitan Area Networks (MANs) have increased service availability and further uptake will increase competitiveness, within the GDA and nationally. Settlements with MAN networks have been shown to be more attractive locations for FDI. ¹³³ Moreover, there is potential to extend MANs further so that they will be even closer to business premises and residential areas. MANs are now available in 25 towns in the GDA. Certain areas of the Greater Dublin Area are currently not covered by (fixed line) broadband access. The National Broadband Scheme (NBS) has been entered into with the ICT company "3." It is hoped that this will help ensure delivery to those areas in which broadband services are currently not available including considerable parts of Kildare, north and south Wicklow and Meath.

It is critical that as Ireland and the GDA look to market themselves as centres for creativity, innovation and enterprise, that broadband speeds and costs are competitive with international and especially European alternatives. For the GDA to meet its full potential it is essential that steps are taken to bring about improvements to current broadband offering. In so far as possible planning should facilitate future-proofing of the regions telecommunication infrastructure; and improve the

availability of advanced service offerings. Facilitation of the installation of more modern fibre access lines as part of new developments is an important part of this process. More generally, it is imperative that demand side initiatives for business, e-Government and education are enhanced to ensure the take up of existing and emerging technological opportunities. Broadband quality, availability and cost need to be improved to reflect the importance of the GDA and capital as an ICT hub of European and global significance. Development Plan policies should also be cognisant of the Departmental Guidelines for Planning Authorities on Telecommunications Antennae and Support Structures and any subsequent revisions or expanded Guidelines on this area published subsequent to the adoption of the RPGs.

6.6.4 Gas Network

Current policy and investment are directed by the "Gas Capacity Statement 2009", produced by the Commission for Energy Regulation (CER) and the Utility Regulator (Northern Ireland) as part of the Common Arrangements for Gas Project as part of the All-island Energy Market Development Framework.

The most recent document indicated that future supply has become stronger over the past year with demand forecasts lower due to the economic downturn and the supply side strengthening due to Shannon LNG having secured planning permission for a terminal and the likelihood of the Corrib project progressing. It is anticipated that if gas from the Corrib field and Shannon LNG displaces gas coming from interconnectors that there will be potential infrastructural implications as gas will flow from the west to centres in the South and East. In addition, further gas prospects being developed off the North West coast and in the Celtic Sea, as well as a salt cavity storage facility in Larne could also contribute in the medium and long term. A key driver for gas demand is energy generation. The efficiency of Combined Cycle Gas Turbines (CCGTs) and uptake of renewables will impact on demand and the nature of generation stations. Increases in demand for gas from new power stations may result in a requirement for considerable investment in pipeline infrastructure across and throughout the GDA.

In terms of reinforcement of the system in the GDA, plans have yet to be developed as the need to reinforce does not occur in the short term, following the significant works in recent years. However, as the RPGs look to 2022 work will need to take place in the medium term during the life of the current RPGs and that investment in securing the network is of regional importance.

6.6.5 Renewable Energy

Renewable energy provision within the GDA will continue to become a more central issue in terms of environmental concerns, economic viability and development, and employment creation in green technologies. Approximately 5,500 MW of renewable generation by 2020 is required to meet the government target of 40% total consumption from renewable energy.¹³⁴ To achieve this, upgrading, strengthening and facilitation of the electricity transmission network is needed alongside the replacement of older plants by conventional generation to integrate the large amount of renewable required. The delivery of a sustainable energy future as outlined in the Energy Policy Framework 2007-2020 is closely linked to the national climate change policy.¹³⁵ Achievement of these national targets will require development of renewable energy options such as offshore wind generation, marine based energy generation, solar energy and geothermal both within, adjacent to, and outside the GDA. Subject to the provision of adequate capacity in the Grid to receive, transport and distribute energy, renewable energy provision will assist efforts to meet Kyoto Protocol targets, increase security of supply, and bolster energy supply levels catering for future demands arising from a knowledge and ICT intensive economy and will assist the decoupling of economic growth from carbon emission levels. Policy in this area should be developed based on the Departmental planning guidelines in relation to Wind Farms, ¹³⁶ any subsequent updates published and/or future publications in the area of ocean energy guidelines or other guidelines¹³⁷ pertaining to generation of energy from renewable sources.

¹³² Local loop unbundling (LLU or LLUB) is the regulatory process of allowing multiple telecommunications operators to use connections from the telephone exchange's central office to the customer's premises. In other words incumbent operators make their copper cables (line networks) available to other companies.

¹³³ Source: Department of Communications Energy and Natural Resources website- www.dcenr.gov.ie.

¹³⁴ The White Paper "Delivering a Sustainable Energy Future for Ireland" states that there is considerable potential for renewable energy and bio-energy sectors to support regional and rural development. The previous 33% target was increased to 40% in December 2008. The interim target for 2010 is 15%. (The European Renewables Directive (2009/28/EC) sets a binding target of 20% for renewable energy as a percentage of overall EU consumption by 2020 and a mandatory 10 % minimum target to be achieved by all Member States for the share of biofuels in transport petrol and diesel consumption by 2020, to be introduced in a cost-effective way).

¹³⁵ *The National Climate Change Strategy 2007-2012* recognises the importance of a renewable energy policy as a central means to reduce Green House Gas (GHG) emissions.

¹³⁶ Wind Energy Development Guidelines, 2006.

¹³⁷ For example Guidelines on the Planning, Design, Construction & Operation of Small-Scale Hydro-Electric Schemes and Fisheries (DCENR, 2007).

In light of the growing market in small scale energy generation both in the residential and industrial areas of the GDA as well as rural locations, it would be appropriate and timely that a wind energy study on the potential of wind energy; appropriate locations for varying types of turbines; and associated land-use policies to guide, assist and promote this new green business be undertaken. In light of the geography of the GDA such a project would be most suitably undertaken as a cross-Council project, at a regional scale to ensure a consistent policy approach across Local Authorities.

6.6.6 Energy Action Plans and Energy Statements

Sustainable Energy Action Plans which seek to set and strategically meet energy reduction targets and promote energy efficiency and opportunities should seek to include, amongst other issues, identification of opportunities to promote rational use of energy including sustainable material and energy utilisation in construction. These should be presented in a spatially geographic manner where possible in order to provide an extended evidence base in the decision making process.

It is suggested that Energy Statements are submitted to Planning Authorities as part of planning application packs in respect of larger developments. These should outline how carbon reductions have been achieved and the extent, if any, of the carbon reduction. Reference is made to SI 666 2006 regarding the energy performance of buildings and the assessment and/or consideration of alternative energy systems.

6.6.7 Strategic Policy & Recommendations Energy & Communications

Strategic Policy PIP4

That the ICT and energy needs of the GDA shall be delivered through the lifespan of the RPGs by way of investment in new projects and corridors to allow economic and community needs to be met, and to facilitate sustainable development and growth to achieve a strong and successful international GDA Gateway.

Strategic Recommendations.

- PIR25 That reinforcements and new infrastructure are put in place by the key agencies, and their provision is supported in Local Authority policies, to ensure the energy needs of future population and economic expansion within designated growth areas and across the GDA can be delivered in a sustainable and timely manner and that capacity is available at local and regional scale to meet future needs.
- PIR26 Development Plans and Local Authorities support, through policies and plans, the targets for renewable generation so that renewable energy targets for 2020, and any further targets beyond 2020 which become applicable over the duration of the RPGs, are met.
- PIR27 That low carbon sustainable renewable energy systems, bio-energy and energy conservation potentials are exploited to their full potential through the advancement of EU and national policy at regional level and the promotion of existing and emerging green technologies.
- PIR28 To ensure that planning policy at Local Authority Level reflects and adheres to the principles and planning guidance set out within Department of the Environment Heritage and Local Government publications relating to 'Telecommunications Antennae and Support Structures', 'Wind Energy Development' and any other relevant guidance which may be issued in relation to communications and sustainable energy provisions.
- PIR29 Ensure that when reviewing County and City Development Plans that an Energy Action Plan is developed to provide an evidence base to identify the opportunities for decentralised energy reduced energy consumption, increased energy conservation and improvements to low carbon energy provision and to future proof sustainable energy provision and practices for local communities.
- PIR30 Continued promotion of opportunities by, and cooperation between, all relevant agencies and stakeholders to achieve an internationally competitive ICT sector is developed putting the GDA on a par with leading European regions by investment in broadband.

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- PIR31 Future corridors for energy transmission or pipelines should avoid creating sterile lands proximate to key public transport corridors, particularly rail routes.
- PIR32 Seek the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity transmission grid in a sustainable and timely manner; and continued support by all key stakeholders of energy conservation measures.
- PIR33 Plans and projects associated with the generation or supply of energy or telecommunication networks that have the potential to negatively impact on Natura 2000 sites will be subject to a Habitats Directive Assessment (HDA) according to Article 6 of the habitats directive and in accordance with best practice and guidance.
- PIR34 That a study is undertaken on wind energy potential by local authorities jointly in the GDA focusing on suitable areas for larger wind energy projects, role of micro wind energy in urban and rural settings and the potential for wind energy within industrial areas with the outcome presenting regionally consistent new land-use policies and objectives and associated development management guidance to potential projects.
- PIR35 To maximise the potential of the ICT sector it is strongly recommended that: open access fibre connections are included in new developments; that carrier neutral ducting is installed during significant public infrastructure works such as roads, water and sewerage and that all ductings are recorded and mapped; that existing ducting along publicly owned infrastructure is considered to provide backhaul connections where possible; and that reasonable broadband speed and access is provided to each citizen and business within the GDA to ensure a competitive service and in order to facilitate an evolutionary, globally competitive, efficient and sustainable society and economy in line with the "Digital Agenda for Europe." 138

Role of Local Authorities

Development plans should facilitate the provision of energy networks in principle, provided that it can be demonstrated that –

- the development is required in order to facilitate the provision or retention of significant economic or social infrastructure;
- the route proposed has been identified with due consideration for social, environmental and cultural impacts;
- the design is such that will achieve least environmental impact consistent with not incurring excessive cost;
- where impacts are inevitable mitigation features have been included;
- where it can be shown the proposed development is consistent with international best practice with regard to materials and technologies, that will ensure a safe, secure, reliable, economic and efficient and high quality network.

In considering facilities of this nature that traverse a number of counties or that traverse one county in order to serve another, Planning Authorities should consider the proposal in light of the criteria outlined above. In the case of strategic infrastructure development under the PDA Act 2000, as amended it is important that planning authorities engage in early consultation and discussion with the Transmission System Operator (TSO - EirGrid) or relevant other planned bulk transmission, or relevant other, infrastructure projects as part of their roles as either the competent authority or prescribed body.



138 The "Digital Agenda for Europe" was built upon inputs from the "Digital Competitiveness Report 2009" – COM(2009) 390 and is a flagship initiative of the "Europe 2020 Strategy."

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Waste management infrastructure provision is an important part of the physical infrastructure investment needed in the GDA for population and economic growth. Since the 2004 RPGs a number of developments and projects have been delivered improving the management of the regions municipal solid wastes including investment in recovery centres, civic amenity sites and the granting of waste-to-energy facilities. There has been considerable investment in all types of waste management infrastructure with appreciable increases in recycling rates across all sectors within the GDA.

The direction of waste policy needs to be continually reviewed through the Waste Management Plans for each waste management area¹³⁹ in the GDA in order to secure increased competitiveness and efficiencies across the GDA. Waste management policy needs to:

- Further coordinate waste management plans to maximise potential economies of scale and to enable the market to pass on the benefits to businesses and households;
- Develop a greater range of choice in terms of waste treatment solutions including commercial energy recovery options;
- Decouple the link between waste generation and GDP;
- Expand policies to promote and support source reduction and reuse, to reduce stresses on waste management infrastructure and to create better synergies between businesses and across sectors;
- Promote improvements to quality of recycling infrastructure to reduce costs;
- Continue to invest in increasing opportunities for recycling and safe disposal of waste;
- Expand treatment capacities and options to reduce the quantity of organic materials entering the waste stream;
- Development of opportunities, as outlined above, shall not compromise the integrity of ecologically sensitive areas, in particular infilling with inert materials which can give rise to fragmentation of habitats. A change in the regulations that effectively exempts land filling once it achieves land reclamation would support this endeavour.

The signs are encouraging with recycling levels up to 26% for households nationally in 2007. 140

Preservation of the environment and conservation of diminishing natural resources are key principles inherent within the concept of sustainable development. The RPGs support the waste management hierarchy and increased and coordinated effort should be made in the areas of source reduction and re-use of waste across the industrial, commercial and residential sectors of the GDA.



139 The constituent counties of the GDA fall into four waste management areas. The four Dublin Counties prepare a single plan for Dublin; Meath forms part of the North-East Region (which also includes Cavan, Monaghan and Louth) and Kildare and Wicklow both prepare individual waste management plans for their county.
140 National Waste Report, 2007, EPA, 2009.

Local Authorities should seek to anticipate burgeoning waste streams, identify opportunities to integrate facilities where appropriate and identify current or future opportunities for re-use of waste, for example, the re-use of secondary aggregates as physical infrastructure construction bases or the potential reuse of suitable soil material in amenity projects or landfill restoration. In terms of construction waste, market factors will invariably dictate the extent of the viability of reuse of this waste. European and national legislation and principles, as well as regional waste management plans adequately administer direction regarding environmental safeguards and controls for waste activity as well as other particulars pertaining to and necessary for the management of all waste types. ¹⁴¹ Enforcement of these standards and principles is paramount to avoiding ecological and environmental problems.

6.7.1 Strategic Policy & Recommendations- Waste Management

Strategic Policy PIP5

To ensure, from environmental, business and public health needs, that waste management remains a priority for local authorities and waste management regions in continuing to invest in promoting and facilitating reuse and recycling by residential and commercial sources and that high standard options for treatment and final disposal of waste are available within the GDA.

Strategic Recommendations

- PIR36 The new waste management strategy across the regions of the GDA should seek to facilitate a balanced use of resources and greater adaptability and robustness of services. Integrated waste management should be considered from the perspective of the GDA as one singular functioning economic and spatial unit and to increase economies of scale.
- PIR37 Encourage the expansion of increased levels of diversion of biodegradable waste from landfill through provision of or support for biological treatment facilities and home composting.
- PIR38 Ensure that developments include adequate space for domestic recyclable waste storage both within and outside dwellings; and ensure that larger development proposals, masterplans and local area plans incorporate bring banks and recycling facility requirements to facilitate sustainable development and optimal rates of recycling.
- PIR39 The reuse of waste should be encouraged and reinforced through encouragement of business clustering across the GDA. Opportunities to facilitate source reduction, the reuse of wastes, by-products and associated energy throughout the GDA should be examined as part of economic policies. Development of these opportunities shall not compromise the integrity of ecologically sensitive areas, in particular infilling with inert materials which can result in loss and fragmentation of wetlands.
- PIR 40 Waste management facilities should be appropriately managed and monitored according to best practice to maximise efficiencies and to protect human health and the natural environment.
- Plans and projects associated with waste management that have the potential to negatively impact on Natura 2000 sites will be subject to a Habitats Directive Assessment (HDA) according to Article 6 of the habitats directive and in accordance with best practice and guidance.

¹⁴¹ DoEHLG Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Waste Projects, 2006 and any later amendments or updates should be referred to.

[₩] Habitats Directive Assessment Mitigation Appendix A6, Vol. II



Green Infrastructure, Heritage and Environment





Green Infrastructure, Heritage and Environment

7.1 Introduction

Heritage is recognised at a national level as an important environmental and economic resource that requires care and management through the National Development Plan and the National Spatial Strategy. The Greater Dublin Area (GDA) has a diverse range of natural, cultural and built heritage resources –from internationally designated areas to sites of local importance. In looking forward to 2020 the priority areas for heritage and environment are:

- The continued protection, management and enhancement of natural heritage, built heritage and environmental resources.
- A revised approach to policy and objective formulation structured around compliance with existing and emerging European and national legislation, including flood protection measures, biodiversity management, improving water quality status and the identification and management of coastal management zones.
- Continued development and promotion of areas of heritage value which have importance to the region, county or
 locality, including sourcing appropriate resources and development of management plans for long term and sustainable investment and monitoring.
- Ensuring that council boundaries do not result in fragmentation of policy implementation.
- Reassessment of the way in which open spaces are managed, linked and developed and the potential for integrating additional functions in that reassessment through the provision of Green Infrastructure planning and development.

This chapter seeks to place both heritage and environment as a core part of regional planning policy and to bring a regional perspective to policy delivery through establishing the principles of green infrastructure networks on a regional scale. This chapter examines the elements of built and natural heritage and green infrastructure in separate sections below.

7.2 Built Heritage

Archaeological Heritage

The European Convention on the Protection of the Archaeological Heritage¹⁴² requires that appropriate consideration is given to archaeological issues at all stages of the planning and development process. This is also reflected in national legislation. Local Authorities need to incorporate measures to manage and protect archaeological heritage though Development Plans. Policies and objectives should be included in Plans to protect and enhance archaeology, monuments and their setting and zones of archaeological potential, including re-use and integration of existing features into new development schemes, where appropriate. Key issues that should be addressed in future Plan policies are:

- In accordance with international best practices guidance, ¹⁴³ policy seeking preservation in situ of buried archaeological remains as the preferred option in archaeologically sensitive locations (particularly urban areas) and that new development should be designed in such a manner to facilitate, where practical, measures to ensure in situ preservation.
- Policies to protect the archaeological potential of the coastal and inter-tidal zones and underwater archaeology, and the potential impacts on these sites from modern development pressures.
- Recognition of the importance of archaeological features at the landscape level, whereby clusters of archaeological materials may be connected, and cumulatively form an important part of the overall area.
- 142 http://conventions.coe.int/Treaty/en/Treaties/html/143.htm
- 143 Best practice sources include 'Policy and Guidelines on Archaeological Investigation', 1999 & 'Framework and Principles for the protection of the Archaeological Heritage', 1999 (DoEHLG), including supplementary and subsequent guidance reports

- Recognition of the cultural aspects of archaeological sites and places of significance such as historic battlefields, Gaeltacht areas, and related historical sites, artefacts and areas of archaeological significance.
- Historic open spaces, such as old and disused graveyards, walled gardens and demesnes can be subject to pressures for excavation to facilitate new developments and ancillary site development works. Planning policies and objectives should be included in Development Plans to ensure that historic landscapes and cultural landscapes are developed or reused whereby the sensitivities of the area and green space values are respected.
- Include provisions within plans and conditions of planning permission regarding cultural aspects of archaeology such as incorporating archaeological features into the design and layout of new developments and providing 'reference sign posts', 144 and using historic place names, features and associated legends to inform the naming of new developments such as new residential schemes.

An issue for rural areas in relation to this topic has been the ongoing and gradual decline in archaeological monuments in the countryside and degradation of field monuments. This is an issue that should be examined regarding both policies and actions of Heritage Plans to both improve protection and develop new management strategies to ensure their preservation.¹⁴⁵

Local Authorities have been key local leaders regarding the collation and management of heritage and archive information. It is important that this role is built on in the form of information sharing and resource allocation, by developing locally accessible public sector archives drawing from central sources, and that infrastructure to facilitate curation and storage of recovered artefacts are supported at national, regional and county level. See also figure 3.8 of the SEA- Monuments.

Architectural Heritage

The built environment and its architecture, in addition to its functional values, can have aesthetic merits, cultural significance, civic or social importance and provide a timeline of history. The architectural heritage of the GDA is extremely rich, from the classical Georgian squares of inner city Dublin to the grand estates and traditional farmsteads and iconic and important modern era design classics. In order to ensure that the built environment continues to play a positive role in the way we live and interact with our surroundings, policies and objectives to protect and enhance protected structures, conservation areas and their settings, together with vistas and important viewpoints, need to continue to be included in future Development Plans and Local Area Plans.

One of the key inputs into assessing architectural heritage is the National Inventory of Architectural Heritage (NIAH) completed by the DoEHLG for each Council area and is a superb resource for local authorities and the general public. Where appropriate, buildings identified on this list should be included on the Record of Protected Structures.



Refers to a plaque, sign, commemorative inscription, information plate or similar which provides a brief outline of the archaeological relevance of an important feature which has been incorporated into any new development schemes.

¹⁴⁵ Stone Monuments Decay Study, 2000 by Sara Pavia & Jason Bolton

The GDA is fortunate to have a high quality legacy of very attractive towns and villages in both urban and rural settings, which contain very attractive features. The introduction of Areas of Architectural Conservation has created a legislative tool to enable these places to be recognised and valued. Significant work has been completed on identifying ACA areas, completing assessments and setting out needs and policies to protect their character. This work is an invaluable resource to planning in such sensitive locations. Within smaller settlements, such as at the small town or village scale, it is important that local character and identity continue to be recognised in order to inform future development and to encourage urban diversity.

Improved protection for Architectural Conservation Areas (ACAs) and also for individual vernacular buildings can be achieved through appraisals to identify and explain their particular qualities/character. The appraisal results can input into policies to promote and strengthen that character in Local Area Plans, other plans or design frameworks. In considering ACA policies it is important to consider the cumulative impact of development and the incremental damage caused by an accumulation of various development components, such as advertisement structures, signage and overt engineering solutions which can affect the quality of townscape Architectural Conservation Areas, protected structures and historic settlements and sites. The sympathetic maintenance, adaptation and re-use (including disused buildings and under utilised sites) should continue to be promoted, and supported by Local Authorities through publication of guides, courses and policy direction. A degree of flexibility, particularly in relation to reuse of disused/under-utilised buildings that are protected structures or of merit, should be applied regarding the manner in which it is redeveloped. This would be subject to a given proposal protecting the special interest of the building.

It is also important to continue to strengthen the built heritage policies and objectives for rural and isolated sites (including traditional farm clusters and homesteads, estate houses and demesnes and non-residential buildings such as outbuildings, mills, forges and limekilns). Councils can play an active role in supporting recognition of vernacular building patterns, materials and built forms. Changes to the agricultural economy has seen many traditional building and smaller houses fall into disuse, and their loss both as a testament to the history, hard work and skills of rural communities of the past and of their core value as vernacular buildings in the landscape needs to be avoided and opportunities for their preservation sought.

Industrial Heritage

Industrial heritage which forms part of the architectural heritage refers to industrial activities of the past and associated infrastructure and can include for example a range of buildings, artefacts, features and ancillary features such as quarries, mines, mills, utilities such as water gas and electricity buildings and structures, railways, bridges, canals, harbours, airfields, windmills, watermills and steam engines, ¹⁴⁶ and can in some cases also include coherent landscapes of former industrial activity.

The historic and cultural significance of industrial archaeology and heritage should be recognised in planning policy documents, and objectives included in order to ensure the continued survival of these assets.



146 Reference source: Industrial Heritage Association of Ireland

7.2.1 Strategic Policy & Recommendations – Built Heritage

Strategic Policy GIP1

To ensure that all aspects of the built heritage including archaeological, industrial, and architectural heritage, and those building which are home to protected species are suitably protected, enhanced, sensitively reused/ integrated into new development works and incorporated in development plans, records of protected structures, heritage plans and site specific projects & developments.

Strategic Recommendations

- GIR1 Continue to protect through Development and Local Area Plan policy and zoning, design frameworks and other planning documents and through the development management process, all national sites and monuments identified on the national record and also other archaeological sites that emerge through investigative or construction works in cooperation with the Department of Environment, Heritage and Local Government.
- GIR2 Adopt plan policies and objectives to manage, protect, enhance, and/or sensitively integrate, where appropriate, all areas of heritage, as defined within the Heritage Act.
- GIR3 Carry out thematic heritage audits, including those relating to industrial heritage, in order to inform policy and decision making in the planning process and where appropriate, inclusion in the Record of Protected Structures. Continue to actively protect through development plan policy and development management decisions, Architectural Conservation Areas, protected structures and vernacular buildings.
- GIR4 Through actions such as school and education programmes, heritage plan actions, and interaction between statutory bodies, local authorities and local communities in the form of workshops and resource programmes to promote awareness and increased stewardship of built heritage within the community.
- Promote, where appropriate, settlement identity through traditional plot sizes, street patterns, street furniture and building scales in the development of towns, villages and hamlets.
- GIR6 Continue to provide Local Authority grant assistance to individuals in relation to specific conservation projects, where practical.
- GIR7 Promote sensitive retrofitting of established building stock, where appropriate.
- GIR8 Improve the appearance and character of areas with particular townscape character by actively protecting their distinctive identities.
- GIR9 Seek protection, enhancement and sensitive integration/re-use, as may be appropriate, of heritage transport corridors, including rail, road and water corridors, to ensure their long term future and their role in relation to access provision, tourism development, biodiversity space and development buffers.
- GIR10 Undertake research to identify key historic landscapes and possible World Heritage Sites within Council areas which merit protection and support outcomes through policies and objectives in Development Plans.
- GIR 11 To protect the intrinsic natural, built and cultural heritage of the GDA whilst ensuring that any future development of tourist and recreational uses are facilitated in a manner which complements and protects the intrinsic heritage features of the region.

Dublin Regional Authority and Mid-East Regional Authority

7.3 Natural Heritage

The GDA has a very wide range of habitat types and landscapes supporting diverse species in natural, semi-natural and managed locations and also proximate and within high density urban areas. The condition and preservation of these natural habitats directly and indirectly impacts on the quality of life of residents, workers and visitors to the GDA. The conservation of our natural heritage is a key objective of Government through the National Heritage Plan and the National Biodiversity Plan, which recognise that heritage is a communal and mutually shared asset to be protected by the actions of all. Protection of heritage is best served at a local level, and the action of Local Authorities, particularly through the work of Heritage Plans has been supportive and active on the ground in protecting the natural heritage within the GDA. Heritage plans also play an important role in protecting archaeological and architectural heritage.

Designated Heritage Sites

There are a wide range of sites across the GDA that are designated under national and EU legislation. The National Parks and Wildlife Service designates Special Protection Areas (Wildbirds) and proposed Special Areas of Conservation under the EU Birds and Habitats Directives. SAC and SPA sites form part of a European network of designated sites called "Natura 2000". Other designations which are important within the national context include proposed Natural Heritage Areas (pNHAs) which are designated to conserve species and habitats of national importance as well as sites of geological interest. Also in place are UNESCO biosphere reserves and RAMSAR sites.

Figure 13 shows all of the designated Natura 2000 sites across the GDA at the time of preparation of the RPGs. 147 (See also figure 3.1.of the Strategic Environmental Assessment Report.)

Non-Designated Areas supporting Bio-Diversity

Biodiversity is not just contained within specifically designated sites. Areas such as parkland, graveyards, back gardens, hedgerows, farming land, river corridors and mountain lands support a range of species and play an important role individually and in supporting and linking habitats. Protecting these areas through legislation is not appropriate, however it is important to preserve ecological infrastructure across the GDA and within each Council. For this reason the RPGs are recommending the development of a Green Infrastructure network for the GDA. This is elaborated in section 7.4 of this chapter. In relation to biodiversity, the guidance in the "Green City Guidelines" (2008) published by the Urban Institute at University College Dublin, gives advice to local authorities on how to support and enhance biodiversity in new medium and high density urban developments.

Biodiversity and Climate Change

Climate change and its effects present a real threat to the functions of ecosystems. Natural systems are especially vulnerable to climate change and can often undergo irreversible damage. At the same time the quality of natural habitats is central to maintaining resilience to climate change impacts. Firstly, the types and composition of forests and soil types impact differently on carbon sequestration rates. Peatlands are identified in various literatures as important carbon sinks. In fact, carbon sequestration through land use changes and forestry has been the focus of much attention due to its potential as a cost-effective mitigation strategy. Similarly wetland systems may be conserved or created to sequester carbon. The Irish landscape therefore offers a distinctive spectrum of possibilities in relation to carbon sequestration. At the same time, land use changes can negatively affect the ability of the natural environment to absorb some of the primary impacts of climate change such as increased rainfall and flood events. Though conservation success can be measured in terms of biodiversity patterns - the quantity of biological features, the quality of habitats, proliferation and diversity of species, or even numbers of hectares protected - it is much more difficult to unambiguously identify all the negative impacts on biodiversity directly caused through anthropogenic induced climate changes. It is nonetheless possible to account for the emergence of invasive species due to a warmer climate and/or waters, to identify coastal habitats under threat from rising sea levels, to identify where habitat degradation/fragmentation may occur due to prolonged periods of drought, or to identify linkages between biodiversity degradation and poor air quality. Regardless, by taking a whole system approach to maintaining and enhancing the robustness of ecosystems and ecosystem functioning, through the policies pursued within these Guidelines - mitigation to stabilise and reduce emissions of GHGs and adaptation to adjust for unavoidable consequences - the limited capacity of ecosystems to absorb climate induced changes will be improved.

Bún Laoghaire SAC SPA SAC & SPA NHA Proposed NHA and/or SAC/SPA © National Parks and Wildlife Services; © OSI License No. EN0002809 Figure 13 **Designated Natura 2000 Sites and National Heritage Areas**

¹⁴⁷ This information is correct at the time of publication of the RPGs. The most up to date information should be sought from the National Parks and Wildlife Service.

7.3.1 Strategic Policy and Recommendations — Natural Heritage

Strategic Policy GIP2

To protect and conserve the natural environment, in particular nationally important and EU designated sites such as Special Protection Areas, Candidate Special Areas of Conservation and proposed Natural Heritage Areas, protected habitats and species, and habitats and species of local biodiversity value. This policy also includes new or extended ecological sites that are notified or designated in the lifetime of the RPGs. Appropriate measures to protect Natura 2000 sites should be identified at the initial stages of all planning processes and included as a material consideration in order to inform future development.

Strategic Recommendations

- GIR12 Local Authorities should continue to support the development and renewal of Local Authority Heritage Plans in each Council area working with all key stakeholders to identify and deliver a range of actions and programmes to support heritage in the Council area and to support the Heritage Plan through other plans and programmes.
- GIR13 Development and delivery of Biodiversity Action Plans in each Council area, including protection of local features and species of biodiversity value and to identify biodiversity resources at the initial stages of all planning processes and include them as a material consideration to inform future development.
- GIR14 Expansion of the programme to protect important individual or groups of trees through greater use of tree protection orders through the undertaking of an inventory of the Council area where funding allows.
- GIR15 Continued use of policies to protect views and prospects in the Development Plan and local area plan process to facilitate passive enjoyment of the heritage of the landscape.

7.4 River Basin Management

The Water Framework Directive came into force in 2003 and is currently being implemented. The Water Framework Directive (WFD) was transposed into national legislation by S.I. No. 722 of 2003. The Directive, which applies to all inland, coastal and groundwaters, 'artificial' and 'heavily modified' water bodies, is a move toward an integrated and cooperative approach toward river management and uses River Basins as the basis for this holistic approach. Both the Water Framework Directive (WFD) and River Basin Management Plans (RBMP) set out targets for water quality in the GDA and also provide data on the current water quality and status for rivers, ¹⁴⁸ waterbodies and ground water.

In summary the Regulations provide for –

- The protection of the status of all waters (i.e. no deterioration to be allowed) and the achievement of at least "good status" by 22 December 2015 for all waters.
- The establishment of RBDs as the administrative areas for implementation of the Directive.
- The coordination of actions by all relevant public authorities for water quality management in an RBD.
- The characterisation of each RBD.
- The establishment of environmental objectives for each RBD.
- The development of a programme of measures to achieve those objectives and subsequently its review/updating every six years.
- The development and adoption in each RBD of a River Basin Management Plan and subsequently its review/updating every six years.

148 See also figure 3.5 of the SEA – river network of the GDA.

River Basin Management Plans (RBMP)

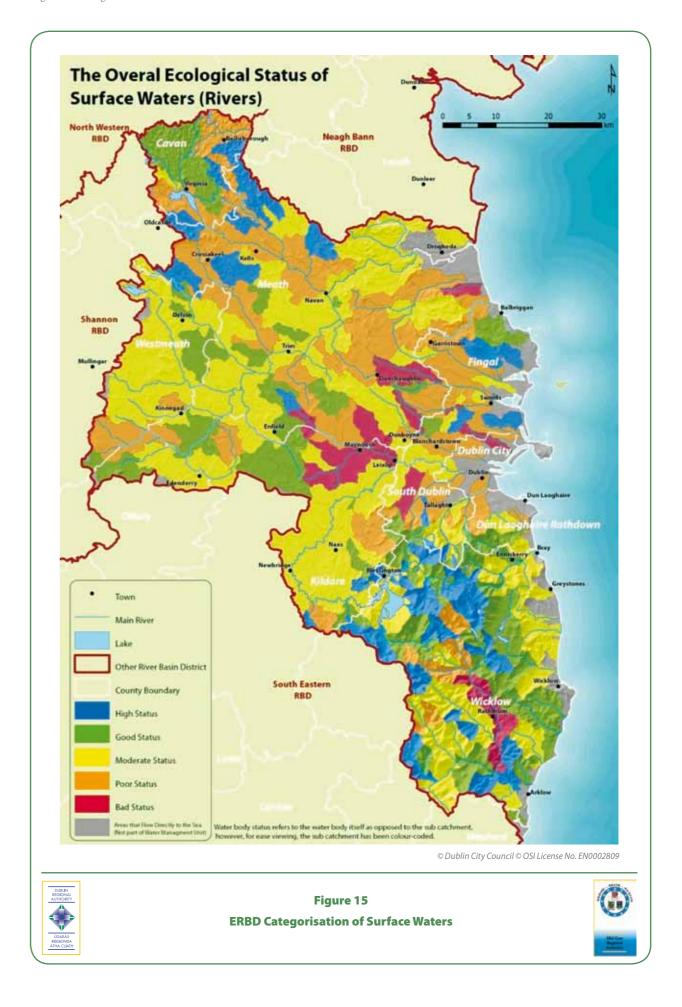
The island of Ireland has been divided into eight River Basin Districts (RBDs) for the preparation of Plans. The Greater Dublin Area is covered mainly by the Eastern River Basin District, but also includes parts of the Shannon River Basin District, Neagh Bann River Basin District and South Eastern River Basin District and respective river basin management plans.

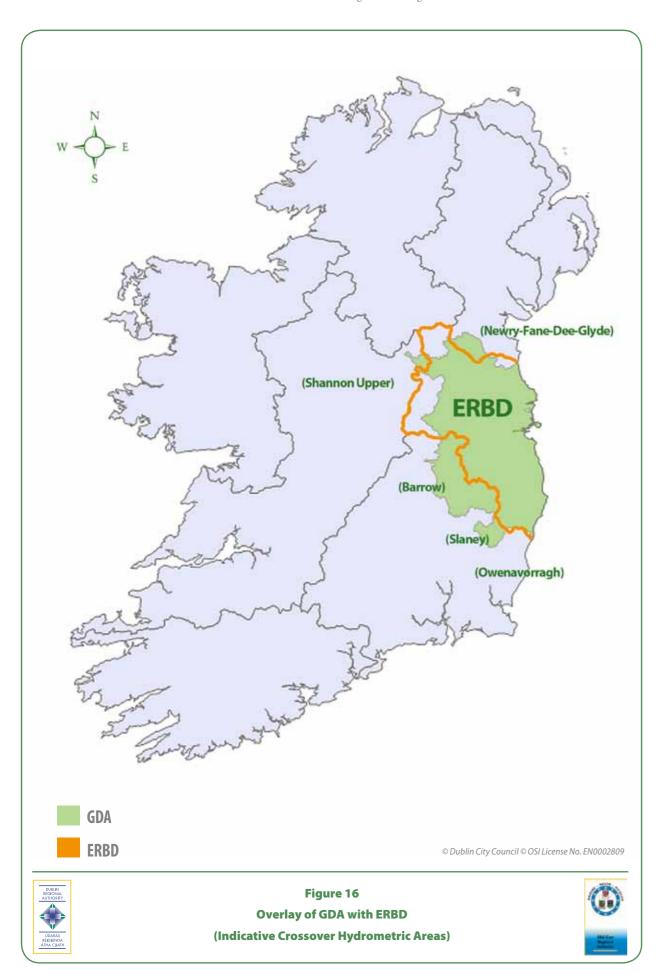
The Plan identifies an extensive series of measures targeting the water bodies most at risk of failing to meet their environmental objectives and protecting those with good status. Overall, local authorities have a primary role in promoting, establishing and implementing the RBDs. Local Authorities should also have due regard to, and incorporate, any measures from the Freshwater Pearl Mussel sub-basin plans, as appropriate. For example The Dereen (Slaney) area includes a Sub-Basin Management Plan for Freshwater Pearl Mussel.

In the context of climate change and interpretation of river basin management plans local authorities will need to be cognisant of the likely implications of extreme rainfall events, changes in surface volume run-off and rising water tables. Regional water processes will need to be considered in terms of water quality, quantity and the impact on ecosystems.









Implications of the WFD for the GDA149

Responsibility for the implementation of river basin management plans lies with the local authorities, however other public authorities are required to exercise their functions in accordance with the adopted river basin management plans. This will impact on several core public authority functions, including spatial and land use planning, transportation, energy demands, conservation measures for Natura 2000 sites, 150 water service strategic planning (such as the water service investment programme and rural water programmes), pollution reduction plans/programmes, waste management and tourism and recreation. This raises new challenges in relation to plan and policy development and implementation.

In relation to plan preparation, adopted river basin management plans should inform the spatial planning process of the potential risks posed by various planning policies and the effect on delivering the targets set out under the RBMPs, which needs to be reflected in the Strategic Environmental Assessment (SEA) process. The development of the RPG settlement strategy for the GDA has had regard to the Draft River Basin Management Plans in place at the time of preparation and the direction of future growth has been directly informed by the need to meet the requirements of the water framework directive.

The formulation of planning policy in all development plans and local area plans is now obligated to ensure that any development (and the resulting increased potential loading from this area) is managed through provision of adequate wastewater collection and treatment infrastructure, and that planned growth matches the ability to service such increases. The provision of adequate wastewater, foul drainage and surface water infrastructure in advance of increased loading from development is essential to complying with the Water Framework Directive. Additionally, avoidance and controlling of particular types of development in certain locations which pose a risk to water quality may also be necessary through Plan policy and objectives.

With regard to the development management guidance and practice in local authorities, re-emphasis on Sustainable Drainage Systems (SuDS) and water conservation measures, flood risk assessment, surface water run off, attenuation and use of permeable materials will be required in most locations.

In addition to the above, protection of ground waters is equally important, particularly in relation to security of safe drinking water¹⁵¹. Ground Water Protection Schemes (GWPS), carried out jointly by the Geological Survey Ireland (GSI) and Local Authorities, provide a framework for decision-making and guidelines for the Local Authorities in carrying out their functions. As advocated by DoEHLG circulars and recommendations, prepared ground water schemes should be incorporated into Development Plans. It is also recommended that both the Development Plan and local area plans include objectives in relation to ground water management based on ground water protection schemes.

7.4.1 Strategic Policy & Recommendations – River Basins

Strategic Policy GIP3

To ensure alignment between the core objectives of the Water Framework Directive, (including River Basin Management Plans and Programmes of Measures affecting the Greater Dublin Area) and other related plans such as County Development Plans and related Local Area Plans; Habitat and Species Protection Plans under the Habitats Directive, Water Services Investment Programme, Nitrates Action Programme; and Flood Management Plans.

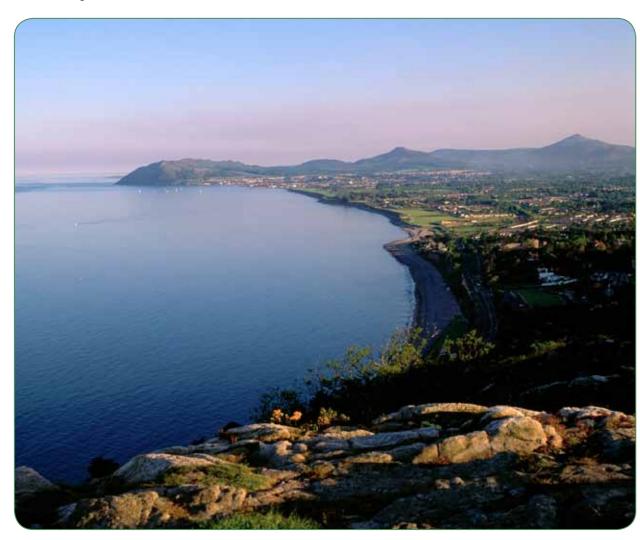
¹⁴⁹ In terms of the implications of the WFD for the GDA it is important to take account of the European Communities (Water Policy) Regulations 2009 (S.I. No. 272 of 2009), which sets out the environmental quality standards for the classification of ecological and chemical status under the WFD.

¹⁵⁰ In the context of the Water Framework Directive, the Birds Directive is also an important mechanism for the protection of the Natura 2000 network.

¹⁵¹ S.I. No. 9 of 2010 - European Communities Environmental Objectives (Groundwater) Regulations 2010 establishes a new strengthened regime for the protection of groundwater in line with the requirements of the Water Framework Directive (2000/60/EC) and by the Groundwater Directive (20006/118/EC).

Strategic Recommendations:

- GIR16 Local authorities incorporate the objectives from the River Basin Management Plans in their jurisdiction into the plan making process so that the implications of development on water quality is a key driver in identification of suitable locations for new development.
- GIR17 Development Management objectives and guidance places strong emphasis on the need for Sustainable Drainage Systems and water management to reduce both flood risk, overflows and the washing of pollutants from surface areas into receiving waters and to support ecological processes.
- GIR18 Areas of high ecological status in the River Basin Management Plans are identified in Development Plans and specific policies to protect their status are incorporated in the Plans, including restrictions on types of development which impact on water quality.
- GIR 19 To promote awareness and protection of, shellfish and non invasive molluscs, including their breeding and feeding areas (Shellfish Growing Areas), from on-site and external sources of pollution, referencing Pollution Reduction Programmes.
- GIR20 Include ground water protection measures in Development and Local Area Plans in accordance with consultation with the DoEHLG, Environmental Protection Agency, Geological Survey Ireland and any other relevant licencing bodies.
- GIR 21 Plans and projects that have the potential to negatively impact on Natura 2000 sites will be subject to a Habitats Directive Assessment (HDA) according to Article 6 of the habitats directive and in accordance with best practice and guidance.



7.5 Integrated Coastal Zone Management

The coastal length of the GDA is located on the Irish Sea which is part of OSPARs Celtic Sea Regions. Ireland having ratified this convention agreed to protect and conserve the ecosystems and the biological diversity of the maritime area. Similarly, the Marine Strategy Framework Directive (2008/56/EC) states that "by applying an ecosystem-based approach to the management of human activities while enabling a sustainable use of marine goods and services, priority should be given to achieving or maintaining good environmental status in the Community's marine environment, to continuing its protection and preservation, and to preventing subsequent deterioration".

A regional approach to integrated coastal zone management (ICZM) is supported by the NSS and recommended by the EU. ¹⁵² The ICZM model offers a means to sustainably manage the development of the coastal zone through a collaborative and community focussed approach to planning and management of coastal resources. It is also concerned with the promotion of sustainable marine focused tourism and leisure activities, and protection of marine and coastal environments.

The protection of the marine environment and its cultural and natural heritage is important to health and quality of life in the Greater Dublin Area. The coastline of the Dublin and Mid East Regions represent an area of existing and future economic potential, tourism potential, mineral and food potential, and an energy resource. A balance must be struck between the wide range of activities possible. This balance includes the requirements of provisions for recreation, public slipways and marina activity against international and national obligations to protect and responsibly manage designated cultural and natural heritage coastal areas. Marine environments globally experience pressure from increasing populations along the coast; infrastructural and recreational development within coastal areas; the necessary building of flood defences causing a coastal squeeze on marine habitats; the effects of climate change (flooding, increases in invasive species, and reduction in ocean salinity); and pollution from land side agricultural and industrial activities.

The east coast of Ireland is largely low lying. One of the main flooding concerns is the potential effects on low lying coastal habitats and areas as rising sea levels, ¹⁵³ more severe storms and tidal surges place these areas at greater risk. Regardless of the uncertainty surrounding the accuracy of climate and sea level change an increase in the scale and frequency of surge events will potentially lead to damage to coastal habitats such as dunes, wetlands and estuaries. In addition to coastal flooding and loss of coastline, saline inundation can have negative affects on agricultural land, result in the degradation of habitats and the loss of species. Coastal erosion and flooding has the potential to affect properties, businesses and infrastructure and can lead to loss of coastal archaeology and sites of architectural or tourism importance. ICZM needs to address this issue looking at (i) precautionary approaches should be taken including the creation of buffer zones to restrict development within areas of high risk erosion, predicted sea level increase or high coastal flooding risk and (ii) suitable sustainable options for protecting key assets- natural, built and infrastructure; and a full exploration of all the issues including habitat impact, through the preparation of Coastal Zone Management Plans with local authorities, state bodies and communities working together. The completion of the Catchment Flood Risk Assessment and Management Studies (CFRAMS) and the Irish Coastal Protection Strategy will also provide valuable information to local authorities on flood risk in coastal areas, which can input into future Coastal Zone Management Plans.

The Dublin Bay Taskforce (DBTF) was established by the Minister for Environment, Heritage and Local Government in May 2008 with a remit to prepare a draft master plan for Dublin Bay and make recommendations for institutional arrangements utilising the principles of ICZM across Dublin Bay. It is anticipated that the Dublin Bay initiative will become a forerunner for the effective application of ICZM across the regions and it is recommended that marine leisure should be represented in the institutional arrangements. The initial process of ICZM as undertaken through the DBTF has resulted in the development of an initial set of recommendations for the Dublin Bay coastal area which will form the building blocks for enhanced management, consensus building and furthering the scope of consultation and cooperation.

^{152 2002/413/}EC

¹⁵³ *The Dublin Coastal Flooding Protection Project, 2005* estimates an annual sea level rise of 4.15 mm/year until the end of the 21st century. This includes an allowance of 0.3 mm/year for land subsidence. This prediction fits with global sea level predictions of a rise between 0.28 and 0.43 metres by the century end based on 1989-1999 levels. (Heritage Council, 2009)

7.5.1 Strategic Policy & Recommendations - ICZM

Strategic Policy GIP4

Promote the development of cross boundary Integrated Coastal Zone Management with all coastal local authorities in the GDA area so that future Development Plans can be guided in relation to the management of coastal areas drawing from a mutually supported plan for marine and coastal areas which has engaged with key stakeholders.

Strategic Recommendations:

GIR22 The completion of an ICZM for Dublin Bay, building on research and the completion and implementation of the recommendations of the Dublin Bay Taskforce and working collaboratively to achieve an agreed framework Plan or strategy incorporating land and marine planning and policies in an integrated manner and with regards to Article 6 of the Habitats Directive.

GIR23 The expansion of collaborative ICZM, and consideration of the complementary process and framework of marine spatial planning, for similar cohesive coastal landscape blocks to Dublin Bay along the eastern seaboard. This process shall take account of the:

- Water Framework Directive,
- Birds Directive,
- Marine Strategy Framework Directive,
- Flood Risk Assessment studies,
- Article 6 of the Habitats Directive,
- Best available information on the regional impacts of climate change and
- All current and future alignments between these directives, assessments, and plans.

GIR24 That the concept of coastal parks is considered in future planning as a means of enhancing coastal habitats marine protection and sustainable marine based tourism and of integrating coastal (blue) infrastructure with green infrastructure.



₩ Habitats Directive Assessment Mitigation Appendix A6, Vol. II

7.6 Landscape

Landscape Classification and Character Assessments

The European Landscape Convention (ELC)¹⁵⁴ aims to encourage public bodies to adopt policies and measures at national, regional and local level to protect, manage and plan landscapes. Landscape means *an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors*¹⁵⁵ and can include high quality natural areas, rural lands, urban areas, peri-urban areas, degraded areas and everyday spaces.

Within Ireland, there is variation in the approach to landscape classification, ¹⁵⁶ content, report structure and judgements in relation to the spatial consistency and extent of Landscape Character Assessments (LCAs) in Ireland. Within the GDA, consistency ranges from good to poor between the seven council administrative areas and there is generally poor consistency with LCA classification between the GDA counties and adjoining counties e.g. Offaly, Louth and Wexford. In order to address the existing inconsistencies, it is important that local authorities within the Greater Dublin Area move towards consensus and adopt a shared methodology and consistency in landscape classification and assessment to ensure compatibility in decision making. This shared approach should include the identification of landscape conservation areas and consideration of urban and coastal landscape areas, which by their nature frequently extend across administrative boundaries.

Until such time as a national landscape classification is adopted together with contemporary guidelines for landscape and landscape assessment, it is recommended that local authorities carry out landscape assessments in accordance with the 'Guidelines for the Implementation of the European Landscape Convention' (2008).

Soil Protection

Recent European publications such as 'Towards a Thematic Strategy for Soil Protection" and more recently the draft 'Soils Framework Directive' recognise that soils are an important natural resource and the need for the protection and sustainable use of soil, including preservation of soil functions, maintaining soils where they are considered to have value, preventing further degradation and restoring degraded soils to a level of functionality consistent with current and intended use.

While soil quality in Ireland is deemed to be reasonably good (based on limited data), it is fragile due to damage from a number of factors, including settlement patterns, generation of slurry and sludge, nutrient loss from soil to water, ammonia emissions to the atmosphere and soil organic carbon losses. Adverse effects can include reduced soil quality and quantity, such as erosion, loss of organic matter, compaction, salinisation, landslides and flooding, soil sealing, loss of biodiversity and contamination.¹⁵⁷

Landscapes such as grasslands, managed forests and native ecosystems, and the manner in which they area treated, have an important role in the effects of soil carbon loss and carbon stocks. The effects of land use change and drainage, particularly on peat and organic soils can have a significant effect on carbon stocks. In particular upland peatlands and peat bogs within Counties Wicklow, Meath and Kildare are considered to have an important regional role in terms of soil carbon stocks and loss.

County Development Plans, landscape management strategies and action plans should recognise the significant impacts of land use, land use change and sludge generation and treatment in relation to carbon loss/stocks and should also recognise the function of soil assessment and management, carbon sinks, carbon sequestration and restoration of degraded lands¹⁵⁸ in plan led settlement and development strategies. The national soils database is a useful resource regarding soil management.¹⁵⁹

¹⁵⁴ ELC- ETS No. 176: Entry into force in Ireland on 01/03/2004.

¹⁵⁵ Source: Definition contained in 'Guidelines for the Implementation of the European Landscape Convention', adopted by the Council of Europe Committee Ministers on 6th February 2008.

 $^{156\} Landscape\ Character\ Assessment\ (LCA)\ in\ Ireland\ Baseline\ Audit\ and\ Evaluation\ Sept\ 2006.$

¹⁵⁷ Information derived from State of the Environment Report 2008, EPA

¹⁵⁸ The issue of inherited or historic degraded lands within the region requires suitable resourcing to enable their appropriate restoration, enhancement and reuse

¹⁵⁹ Available at http://erc.epa.ie/nsdb/.

Geology

The identification of sites which have special geo-diversity and geological heritage value is an important element of the landscape heritage of the GDA. Clear policies and information showing the location of such features will ensure their protection and management in the planning system and support the promotion of geological heritage at county level. It is important that complete geological audits under the Geological Heritage Programme for all local authority areas in the GDA are completed, and where necessary, this results in an update and review of existing NHA designations. Where sites of geological importance overlap with existing designations, site/development Plans should specify that proposals for works should consider affects on the geological importance of the site.

Landslide Hazard

While landslides occur infrequently in Ireland, the most frequent occurrences tend to be along the coastal areas, upland areas and peat bog areas. 160 Although research and available data is limited, recorded landslides have occurred within the past 10 years in County Wicklow and County Dublin. It is recommended that data on landslide hazards, and available reliable geological information, is used to inform planning processes and assess development potential in risk areas.

7.6.1 Strategic Policy and Recommendations

Strategic Policy GIP5

Adopt policies and measures at county level to protect, manage and plan landscapes through the provision of Landscape Classification and Character Assessments in accordance with adopted European (and contemporary National) Landscape Guidance Documents such as 'Guidelines for the Implementation of the European Landscape Convention, February 2008'.

Strategic Recommendations

- GIR25 Develop a shared methodology and classification for Landscape Classification and Character Assessments (LACCA) in the Greater Dublin Area, through a multi disciplinary approach, identify short-comings in existing landscape character assessments and GIS mapping data and update accordingly, carefully consider landscape character issues in the planning process and use LACCA to inform Historic Landscape Character Assessments (HLCA).
- GIR26 Local Authorities should undertake an examination of suitable locations for designation of Special Amenity Area Orders within each Council area.
- GIR27 Recognise the function and role of carbon sinks/sequestration, heat sinks and soil management in landscape management.
- GIR28 Expand the use of geological and soil mapping to inform planning decisions relating to settlement, flooding, food production value and carbon sequestration, to identify prime agricultural lands (for food production), degraded/contaminated lands (which may have implications for water quality, health, fauna), and those which are essential for habitat protection, or have geological significance.
- GIR29 Use available Geological Survey Ireland data and other reliable data sources to map landslide hazard areas, to inform SEAs and EISs and formulate policies and responses to areas where landslide hazard is a known problem and promote awareness of landslide hazards through workshops, seminars and information publications.



160 Source: Landslides in Ireland: A report of the Irish Landslides Working Group, June 2006

7.7 Green Infrastructure

Green Infrastructure¹⁶¹ (GI) is a generic term encompassing the protection, management and enhancement of urban, peri-urban and rural environmental resources (natural and managed) through the identification and provision of multi functional and interconnected green spaces and provides an opportunity to reassess the manner in which we manage and use our green spaces. This includes a holistic approach to developing the landscape inclusive of other influences such as ecological development, improving air, water and soil quality, flood protection, access provisions and linkages, climate change/amelioration, pollution control and quality of life issues, in a sustainable and ongoing manner. As part of informing the process of preparing strategic spatial or land use policies within the Greater Dublin Area, the role of green infrastructure is important in informing the decision making process on the direction and focus of future development and growth.

Green infrastructure can include varying land uses- pasture lands, croplands, woodlands, heath, bog and scrubland, quarries, parks, formal and informal green spaces at varying scales, active and passive spaces, areas around domestic and non-domestic buildings, brownfield areas, waterways and waterbodies, wetlands, coastal areas, and community/institutional lands such as hospitals, schools, graveyards, allotments and community gardens. Publications such as the Green City Guidelines provide good examples of the recognition of integrating specific G.I. issues (ecology and biodiversity) with mainstream planning.

GI Development at the Regional Level

At a regional level, it is intended that the function of green infrastructure planning is to provide an overview of natural and cultural resources with emphasis on the identification of priority elements and routes. From this the establishment of strategic priority areas for inclusion and development; the provision of guidance for a more integrated approach to environmental management; and identification of broad areas for green infrastructure development can be achieved. More prescriptive details on how areas are to be enhanced or routes developed should be carried out through Development Plans, Local Area Plans and other spatial plan processes.

It is important that all natural and environmental resources are identified and then priorities are adjudicated upon, and a series of suitable policies and actions prepared to ensure such areas are suitably integrated, enhanced, managed and/or protected as part of the on going changes taking place regarding settlement and population, land use, planning, transport, economic activity, rural development, lifestyles, and ecology. In order to achieve this, Green Infrastructure policies should be integrated into the mainstream planning processes at the beginning of policy making.

Within the GDA a number of environmentally important areas have been identified in Table 12, placing focus on selected themes and regional classifications. Within the Dublin and Mid East Region, sites and areas which have been identified as having regional importance include World Heritage Sites, Natura 2000 sites, (SPC's, SAC's), NHA's and proposed or candidate sites, coastal areas of recognised heritage importance, major river corridors and canals, major recreational and amenity sites, greenbelts, areas of ecological, physical or historical importance, access routes for walking and cycling activities and access between and to the aforementioned areas.¹⁶⁴

A series of priority actions for GI development is also set out below. Priority areas of GI development at the regional scale are supported by Figure 17 which provides an illustrative indication of regional G.I. assets and areas of focus for development of GI strategies.

¹⁶¹ A commonly quoted definition of GI is that by Benedict and McMahon, 2002, as quoted in *Metro Green* by Donna Erickson -'an interconnected network of green spaces that conserves natural ecosystem values and functions and provides associated benefits to human populations'

¹⁶² Reference Source: 'Green Infrastructure Planning Guide' by Davies McFarlan, McGloin and Roe, in partnership.

¹⁶³ Green City Guidelines- Advice For The Protection And Enhancement Of Biodiversity In Medium To High Density Urban Developments, 2008.

¹⁶⁴ In preparing GI strategies at county level, one approach may be to identify all rivers and streams as a foundation or baseline layer, followed by additional layers consisting of important land types and sensitive locations, (forest, agriculture, bogs, uplands urban, etc), transport corridors, open spaces/parks, etc. The use of existing data from biodiversity mapping, River Basin Management Plans could be integrated to form relevant map layers.



Box 11: Actions for Green Infrastructure Development in the GDA

Increase opportunities and ease of access to countryside and areas of interest for residents, wildlife and biodiversity, with focus on promoting river corridors, Natura 2000 sites, nature reserves and other distinctive landscapes and regionally important green spaces as focal features for linkages between natural, semi natural and formalised green spaces.

Develop and promote GI strategies to achieve connectivity between areas which is informed by habitat scale, aimed at arresting habitat fragmentation, extension and promotion of traditional habitats such as forestry, wetlands and bogs, rights of way issues, tourism and economic benefits and competing land use issues. At a local and site specific scale, the identification of important landscape corridors can include hedgerows, treelines and pockets of tree cover (which have an important role for the movement of species and as a land-scape structure function), streams and roadside verges.

Minimum distances for reservations to be kept free from built development around rivers and streams should be established, taking into account established urban form characteristics and sensitivities e.g. 10-30m in large urban/brownfield sites, 31-50m in urban fringes and green field rural areas or increased distances based on planned parks and GI corridors, particular site features, or type of adjoining land use/zoning and potential to impact on water courses and associated habitats.

Map areas of deficiency in active open space areas based on spatial distribution and population needs.

Provide regional and district green hubs as anchor points of GI linked network and create new strategic green spaces in association with major new developments and population increase. Green belts, where appropriate, can assist in the provision of green hubs, providing important linkages between urban and rural areas.

Identify and provide linkages along and between river and canal corridors within the GDA region and adjoining regions to create inter connected routes and develop riverside parks and create linkages between them to form 'necklace' effect routes including development of walkways, cycleways and wildlife corridors, incorporating river restoration schemes, SuDS and control of development on flood plains.

Development of targeted walkway and cycle ways, integrated as part of opportunities for other projects such as river restoration, biodiversity enhancement as part of process of strengthening connectivity between green spaces and strategic linkages between urban settlements and countryside.

Promote and facilitate the development of coastal paths along the east coast of the GDA, joining up with existing recreational paths, creating new linkages between and extensions to existing facilities where feasible. Development Plans should include a goal to facilitate a feasibility study of a coastal path for the entire GDA which would include a habitat impact assessment and the need to avoid negative impacts on Natura 2000 sites, and careful route selection, linking and expanding into adjoining Regional Authority areas and integrated into future coastal zone management plans for the area.

Apply principles of Coastal Zone Management and development of strategic walkways/cycleways between coastal sites and inward linkages to green spaces in built up areas.

Encourage development of green bridges over existing physical transport barriers and require their inclusion in future infrastructure investments. Retrofitting projects should be phased and prioritised to repair fragmentation caused by grey infrastructure development.

projects, being informed by noise mitigation, biodiversity, air quality and climate amelioration effects.

Note: The actions in box 11 should take account of the access and threat issues identified in subsequent sub headings of these guidelines.

Key Regional Assets

In examining G.I. development at a regional level, it is important to acknowledge a number of unique assets, which contribute to the diverse richness of the Greater Dublin Area. Notably, the Dublin/Wicklow Mountains, Bru Na Boinne, Liffey Valley and Dublin Bay exemplify this uniqueness. These areas (together with those listed in table 12 below):

- support nationally and regionally unique habitats, biodiversity, and fragile ecosystems;
- have important recreational, tourism and cultural roles;
- provide or support forestry, crop production, agriculture and energy development;
- provide green buffers /green wedges between built up areas;
- improve air quality.

Table 12: Regional Green Infrastructure Classifications and Actions

Aim: To provide an overview of environmental and cultural resources and identification of strategic priority elements, areas and routes for inclusion in GI development within the Greater Dublin Area¹⁶⁵

| Regional Classification | Regional Examples in GDA | Example of Reference projects/publications |
|---|---|---|
| World Heritage sites, Natura 2000 sites and specific designations at County Level | Bru Na Boinne SAC's, cSAC's, SPA's and cSPA's Ramhar sites NHA's, SAAO's and nature reserves, bogs/peatlands/ wetlands | Dublin Mountains Partnership's Strategic Plan for Development of Outdoor Recreation (2007-2017) |
| Cultural and Archaeological Sites | Hill of Tara Powerscourt, Carton House, Oldbridge Demesne. | |
| River & canal corridors | Boyne Valley Tolka, Liffey, Dodder, Vartry, Barrow, Griffeen, Owendoher, Camac and canals such as Royal, Grand and Boyne canals. | Liffey Valley Park Study |
| Coastal zones and estuaries | Dublin Bay area. | Dublin Bay - An Integrated Economic, Cultural and Social Vision for Sustainable Development Dublin Bay Task Force for ICZM |
| Transport corridors | Disused Rail corridors Public transport routes. Major road corridors. | Metals Howth Tramline Greenway |
| Regional cycle/ walkways | Wicklow Way, S2S, Barrow Way, Grand Canal Way, Royal Canal Way. | National Waymarked Routes South Dublin County Council Green routes proposal |
| Regional Scale Managed Parks and strategic green belts | Phoenix Park, Curragh, Ardgillan House and Gardens, Castletown House and attendant demesnes. | Wicklow Outdoor Recreational Strategy |

¹⁶⁵ This list should not be seen as exhaustive and should be supplemented at Development Plan stage to ensure it is fully up to date and all key elements for the Council area are included.

Within the local context classifications can be more prescriptive, based upon workable GIS layers in order to make data more user friendly. For the most part, the built footprint of the metropolitan area and of larger towns is defined by existing settlement patterns and typography. It is therefore anticipated that the focus on green infrastructure development should be towards identification, enhancement and improvement of existing green areas and provision of linkages internally within the built up footprint areas and from this to the surrounding hinterlands and rural areas. Within rural areas and future areas of expansion of the built footprint, there are greater opportunities to identify new areas for green infrastructure development and linkages.

Identifying Threats

In delivering comprehensive green infrastructure plans/ strategies to fruition, a number of threats can also arise including a lack of transference from recommendation to implementation such as inappropriate works and development; climate change impacts; disturbance to flora and fauna and damage to existing ecosystems by way of foot traffic, vandalism, littering; and the spread of alien species by the creation of new green linkages and ecological corridors. In order to avoid such potential threats it is important that up to date survey and management proposals, informed by consultation with statutory bodies, interest groups and stakeholders, are put in place and that sufficient resources and on going monitoring is provided.

Access Management

Access to green corridors and natural heritage is complex, involving issues such as private ownership of lands or physical difficulties in accessing some of those sites which are within public ownership. It is recommended that local authorities identify strategic access points within public ownership lands and enhance and improve linkages between publicly owned sites. Furthermore, the local authorities should utilise mechanisms within the planning system where the opportunity exists, to enlarge public ownership of lands within corridors. Grant schemes, formal and informal agreements and community led projects to engage private land owners to support managed access to identified sites should also be exploited, where feasible. It is important for a number of environmentally sensitive locations that access does not result in unlimited access, but rather 'managed access' where appropriate. This should also be supported by transport modes such as secure and direct pedestrian and cycle routes and public transport provision.

Walking and cycling provisions in the countryside

The provision of new walking and cycling routes and improvement of existing routes in the countryside can enhance peoples experience of nature and provide a greater appreciation of our natural heritage. These 'green routes' also have particular appeal to specialist groups such as rambling and cycling groups and can aid in the development of tourism and other outdoor recreational pursuits. On the other hand, there is a paramount need to preserve fragile ecosystems, sensitive landscapes and sites with special designation under EU and national legislation. This, in turn, may affect and shape access and route selection choices.

As described in the previous sections of this chapter, green infrastructure development is considered an appropriate framework for sensitive integration of recreational activity and accessibility in the countryside with the need to ensure suitable protection of sensitive landscape areas. A green infrastructure strategy, together with heritage/biodiversity actions plans and local based initiatives should provide the basis from which to inform the feasibility of access, rights of way and walking /cycling trails.

Local authorities should promote a co-operative and consensus-based approach with recreation bodies, tourism agencies, NPWS, landowners and other stakeholders to maintain and develop rights of way to develop and maintain green routes. Less formal route development may also be considered to enable countryside access, subject to environmental sensitivities, appropriate management measures and agreement of relevant agencies and stakeholders.

7.7.1 Strategic Policy & Recommendations- Green Infrastructure

Strategic Policy GIP6:

To ensure the protection, enhancement and maintenance of the natural environment and recognise the health benefits as well as the economic, social, environmental and physical value of green spaces through the development of and integration of Green Infrastructure (GI) planning and development in the planning process.

Strategic Recommendations

GIR30 Each Council should prepare a county based Green Infrastructure Strategy linking to adjoining areas and following regional connections, and implement GI strategies in local area plans and development management processes. (Local authorities, shall where necessary, liaise with each other to ensure consistency in delivering regionally identified green infrastructure development as part of their green infrastructure strategies).

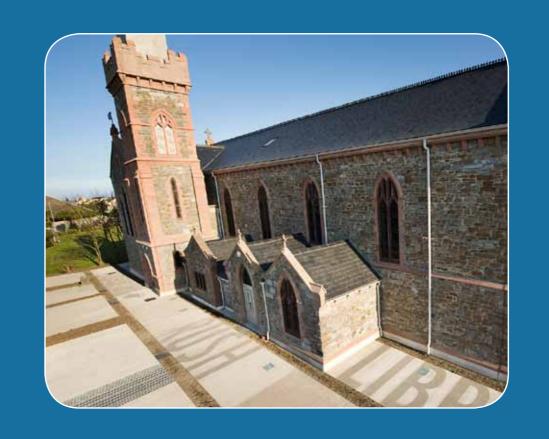
GIR31 GI development should be identified at the initial stages of all planning processes and included as a material consideration in order to inform future development.

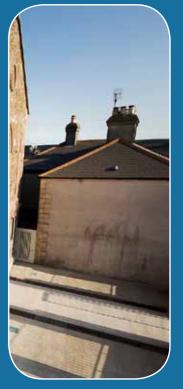


- GIR32 As part of the GI Strategy local authorities are recommended to carry out
 - (i) A 'stock take' of existing data available, studies and survey works and identify areas for further work.
- (ii) Identify threats to habitats and green spaces as part of GI development and provide appropriate responses, obviation and mitigation measures as part of the process.
- (iii) Identify priority areas for investment and pilot projects, including long and short term objectives and have clear designation of responsibility of process ownership for delivery of particular aims.
- (iv) Engage with private landowners, relevant agencies (governmental and NGO's), community groups to build partnerships for development, delivery and maintenance of green infrastructure strategies and action plans.
- (v) Adhere to the provisions of Article 6 of the Habitats Directive and promote ecological coherence of the Natura 2000 network, in accordance with Article 10 of the Habitats Directive.
- GIR33 Councils should apply the principles of GI development and county GI strategies to inform the development management process in terms of the design and layout of new residential areas, business/industrial development and other relevant projects.
- GIR 34 Recognise the importance and contribution of green infrastructure throughout the region for the maintenance of biodiversity and ensuring that the region will be able to, or be ecologically robust enough to, adapt and respond to climate change issues.
- GIR 35 Local authorities shall, on the basis of cooperation with landowners, recreational users and other relevant stake-holders, take a positive approach to the promotion of agreed and managed access in the countryside and to the coast for people, including agreed and managed walking/cycling routes. The feasibility of such access provisions and routes shall be informed by legislative responsibilities to designated sites of special amenity, ecological sensitivities and heritage value and shall be delivered on the basis of sustainability, consultation and consensus building.



Social Infrastructure and Sustainable Communities





Social Infrastructure and Sustainable Communities 8.1 Introduction

Central to the idea of inclusive planning is the aim of building sustainable communities. The Departmental publication *Delivering Homes – Sustaining Communities*¹⁶⁶ defines this as:

"Sustainable communities are places where people want to live and work, now and in the future. They meet the diverse needs of existing and future residents, are sensitive to their environment, and contribute to a high quality of life. They are safe and inclusive, well planned, built and run, and offer equality of opportunity and good services for all."

This section of the Regional Planning Guidelines sets out critical elements of social infrastructure which are key to building sustainable communities and enhancing quality of life across the Greater Dublin Area (GDA). The RPGs have a role in setting out common policies for Local Authorities in the GDA on how social inclusion can be incorporated into planning policy documents. An overarching aim is that existing shortfalls in social infrastructure and existing social exclusion within the Dublin and Mid-East regions are not exacerbated through decisions made at local government level and that the full range of social infrastructure is put in place to meet the requirements of existing and future communities. Opportunities for shared and multi-use facilities within communities should be explored to assist in meeting these needs. This chapter examines the elements in relation to community building for which planning policy plays a key role.



166 Delivering Homes – Sustaining Communities – Statement of Housing Policy DoEHLG, 2007, Pg.27.

8.2 Existing Policies and Guidance

As part of the review process in preparing the RPGs a number of documents were identified that set the context for future policy and recommendations, including amongst these the 2004 RPGs. The RPGs for the GDA 2004-2016 noted that "quality of life in a community does not only depend on the provision of housing, employment and infrastructure support, but also on access to social, community and cultural facilities that are fundamental to social cohesion, a sense of community and personal enhancement". ¹⁶⁷

At a national level the NSS suggests that whilst considering ways of promoting more balanced development, physical infrastructure can be emphasised, but that many other economic and social factors influence spatial development. These factors include people's varied preferences in quality of life terms, and education and health provision. Furthermore, the current NDP¹⁶⁸ includes social infrastructure and social inclusion priority for investment in the future of the State, and particularly places emphasis on the promotion of social inclusion policy and actions and improving the quality of life of citizens. Further national guidance of note is the National Action Plan for Social Inclusion 2007-2016, which set out the aim of eliminating consistent poverty by 2016. It refers to the lifecycle approach, considering children, people of working age, older people, and people with disabilities as key stages in responding holistically to the needs of communities. Overall therefore, at the national policy level, the importance of social infrastructure and social inclusion is recognised as a central component in achieving balanced spatial development. 'Government Policy on Architecture 2009 - 2015' was published by the Department of the Environment, Heritage and Local Government in October 2009. The policy recognises the place of architecture in society as an expression of cultural, aesthetic, and social values, both past and present, and the challenges and expectations of the future in shaping a sustainable quality environment. It acknowledges that the 'creation of sustainable communities and the maintenance of existing communities involves integrating urban and landscape design, urban and building conservation and architectural quality criteria at every level in the planning process and effective coordination of hard and soft infrastructure provision in developing areas. High quality "place-making" must also recognise the importance of locational criteria in the promotion of a sustainable built environment. The document includes a number of actions to be implemented over the lifetime of the policy by various bodies including local authorities.

8.3 Housing

The Settlement Strategy Chapter earlier in this document examined the challenges and requirements for each Council with regard to housing land provision and the optimum locations within each Council for new housing development. However, delivery and management of housing is a much more complex issue, involving need, community, quality, tenure and place; and for which the local authorities are central to all elements. The Departmental publication on housing policy *Delivering Homes, Sustaining Communities*¹⁶⁹ sets out a vision for Irish housing over ten years from 2007. The document focuses on (i) achieving high quality housing and environments, (ii) building sustainable communities, and (iii) transforming housing services so that they are tailored to address the needs of specific households and the effective delivery of accommodation programmes. The Guidelines also have an accompanying best practice manual, providing practical guidance on design factors.¹⁷⁰

The Department also published planning guidelines, *Sustainable Residential Development in Urban Areas*¹⁷¹ to set out the key planning principles which should be reflected in development plans and local area plans, guiding the preparation and assessment of planning applications. These Guidelines directly complement the *Delivering Homes* publication. Below are listed the high-level aims from the *Sustainable Residential Development Guidelines* which clearly support the goal of creating sustainable communities and reducing social exclusion across the region:

- Prioritise walking, cycling and public transport, and minimise the need to use cars;
- Deliver a quality of life which residents and visitors are entitled to expect, in terms of amenity, safety and convenience;
- Provide a good range of community and support facilities, where and when they are needed and that are easily accessible;

¹⁶⁷ Regional Planning Guidelines for the Greater Dublin Area 2004-2016, Pg 74.

¹⁶⁸ National Development Plan 2007-2013 'Transforming Ireland – A Better Quality of Life for All'.

¹⁶⁹ Delivering Homes, Sustaining Communities: Statement on Housing Policy. DoEHLG, 2007

¹⁷⁰ Quality Housing for Sustainable Communities, Best Practice Guidelines for Delivering Homes, Sustaining Communities, DoEHLG, 2007.

¹⁷¹ Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas (Cities, Towns and Villages) DoEHLG, 2009

- Present an attractive, well-maintained appearance, with a distinct sense of place and a quality public realm that is easily maintained, accessed and traversable;
- Promote the efficient use of land and of energy, and minimise greenhouse gas emissions;
- Provide a mix of land uses to minimise transport demand;
- Promote social integration and provide accommodation for a diverse range of household types and age groups;
- Enhance and protect green infrastructure and biodiversity; and
- Enhance and protect the built and natural heritage.

These Guidelines clearly go beyond design standards and place quality within the context of integrated sustainable living.

The RPGs in examining the issues surrounding housing provision addresses specifically three key areas: (i) Quality; (ii) Density; and (iii) Integration & Role of Housing Strategies.

Quality.

The NDP 2007-2013 states that good quality housing is fundamental to the social and economic development of the country. Quality housing should be reflected equally in terms of the overall layout of the scheme and its urban design characteristics, the internal layout, form and design of housing and the external architectural form of housing which should relate to the wider urban area of which it is part while facilitating the creation of areas of distinct character. In addition to the aforementioned Departmental Guidelines, guidance was also published on new apartments - Sustainable Urban Housing –Design Standards for New Apartments (2007), which seek to ensure that design and layout of new apartments provide satisfactory accommodation for a variety of household types and sizes, including families with children, and does so over the medium to long term, incorporating the principles of universal and life cycle design. All of these Guidelines set clear direction for local authorities to follow in their plans and development management practices, and need to be fully implemented. Alongside design quality is the quality of energy efficiency in homes. The promotion of energy efficiency and safety should become a key facet in the design of future development and be promoted through the planning process and policy. Good quality housing is of key importance for the GDA in forthcoming years, in that in seeking to achieve more sustainable places there is a need for new developments to be attractive liveable places, particularly those of higher or medium densities close to good public transport so that they offer a strong alternative to locations more remote from where people work or come from.

Density

Land is a limited resource and needs to be used as efficiently as possible. 173 Low densities use up this limited resource and increase the costs to society through delivery of services, water, access and healthcare. Moreover, it makes the provision of good public transport almost impossible, resulting in increased car usage and loss of opportunities for walking and cycling to access local facilities, overall creating environments which encourage unhealthy lifestyles and driving up the ecological footprint of households. Building at higher densities to the traditional estates of the mid 20th century creates the opportunities for sustainable and inclusive communities. The RPGs, in seeking to support sustainable development are directing new housing growth towards key locations on high quality public transport corridors. It is critical for the success of this policy that those areas of land adjacent or close to high quality public transport services are cognisant of the Government policy and plan for densities at medium or high levels, with regard to the site, location, surrounding lands and environmental impacts. The delivery of key investment in new rail based services particularly presents the opportunity to serve a large population with high quality transport within walking or a short cycle of a rail station, with all the benefits from social and environmental perspective to the resident in being provided with quick, efficient and accessible public transport.

Alongside this, the scale of density used, particularly in smaller towns and villages needs to be appropriate to the existing and surrounding environment, respect the character of the towns and existing patterns and built forms and provide attractive extensions or infill, with the appropriate mix of housing types suitable and sought for the area. Density should also take into account surrounding sensitive or heritage landscapes or environments. Local area plans and other locally focused

plans such as master plans provide good opportunities for planning authorities to guide the type and form of development for new areas so that good design, integrating layout and suitably scaled densities can be delivered.

Integration & Role of Housing Strategies

Housing Strategies are in place in local authorities across the GDA. As required by the Planning and Development Acts, they set out a strategy to ensure that the proper planning and development of each area provides for the housing of the existing and future population as set out in each strategy.

Housing need can vary according to income, category of household and additional special requirements of groups such as the elderly. A range of housing types and sizes to match these requirements must be provided, and undue segregation of persons of different social backgrounds avoided.

The preparation of housing strategies needs to evaluate both existing and likely future need and in turn, a Local Authority must ensure that sufficient serviced land is made available to address this identified housing need. The provision of housing must also fit into the wider settlement hierarchy in place across the region; discussed and outlined in Chapter 4. The Housing Strategy has an important role in creating a unified approach within Local Authorities to responding to housing needs of the Council area and ensuring that the policy approach adopted is reflected and reinforced through planning and housing policies.



¹⁷² National Development Plan 2007-2013, p10.

¹⁷³ Sustainable Residential Development in Urban Areas, DoEHLG.(2009) p28.

8.4 Education

"Research indicates that investment in education yields very significant economic and social benefits for society at large. In the current difficult climate, it is important that the long-term importance of investment in education is not forgotten." (ESRI)

Elsewhere, the National Development Plan 2007-13 'Human Capital Funding' set out a continuing objective 'to ensure access to a very good standard of education and training for all and, in particular, to provide the labour force with the skills and adaptability to meet the challenges of the future'.

The continual provision of high quality education is required to facilitate Ireland's focus on the knowledge based economy and in order to be competitive in the international market place. The next phase of economic development in Ireland will need to be based on a new source of competitive advantage, accepted as being based mainly on knowledge. This has been reflected in a significant increase in investment in research in order to create new knowledge and to transfer that knowledge to enterprises throughout Ireland. This suggests that investment in education and forging successful links between education and industry will be a factor in promoting the knowledge society as a key driver for economic development across the region. The GDA has a primary role for the State in this area, having the highest concentration of higher education institutes, research activity, research expenditure and attracting a high volume of government funding for research activity. Third level education rates in the GDA are above the national average and higher than all of the other regions. Recent CSO data indicated that the Dublin region had the highest proportion of people with 3rd level education among those who had completed their full-time education (at 35.9%) while the Mid-East region rate of 30.8% was the second highest. (The national average level was 29.1%). The creation of outreach facilities in counties with no third level institutions would be beneficial in terms of improving accessibility to higher education and would enhance the possibility of linkages between education and industry. Enhanced cooperation between the counties in respect of this could facilitate an equitable distribution of services which would best serve the needs of the population.

The disparity between the rate of provision of schools in new and rapidly growing communities and demand for school places has created some controversy in the past. The high levels of population growth in some areas across the GDA has put significant pressure on educational resources. Responding to the needs requires strong cooperation between Local Authorities and the Department of Education & Science. In seeking to address this issue, the Department of Environment, Heritage & Local Government have put in place a series of policy recommendations and directions in *Sustainable Residential Development in Urban Areas* (2009), *The Code of Practice on the Provision of Schools and the Planning System* (2008) and the *Development Plan Guidelines* (2007).

The *Code of Practice on the Provision of Schools and the Planning System* was published in 2008 jointly by the Department of Environment, Heritage & Local Government and the Department of Education & Science. ¹⁷⁷ It seeks to ensure that best practice approaches are followed by planning authorities in facilitating the timely and cost-effective roll-out of school facilities by the Department of Education and Science. The code builds on guidance provided in the *Development Plan Guidelines*, ¹⁷⁸ and outlines the principles and scope for integrating schools provision with the development plan process, linking anticipated levels of demand for school places with housing strategies and the provision of large-scale residential developments.

The Code of Practice is based on three core objectives:

- schools provision should be an integral part of the evolution of compact sustainable urban development and the development of sustainable communities;
- the provision of any new schools should be driven by and emerge from an integrated approach between the planning functions
 of planning authorities and the Department of Education and Science; and
- planning authorities will co-operate and co-ordinate with the Department of Education and Science in ensuring the timely delivery of schools.

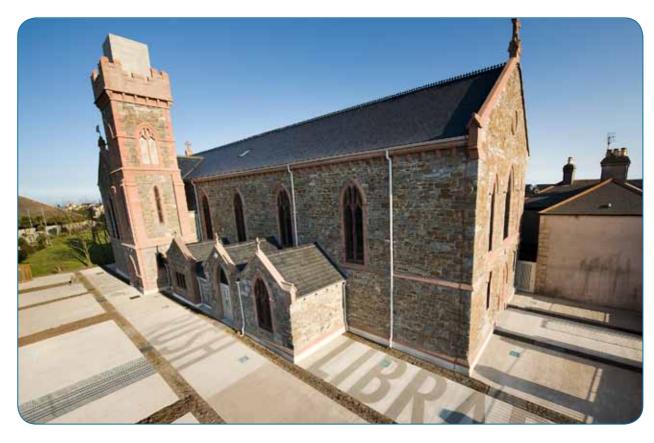
Whilst planning authorities do not play a role in the delivery of new schools, authorities have an important role in identifying sites at primary and secondary level and policy decisions by Councils through development give rise to growth in demand for schools in certain locations. *The Code of Practice on the Provision of Schools and the Planning System* is a key guidance document to Local Authorities along with guidance in *Sustainable Residential Development in Urban Areas* in setting out key principles regarding the interaction between the planning system and education, and specifically the Department of Education and Science (DES) schools planning unit. This is an area where recent years have seen significant progress in building relations between the DES and Councils and this work needs to be continually built on and evolve.

8.5 Leisure and Recreation

A report on the health impacts of the built environment by the Institute of Public Health in Ireland noted that public spaces and networks influence health in a number of ways. The report identifies, among other things how access to good-quality well maintained public spaces, efficient, modern public transport systems and 'walkable' neighbourhoods can encourage physical activity, promote social interaction and contribute to better air quality. In combination these cumulative effects will positively improve community well-being and mental health. It also notes that for children, the provision of safe play space, both in public areas and in schools, is of particular importance given growing concerns about obesity.

The provision of recreation facilities is a key part of a sustainable community. The GDA has a wide range of facilities and recreation opportunities for its residents, including leisure centres, sports halls, parks, pitches and more informal recreation spaces. In addition, informal recreation and access to informal green spaces is of key importance to many residents of the GDA, especially in areas where distances to formal recreational facilities are not optimal. As discussed in Chapter 7, a number of local authorities are preparing Green Infrastructure strategies for their administrative areas and this, and the integrated development of a Green Infrastructure network across the Greater Dublin Area, will create greater access to and linkages with parks and informal recreation spaces.

It is important that local authorities put in place in Development Plans clear policies regarding provision of open space. Progress needs to continue on developing more user focused policies, looking at uses, ages, play spaces and sports needs



179 Health Impacts of the Built Environment, A Review. Institute of Public Health (2006)

¹⁷⁴ *Investing in Education: Combating Educational Disadvantage* Pg 58 Emer Smyth And Selina McCoy. Research Bulletin 2009/3/3 Commissioned by Barnardos and published by The Economic and Social Research Institute

¹⁷⁵ Forfás Regional Competitiveness Agendas East: 2009

¹⁷⁶ Regional Quality of Life Central Statistics Office (2008).

¹⁷⁷ Code of Practice on the Provision of Schools and the Planning System DoEHLG and Dep. Ed and Science (2009).

¹⁷⁸ Development Plans – Guidelines for Planning Authorities DoEHLG (2007).

within places with good connectivity, high levels of passive supervision, interacting with urban design principles to create well used, accessible open spaces. It is important that open space policy accords with best practice in terms of accessibility and security so that the open space acts positively on its surrounding neighbourhood. A hierarchy approach to open space in towns and large urban areas, providing for a mix of types of spaces and for a joined up approach from multiple developments is essential to ensuring that areas get real benefit from open space standards. Linkages of open space policy to schools provision and siting, protection of natural amenities and water management should be explored including where possible the sharing of facilities between schools and community.

It is important that local authorities carry out a formal audit of recreational spaces, to identify the quality and type of existing spaces and facilities and from this identify gaps in provision and future needs. This is particularly important in areas and towns which have in recent times or are planned to experience population growth in coming years. A significant delivery since the 2004 RPGs has been the adoption by Councils of play policies for their respective areas. These policies are the result of a full assessment and audit of resources and set out future needs. Local Authorities across the regions have also set up Sports Partnerships and Networks, while Sports Development Officers work to support and encourage recreation activity. Continuation of these networks and services is of particular benefit to more marginal parts of society where these resources have already been successfully targeted and implemented.

Informal recreation, particularly walking and cycling, should be promoted through the development and expansion of a network of safe cycle and walking routes through and across towns, accessing parkland, in the built up area and into and through rural areas. Such routes can link in with existing way marked trails, sli na slainte walks and parts of the Green Infrastructure network (as detailed in chapter 7) and other local resources such as existing or new rights of way. Supporting facilities such as access points and signage or web information for example play a role encouraging outdoor activity and good health.

8.6 Health and Healthcare Facilities

Like the provision of educational facilities, healthcare is not a social service provided directly by Local Authorities, however, the provision of healthcare facilities must be taken into account in planning terms. The DoEHLG Guidelines *Sustainable Residential Development in Urban Areas* suggests that Planning Authorities should consult the Health Services Executive (HSE) at the development plan drafting stage in relation to the provision of healthcare facilities in major new development areas. ¹⁸⁰ *The National Health Strategy — Quality and Fairness - A Health System for You* and the *Transformation Programme 2007-2010*¹⁸¹ points to the move to a more primary care model. This is to ensure that everyone has access to a broad spectrum of services, delivered by a local primary care team. ¹⁸² Overall, Local Authorities can support the HSE policy with regard to community based primary care centres and hospital care, working towards their integration into new and existing communities in the preparation of new plans, particularly for local area or town plans. From a regional perspective, it is noted that a HSE study has identified Navan as the optimum location for a new hospital to serve the northeast region. Local level planning should address facilitating the delivery of this type of project. ¹⁸³ Close consultation between the HSE and Planning Authorities in the development management process- for example in the assessment of proposals which include healthcare, childcare and related projects, or appropriate siting of primary care centres, is also supported.

Also an important part of health provision in the community is the development of respite and nursing home facilities. Demographic projections for the State show that in coming decades the number of older people will form a larger part of society and planning to cater for their needs within communities needs to take place, in partnership with the health authorities. Such facilities should be easily accessible for both residents, patients, staff and visitors from the surrounding community and not be isolated in terms of location except where particular circumstances require it. In an ageing society, focus must be put on incorporating nursing homes and respite centres as accessible and integrated community facilities.

Planning policy can affect health in many ways but some of the biggest impacts are through influencing transportation, buildings and communities, homes and flood risk. Specific health impacts associated with spatial planning include heart

disease, respiratory disease, mental health, obesity and injuries. Planning policies need to consider the added health burden from the effects of air and noise pollution, road traffic accidents, sedentary lifestyles, lack of safe community space or spaces with poor access, poor or unsafe access to a range of food shops and health services, poor access to local health centres, poor land use mix failing to encourage local employment, poor housing/building design, flooding and cold and damp housing. High quality development and strong local area planning provide a key opportunity to increase the quality of life for communities through improvement of health and offering real opportunities for interaction, exercise and ease of access to services by all members of the community.

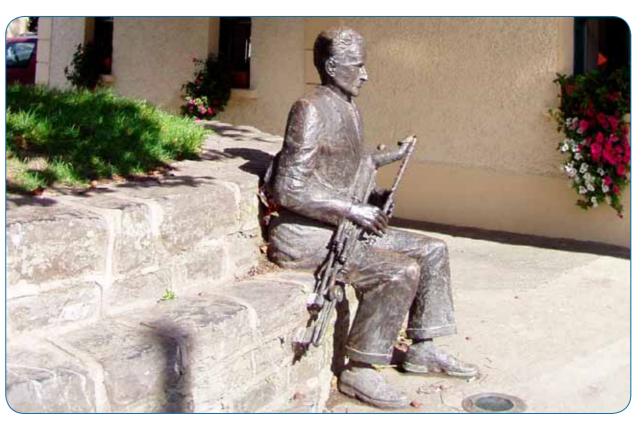
8.7 Arts & Culture

Regional Planning Guidelines for The Greater Dublin Area 2010-2022

Arts and culture add to the quality of life for communities and individuals. Arts and Youth Arts strategies are in place in Local Authorities across the GDA, setting out aims to promote the arts and culture locally. Councils are key supporters of cultural events across the GDA, including arts festivals, literary events, music events and festivals and various summer schools as just some of the examples. Dublin as a capital city has a special role in promoting arts and culture at a national and international level with the national theatre, galleries and museums cited within its area. National and international promotion of culture is also aided by bodies such as Culture Ireland and the Arts Council. Over recent years, there has been significant and encouraging development of arts facilities across the region. Some examples include The Lab in Dublin 1, the Solstice Arts Centre in Navan and Rua Red in Tallaght.

From a planning perspective, arts and culture can be supported through support of the provision and the development of arts facilities, from work spaces, to performance spaces both indoor and outdoor. Existing facilities, some of which also serve a general sporting and recreation function are of great value to the population and the maintenance of such facilities is important.

The promotion of Irish culture and language is an important facet of arts and cultural activities across the region. The GDA has two separate Gaeltacht Areas, Rathcairn, three miles south-east of Athboy and Baile Ghib, six miles east of Kells, both in County Meath. It is an objective of Government to maintain Irish as the language of communities in Gaeltacht areas. Meath County Council as the main local authority involved has played an active part both in relation to planning and other areas of Council policy in supporting these Gaeltacht communities and will continue to deliver to meet the particular needs of these communities.



 $^{180 \ \}textit{Guidelines for Planning Authorities on Sustainable \textit{Residential Development in Urban Areas} \ (\text{Cities, Towns and Villages}) \ DoEHLG \ (2009) \ p.26.$

¹⁸¹ Transformation Programme 2007-2010, HSE (2007)

¹⁸² Quality and Fairness – A Health Service for You. Department of Health and Children (2001).

¹⁸³ The North East Regional Hospital Location Study 2008, commissioned by the HSE.

8.8 Social Inclusion, Development Boards & Community Development

Social Inclusion

Social inclusion is an active response to social exclusion, whereby certain groups or individuals are excluded from the community due to factors such as lesser educational attainment and poverty and isolation. As alluded to previously, planning policy is a small part of the overall integrated response needed, but the RPGs have a role in setting out common policies for all Councils on how social inclusion can be incorporated into planning policy documents.

The NDP's social inclusion priority reflects the life cycle approach, also seen in the National Action Plan for Social Inclusion 2007 – 2016 (NAP/Inclusion), which refers to children, people of working age, older people and people with disabilities - all groups which can experience social exclusion. This approach places the individual at the centre of policy development and delivery, which is an effective approach to take in planning documents. The NAP/Inclusion sets out a wide-ranging and comprehensive programme of actions and goals to address poverty and social exclusion as significant interventions are required in some key areas in order to achieve the overall objective of reducing consistent poverty.

Children

Over the past number of years, the provision of childcare facilities across the GDA, has increased, meeting increased demand for quality childcare which is proximate to local communities. He area. This demand is set to continue, as the CSO's latest Population and Migration Estimates to April 2009, indicate an increase in national births year-on-year since 2007. The Department of the Environment Heritage and Local Government's guidelines on Childcare Facilities published in 2001 referred to the need to ensure that increased childcare provision were of a suitably high quality and emphasised the importance of local assessment of the need to provide such facilities at the development or local area plan stage, having regard to the provision of existing facilities in the area.

Currently, Childcare Strategic Plans are in place in the counties across the regions. These cover the period 2007-2010 and are implementing funding under the National Childcare Investment Programme (NCIP) 2006 – 2010. The City and County Childcare Committees play a key role in the implementation of the NCIP and enable flexibility and responsiveness to local needs. Overall the programme aims to provide additional childcare places, including after school places, and also providing additional trained childcare staff. Overall, development plans and local area plans can specify standards in relation to childcare facilities, ensuring that they are provided for in newer, mixed used developments. In addition, it is important to ensure that smaller scale facilities are maintained in more established residential areas.

People with a Disability

In the 2006 Census, 8.1% of people in the Mid-East and 9.5% of people in Dublin had a disability. The Department of the Environment, Heritage and Local Government's sectoral plan under the Disability Act 2005 sets out its high-level goal to "promote and pro-actively encourage equal opportunities for persons with disabilities to participate in the economic, social and cultural life of the community." The plan refers to providing accessible design and further guidance such as Sustainable Residential Development in Urban Areas and the Development Management Guidelines for Planning Authorities (DoEHLG, 2007) are pointed to as more in-depth guidance on this issue. Progress has been made across the GDA in relation to making building and public areas more accessible and navigable for some people with disabilities. The use of dished kerbs and tactile paving are important public realm examples. Overall the continued integration of disability in terms of the design of public spaces and buildings must be carefully considered and worked into design considerations.

Travelling Community

The main area of interaction by the Travelling community with planning policy is in consideration of the Traveller Accommodation Programme (TAP) in the Development Plan process. The legislative framework of the Traveller

Accommodation Programme is contained in the Housing (Traveller Accommodation) Act, 1998 which requires housing authorities to prepare and adopt a 5 year programme, or for such shorter periods as the Minister may direct, to meet the existing and projected accommodation needs of Travellers. Traveller Accommodation Programmes are in place across the regions for the period 2009-2013. These set out individual council's policy in relation to the provision of Traveller accommodation during this period. The TAP has contributed in recent years to the development of Traveller accommodation across the regions and its continuation is important to improving the quality of life for the Travelling community.

Ethnicity

The results of the 2006 Census showed that the GDA has become a more ethnically diverse region, within a fairly rapid period of time. Areas where high concentrations of immigrant populations have settled were identified by the Census and this change brings new challenges for both local authorities and other state bodies in addressing the needs and threats to these newer communities in the GDA. Certain electoral divisions recorded immigrant populations in excess of 20% and up to 46%. The occurrence of such strong pockets of new residents into a small number of locations creates a number of challenges regarding service delivery, education, and integration which must be regarded by local authorities on an ongoing basis.

Homelessness

The Homeless Agency published *The Way Home: A Strategy to Address Adult Homelessness in Ireland 2008-2013* in 2008. It suggests that where appropriate, the development of preventative measures should be approached on a regional basis or shared by two or three local homeless forums, while maintaining the core elements of local homeless action plans and partnership. Overall, Local Homeless Action Plans are the basis for homeless policy in local authority areas. Addressing homelessness is an important part in the development of Housing Strategies for Development Plans. Also of consideration is the importance of affordable, suitable housing options for those coming out of homelessness, and the need to consult with the relevant agencies in consideration of some of the most vulnerable members of society. At a more local level the provision of supportive housing options as part of accommodating all parts of society should, where suitable, be supported.

City & County Development Boards

Across the region, County and City Development Boards (CDBs) play an important coordinating role to ensure the provision of integrated service delivery at local level, whilst promoting partnership and collaboration between a range of community groups. This is a key role which recognises the activities of local level community activity, providing supports where necessary. The various committees of the CDBs have developed and delivered a range of integrated inter-agency policies for their geographical areas in key issues such as social inclusion, childcare and enterprise. The input from the CDBs into planning can assist in shaping policy which takes account of the needs of the various community groups represented through the CDBs and in shaping policy to reflect the challenges of areas of social exclusion.

Community Policing

The establishment of Joint Policing Committees at Council & Development Board level and local policing at neighbour-hood level provides new opportunities for cooperation between local authorities, community representatives and An Garda Síochána. While mainly focussed on improving saftety and quality of life for their communities; this cooperation also can play a role in planning by allowing input into plans and major applications on designing to avoid crime risk. The careful planning of layouts and connections between public spaces for example, or ensuring good mix of uses to avoid "dead areas" in the evening can all play an important role in making places safe and pleasant places to be. Local Authorities should work with the Joint Policing Committees to develop linkages and inputs into planning to bring the experience of community and Garda representatives into future plans.

¹⁸⁴ On a broad level it is hoped that "Growing up in Ireland - The National Longitudinal Study of

Children" will also assist in determination of provision of services for children.

¹⁸⁵ Population and Migration Estimates to April 2009. Central Statistics Office, Sep 2009, p2.

 $^{186 \ \}textit{Childcare Facilities} - \textit{Guidelines for Planning Authorities} \ DoEHLG \ (2001).$

¹⁸⁷ Sectoral Plan under the Disability Act 2005, DoEHLG (2006) p.8.

¹⁸⁸ Organisations such as Nacro and the Rowntree Trust in the UK have numerous publications detailing the benefits of policing and planning working together to create safer places. Also a number of UK Local Authorities have published guidance in this area such as "Designing Out Crime" by Royal Borough of Kensington & Chelsea.

RAPID and CLÁR

Two tools of Government, established to directly tackle problems of social exclusion are the RAPID and CLÁR programmes, which are area specific. RAPID (Revitalising Areas by Planning Investment and Development) is a Government initiative targeting some of the most disadvantaged urban areas in the country. The Programme aims to ensure that priority attention is given to tackling the spatial concentration of poverty and social exclusion within the designated areas through targeted state resources. Currently there are eighteen areas in the GDA in this programme.

CLÁR (Ceantair Laga Árd-Riachtanais) schemes are more rural focused and provide funding to a variety of developments such as village, housing and schools enhancement, electricity conversion, roads, water supply, waste water treatment, health, coastal, sports and community projects. CLÁR operates in two areas of the GDA. They are in the northwest of Meath and tracts of the western side of Wicklow incorporating EDs such as Ballinguile, Lugglass, Ballybeg, and Ballinacor. Both CLÁR and RAPID have contributed to targeting investment into disadvantaged areas and have provided an important localised co-ordinating role, which is and should continue to be supported by the agencies involved.

Local Development Social Inclusion Programmes (LDSIP)

The Local Development Social Inclusion Programme forms part of the National Development Plan 2007-2013. Up to the end of 2008 the LDSIP was implemented across the country through 38 Area-based Partnerships, 29 Community Partnerships and two Employment Pacts.

The LDSIP aims to counter disadvantage and to promote social inclusion. It does so through funding and supporting companies who develop local plans which respond to the needs of those experiencing social exclusion. The programme aims to add value to mainstream organisations and is a useful approach in the overall aims to tackle social exclusion at a local level. The GDA has a significant number of LDSIP offices functioning across the area, located mainly in areas of disadvantage. These organisations play an important role at a local level in supporting local enterprise and training opportunities, building up capacities and in directing resources to deliver greater benefit and inclusiveness for vulnerable groups within society. The planned merger of the LDSIP and the Community Development Programme aims to achieve a more streamlined service. It is expected that this will be delivered during the lifetime of these RPGs.

8.9 Strategic Policy & Recommendations

Strategic Policy SIP1

That Local Authorities work with the relevant state agencies in ensuring that an integrated approach is taken to both planning for the communities who live within the GDA either in planning for growth, for change or regeneration in communities; that the needs of particular elements of society are identified and responded to and that the most vulnerable are valued as part of the community.

Strategic Policy SIP2

That quality of life forms a central part of planning policy in supporting good spaces, good places and that social activities and the arts form a core part in making good places.

Strategic Recommendations

- SIR1 The delivery of housing needs to follow sustainable models through avoiding low density car based development forms and be focussed on medium densities which will support and be integrated with a range of community facilities within accessible walking distances. Where lands are close to public transport nodes/stations or QBC corridors the density and connectivity of developments should directly support increased population being able to benefit from good transport links.
- SIR2 Councils should require that all residential development be of high quality in design, layout and space provision, and create a mix of typologies and tenure within residential areas, in line with the Departmental Guidelines. 189



- Where significant new housing is proposed in an area or community, an assessment of need regarding schools provision should take place; and local area plans (and/or Development Plans or Master Plans) should designate new school sites at accessible, pedestrian friendly locations.
- SIR4 Planning authorities should work with the health services with regard to provision for community based primary care centres and hospital care in key population centres, supporting their integration into new and existing communities.
- SIR5 Councils should continue to promote the integration of quality childcare facilities in newer communities, in line with the Department Guidelines on childcare facilities.
- Plans and projects associated with the provision of social infrastructure, recreation, leisure and tourism activities that have the potential to negatively impact on Natura 2000 sites will be subject to a Habitats Directive Assessment (HDA) according to Article 6 of the habitats directive and in accordance with best practice and guidance.
- Identify the importance of the development of recreational and leisure programmes and facilities in a balanced fashion across the GDA, where facilities are planned and provided for appropriate to the local community needs. It is recommended that an audit of recreational facilities with the purpose of identifying needs and new policy direction is undertaken prior to commencing a review of the County/City or Town Development Plan¹⁹⁰ and that new and existing facilities which form part of the recreation strategies are protected through appropriate zoning and development plan policies.
- SIR8 That the role of Arts and Culture in supporting sustainable and multi-faceted communities is recognised and that arts and culture facilities throughout the regions are promoted and are accessible to the communities they serve.
- SIR9 That Development Plans and Local Area Plans are prepared so that important issues of social inclusion, ethnicity, minority groups and those with disabilities are fully considered and that social inclusion forms part of considering the policies set out for the growth and development of the Council area for the future.
- SIR10 Local Area Plans and Development Plans should specifically examine the needs of the elderly or infirm in planning for existing, new or expanded communities and set out objectives to ensure that appropriate provision is made for assisted housing and/or specialised facilities at accessible locations that clearly integrate into the community to meet current and future needs.
- SIR 11 The importance of managing and enhancing recreational facilities, including publicly owned lands associated with regionally important assets (such as the Dublin Mountains) is recognised and should be supported by the relevant bodies in line with environmental compatibilities in association with plans and/or measures to protect important habitats within or proximate to these locations.

¹⁸⁹ Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas; Quality Homes for Sustainable Communities; Delivering Homes, Sustaining Communities and Design Standards for New Apartments, and any subsequent documents or revised versions of the above.

[₩] Habitats Directive Assessment Mitigation Appendix A6, Vol. II

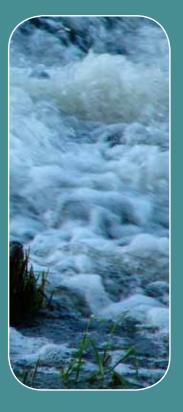
¹⁹⁰ Plans and projects that have the potential to negatively impact on Natura 2000 sites will be subject to a Habitats Directive Assessment (HDA) according to Article 6 of the habitats directive and in accordance with best practice and guidance

[₩] Habitats Directive Assessment Mitigation Appendix A6, Vol. II



Regional Flood Risk Appraisal





Regional Flood Risk Appraisal

Introduction

This chapter addresses the relationship between the Guidelines, flood risk and the management of flood risk. Flooding is a natural process that can happen at any time in a wide variety of locations and plays a role in shaping the natural environment. Flooding from the sea and from rivers is probably best known but prolonged and intense rainfall can also cause sewer flooding, overland flow and flooding from groundwater. When it impacts on human activities, it can threaten people, their property and the environment. Also important to this issue is the consideration of the consequences of climate change on sea level change, the nature and pattern of rainfall events and weather patterns generally. Whilst the exact impacts of climate change are not known, it is widely agreed that it will result in higher risk of flooding both inland and along coastal locations. It is important therefore that this issue is examined within the RPGs as decisions on the direction of future growth within the GDA can impact on flood risk. The long-term planning element of climate change issues such as increased flooding events is not underestimated and it is necessary to plan now for potential flood risk in the coming decades. It is also important that the RPGs highlight the need for developing policy and actions in relation to flood risk, and encourage cooperation across Councils as the impact of flood and water movement in many places crosses Council boundaries.

The Department of Environment, Heritage and Local Government (DoEHLG) and the Office of Public Works (OPW) published Planning Guidelines The Planning System and Flood Risk Management, in November 2009. The Guidelines recommend a clear and transparent assessment of flood risk at all stages in the planning process and set out that regional flood risk appraisal and management policy recommendations are necessary to set a policy framework for Development and Local Area Plans at the local level. The guiding principles for Flood Risk Assessment are as follows:

- Avoid risk where possible;
- Substitute less vulnerable uses where avoidance is not possible;
- Mitigate and manage the risk where avoidance and substitution are not possible.

This chapter sets out the key policy recommendations with regard to avoiding and managing flood risk within the Greater Dublin Area (GDA) as part of the flood risk appraisal of the area in the context of the strategic level of the RPGs. Flood Risk Appraisal is an overview of flood risk at regional level, including:

- the identification of appropriate policy responses for priority areas, including areas that transcend administrative boundaries and where there appears to be significant flood risk; and
- · requirements on foot of the guidelines for cooperation, implementation and coordination of more detailed area level strategic flood risk assessment in City and County Development Plans.

9.2 Regional Flood Risk Appraisal of the GDA

The Greater Dublin Area incorporates seven local authority areas- Dublin City, Dun Laoghaire-Rathdown County, Fingal County, South Dublin County, Meath County, Kildare County and Wicklow County Councils. This area is large in size (698,200 ha) and includes a multitude of topographies, soil and rock types, water bodies and a large coastal area to the East. Alongside this it contains 1.66 million people - 39% of the population of the State, making it the most densely populated area of the State at 2.38 persons per ha. Despite the overall higher numbers living in the GDA, the area also contains large areas of wilderness and rural locations where the natural cycles of nature do not directly impact on human settlement. The area to a large part falls with the Eastern River Basin District- encapsulating the rivers and tributaries of the Liffey, Boyne, Dodder, Tolka, Avoca and Vartry. The area is bound to the east by the Irish Sea and contains a smaller number of lakes, of which a number are man made reservoirs supplying water to Dublin and surrounding Counties and districts.

Available Data

Regional Planning Guidelines for The Greater Dublin Area 2010-2022

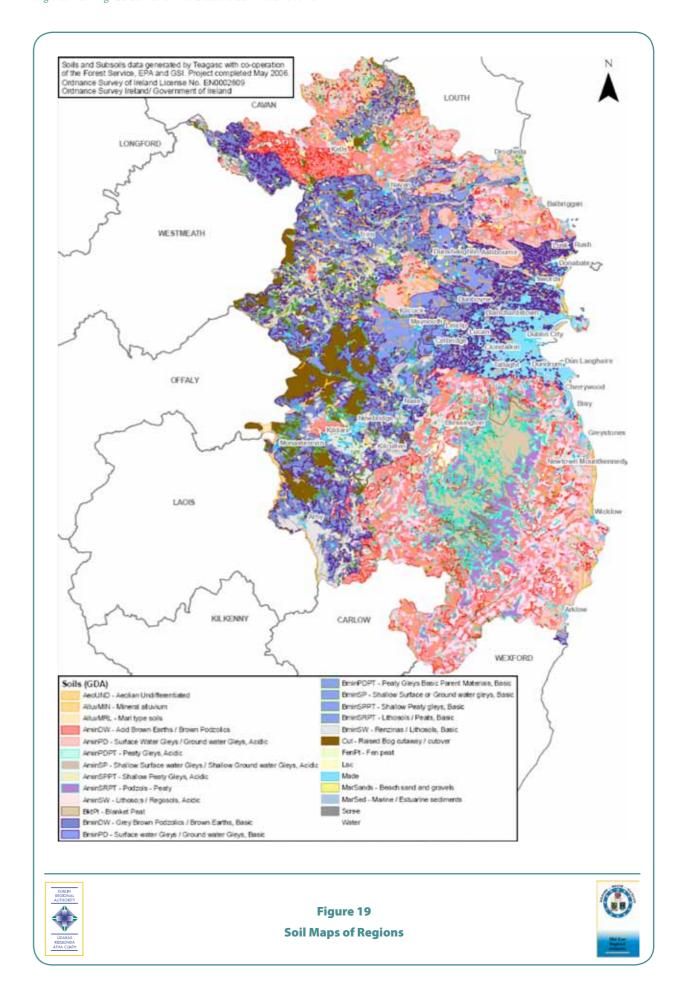
The OPW are currently involved in preparing catchment-based flood risk management plans- Flood Risk Assessment and Management Studies (CFRAMs) with the relevant local authorities, the Environmental Protection Agency (EPA) and other key agencies. These, when completed, will provide an integrated and pro-active approach to flood risk and are the mechanisms through which predictive flood maps and Catchment Flood Risk Management Plans (CFRMPs) are being developed. These CFRAM Studies will establish a prioritised set of flood risk management measures for their relevant areas, including the use of physical and management responses. Other available data informing flood risk management in the GDA include:

- Individual area flood studies- the Tolka Flooding Study, The Greater Dublin Strategic Drainage Study, the River Dodder Flooding Study, Bray Flood Study, Dublin Coastal Flood Protection Project, Murrough Coastal Protection Study and Fingal East Meath CFRAM Study (ongoing).
- Flood Relief Schemes- at Arklow, Bray, Mornington, Tolka, Rye Water, South Docklands, Avoca, Aughrim, Baltinglass, Duleek, Hazelhatch, Lyreen-Meadowbrook, Morrell River, Boyne, Broadmeadow and Ward.
- Historical recording in spatial point information from www.floodmaps.ie prepared by the OPW (this map gives a clear illustration of the number and distribution of previous flood events across the GDA).¹⁹¹
- Soils maps of the GDA. 192

The OPW are nearing completion of the Irish Coastal Protection Strategy Study which will produce flood and erosion risk maps for the entire coastline of the GDA which, when finalised, will provide an important data source to Local Authorities.



191 It should be borne in mind that works have taken place in many of the flood locations to alleviate risk of repeat flood events. 192 Source: Geological Survey of Ireland, shown under licence.



Appraisal Process

The regional flood risk appraisal of these Guidelines examines the issue of major flood risk from river, estuarine and coastal flooding and does not examine groundwater or artificial drainage flood events. The process involved the mapping of historical flood events in the GDA (see Figure 18) to provide a general indication at a regional scale of where flood vulnerable locations are located in GDA. Alongside this, the mapping of alluvial soils indicating flood plain locations in the GDA was examined at a regional level (Figure 19). From the various local flood studies completed in recent years, the evidence points to significant sections of the built up area of Dublin and key towns in the GDA being vulnerable to flooding particularly along the coast, estuaries and lands proximate to the rivers flowing through the area.

Areas Likely to be Affected by Flooding

From the information emerging from the ongoing CFRAMs studies and previous flood studies the growth towns in the settlement and economic hierarchy are emerging as likely to have some possible flood risk. It is important that Development and Local Area Plans for all areas of new development in the GDA, are informed by the outputs of the CFRAMs studies or prior to completion of such work, by flood risk assessments for the areas in question so that the flood risk potential of these locations fully informs the planning process, using the more recent data available. The completion of the CFRAMs studies for all catchments of the GDA is a critical input into Flood Risk Assessment of future local and county plans.

Development within Possible Flood Risk Areas

The settlement hierarchy selected by the Guidelines takes account of the fact that while a number of key towns and the City which are vulnerable to two key sources of flooding- fluvial and coastal- effective management of flood risk coupled to wider environmental, sustainability and economic considerations mean that it is possible to facilitate the continued consolidation of the existing urban structure of the GDA. In line with the sequential and justification criteria set out in the Department's Guidelines on the Planning System and Flood Risk Management¹⁹³ it is considered that these locations should be encouraged to continue to consolidate and to grow in order to bring about a more compact and sustainable urban development form while at the same time managing flood risk appropriately.

Due to the landscape within which Dublin City and the metropolitan area is set, large areas are within a natural flood plain and are not avoidable. As the national capital, largest city and a national and international gateway, these Guidelines outline measures through which both the flood risk and the continued development of the City can be reconciled.

A large number of well established and vibrant towns across the hinterland and metropolitan areas are likely to be identified in future CFRAMs as having areas vulnerable to flooding, or currently have a history of flood events. Within these towns, implementation of the planning guidelines on flood risk establishes the mechanism to reconcile development and flood risk issues. A number of recommendations and best practice are outlined in this chapter for Local Authorities to support this approach.

Flood Risk Assessment across Administrative Boundaries

In the GDA, the pattern of fluvial risk follows, for many areas, the flow and catchments of existing rivers. Of these rivers, the largest cross in many cases two and three Council areas, with some such as the Liffey, passing through five- rising in Wicklow, and passing through Kildare, South Dublin and Fingal jointly, and finally through Dublin City Council area. In such circumstances integrated approaches to catchment management is essential to avoid increasing flood risk. There is already within the GDA a strong tradition of cooperation between all of the Councils in managing flood risk and in surface water management- many of the existing studies in the GDA were collaborative studies involving all of the Councils on the river and the OPW; the Greater Dublin Strategic Drainage Study was participated in, funded and supported by all Councils in the GDA. It is recommended that this collaborative approach and shared management of river catchments should continue, and that Councils should fully support the completion of CFRAM Studies and jointly implement any actions identified; recognising their important role of shared caretakers of both the land, resources and communities that live within the river catchments. All CFRAM Studies will involve cross Council approaches including the existing FEM-FRAM (Fingal East Meath) and Dodder CFRAM Studies.

193 The Planning System and Flood Risk Management Guidelines for Planning Authorities: DoEHLG November 2009.

9.3 Strategic Policies & Recommendations for Regional Flood Risk Management

The impact of flood risk within the context of the Regional Planning Guidelines and decisions regarding future directions of growth is recognised and has been incorporated into the policies of the RPGs, both within the main document and within the Strategic Environmental Assessment process associated with the preparation of the Guidelines.

Strategic Policy FP1

That flood risk be managed pro-actively at all stages in the planning process avoiding development in flood risk areas where possible and by reducing the risks of flooding to and from existing and future development.

Strategic Recommendations

- FR1 New development should be avoided in areas at risk of flooding. Alongside this, the Regional Flood Risk Appraisal recognises the need for continuing investment and development within the urban centres of flood vulnerable designated growth towns and the City and for this to take place in tandem with the completion of CFRAM Studies and investment in comprehensive flood protection and management.
- Perceipment and Local Area Plans should include a Strategic Flood Risk Assessment and all future zoning of land for development in areas at risk of flooding should follow the sequential approach set out in the Departmental Guidance on Flood Risk Management. All Flood Risk Assessments and CFRAM studies should take place in coordination and consultation with adjoining local authorities and regions and in coordination with the relevant River Basin Management Plans.
- FR3 Local authorities should take the opportunities presented to optimise improvements in biodiversity and amenity when including policies and actions in development plans/local area plans (such as flood plain protection and SuDS) for existing and future developments.
- Plans and projects associated with flood risk management that have the potential to negatively impact on Natura 2000 sites will be subject to a Habitats Directive Assessment (HDA) according to Article 6 of the habitats directive and in accordance with best practice and guidance.



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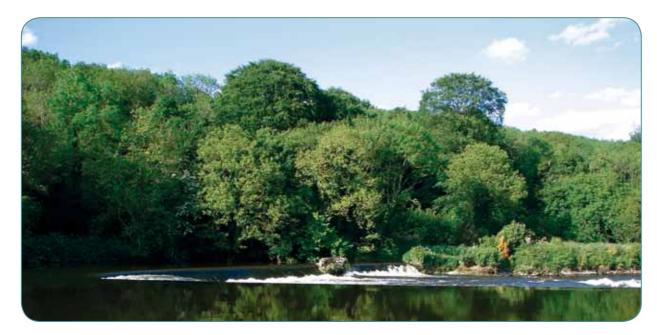
Local Authorities must take account of the issues raised in this Regional Flood Risk Appraisal and undertake Strategic Flood Risk Assessment for future plans in line with the Department's Guidance on the Planning System and Flood Risk Management Guidelines. Local Authorities should ensure that they adhere to the principles of avoiding risk where possible in preparing future Plans.

The RPGs seek to emphasise the need to protect across the GDA the natural flood plains and riparian corridors of all rivers that have not already been built on, and seek that this is explicitly stated and spatially designated in all future Development and Local Area plans following the completion of CFRAMs for the area in question. In the absence of such data, Councils should identify these areas using other data from the OPW and existing studies and historical information available, and, where necessary, through additional studies or investigations. Land required for current and future flood management should be safeguarded from development. Allocation of future areas for development as extensions to existing built up areas, villages or towns should follow a sequential approach; be within the lowest risk sites appropriate for the development; and should include adequate provision for adaptation to, or protection against, the projected impacts of climate change.

In Preparing Plans

In the preparation of future Development and Local Area Plans, Local Authorities are advised to:

- Identify and consider at the earliest stage in the planning process flood hazard and potential risk.
- Identify flood risk areas on the Development Plan and Local Area Plan maps.
- Review existing Development Plans and Local Area Plans to ensure that issues of Flood Risk has been addressed in a manner consistent with the Flood Risk Management Guidelines. Where lands are already zoned for housing or other vulnerable development in flood risk areas, the Council should undertake a re-examination of the zoning in accordance with the sequential approach. RPGs may need to identify Plans which will require a variation to take account of FRA.
- Include policies which ensure that flood risk areas targeted for development following the sequential approach should be planned, designed and constructed to reduce and manage flood risk and be adaptable to changes in climate.
- Include policies to ensure that flood risk and impact is considered as a key element in the assessment of future waste and mineral planning strategies and developments.
- Include policies that ensure that the location of key infrastructure will be subject to FRA.
- Include policies on the importance of the inclusion of Sustainable Drainage Systems (SuDS) in future developments, in accordance with the recommendations of the Greater Dublin Strategic Drainage Study Guidelines and Appendix B of the Flooding Guidelines published by the Department and the OPW.



In Relation to Coastal Areas

The coastline of the GDA, like all coasts, is experiencing both erosion and deposition and some flooding as a result of normal sea actions and also in the future by increased storm activity and sea level rise. Large parts of the coast in the GDA are low lying and vulnerable to flooding in the long-term from sea level rise, and it is essential that current and future plans and development now do not create significant problems in the future. Continued investment needs to be made in research on long term options for the protection of Dublin and existing fabric of coastal towns from long-term sea level rise and increased storm activity. It is important that the possible impacts of global warming and associated sea level rise form part of policy development and coastal zone management for these areas, using longer time horizons than the Development Plan cycle.

Protecting Key Assets

Flooding events, whether widespread or extremely localised, can cause serious damage to key infrastructure (e.g. power stations, sub-stations, communication hubs, wastewater treatment plants etc.). The cost of such disruption is significant to business, causes hardship to residents and also can place people in at risk situations. For this reason, it is recommended that on completion of CFRAMs and the identification of areas of high flood risk in each Council area, that key infrastructure suppliers are advised of the risk to such installations and encouraged to assess current infrastructure for risk and stress test future projects against flood risk, where this has not been previously undertaken.



Implementation, Monitoring and Evaluation





Implementation, Monitoring & Evaluation 10.1 Introduction

An important element in the preparation of the 2010 RPGs has been the need to look forward beyond the publication of the Guidelines to how (i) they will be implemented and (ii) they can be monitored, evaluated and reported on to the elected representatives of the Regional Authorities, key stakeholders and the public. Regular reporting on progress (or not) achieved is critical as the RPGs are reliant on their delivery by a range of key agencies, not least of which are the Local Authorities, DoEHLG and the National Transport Authority. The success of the RPGs will depend on all stakeholders taking an integrated approach to decision making, supporting a focussed and coherent strategic approach so that the future direction of the RPGs is supported and delivered by a series of interlinked decisions and actions bringing about clear and sustained new direction for growth.

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Achieving a coordinated and integrated multi-agency approach requires clear monitoring so that areas where attention needs to be focussed can be identified, and new trends can be monitored. It is recommended therefore that following the adoption of the RPGs that procedures are established so that regular reporting can take place utilising existing and relevant monitoring where possible.

10.2 Legal Context to Implementation

The Strategy present in these Regional Planning Guidelines 2010-2022 will replace the existing Regional Planning Guidelines for the Greater Dublin Area 2004-2016 and will have statutory effect under the Planning and Development Act, 2000, as amended. Currently the Dáil is considering an amending Planning and Development Bill (2009). The Bill aims to ensure a closer alignment between the National Spatial Strategy, Regional Planning Guidelines, development plans and local area plans.



A key element is the introduction of a requirement for an evidence based 'core strategy' in development plans which will provide relevant information as to how the development plan and the housing strategy are consistent with regional planning guidelines and the National Spatial Strategy. The Bill amends the Principal (2000) Act by explicitly requiring for the RPGs to be prepared in order to support the implementation of the NSS, so that RPG policies are set within the policy framework of the NSS, including population targets that are updated from time to time. Development Plans must be consistent with the Regional Planning Guidelines in force at the time of their preparation. The Bill identifies the role of Regional Authorities in commenting during the pre-draft and Draft Development Plan consultation periods and any variations, including informing the Minister of their views.

Under the legislation as it currently stands Planning Authorities must have regard to the Regional Planning Guidelines as set out in the provisions of section 27 of the Planning and Development Act, 2000 when preparing and adopting their development plans. Following the adoption of the Regional Planning Guidelines for the Greater Dublin Area, the seven constituent planning authorities are required to review the existing development plans and consider whether any variation of those development plans is necessary in order to achieve the objectives of the Regional Planning Guidelines.

10.3 Implementation

The implementation of the RPG Strategy and vision will be achieved by:

• Investment in key infrastructure priority areas;

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- Integrated planning land use linked to public transport investment from NDP, NSS, RPG, Development Plan through to Local Area Plans supporting the economic and settlement strategy and delivered through the planning process;
- Coordinated and integrated approach for delivery of key services from all relevant agencies;
- · Protection of green corridors, protected sites, natural flood plains and supporting investment in creation of high quality places through investment in open space, leisure and community facilities;
- · Annual monitoring of the implementation process and identifying any needs for adjustment of policies in future review of the Guidelines.

10.4 Investment Priorities

The RPGs represent an important spatial framework within the Greater Dublin Area for local authorities, government departments and their agencies, as well as the private sector to coordinate and pool their investments, to gain greater synergies and integrated delivery, to mutually support investments made and to achieve better efficiencies.

The RPGs, which have been written mindful of investment decisions already made and in also recommending other key investments necessary, ensure integrated land use planning. Central to this approach has been the investment plan of T21 which will be effective for the life of these RPGs until they are reviewed in 2016.

The investment priorities for the GDA fall into two categories:

- Critical enabling investment priorities: These are the types of individual key interventions necessary to underpin central elements of the approach of the Guidelines.
- Matching regional and local level priorities: This refers to prioritisation by the local authorities in the region to match the critical national level investments.

The RPG document sets out the key investment priorities for the GDA, detailed particularly within the Physical Infrastructure and Social Infrastructure chapters earlier. Particularly central to the Greater Dublin Area RPG strategy is the delivery of Transport 21 and its associated high quality public transport network, as the central framework to accommodating and framing sustainable growth patterns for the future and reducing the carbon footprint of the Regions. The recently established National Transport Authority will play a central part in this delivery.

10.5 Implementation Structures

The successful implementation of the RPGs will depend on the actions of a number of different agencies and the Regional Authorities will want to achieve their support through the maintenance and development of close working relationships with these agencies. The implementation of the RPGs will require the coordinated efforts of:

- The regional and local authorities -both members and the executive;
- Government Departments and their agencies;
- Providers of physical and social infrastructure;
- The National Transport Authority;
- The private sector;
- The general public.

Most responsibility for implementation of the RPGs rests with the various public and semi-state bodies charged with the provision of social, economic and physical infrastructure and the protection and enhancement of our natural and human resources.

In seeking to achieve coordinated implementation it is necessary that there is continued monitoring and reporting of progress in implementation within an agreed structure. The current role of the Technical Working Group and the Steering Committee as both reviewers of implementation reporting prior to presentation to the Regional Authorities and also in assisting in achieving implementation at local authority level and co-ordinating with other agencies should continue following the adoption of the RPGs. Where necessary implementation will be assisted through establishment of sub-groups focusing on specific, geographical and/or transboundary areas.

Future actions and delivery will be guided by the Department of Environment, Heritage & Local Government *Implementation Regional Planning Guidelines- Best Practice Guidance* of 2005 and any subsequent updated Guidance.

10.6 Monitoring & Indicators

The purpose of this section of the RPGs is to establish the main areas of future monitoring to provide clear evidence of change and delivery of the RPGs. In selecting indicators to use, the RPGs draw on existing sources of published information, avoiding duplication of research and minimising cost. This regular monitoring will also play an important role in providing key background information for future reviews of the RPGs. All reporting of the RPGs will be dependent on the resources available to the Regional Authorities during the life-time of the RPGs. The scale and extent of monitoring reports will be commensurate to the available resources to prepare the reports.

It is recommended that an annual report is produced in relation to monitoring of the RPGs which addresses all of the chapters of the RPGs using indicators that are regularly published and that more in-depth individual issue reports are produced following the publication of key less regular data or documents, including new Census results and following Development Plan adoption.

Monitoring and evaluation measure the success of the recommendations and progress of the regional planning guidelines. Indicators can be used to track progress over the lifetime of the Guidelines providing policy relevant data or information to assist monitoring and evaluation. In order to assist the monitoring process a menu of possible indicators has been prepared as part of this document which can be used to measure delivery. The monitoring process links the policy recommendations of the RPGs to quantitative indicators and/or actions where available and suitable. These indicators convey the status of the local, county, regional or national environment and socio-economic conditions.

The indicators are linked to specific policy recommendations and their measurement over time will be utilised to determine whether the Guidelines are progressing in a sustainable direction. Similarly, indicators could also be used to provide

an overall context for policy recommendations. A distinction is made here between indicator types used to signal the progress of the RPGs policy and recommendations and indicator types which are used to underline broader issues such as national economic performance, EU directives and national policy or population dynamics.

The indicators and associated reports are not used to provide an absolute number of how close a region is to sustainable status or when it will reach this goal but rather to ascertain that policies and recommendations are resulting in positive change. In assessing regional socio-economic and environmental planning policy it is important that analysis, insofar as possible focuses on readily available and updateable information. Indicators which are normally empirical representations of reality are used here as signals of progress towards planning deliverables and are selected on the basis of their usability as reliable metrics of sustainable long term regional planning. ¹⁹⁴ Indicators need to satisfy a number of criteria in order to be selected as viable metrics for monitoring and review of regional planning guidelines. They are therefore considered on the basis that they are:

- Representative reflective of the objectives of the regional planning guidelines and of environmental, social or economic conditions,
- Quantifiable able to show trends over time and have baseline reference values,
- Comparable across local authorities and regions wherever possible,
- Reliable, reproducible and robust indicators must be sourced from a reliable source, scientifically robust and be reproducible over time,
- Adaptable- as indicators are only measures of current trends new or modified indicators must be developed, where necessary, in accordance with changes in data, targets and policies or if new concerns arise, and
- Relevant to stakeholders.

A caveat must be affixed to the use of indicator data for monitoring and evaluation as data sets may become less readily available or unavailable and/or reporting structures may be altered. Also in using some indicators it may emerge that they do not provide useful or useable information and these may no longer be tracked. For monitoring social infrastructure and sustainable communities a centrality (Services) index is proposed for use as a pilot in one monitoring report and following this, a decision to continue will be made based on its suitability as an indicator and its practicality in resource terms.



194 The OECD (1994) described an indicator as "a (derived) parameter or a value, which points to, provides information about, or describes the state of a phenomenon/environment/area, with a significance extending beyond that directly associated with a parameter or value."



Integrated Policy Approach

There are numerous interactive characteristics and elements to the policies and recommendations of the RPGs 2010-2022. As sustainable development is an overriding theme of the document it is necessary that policies and recommendations overlap and complement each other between different policy areas. The RPGs are designed to consider the broad role of planning in managing the resource base, physical infrastructure and productivity of the GDA, whilst respecting and enhancing its natural and manmade assets. There is, therefore, a multitude of inter-linkages between policy areas. For example, the provision of social capital affects the effectiveness of settlement strategies, overall quality of life and economic performance, while flood risk policies are an issue for physical infrastructure planning and the maintenance and enhancement of natural habitats. The common characteristics of the recommendations are therefore the result of an aspiration to create, through joined up thinking, a healthier, more accessible, equitable and efficient Greater Dublin Area. These commonalities are also reflected in indicator selection for different categories.

Furthermore, the RPGs attempt to progress future planning in a harmonised manner, integrating SEA, Habitats Directive Assessment (HDA), WFD and regional planning objectives within strategic policy and recommendations. This will ensure that urban and rural areas within the GDA are not just environmentally pleasant but ecologically viable.

In terms of environmental assessment, SEA and Habitats Directive Assessment provide complementary sets of objectives and indicators to ensure that the spatial implications of decision making are appropriately monitored from the point of view of short, medium and long term ecological and human health effects. SEA and HDA aside, it is necessary to introduce indicators which are linked to the policy and recommendations of the Guidelines. A list of indicators to be considered for use in monitoring, (which should not be considered as a definitive or required list) is set out in Appendix A2.

Local authorities should seek to avail of GIS data from external organisations such as geo referenced listings of tourism, health, education, accommodation and features where it is made available and to share and combine these data. Subject to licence these could be made available to the RPG office or alternative central database repository.

In relation to the population and housing targets and the current volatility in relation to housing construction, housing vacancy levels and migration levels, it is vital that during the lifetime of the RPGs that the figures set out in Chapter 4 are reviewed to consider whether new trends emerging from 2011 Census results impact on the figures included in the RPGs. This review should take place mid term in these RPGs, and follow in coordination with a national review of population estimates and housing targets by the Department of Environment, Heritage and Local Government.

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