The West Regional Authority
Údarás Reigiúnach an Iarthair

MID-WEST REGIONAL AUTHORITY
Údarás Réigiúnach an Mhean Iarthair

Donegal
Sligo
Monaghan
Leitrim
Louth
Cavan

KILDARE - MEATH - WICKLOW

MIDLAND REGIONAL AUTHORITY
Údarás Réigiúnach Lár na Tíre

NASC AGUS NEART

DUBLIN REGIONAL AUTHORITY
ÚDARÁS RÉIGIÚNDA ÁTHA CLIATH

REGIONAL INDICATORS REPORT

MONITORING FRAMEWORK FOR IMPLEMENTATION OF THE REGIONAL PLANNING GUIDELINES

2014

REGIONAL AUTHORITIES OF IRELAND

THE WEST REGIONAL AUTHORITY

THE MID-WEST REGIONAL AUTHORITY

THE BORDER REGIONAL AUTHORITY

THE MID-EAST REGIONAL AUTHORITY

THE SOUTH-WEST REGIONAL AUTHORITY

THE MIDLAND REGIONAL AUTHORITY

THE SOUTH-EAST REGIONAL AUTHORITY

THE DUBLIN REGIONAL AUTHORITY

ACCESSING THE DATA

Final datasets as illustrated in this report will be made available on the DECLG's website **http://www.MyPlan.ie** and are accessible to national, regional and local government, the private sector and to members of the public.

Developed in conjunction with

FutureAnalytics

On behalf of the eight Regional Authorities in Ireland.

FOREWORD

MINISTER FOR HOUSING AND PLANNING, MS. JAN O'SULLIVAN T.D.

Ireland's economic recovery and the creation of sustainable employment as the principal benefit of that recovery, has been the single most important objective of this Government.

Ireland's economic performance depends on the regions performing optimally. The National Spatial Strategy 2002-2020 and the Regional Planning Guidelines framed in the context of the NSS seek to deliver more balanced regional development through the most effective performance of the regions.

The NSS stands at the head of a hierarchy of planning strategies that leads from the local authority and regional levels to government level.

However, it is the implementation of plans that is most important and that is why I welcome the publication of this Indicators report.

This is the first occasion that a comprehensive methodology has been published on the measurement of the progress being achieved in securing the objectives of the Regional Planning Guidelines and, by extension, the NSS.

I welcome the fact that the report finds that the cities and towns identified in the various regional planning guidelines have benefitted from investment in required infrastructural capacity to accommodate future development and that Ireland's environment is generally in a good condition.

I look forward to the continued use of the indicators in the future evolution of national, regional and local planning policies.

Jan O'Sullivan, T.D.
Minister for Housing and Planning

INDEX OF REGIONAL INDICATORS

3 STRATEGIC THEMES

Economic Prosperity | People and Places | Environment and Infrastructure

24 INDICATORS

ECONOMIC PROSPERITY

- Employment Rate
- SMEs
- IDA Companies
- IDA Employment
- Sectoral GVA Contribution
- GVA Per Person
- Tertiary Education
- Broadband Coverage
- Internet Access
- Personal Computer

PEOPLE AND PLACES

- Population
- Population Change
- Urban/Rural Share
- Dependency Rate
- Housing Stock
- Housing Vacancy
- Work-Related Communting

ENVIRONMENT AND INFRASTRUCTURE

- Status of Water Bodies
- Compliance with UWWTD
- 100% WTP/WWTP
- Renewable
- Energy
- Managed & Unmanaged Waste
- EU Habitats and Species

CONTENTS

REGIONAL AUTHORITIES OF IRELAND

Key

The following thematic colours have been assigned to each region to assist as a consistent visual aid in identifying each region as found in various graphics throughout the report.

- Border Region
- Midland Region
- West Region
- Dublin Region
- Mid-East Region
- Mid-West Region
- South-East Region
- South-West Region

Population Summary, 2011

Midland Region	282,410
Mid-West Region	379,327
West Region	445,356
South-East Region	497,578
Border Region	514,891
Mid-East Region	531,087
South-West Region	664,532
Dublin Region	1,273,069

EXECUTIVE SUMMARY

The **Regional Indicators Report** has been prepared and published jointly by the eight Regional Authorities to provide an instrument to assess the impact of the implementation of **Regional Planning Guidelines** (RPGs) 2010-2022 in each of the eight NUTS III regions (or Regional Authority areas) in Ireland. The framework contained herein will provide baseline information which will inform the next review of the **National Spatial Strategy** (NSS), RPGs or their successors. It selects the most appropriate 'indicators' which will better inform future decisions at a range of governance levels.

The management of land use planning, housing, infrastructure provision and economic development policy in Ireland is co-ordinated and implemented at various levels of governance at national, regional and local levels. The National Spatial Strategy (2002-2020) and RPGs have provided a national and regional policy framework for Local Authority Development Plans. The implementation of the 2010 Regional Planning Guidelines is a vital part of the Government's programme to enable Ireland's planning system to play an important role in the national economic recovery by delivering a plan-led planning system where plans at national, regional and local levels are effectively aligned, will benefit the economy and environment as a whole and provide every citizen with an opportunity for an improved quality of life.

This Regional Indicators Report builds upon the work of other related studies and provides a tool and methodology for the effective evaluation and assessment of the outputs of the adopted RPGs currently in place. The themes and indicators selected filter the performance of key strategic policy objectives, which in turn will assist policy makers in their evaluation of the performance and applied delivery of spatial, economic and environmental development strategies.

AIM OF REPORT

The aim of this report is to provide a monitoring framework based on an agreed set of indicators using empirical baseline data to measure the progress of the implementation of the RPGs. This report represents a snapshot in time of the current performance of the RPGs as of 2013, while providing a framework, information base and gap analysis for the statutory review of the RPGs during 2014-2016. The outputs and assessments arising from this study will provide policy decision makers with performance information and assist in the evaluation of current strategic policy implementation and development at a regional level. This information can also be linked with national and sub-regional performance.

Given the complexity and interaction among spatial, economic, social, environmental and infrastructural strategic policy development, this study has been designed to provide an oversight of the performance of 24 key indicators, grouped within 3 thematic areas. The themes chosen for this study are '**Economic Prosperity**', '**People and Places**' and '**Environment and Infrastructure**', which are considered representative of the strategic areas contained within each of the RPGs and which represent the pillars of sustainable development.

Each indicator is capable of monitoring trends associated with the objectives contained in the RPGs, thus illustrating the progress being achieved in the attainment of the targets and objectives set by policy makers in the promotion of more sustainable and balanced regional development throughout Ireland.

CONTEXT

Ireland has experienced rapid social and economic change over the last decade, which has had significant impacts on patterns of human settlement, economic growth and environmental sustainability. These impacts occurred within the context of a fast growing economy, substantial infrastructural and housing investment, followed by a sharp economic decline and increased emigration. Such rapid changes have had significant impacts on the policy environment and this report highlights some of the emerging trends for investment, jobs and development in the regions. Spatial planning, economic development, job creation and public infrastructure provision in Ireland are implemented through a number of statutory and non-statutory policy documents at a national, regional and local authority level. The spatial and land use planning policies are derived from the statutory NSS, RPGs, Ministerial Guidelines and City and County Development Plans using an evidence-based, plan-led approach to policy formation and development.

Demographic trends and spatial settlement patterns are important components of strategic regional policy planning. Population dynamics can provide valuable insights into the manner in which regions are developing and provide markers for the assessment of the performance of the RPGs in achieving the objectives of the NSS, the promotion of sustainable development, housing, infrastructure, services and amenities provision for each region in a healthy natural environment.

This report integrates and assesses various economic, employment, infrastructure and environmental indicators which will support the formulation of the planned **Regional Spatial and Economic Strategies** (RSESs) provided for in the "**Putting People First**" framework document issued by the DECLG in October 2012.

The planning and investment in infrastructure provision is closely related to spatial planning, human settlement, economic development, the harnessing of resources and the safeguarding of the environment which together should promote greater prosperity for all. The report reviews the status of infrastructural provision at a Regional, Gateway, Hub and Tier 1 Town[1] level, and identifies both opportunities and deficits which are impacting on the realisation of an improved quality of life for all.

The 2010 RPGs identified that monitoring would be conducted. For this purpose, a number of proposed indicators were identified from each individual RPG document. This was essentially the first step in the process of providing a set of regional indicators. This Regional Indicators report is a milestone in this process as it provides a comprehensive suite of indicators which are suitable for analysis and monitoring across all eight Regions.

The Regional Indicator report has highlighted the significant differences that exist between regions, across the spectrum of indicator themes. Each region has particular strengths and weaknesses, which require positive policy interventions, to support European, national, regional and locally based strategies and policies through the RPG or the planned RSESs.

1 Tier 1 Towns are settlements below Hub status which are defined in RPGs. It must be noted that not all RPGs contain Tier 1 Towns.

THEME: ECONOMIC PROSPERITY

Employment is the key driver of economic activity. The proportion of the population who are in full-time employment is a defining feature of regional economic prosperity. The Central Statistics Office (CSO) statistics used in this report indicate that there remains significant room for improvement within all eight of the regions in terms of reaching both the Europe 2020 employment and the National Reform Programme target rates of 75% and 69% to 71% respectively. The Dublin Region is closest to achieving its 2020 targets. Although it is clear that all regions fall some way short of employment targets, it is also impossible to discount the effects of the economic recession and how this has impacted upon regional performance.

It is imperative that the regions place a major emphasis on enhancing economic performance by encouraging growth in employment, particularly youth employment, ensuring that existing levels of employment are maintained, and that associated unemployment trends do not become ingrained within their regions. While national policies have a significant influence on overall employment levels, regional policy making must ensure that sustainable employment measures are enacted to protect and promote job creation.

Small to Medium-sized Enterprises (SMEs) are considered to be important drivers in Ireland's economic recovery strategy. The sustainable development of the regions is dependent on maintaining and enhancing the contributions that SMEs make to the economy through the provision of employment and their contribution to the regional and national Gross Value Added (GVA).

Foreign Direct Investment (FDI) has been and will continue to be a source of high-quality jobs and a major contributor to the provision of a Smart Economy. The West, Dublin and South-West Regions show a strong link with IDA Companies and together with the Mid-West (when Shannon Development Companies are included in the figures), have the largest number of IDA Companies. When the number of IDA Companies is measured against the population of each region, the Mid-West, Dublin and South-West have a comparatively higher proportion of IDA Companies per capita when compared to other regions. The ratio of regional population (2011) to the number of employees in IDA Companies, shows that the Dublin, South-West and West Regions are in more favourable situations. It is considered that a pattern is emerging where new FDI companies and employment gravitate towards existing companies already established in Ireland, creating a clustering effect.

The GVA per person and per sector are considered to be key indicators and the findings of this report indicate that only two of the eight regions have exceeded the national GVA targets per person, namely Dublin and the South-West Regions. This analysis provides a clear indication of the economic dominance of the Dublin and South-West Regions in terms of GVA per person as compared to the remaining six regions. This trend reinforces the role of our regions and the need to develop specific economic policies to address the effects of such disparity. While 42.1% of the total GVA by sector is produced in the Dublin Region, and 17.5% is produced in the South-West Region, the remaining six regions each contribute less than 10% of the national total GVA by sector. This illustrates the need to introduce specific regional policy on smart specialisation initiatives to ensure that each region performs to its potential rather than competing on a national stage.

KEY FINDINGS

All eight regions have exceeded the Europe 2020 Tertiary education targets, while six of the eight regions have reached the National Reform Programme target of 60%. Female tertiary educational attainment in the 30-34 age group exceeds male figures across all regions and this will have significant implications for the future make-up of the region's labour force. Educational levels will make significant contributions to the overall performance of regional economies and to the promotion of sustainable economic development.

The provision of quality high speed broadband is a requirement for the promotion of smart specialisation and economic development. While there has been a significant improvement in broadband coverage, only three regions (Dublin, Mid-East and South-West) have met or exceeded the national target of 61.4%, while many regions are underperforming relative to the State average (61.9%). The analysis of this sector in general has identified a gap in the availability of broadband data on coverage, speeds, and sectoral information at regional level when compared to national level.

THEME: PEOPLE AND PLACES

The baseline information used in this theme provides a broad overview at a strategic level and illustrates the diversity of regions and the potential opportunities upon which to develop future settlement policy. While population growth and urbanisation trends from 2006-2011 are generally in line with the core targets expressed in RPG policy, there is a need to consider the provision of specific policies at a regional level to promote sustainable development, rather than apply a standardised approach to human settlement and development across a diverse regional base. Significant regional disparities have been identified with shifting demographic trends reflecting the patterns of change caused by unsustainable economic development, patterns of migration and developer-led housing provision.

The age, gender and dependency profiles of regions are critical indicators for the future planning and development of regions and the provision of appropriate services, e.g. education, health facilities and amenities. The report's findings indicate that many of the major Cities and significant Hub Towns have not achieved their desired population and housing growth targets and that there are significant regional disparities with regard to housing vacancy rates, particularly at the Gateway and Hub Town levels. It is noted that there are significant differences in vacancy rates between settlements and also within regions, which require further examination and assessment.

The housing stock has grown substantially between the census years of 2006-2011, much of which is located outside the designated Gateway and Hub towns. The analysis of housing stock, vacancy and dependency rates suggest that such indicators are not solely linked to population growth or to agreed settlement policy.

Regional disparities can disguise underlying trends that require further investigation and analysis to ensure correct regional interpretation. The opportunity to address these issues presents itself within the proposed new **National Spatial Strategy** and review of associated policies, taking into account the measurement of trends identified in the report. Achieving critical mass, settlement targets and optimum returns on investment in critical infrastructure provision is fundamental to the success of the current RPGs policies and to the achievement of sustainable regions.

KEY FINDINGS

THEME: ENVIRONMENT & INFRASTRUCTURE

The achievement of environmental quality targets is critical to the protection and enhancement of our natural environment. Significant variations occur in the quality of water bodies both within and between regions. Deteriorations in 'high status' waters have occurred and measures are required to address this decline.

There has been improved compliance in respect of waste water treatment, although more investment is required in all regions to ensure that there is sufficient infrastructure to meet the needs of growing urban populations and to secure improved secondary treatment and nutrient reduction of waste water discharges. A safe and secure water supply is necessary for all regions. Future strategic water services investment must be aligned with the priorities in the current RPGs and new Regional Spatial and Economic Strategies.

The managed and unmanaged waste indicator provides an overview of the regional levels of waste collection, recycling, recovery and waste diversion. Only three regions, namely Dublin, South-East and West, have achieved the national average for managed waste, and further actions are needed to improve the collection of regional waste.

The latest assessments of the status of European protected habitats and species indicate a deteriorating condition, particularly among the habitats such as forests, peatlands, grasslands, freshwater habitats and dunes which have been most affected. There is a higher level of species with a 'good status' such as mammals and vascular plants. However, such species conditions may only be maintained in the short to medium term in habitats under threat. The status of protected habitats is symptomatic of wider impacts on biodiversity in the regions. Greater efforts to integrate biodiversity and ecosystem services (which underpin the needs of society and the economy) into land use planning policy are necessary.

Indicators on energy consumption and renewable energy generation outline how Ireland will meet its commitments to the Kyoto Protocol, the EU Renewable Energy Directive and Energy Services Directive. The national target of 40% renewable energy generation to be achieved by 2020 requires that 16% of final energy consumption is to be achieved from renewable resources by 2020. The contribution of renewable energy to overall energy demand rose from 2.3% to 5.6% between 1990 and 2010, and reached 6.5% in 2011. Increasing renewable energy outputs in a sustainable manner will ensure that Ireland has a secure national energy supply, thus reducing our dependence on imported fossil fuels and supporting international efforts in tackling climate change.

KEY FINDINGS: CONCLUSION

This is the first Regional Indicators Report which seeks to provide an innovative approach to monitoring the performance of the RPGs and ancillary policy initiatives in achieving EU, National and Regional objectives. The purpose of the report is to provide a baseline for future monitoring of RPGs or new RSESs. In addition, it provides an understanding of the dynamics underlying the disparities that exist between regions and highlights issues and opportunities which exist to improve the quality of life for all citizens in Ireland. Further research and refinement of indicators will be required in the preparation and the analysis of subsequent reports.

INTRODUCTION 01

Effective monitoring mechanisms are essential in measuring whether plans are achieving their intended objectives. In order to understand and assist practitioners in identifying trends, performance and effectiveness of plans, it is now widely known and accepted that evidence-based planning is a prerequisite for good decision-taking and policy-making. The establishment of an effective monitoring framework to measure regional performance against quantifiable spatial planning, economic, social and environmental targets is a key objective for the regions as identified in the **National Regional Planning Guidelines Implementation Annual Report 2011**.

In the absence of a dedicated monitoring framework for the 2004-2016 Regional Planning Guidelines and the lack of suitable national spatial planning indicators, it is clear that a new set of focused indicators are necessary.

The Regional Indicators Study seeks to provide an instrument to assess the impact of the implementation of RPGs 2010-2022 in each of the eight NUTS III regions (or Regional Authority areas) in Ireland.

The framework contained herein provides a baseline which will inform the next review of the RPGs. It selects the most appropriate 'indicators' which will better inform future decisions at a range of governance levels and the development of the new Regional Spatial and Economic Strategies.

Development

Work on the regional indicators arose out of an identified need for a monitoring framework to measure progress in the implementation of the Regional Planning Guidelines 2010-2022 and the need to establish a baseline for the RPG reviews in 2014-2016.

WIDER CONTEXT

In October, 2012, '**Putting People First - Action Programme for Effective Local Government**' put forward a reform programme which outlined fundamental changes in local and regional government.

While the regional structures are changing, regional planning and the mechanisms which influence the implementation of RPGs are recognised as being an important component of the national planning framework. RPGs are a cornerstone of the planning system in Ireland supporting the sustainable development of the regions and continue to be supported by Government. The indicators in this report will be moulded to fit the new regional boundaries in later iterations.

The '**Programme for Government**' and '**Putting People First**' place a high value on the role of evidence-based planning in supporting regional and national economic recovery. The Planning and Development (Amendment) Act, 2010 emphasised the need for greater co-ordination between the National Spatial Strategy 2002-2020, RPGs and local Development Plans, which can drive regional development.

INTRODUCTION

Strategic planning and oversight will remain a key role of the regional and local government system and the RPGs will be recast as Regional Spatial and Economic Strategies. The new RSES will be informed by a new national spatial strategy, which will be presented to Government in 2014-2015. The new strategy will consider the experience of implementing the existing NSS 2002-2020 and wider societal, fiscal, economic and demographic changes since its inception.

DEVELOPING THEMED INDICATORS

The process of developing a series of indicators to evaluate the implementation of the RPGs was initiated by the Regional Planners Network (RPN) in 2011. The seven Regional Authority planners in the RPN conducted this report for the National (RPG Implementation) Steering Committee (NSC) which comprises the designated City or County Managers in each region, the Department of the Environment, Community and Local Government (DECLG) executive and the Regional Authority Directors.

A series of steps were undertaken, which included an examination of relevant literature and definition of approach, consultation, review and reporting to the NSC. It also included data testing, analysis of outputs and indicator refinement. The project was focused around one key question: **"Are We Achieving Sustainable Regions?"** This question could only be answered by developing a monitoring framework that included indicators under the following three common themes, which are identified in Figure 1.1.

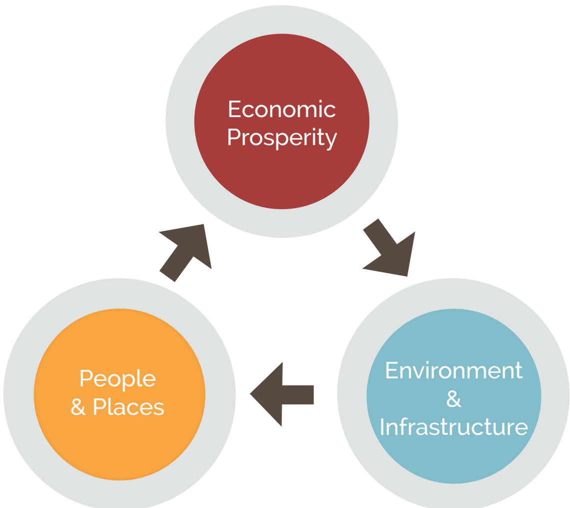


Figure 1.1 - Common RPG themes to monitor the RPGs

The regional indicators selected are based around three RPG themes which are Economic Prosperity; People and Places; and Environment & Infrastructure (Refer to Figure 1.1). They were devised to measure progress in efforts to achieve sustainable regions. To facilitate this assessment, a series of spatially referenced datasets are used (wherever possible and available).

An essential aspect of this project was reaching agreement on common aims and objectives which would be supported by a set of usable RPG-focused indicators applicable at a range of spatial scales. These aims are set out in Figure 1.2:

Economic Prosperity	People & Places	Environment & Infrastructure
Aim 1: Realisation of the Economic Strategy underpinning the RPGs	**Aim 1:** To manage spatial growth and distribution in line with the RPGs	**Aim 1:** To enable the achievement of regional environmental quality targets by coordinating spatial plans with other relevant environmental plans and strategies (e.g. water quality, climate change and waste)
Aim 2: Extend the economic reach of the Gateway cities, Hub towns and other key settlements to act as growth nodes and employment centres for their wider hinterlands	**Aim 2:** To ensure suitable housing provisions to meet the needs of the regions' people	**Aim 2:** To ensure that the development of the region progresses in a way that protects, maintains and/ or enhances the quality of the natural environment in line with national and European legislation
Aim 3: To enable enhancement of the innovation capacity of the regions in line with RPG objectives	**Aim 3:** To promote sustainable travel options and greater accessibility for the Gateways, Hubs and Tier 1 settlements	

Figure 1.2 - RPG Themes and Associated Aims

Relevant guidance and emerging information from other indicator projects were considered during the development of indicators. Consultation with relevant stakeholders continued throughout the process and included organisations such as the the Central Statistics Office, the Economic and Social Research Institute, the Environmental Protection Agency, the National Transport Authority, the National University of Ireland and local authorities.

Once identified, the indicators were tested and refined to avoid duplication, ensuring that they were policy relevant, linked to the common aims and objectives, easy to understand and communicate and were applicable across the regions. Only suitable, up-to-date and reliable data which was readily accessible were used in this report. All indicators have targets associated with them to link them with RPG targets or relevant national or EU targets.

Crucially, the number of indicators were limited, with only 'key' or 'priority' indicators included. Gap-analysis revealed the lack of critical data particularly in relation to a reliable quantitative measure of residentially zoned land, broadband and travel accessibility.

The common thematic aims identified in Figure 1.2 are the benchmark upon which the indicators will measure progress. All indicators have associated targets which identify what the RPGs are seeking to achieve.

The information which has been collected for the 24 indicators presented in this report will allow the creation of an image or a "snapshot in time" of each region. The baseline will inform the preparation of new Regional Spatial and Economic Strategies and observed trends associated with the indicators will inform and guide the process of future policy development at a range of spatial scales.

Figure 1.3 summarises the timeline and associated outputs for finalising the regional indicator set.

Development Timeline

4

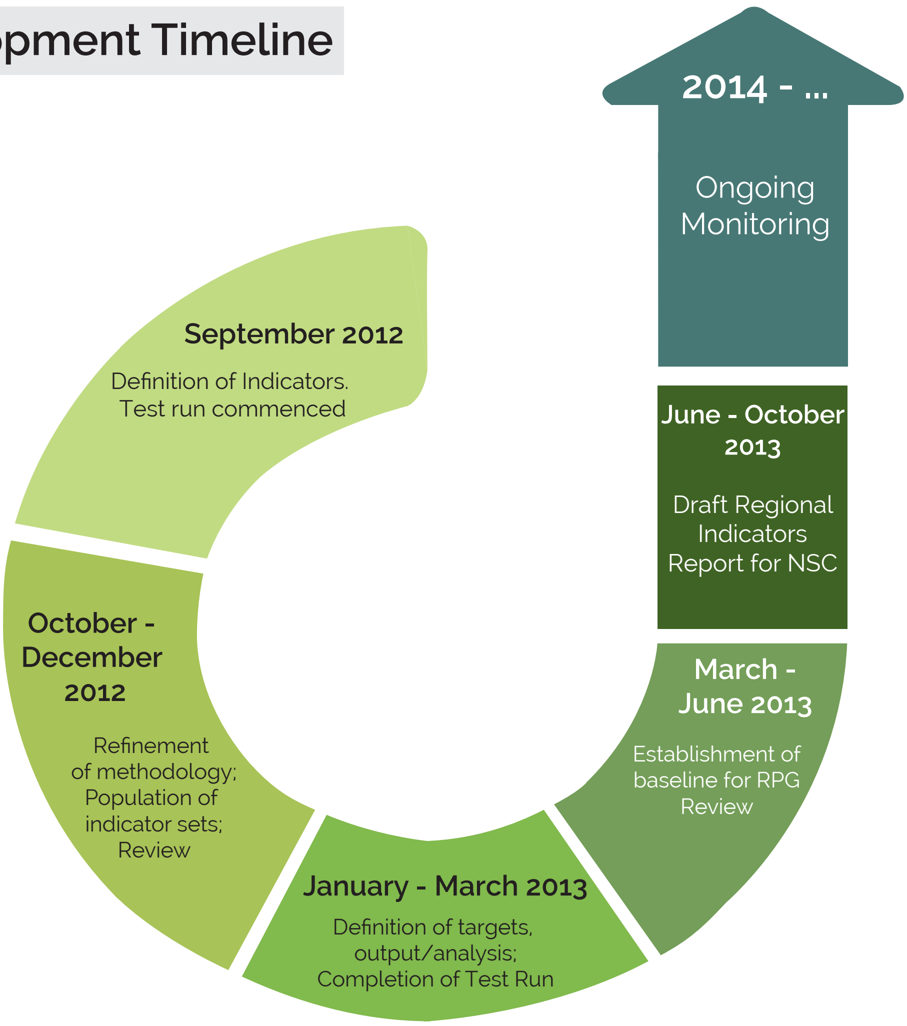


Figure 1.3 - RPG Indicator Report: Development Timeline

Economic Prosperity

THEME: ECONOMIC PROSPERITY 02

DESCRIPTION

Strong economies are essential to the development of sustainable regions. Whilst Ireland is in the midst of extremely challenging economic and financial circumstances, there are opportunities in new growth areas and in building on existing synergies within each region as outlined in the 2010-2022 RPGs.

Successful countries and regions have thriving cities at their core and they in turn drive economic growth. Therefore, it is essential that urban structures are strengthened within regions and that key growth centres (Gateways and Hubs) reach their population targets. The RPGs also recognise that human capital (educational attainment, skills, training) is critical to economic prosperity and a high quality of life.

POLICY

Reference is made within the Economic Prosperity indicators, particularly in relation to targets, to Europe 2020 and the National Reform Programme 2012. These documents provide the overall policy context and also provide specific targets.

The Europe 2020 Strategy aims to enable Europe to emerge stronger from the current economic crisis and to turn the European Union into a smart, sustainable and inclusive economy. Five headline targets for 2020 have been set at the level of the EU as a whole. These cover the areas of employment, research and development, climate change, education and poverty.

Ireland's National Reform Programme identifies national targets in each of the five headline areas as well as the main constraints to reaching these targets. It also sets out the measures necessary to allow Ireland overcome these and to achieve its national targets.

AIMS & OBJECTIVES

The following aims were established in order to develop indicators for Economic Prosperity:

- Realisation of the Economic Strategy underpinning the RPGs;
- Extend the economic reach of the Gateway cities and towns, Hub towns and Tier 1 Settlements to act as growth nodes and employment centres for their wider hinterlands;
- Enable enhancement of the innovation capacity of the regions in line with RPG objectives.

Indicators

- Employment
- SMEs
- IDA Companies
- IDA Employment
- Sectoral GVA Contribution
- GVA Per Person
- Tertiary Education
- Broadband Coverage
- Internet Access
- Personal Computer

THEME

Economic Prosperity

INDICATORS

Employment

Employment rate of population **aged 20 - 64**, per region;

Unemployment rate of population **aged 20 - 64**, per region.

(Sources: Quarterly National Household Survey, Central Statistics Office, 2013[2])

IMPORTANCE OF THE INDICATOR

Employment is the key driver of economic activity. The proportion of the population who are in full time employment is a defining feature of regional economic prosperity. Although spatial planning cannot directly increase/decrease employment, it can create and establish the right conditions for employment growth to occur.

COMMENTARY

The Employment Rate is the number of employed (in the 20-64 age category) expressed as a percentage of the total population.

An analysis of the data for regional employment rates for Q1 2013 indicates that there remains significant room for improvement within all eight of the regions in terms of reaching Europe 2020 employment target of 75% and to a lesser extent the National Reform Programme target rate of 69% to 71%. The breakdown of employment rates by Region, as illustrated in Figure 2.1, shows that the Dublin Region is closest to achieving its 2020 targets, while the Mid-East, South-West and West Regions all have employment rates of between 66.1% and 67.3%. The remaining regions (Border, Midland, South-East and Mid-West) are between 57.8% and 62.9%, demonstrating that significant improvement is required to reach the aforementioned targets.

It is important to note that the unemployment rate is not examined within this indicator as this is expressed as the number of unemployed as a percentage of the total labour force rather than the total population as per the employment rate. However, Figure 2.2 (Unemployment rate of population aged 20-64) has been included for information purposes only.

OUTLOOK

Although it is clear that all regions fall short of employment targets, it is also impossible to discount the effects of the economic recession and emigration trends which have impacted upon regional performance. As the country begins to recover, it is imperative that the regions place a major emphasis on enhancing economic performance by encouraging employment growth to ensure that existing jobs are retained and unemployment does not become ingrained within the regions. Although there can be little doubt that decisions taken at a national level will certainly have an important influence on job creation, regional policy making must ensure that sustainable employment measures are prioritised to promote and facilitate employment opportunities.

In future iterations of these indicators, it may be a valuable exercise to look at employment patterns over a longer period, e.g. over four quarters.

[2] A special tabulation was carried out by the CSO. Information to populate this indicator was taken from the Quarterly National Household Survey (QNHS) in the first quarter of 2013.

THEME

Economic Prosperity

INDICATORS

Employment

Employment rate of population **aged 20 - 64**, per region.

(Sources: Quarterly National Household Survey, Central Statistics Office, 2013[3])

Employment Rate:
The number of employed people (in a particular age category) expressed as a percentage of the total population (in the same age category).

- < 60% Employment
- 60% to 62% Employment
- 62% to 65% Employment
- > 65% Employment

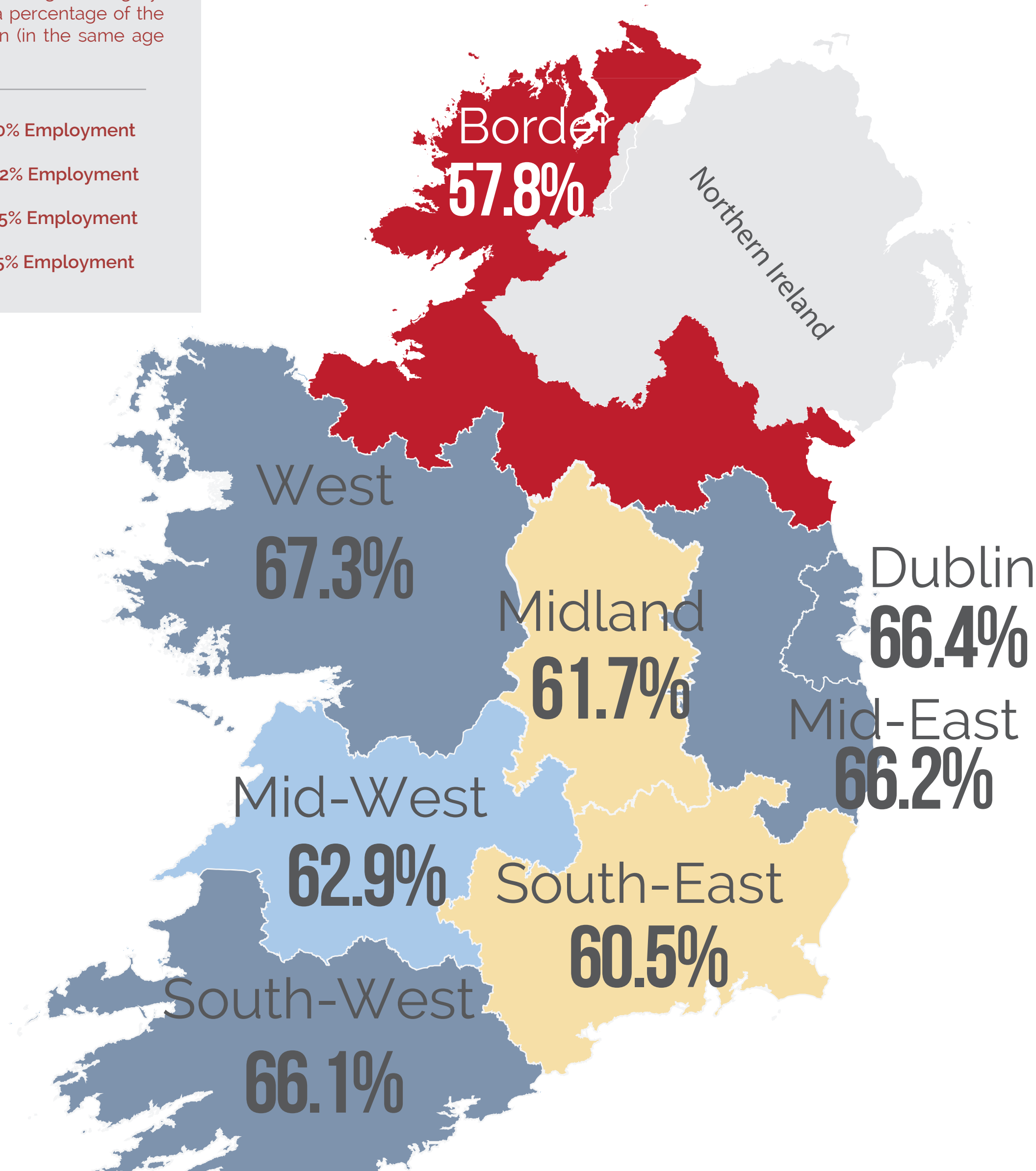


Figure 2.1 - Employment rate of population aged 20 - 64 per region.

TARGETS

69-71% of population aged between 20 - 64 in employment by 2020 (National Reform Programme - 2012 Update)

75% of population aged between 20 - 64 in employment by 2020 (Europe 2020)

3 A special tabulation was carried out by the CSO. Information to populate this indicator was taken from the Quarterly National Household Survey (QNHS) in the first quarter of 2013.

THEME

Economic Prosperity

INDICATORS

Employment

Unemployment rate of population **aged 20 - 64**, per region.

(Sources: Quarterly National Household Survey, Central Statistics Office, 2013[4])

Unemployment Rate: The number of unemployed people expressed as a percentage of the total labour force.

- < 12% Unemployment
- 12% to 15% Unemployment
- 15% to 16% Unemployment
- 16% to 17% Unemployment
- > 17% Unemployment

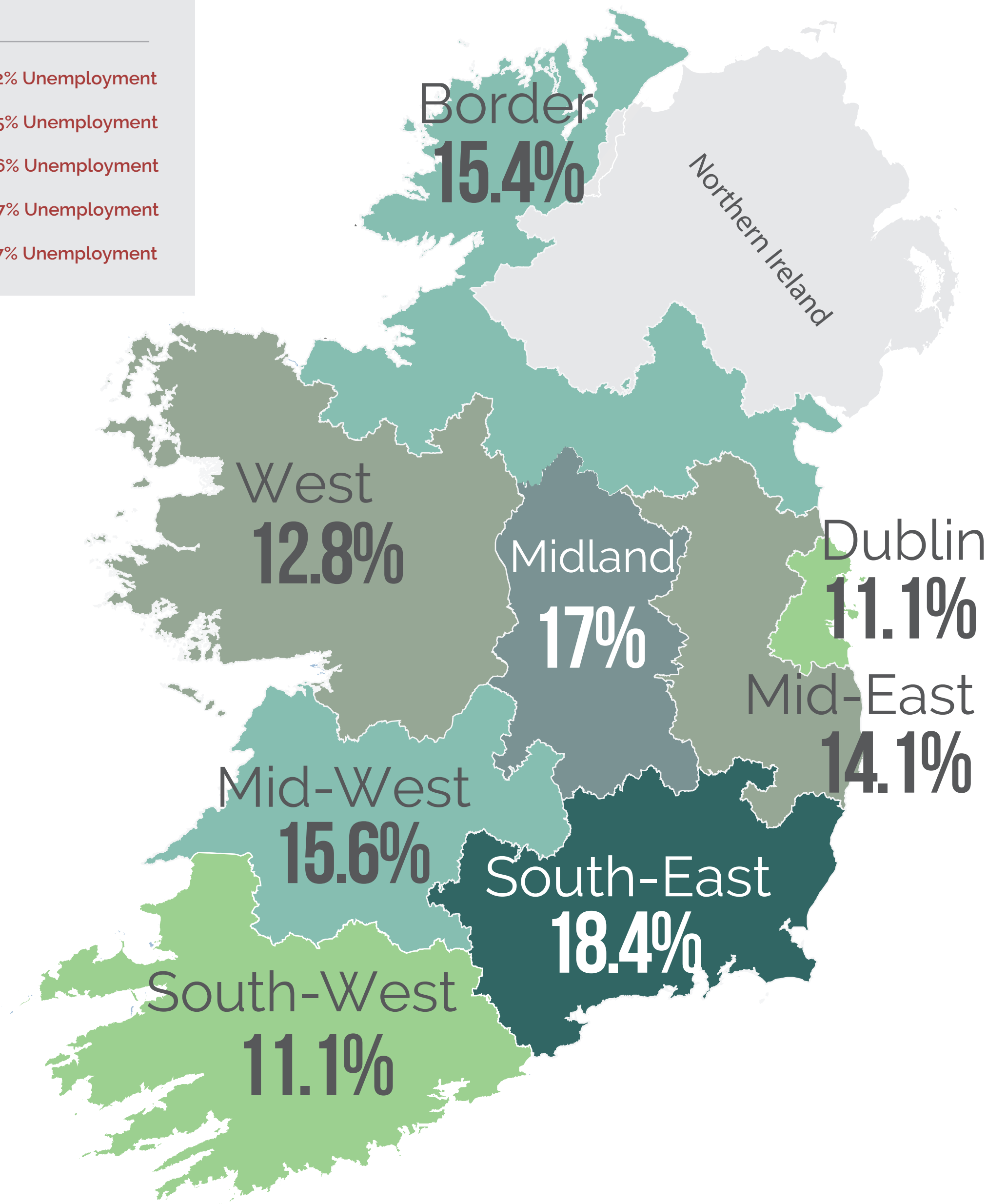


Figure 2.2 - Unemployment rate of population aged 20 - 64 per region.

REDUCE the rate of unemployment in each region

TARGETS

4 A special tabulation was carried out by the CSO. Information to populate this indicator was taken from the Quarterly National Household Survey (QNHS) in the first quarter of 2013.

THEME

Economic Prosperity

INDICATORS

SMEs

Small and Medium Enterprises (SMEs) as a proportion of population per region;

Other businesses (larger than SME) as a proportion of population per region.

(Sources: Business Demography NACE Rev 2, Central Statistics Office, 2011)

Definition:
For the purposes of this report, SMEs are defined as firms with less than 250 employees.

1:25 — Ratio of Enterprises to Regional* Population

183,580 — Number of Enterprises in Region*

STATE — *State shown in example

709,086 — Number of Enterprise Employees in Region*

1:6 — Ratio of Enterprise Employees to Regional* Population

SMEs < 250 Employees

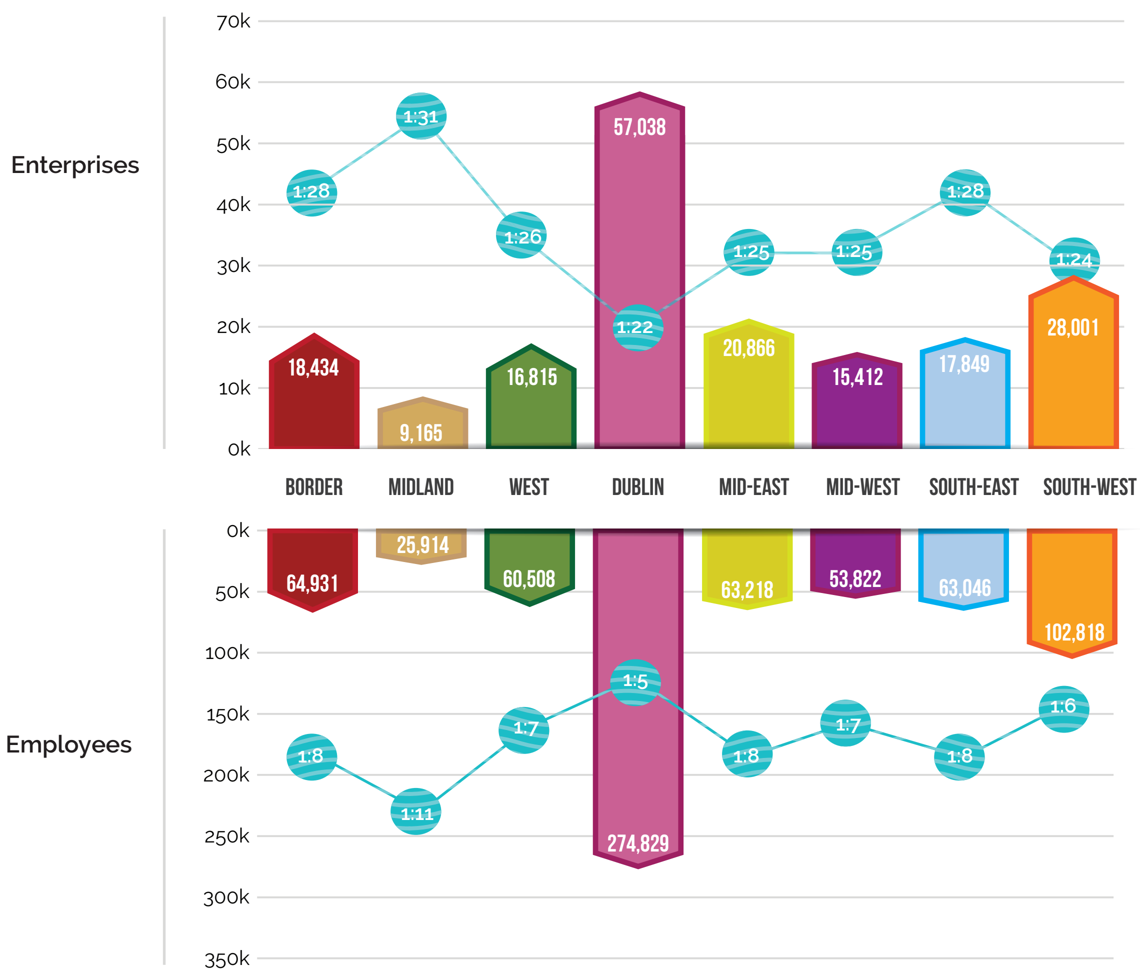


Figure 2.3 - Small and Medium Enterprises as a proportion of population per region (**employees <250 persons**).

TARGETS

MAINTAIN & INCREASE the existing number of SMEs and SME employees in each region

INCREASE each region's proportional ratio towards that of 1:1

THEME

Economic Prosperity

INDICATORS

SMEs

Small and Medium Enterprises (SMEs) as a proportion of population per region;

Other businesses (larger than SME) as a proportion of population per region.

(Sources: Business Demography NACE Rev 2, Central Statistics Office, 2011)

Definition:
For the purposes of this report, SMEs are defined as firms with less than 250 employees.

SMEs > 250 Employees

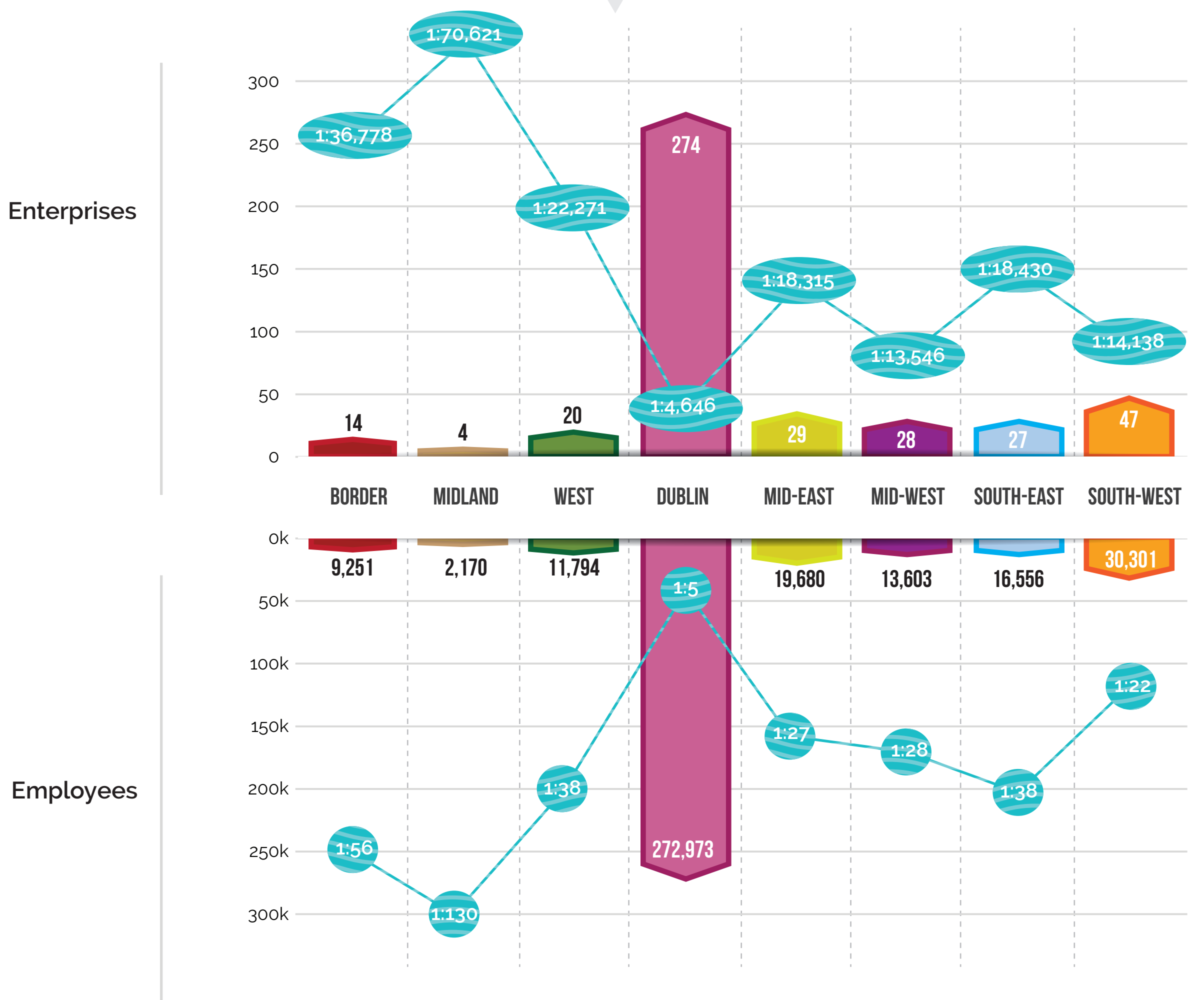


Figure 2.4 - Other Businesses larger than SMEs at NUTS III level, 2011, as a proportion of population per region (**employees >250 persons**).

TARGETS

MAINTAIN & INCREASE the existing number of SMEs and SME employees in each region

INCREASE each region's proportional ratio towards that of 1:1

THEME

Economic Prosperity

INDICATORS

SMEs

Small and Medium Enterprises (SMEs) as a proportion of population per region;

Other businesses (larger than SME) as a proportion of population per region.

(Sources: Business Demography NACE Rev 2, Central Statistics Office, 2011) [5]

IMPORTANCE OF THE INDICATOR

SMEs are seen as being an important part of the economic recovery strategy, particularly in more rural regions that do not have larger urban centres. SME investment is used as a proxy for measuring the attractiveness of regions.

COMMENTARY

The assessment of SMEs as a proportion of the population can be used to give a good idea of the contribution which they make to specific regional economies. The target for this indicator is to increase the number of SMEs in each region from a baseline of 2011. Analysis of the data shows that SMEs as a proportion of the population is quite close amongst all regions. The ratios shown are the numbers of SMEs per population in 2011; therefore, the closer the ratio is to 1:1, the more positive the result. Overall, the figures show that SMEs are critically important to the economies of all regions.

OUTLOOK

The economic importance of SMEs is widely acknowledged and their economic contribution cannot be discounted. The sustainable development of the regions is dependent on maintaining and enhancing the contributions that SMEs make through the provision of employment and their contributions to the regional and national GVA.

OTHER BUSINESSES LARGER THAN SMEs AT NUTS III LEVEL

Under the previous indicator, SMEs were identified as those businesses with <250 employees. There are, however, other businesses that fall outside this category which are those with >250 employees. Figure 2.4 provides an outline of the number of these companies and the number of employees within the regions.

Once again, the more competitive and larger regions with strong urban centres have a greater number of businesses in this category and, therefore, a greater number of employees. This also reinforces the greater importance that SMEs have in the more rural regions and, thus, why they must be supported and developed to facilitate economic recovery.

TARGETS

MAINTAIN & INCREASE the existing number of SMEs and SME employees in each region

INCREASE each region's proportional ratio towards that of 1:1

[5] Activities of holding companies are excluded from NACE Code 'sector K'. Some data have been suppressed to protect the confidentiality of individual enterprises. The geographical breakdown given is an approximation. The county breakdown is based on the address at which an enterprise is registered for revenue purposes, rather than where the business actually operates from, because no comprehensive administrative source is currently available for business locations. In particular, where an enterprise has local units in several counties, but one head office where all employment is registered, all its employees will be counted against the county where the head office is located. Enterprises with 'Unknown' supplied generally have Revenue registered addresses outside of the Republic of Ireland. However, the employees registered with these addresses are working in the Republic of Ireland.

THEME

Economic Prosperity

INDICATORS

IDA Companies

IDA Employment

Number of IDA supported companies and **employment in IDA supported companies** in proportion to population per region.

(Sources: IDA Ireland, 2011; Central Statistics Office, 2011; Forfás, 2013[6])

Dublin

IDA Employees / Population: 1:24 — 52,014 Employees

IDA Companies / Population: 1:2,487 — 512 Enterprises

The Dublin Region possesses a total of 52,014 persons employed in 512 IDA supported Companies with an employee to population ratio of 1:24

Mid-East

IDA Employees / Population: 1:41 — 12,914 Employees

IDA Companies / Population: 1:9,157 — 58 Enterprises

The Mid-East Region accounts for a total of 12,914 persons employed in 58 IDA supported Companies with an enterprise to population ratio of 1:9,157

Midland

IDA Employees / Population: 1:80 — 3,510 Employees

IDA Companies / Population: 1:7,432 — 38 Enterprises

The Midland Region has a person total of 3,510 employed in 38 IDA supported Companies with an enterprise to population ratio of 1:7432

Mid-West

IDA Employees / Population: 1:50 — 7,581 Employees

IDA Companies / Population: 1:3,187 — 119 Enterprises[7]

The Mid-West Region features a total of 7,581 persons employed in 119 FDI companies backed by IDA and Shannon Development with an enterprise to population ratio of 1:3,187[7]

Figure 2.5a - Number of IDA supported companies, and IDA employees per region and as a ratio of total regional population.

TARGETS

MAINTAIN & INCREASE the existing number of IDA supported companies and employees in each region

INCREASE each region's proportional ratio towards that of 1:1

6 Special request to Forfas Stat Bank, based on their Annual Employment Survey 2013 publication. Figures were included in this publication but were listed in the IDA Regions rather than at NUTS III Level.

7 The data for the Mid-West Region include the total of IDA and Shannon Development FDI enterprise activities, and its impact on the total IDA/FDI enterprises shown in the table. Shannon Development fulfilled the IDA functions in the Shannon Free Zone and 5 enterprise centres until early 2013, which functions are currently being transferred to other state agencies. Mid-West Region IDA companies as a proportion of population per region, is unique and excludes the SMEs/FDIs from the Shannon Development Portfolio as follows (2011 – 96 Active Enterprises, employing 5,855), (2012 – 99 Active Enterprises, employing 5,887).

THEME

Economic Prosperity

INDICATORS

IDA Companies

IDA Employment

Number of IDA supported companies and **employment in IDA supported companies** in proportion to population per region.

(Sources: IDA Ireland, 2011; Central Statistics Office, 2011; Forfás, 2013[8])

IDA Employees	Population	Region	IDA Companies	Population
1:31 (14,262 Employees)		West	1: 5,366 (83 Enterprises)	
1:47 (10,669 Employees)		South-East	1:7,898 (63 Enterprises)	
1:29 (22,841 Employees)		South-West	1: 4,551 (146 Enterprises)	
1:73 (7,076 Employees)		Border	1:7,462 (69 Enterprises)	

The West Region has a total 14,262 persons employed in 83 IDA supported Companies with an enterprise to population ratio of 1:5,366

The South-East Region has a total of 10,669 persons employed in 63 IDA supported Companies with an employment to population ratio of 1:47

The South-West Region has a total of 22,841 persons employed in 146 IDA supported Companies with an employment to population ratio of 1:29

The Border Region has a total of 7,076 persons employed in 69 IDA supported Companies with an enterprise to population ratio of 1:7,462

Figure 2.5b - Number of IDA supported companies, and IDA employees per region and as a ratio of total regional population.

TARGETS

MAINTAIN & INCREASE the existing number of IDA supported companies and employees in each region

INCREASE each region's proportional ratio towards that of 1:1

[8] Special request to Forfas Stat Bank, based on their Annual Employment Survey 2013 publication. Figures were included in this publication but were listed in the IDA Regions rather than at NUTS III level.

THEME

Economic Prosperity

INDICATORS

IDA Companies IDA Employment

Number of IDA supported companies and **employment in IDA supported companies** in proportion to population per region.

(Sources: IDA Ireland, 2011; Central Statistics Office, 2011; Forfás, 2013[9])

IMPORTANCE OF THE INDICATOR

Foreign Direct Investment (FDI) is vital to the success of the Irish economy. Without it, Ireland would not have the 140,000 jobs directly created by foreign companies operating here and we would not have the additional 100,000 jobs which support these firms. IDA-supported multinational companies make up 30% of Gross Value Added in the economy, account for more than two-thirds of all exports (at €110 billion annually), contribute nearly half of all corporate tax revenues, spend €7 billion on payroll, and account for €19 billion in total spend in the Irish economy.[10]

FDI has been and will continue to be a catalyst for the future of sustainable prosperity in a Smart Economy. FDI creates hundreds of thousands of high-quality jobs, both for the employees of the investing company and in the firms that provide goods and services to those companies. Continued success requires a process of constant transformation in technology, skills and business processes.

COMMENTARY

Data indicate that FDI is not uniform across regions. The West, Dublin and South-West Regions show a strong link with IDA companies and, together with the Mid-West (when Shannon Development Companies are included in the figures), have the largest number of IDA Companies. The remaining regions have a similar level and number of IDA Companies. When the number of IDA Companies is measured against the population of each region, the Mid-West, Dublin and South-West have a comparatively higher proportion of IDA Companies per population when compared to other regions. There is a clear pattern emerging in that new FDI companies gravitate towards existing companies already established in Ireland. The clustering effect is, therefore, obvious and this can be seen when IDA companies are mapped spatially throughout the country.

In terms of the number of employees in IDA Companies, the Dublin, South-West and West Regions had the highest numbers of employees. The Region with the lowest number of employees is the Midland Region. When the employee numbers are proportioned with the 2011 population figures, the same regions of Dublin, South-West and West have the most favourable ratios. This means that they have a greater number of IDA employees per population. The regions with the highest ratios include the Border, Midland and Mid-West Regions.

Key FDI Impacts on the Irish Economy:*

- €110 billion exports
- 240,000 jobs in total
- 50% of corporation tax
- €19 billion in expenditure
- €7 billion in payroll
- 73% of business RD&I expenditure

9 Special request to Forfas Stat Bank, based on their Annual Employment Survey 2013 publication. Figures were included in this publication but were listed in the IDA Regions rather than at NUTS III level.
10 Sources: Indecon, Forfás, CSO.
* Source: Horizon 2020, IDA Ireland Strategy

THEME

Economic Prosperity

INDICATORS

IDA Companies IDA Employment

Number of IDA supported companies and **employment in IDA supported companies** in proportion to population per region.

(Sources: IDA Ireland, 2011; Central Statistics Office, 2011; Forfás, 2013[11])

COMPARISON OF 2011 AND 2012 DATA

The figures provided for the analysis (on the previous page) are for 2011. Equivalent figures are available for IDA Companies in 2012 but have not been used in graphics as equivalent population figures are not available for regions in 2012. A comparison of the data for IDA Companies in 2011 and 2012 demonstrates the following:

- There were only marginal changes (increases and decreases) in the numbers of IDA Companies within regions between the two years; and
- With the exception of the Mid-East Region, all other regions have shown an increase in the number of employees in IDA Companies.

OUTLOOK

FDI is vital to the future of the Irish economy. It is obvious from the data that the distribution of FDI is not uniform across the country and that there is a clustering effect around the main cities of Dublin, Cork, Galway and Limerick. This trend is a challenge for the other regions in how they must adapt to either compete or complement the other regions.

The IDA Horizon 2020 strategy indicates that it will increase its focus on winning new investments in the following areas:

- Global services
- High-end manufacturing
- Research, development and innovation.

The IDA will focus on winning new investments, particularly from the following sectors:

- Life sciences
    - Pharma and biopharma
    - Medical devices
- Information & communications technology
- Financial services
- Content industry, consumer and business services
- Diversified industries and engineering
- Clean technologies.

All regions must, therefore, strive to become competitive and create the right environment and conditions to attract FDI. Given the importance of the nature, scale and type of employment offered by IDA Companies, it is increasingly obvious that their contribution to regions is significant and, therefore, vital to their future prosperity.

11 Special request to Forfas Stat Bank, based on their Annual Employment Survey 2013 publication. Figures were included in this publication but were listed in the IDA Regions rather than at NUTS III level.

THEME

Economic Prosperity

INDICATORS

Sectoral GVA Contribution

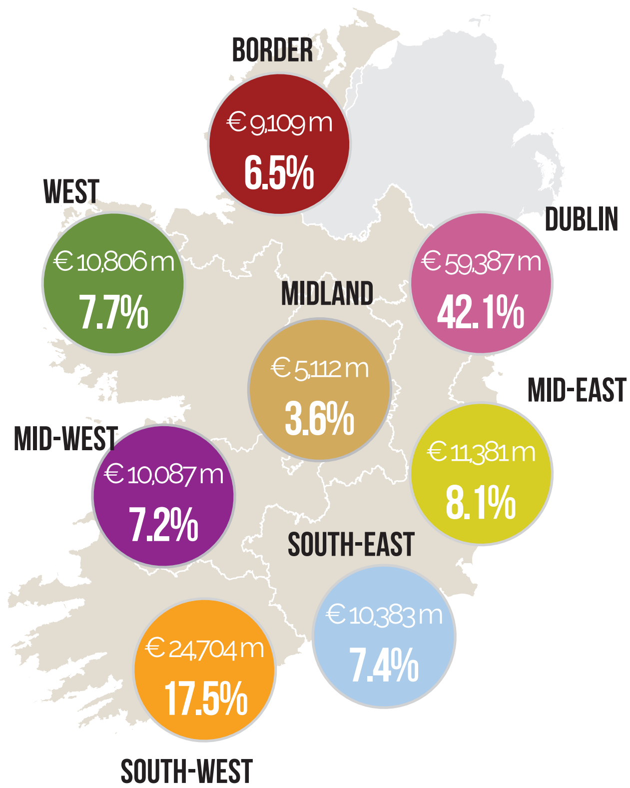
GVA[12] **contribution by sector** in each region at basic prices.[13]

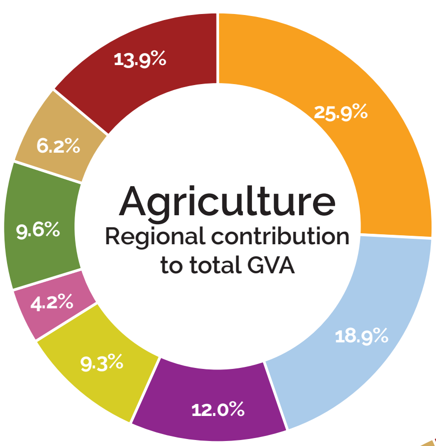
(Sources: Regional Quality of Life in Ireland, Central Statistics Office, 2013)

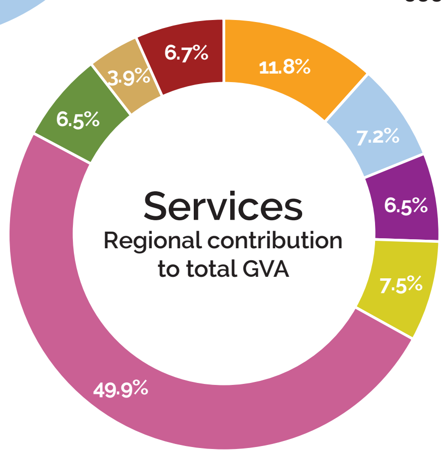
Definition: GVA
A productivity metric that measures the difference between output and intermediate consumption. See **footnote** or **glossary** for additional details.

REGION

Contribution to total GVA (National) — €10,806m 7.7%







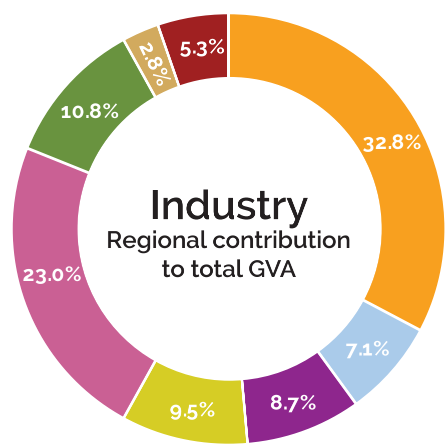


Figure 2.6 - GVA contribution by sector in percentages and total GVA, per region (2010).

TARGETS

INCREASE regional GVA by sector output from baseline figure

12 Gross Value Added (GVA) is a productivity metric that measures the difference between output and intermediate consumption. GVA provides a value for the amount of goods and services that have been produced, less the cost of all inputs and raw materials that are directly attributable to that production.

13 GVA at basic prices is output at basic prices minus intermediate consumption at purchaser prices. The basic price is the amount receivable by the producer from the purchaser for a unit of a product minus any tax on the product plus any subsidy on the product. The State average is taken as 100%. Therefore, regions can be above or below this figure.

THEME

Economic Prosperity

INDICATORS

Sectoral GVA Contribution

GVA[14] contribution by sector in each region at basic prices.[15]

(Sources: Regional Quality of Life in Ireland, Central Statistics Office, 2013)

IMPORTANCE OF THE INDICATOR

The analysis of the GVA contribution by sector provides an indication of the contribution of agriculture, industry and services sectors to the economy of each region. This highlights the sectors in which each region is performing strongly and could assist in identifying areas for improvement. This in turn can potentially initiate policy responses. The analysis also provides a picture of the contribution of each region to the total GVA.

COMMENTARY

The analysis of GVA contribution by sector has been extracted from the CSO Regional Quality of Life Survey of 2013. It is evident that the South-West (25.9%) and South-East (18.9%) Regions contribute most significantly to total GVA for agriculture, while the South-West (32.8% and 11.8%) and Dublin (23% and 49.9%) Regions contribute the highest to total GVA for industry and services respectively. Overall, 42.1% of the total GVA by sector is produced in the Dublin Region, while six of the seven remaining regions contribute less than 10% each of the national total GVA by sector.

In order to complement the information provided on GVA, Figure 2.7 is provided to present data on present sectoral distribution of employment in each region for Q1 2012. In each region, the wholesale and retail sectors were the largest, accounting for approximately 15% of employment. In terms of employment share, agriculture was negligible in the Dublin Region, while it accounted for almost 10% in the South-East and Border Regions. Similarly, in Dublin, less than 10% of employment was in industry, while in most other regions it was 15% or more. In each region, at least one quarter of the total regional employment was in public administration, education and health.

Dublin's share of national employment in the financial, ICT and professional services sectors exceeded 40%; this was higher, by over 10 percentage points, than its share in the total national employment of 28%. In fact, one in two persons working in the financial sector was located in Dublin. With the exception of the Mid-East and Dublin Regions, the share of employment in the financial, ICT and professional services sectors in each region was below the national average. By contrast, the Border and South-East Regions had a higher than average share in total employment in agriculture.

14 Gross Value Added (GVA) is a productivity metric that measures the difference between output and intermediate consumption. GVA provides a value for the amount of goods and services that have been produced, less the cost of all inputs and raw materials that are directly attributable to that production.

15 GVA at basic prices is output at basic prices minus intermediate consumption at purchaser prices. The basic price is the amount receivable by the producer from the purchaser for a unit of a product minus any tax on the product plus any subsidy on the product. The State average is taken as 100%. Therefore, regions can be above or below this figure.

THEME
Economic Prosperity

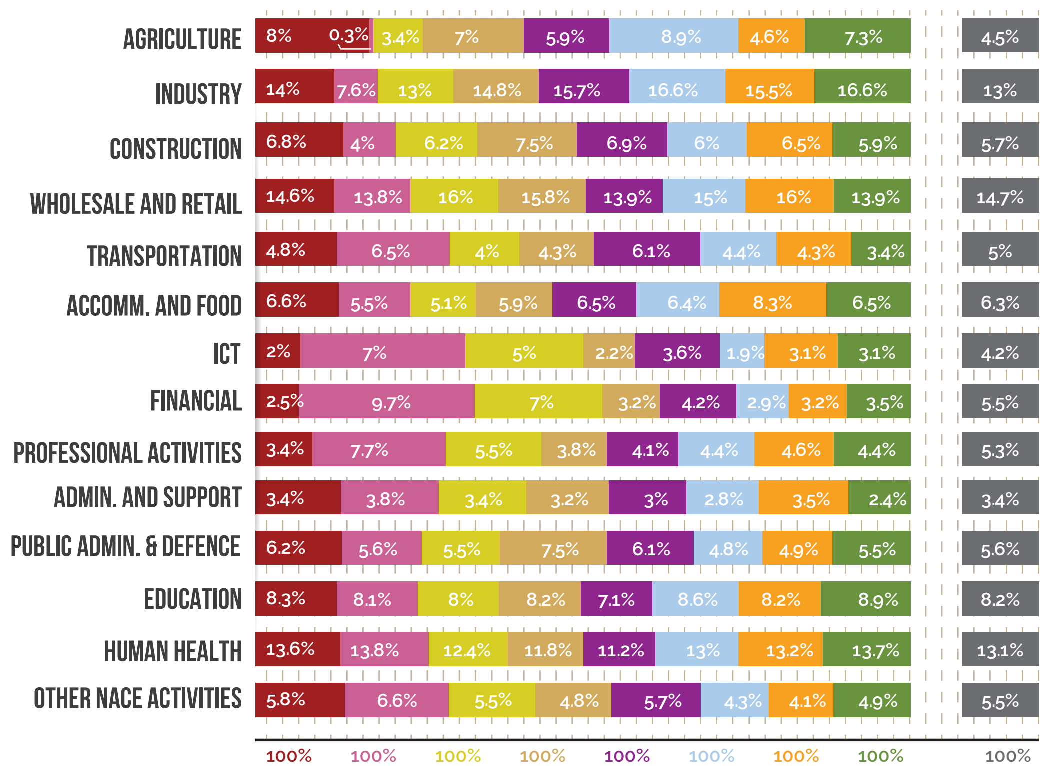
INDICATORS

Sectoral GVA Contribution

GVA[16] contribution by sector in each region at basic prices.[17]

(Sources: Regional Quality of Life in Ireland, Central Statistics Office, 2013)

Border | Dublin | Mid-East | Midland | Mid-West | South-East | South-West | West | State



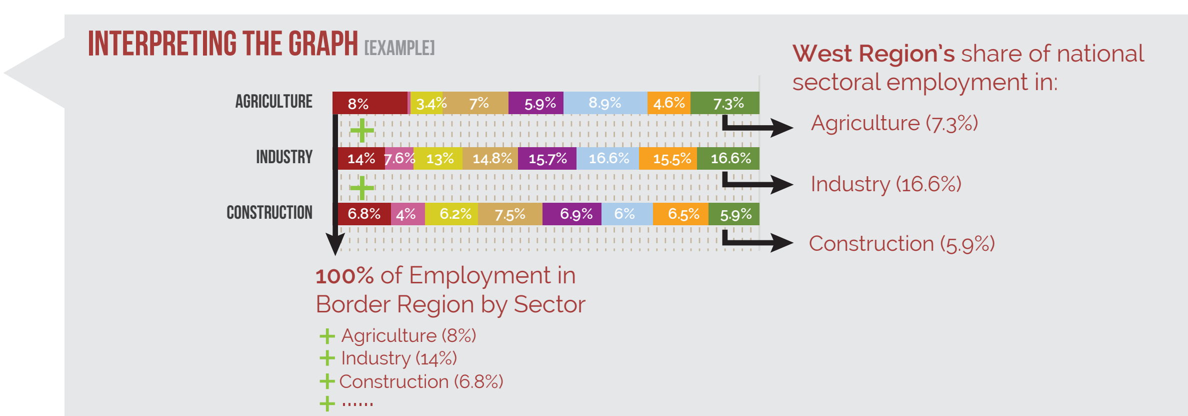


Figure 2.7 - Sectoral employment by region, Q1 2012. Source: Regional Labour Markets Bulletin, December 2012.

16 Gross Value Added (GVA) is a productivity metric that measures the difference between output and intermediate consumption. GVA provides a value for the amount of goods and services that have been produced, less the cost of all inputs and raw materials that are directly attributable to that production.

17 GVA at basic prices is output at basic prices minus intermediate consumption at purchaser prices. The basic price is the amount receivable by the producer from the purchaser for a unit of a product minus any tax on the product plus any subsidy on the product. The State average is taken as 100%. Therefore, regions can be above or below this figure.

THEME

Economic Prosperity

INDICATORS

Sectoral GVA Contribution

GVA[18] contribution by sector in each region at basic prices.[19]

(Sources: Regional Quality of Life in Ireland, Central Statistics Office, 2013)

OUTLOOK

It is apparent that the regions with higher GVA have larger urban centres which have the critical mass to deliver these results. However, it is important to note that each region is different, thus the main aim should be to operate to the optimum as there is an uneven playing field in terms of infrastructure and critical mass etc. While this indicator provides an assessment of three sectors: agriculture, industry and services, it is considered that a more detailed analysis of the sub-sectors within these categories should be examined as this would provide additional information on what areas are performing strongly and where improvement is required.

Consequently, Table 2.1 has been provided which shows employment change by sector and region between Q1 2008 and Q1 2012. It is evident from this table that within this period, employment in Ireland decreased by almost 340,000. Over this period, employment also declined in each region, with the most pronounced decreases, in absolute terms, recorded in the Dublin, Border, South-West and South-East Regions, at -117,000, -47,000, -44,000 and -38,000 respectively. The smallest decline was recorded in the Mid-East (less than 20,000). In each region, the decline observed over this period was greater than the increase observed over the period Q1 2004 to Q1 2008. In relative terms, the greatest decline was recorded in the Border and Dublin Regions (one fifth each), followed by the Midland and South-East Regions (18% and 17% respectively).

In each region, the greatest decline in employment, in absolute terms, was recorded in construction. The decline in construction employment in each region over this period was greater than the increase in the period Q1 2004 to Q1 2008. In most regions, large employment declines were also recorded in retail, industry and agriculture, although of a lesser magnitude than in construction.

Overall it is evident that sectoral distributions of employment decline were broadly similar across regions, although the absolute and relative magnitudes of decline differed. In each region, construction accounted for the greatest share in regional employment decrease. This was followed, in most regions, by wholesale/retail, industry and agriculture.

18 Gross Value Added (GVA) is a productivity metric that measures the difference between output and intermediate consumption. GVA provides a value for the amount of goods and services that have been produced, less the cost of all inputs and raw materials that are directly attributable to that production.

19 GVA at basic prices is output at basic prices minus intermediate consumption at purchaser prices. The basic price is the amount receivable by the producer from the purchaser for a unit of a product minus any tax on the product plus any subsidy on the product. The State average is taken as 100%. Therefore, regions can be above or below this figure.

THEME

Economic Prosperity

INDICATORS

Sectoral GVA Contribution

GVA contribution by sector in each region at basic prices.

Employment change by sector in each region (Q1 2008 - Q1 2012).

(Sources: Regional Labour Markets Bulletin, Central Statistics Office, 2012)

(Figures in thousands, e.g. -2,000. * see footnote)

Sector	Border Region	West Region	Mid-East Region	South-East Region	Midland Region	Dublin Region	Mid-West Region	South-West Region
Accommodation and food serivces	-2	-2	-2	*	-2	-9	*	-2
Administrative and support serivices	-2	-1	*	-2	*	-12	-2	-3
Agriculture, forestry and fishing	-4	-6	-7	-4	-3	+1	-4	-8
Construction	-20	-16	-17	-21	-9	-36	-11	-19
Education	+1	+1	*	+3	+1	+4	-2	-1
Financial, insurance and real estate	-4	+2	+4	*	*	-7	+3	-1
Human health and social work	*	*	+8	+1	+1	+1	+1	+3
Industry	-7	+1	-6	-4	-4	-19	-6	-7
Information and communication	-1	+2	+2	+1	*	*	+1	*
Other NACE activities	-1	-1	+1	-3	+1	*	+2	-2
Professional, scientific and technical	-2	-1	-1	-1	-2	-7	*	-2
Public administration and defence	+2	-1	*	*	*	-5	+2	*
Transportation and storage	-1	*	-1	*	-1	-3	*	*
Wholesale and retail trade	-7	-5	*	-7	-3	-22	-5	-2

Border Region · West Region · Mid-East Region · South-East Region · Midland Region · Dublin Region · Mid-West Region · South-West Region

Table 2.1 - Employment change by sector and region (000s), Q1 2008 - Q1 2012. *

* In many instances, data at regional level are too small for statistical inferences and may be subject to statistical error (e.g. observations less than 1000 cannot be reported for any statistics based on the QNHS; as these instances can be subject to variations caused by sampling size, as opposed to developing trends).

THEME

Economic Prosperity

INDICATORS

GVA Per Person

GVA[22] per person in each region at basic prices.[23]

(Sources: Regional Quality of Life in Ireland, Central Statistics Office, 2013)

IMPORTANCE OF THE INDICATOR

Analysis of the GVA per person can give a good indication of the overall performance of the regional economies. An examination of GVA per person can increase understanding of the output and value-creating performance of an economy. In its '**Regional Competitiveness Agenda**', Forfás regards GVA as the most appropriate output indicator available at regional level.

Taken in isolation, the data which are provided can only tell a limited amount about overall regional performance. However, when assessed in conjunction with the wide range of indicators which have been assembled for the purposes of this study, the regional relevance of GVA becomes much clearer, especially within the context of the results which are indicated here.

COMMENTARY

It is important to note that within a (theoretically) perfectly regionally-balanced economy, the GVA per person for all regions would be around 100%. Therefore, a large gap between the regions with the largest and the smallest proportions of the GVA per person indicates that there is more of a regional imbalance in terms of GVA. The target for this indicator will be to increase regional output from the baseline figures identified in Figure 2.7.

The analysis of GVA per person has been extracted from the CSO Regional Quality of Life Survey of 2013. Using the assumption that the national figure of GVA per person is 100%, only two of the eight regions have exceeded this figure, with both of these producing figures which are well in excess of 100%. In terms of percentages, the average of the six regions which are below 100% is 69.9%, while the average of the two regions which exceed the target is 136.6%. This gives a good indication of the gap in terms of GVA between the Dublin and South-West regions when compared with the remaining six regions.

OUTLOOK

It is no coincidence that the two regions which over-performed relative to the state average for GVA per person were the Dublin Region and the South-West Region. Figure 2.7 emphasises this point. This performance is closely linked to the cities of both regions. It is also an indication of the economic strength of the two main Irish cities when compared with the other regions and highlights the importance of cities at a national level.

22 Gross Value Added (GVA) is a productivity metric that measures the difference between output and intermediate consumption. GVA provides a value for the amount of goods and services that have been produced, less the cost of all inputs and raw materials that are directly attributable to that production.

23 GVA at basic prices is output at basic prices minus intermediate consumption at purchaser prices. The basic price is the amount receivable by the producer from the purchaser for a unit of a product minus any tax on the product plus any subsidy on the product. The State average is taken as 100%. Therefore, regions can be above or below this figure.

THEME

Economic Prosperity

INDICATORS

GVA Per Person

GVA[24] **per person** in each region at basic prices.[25]

(Sources: Regional Quality of Life in Ireland, Central Statistics Office, 2013)

However, when looking at the GVA for the Midland and Mid-East Regions, it is important to note that these figures are distorted by commuting, since the output is measured where it is produced rather than where the individuals who produce it actually live. Since large numbers of people from these regions commute to Dublin for work, the GVA produced by these people is attributed to the Dublin Region rather than to the Midland and Mid-East Regions.

Definition: GVA
A productivity metric that measures the difference between output and intermediate consumption.

See **footnote** or **glossary** for additional details.

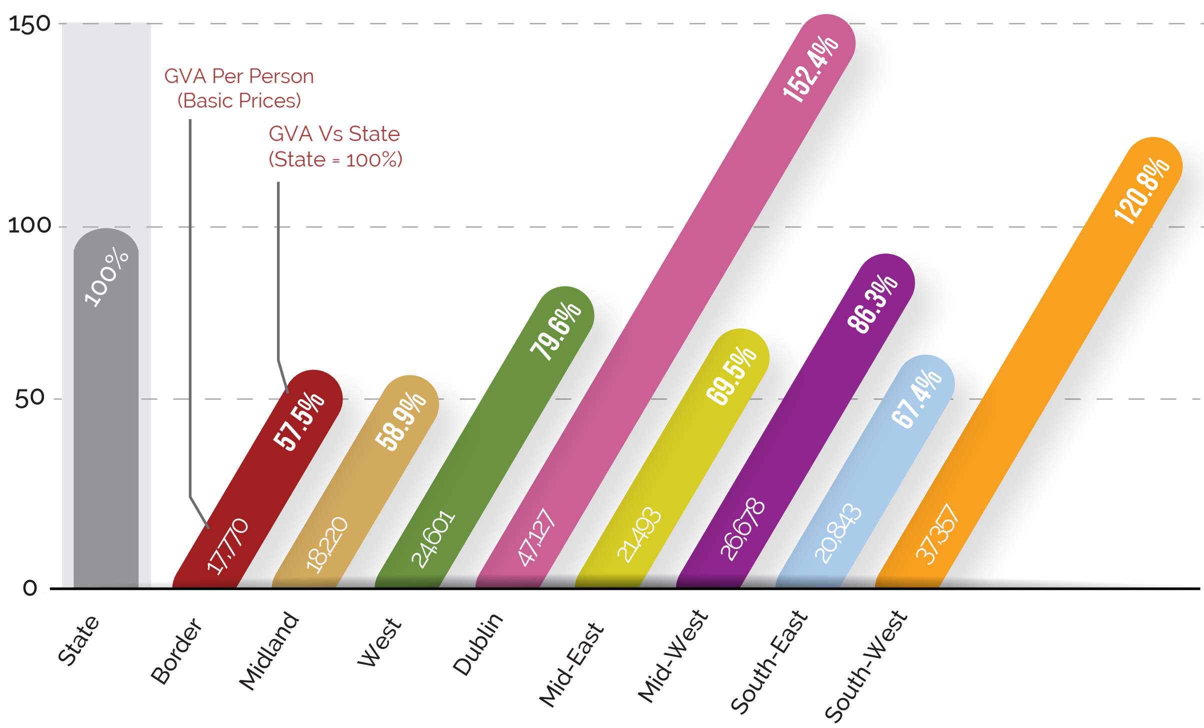


Figure 2.7 - GVA per person at basic prices per region.

TARGETS

INCREASE from baseline figure the GVA output per person at basic prices

24 Gross Value Added (GVA) is a productivity metric that measures the difference between output and intermediate consumption. GVA provides a value for the amount of goods and services that have been produced, less the cost of all inputs and raw materials that are directly attributable to that production.

25 GVA at basic prices is output at basic prices minus intermediate consumption at purchaser prices. The basic price is the amount receivable by the producer from the purchaser for a unit of a product minus any tax on the product plus any subsidy on the product. The State average is taken as 100%. Therefore, regions can be above or below this figure.

THEME

Economic Prosperity

INDICATORS

Tertiary Education

Population (**total numbers only**) per region **aged 30 - 34 with tertiary education;**

(Sources: Central Statistics Office, 2011[26])

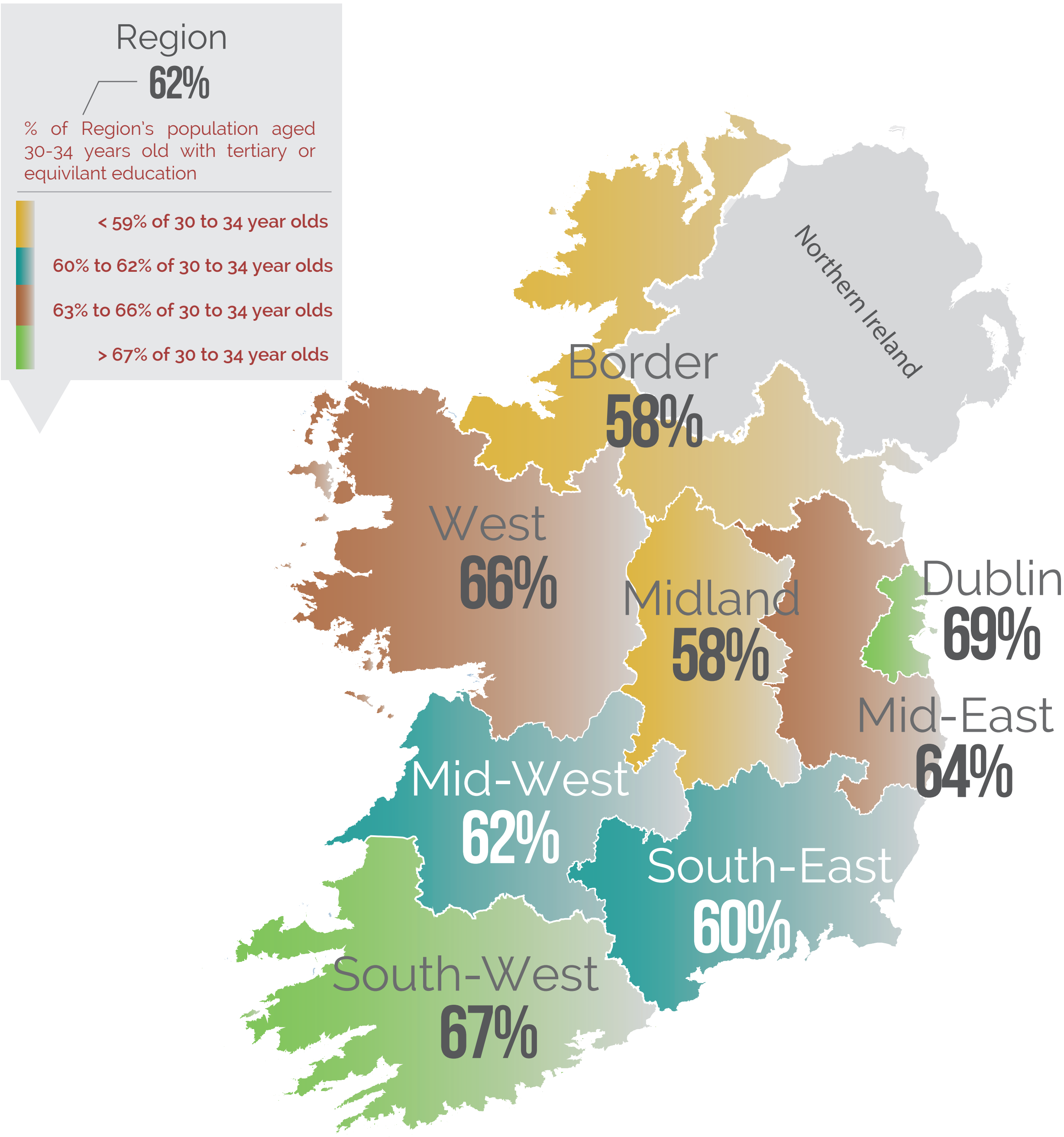


Figure 2.8 - Tertiary educational attainment (**total numbers only**) for ages 30 - 34, per region.

TARGETS

60% — the % share of 30 -34 year olds to have completed tertiary or equivilant education (National Reform Programme - 2012 Update)

40% — the % share of 30 -34 year olds to have completed tertiary or equivilant education (Europe 2020)

[26] A special tabulation was carried out by the CSO. Information to populate this indicator was taken from Census 2011.

THEME

Economic Prosperity

INDICATORS

Tertiary Education

Population (**total numbers only**) per region **aged 30 - 34 with tertiary education;**

Population (**by gender**) per region **aged 30 - 34 with tertiary education**.

(Sources: Central Statistics Office, 2011[27])

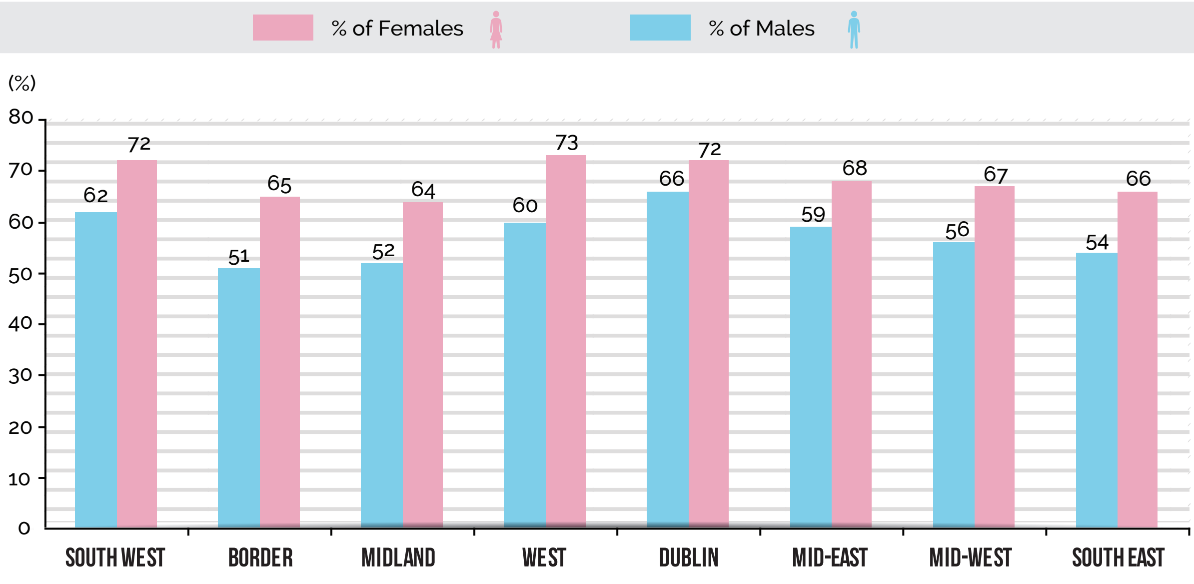


Figure 2.9 - Tertiary educational attainment by gender for ages 30 - 34 per region.

IMPORTANCE OF THE INDICATOR

Tertiary education is a valuable indicator on the earning potential for populations within each region. It is a key prerequisite in building a globally competitive Smart Economy in accordance with national Government policy. Populations with higher tertiary educational levels will have higher earning potentials and, therefore, should support higher levels of economic activity.

COMMENTARY

The Europe 2020 and National Reform Programme targets give an excellent contextual background to the achievements of the various regions in terms of the progress that has been made in striving to reach targets. All eight regions have exceeded the Europe 2020 targets while six of the eight regions have reached the National Reform Programme target of 60%. Figure 2.9 shows population by gender aged 30-34 with tertiary education. It is evident that within this age cohort, female tertiary educational attainment exceeds male across all of the regions.

OUTLOOK

Given the importance of tertiary education and the contribution such education levels make to the regional economies, retaining and ultimately increasing these high levels of educational attainment will be an essential element in improving overall regional performance and encouraging sustainable regional growth.

[27] A special tabulation was carried out by the CSO. Information to populate this indicator was taken from Census 2011.

THEME

Economic Prosperity

INDICATORS

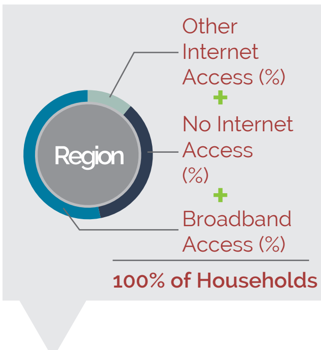
Broadband Coverage

Internet Access

Broadband coverage per region;

Households with internet access per region.

(Sources: Profile 4 - The Roof Over Our Heads, Central Statistics Office, 2012)



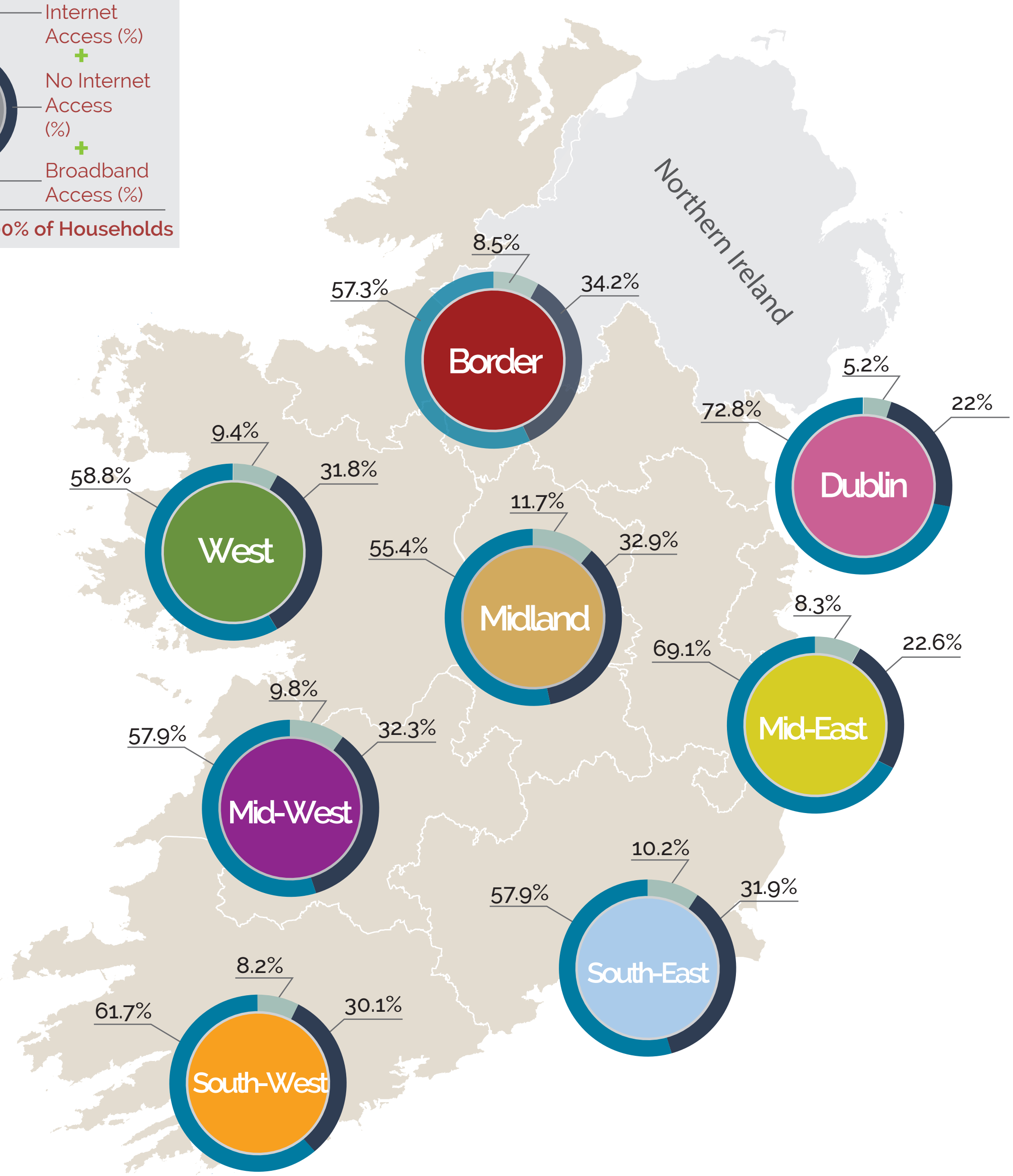


Figure 2.10 - Household access to the internet in each region, showing broadband access, other means of internet access and no access.

TARGETS

INCREASE the overall % of people who have access to broadband

63.8% Broadband Access State Average Census 2011

71.8% Internet Access State Average Census 2011

THEME

Economic Prosperity

INDICATORS

Broadband Coverage   Internet Access

Broadband coverage per region;

Households with internet access per region.

(Sources: Profile 4 - The Roof Over Our Heads, Central Statistics Office, 2012)

IMPORTANCE OF THE INDICATOR

How a country competes in this century will be defined by the relative quality of its digital infrastructure. Just as railways defined the 19th century and the industrial revolution and electricity transformed society in the 20th century, the use of information and communications technology (ICT) and Internet services is already altering how society and business interacts in the 21st century. High speed broadband (also known as Next Generation Broadband - NGB) is a key enabler for a connected society. As a country, we need investment in high speed broadband infrastructure and services. These services are the foundation of our future competitiveness and will be a driving force in job creation and rebuilding Ireland's economy.

COMMENTARY

A cross-regional analysis of levels of internet access among households for 2006 and 2011 is provided in Figure 2.11. This revealed that in 2011 apart from Dublin and Mid-East with 78% and 77.4% respectively, all other regions were in the range of 65.9 (Border) to 69.9% (South West). These statistics are very encouraging and demonstrate that internet access is improving. It is also important to note that there are significant improvements in all regions in internet access in households since 2006. The trends are very positive and it is clear that access is improving. No comparative information is currently available for businesses.

A further analysis of broadband access across all regions in 2011, as provided in Figure 2.10, reveals that a significant proportion of regions are underperforming relative to the state average target of 61.4% for 2011, namely South-East Region with 57.9%, Border Region with 57.3%, Midland Region at 55.4%, West Region at 58.8% and the Mid-West Region at 57.9%. It was found that only three of the regions had exceeded the 2011 national target for broadband access, South-West Region by 0.3%, Mid-East Region by 7.7% and the Dublin Region by a significant 11.4%. The Dublin Region was much higher than other regions and probably distorted the national average. Similarly, if data on broadband access in the Gateways and Hubs were excluded from the regional totals, a different picture of regional broadband access would emerge.

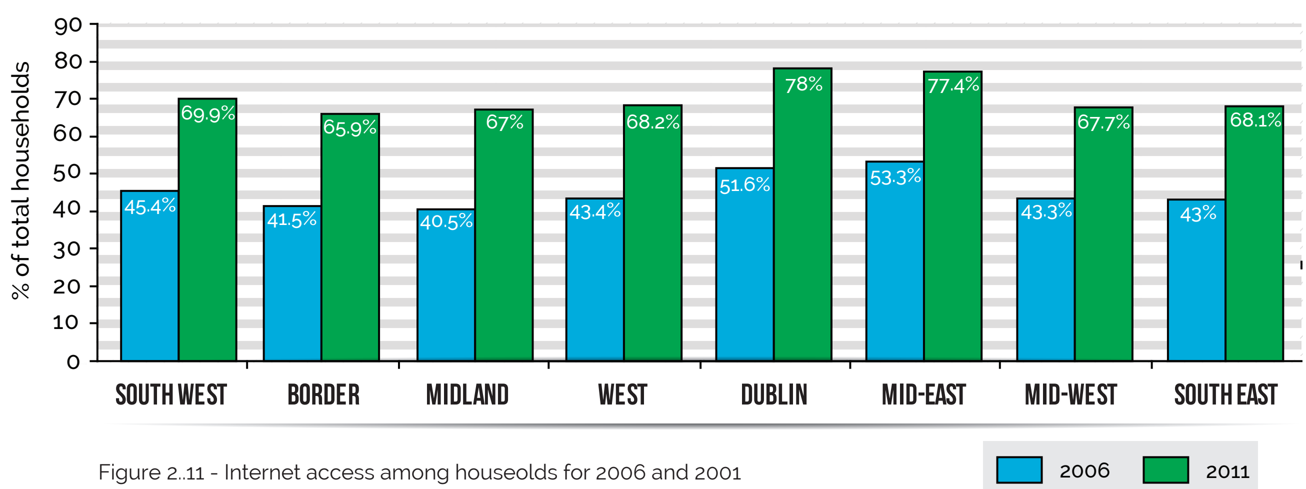


Figure 2..11 - Internet access among houseolds for 2006 and 2001

THEME

Economic Prosperity

INDICATORS

Broadband Coverage   Internet Access

Broadband coverage per region;

Households with internet access per region.

(Sources: Profile 4 - The Roof Over Our Heads, Central Statistics Office, 2012)

OUTLOOK

The full range of opportunities that a new digital economy presents can only be further unlocked if the requisite infrastructure is in place to support the development of new applications, new connectivity, new ways of doing business and new ways of delivering public, private and community services to citizens.

The Digital Agenda for Europe (DAE) highlights "ultra fast Internet access" as a building block for growth and jobs. Many countries like Australia, the Netherlands, Singapore, South Korea and Sweden have already decided that ubiquitous high speed broadband networks will be central to their future. This is a challenge which our regions need to consider in rebuilding Ireland's economy and securing Ireland's future. Ireland has the opportunity to be one of the new digital economies of the world and action is required to build competitiveness and to realise the wealth of societal benefits that a digital economy provides.

The indicators provided in this section do not represent the most critical metrics in terms of measurement of performance in this sector. Detailed information and indicators are available at a national level outlining broadband coverage, availability, speeds etc. that allow for useful international comparisons. Detailed information below the national level is very difficult to source. In terms of developments in information at NUTS II or III level, the following update will highlight where new and emerging information will permit a better range and quality of indicators in the next iteration of this document.

- The Department of Communications, Energy and Natural Resources is currently conducting a National Broadband Mapping Exercise as part of the project to implement the National Broadband Plan. This mapping exercise will help identify broadband services (Basic Broadband and Next Generation Access (NGA)) already in place and where there are plans for such services in the next three years.

  To understand where broadband services are provided, the Department needs information relating to the infrastructure used by operators to provide those services and the extent of the coverage. The information will be used to develop maps identifying those areas which will be served with NGA by private operators and those areas where intervention by Government will be necessary to ensure the roll-out of NGA in line with the National Broadband Plan. This mapping exercise is due to be well progressed by the end of Q4 2013 and draft maps will be available in Q1 2014.

- ComReg does not collect or report such data on a county or regional level. It reports aggregate data on broadband speeds (in quarterly publications) on a nationwide basis only. ComReg is in the early stages of developing a project (and the piloting of a methodology) and an associated tool that measures and publishes actual broadband speeds achieved across a range of platforms. It is intended to publish details of the speed tests from the pilot, broken down by county/service provider/package. However, this is not expected until Q4 2013.

THEME

Economic Prosperity

INDICATORS

Personal Computer

Households with a personal computer per region.

(Sources: Profile 4 - The Roof Over Our Heads, Central Statistics Office, 2012)

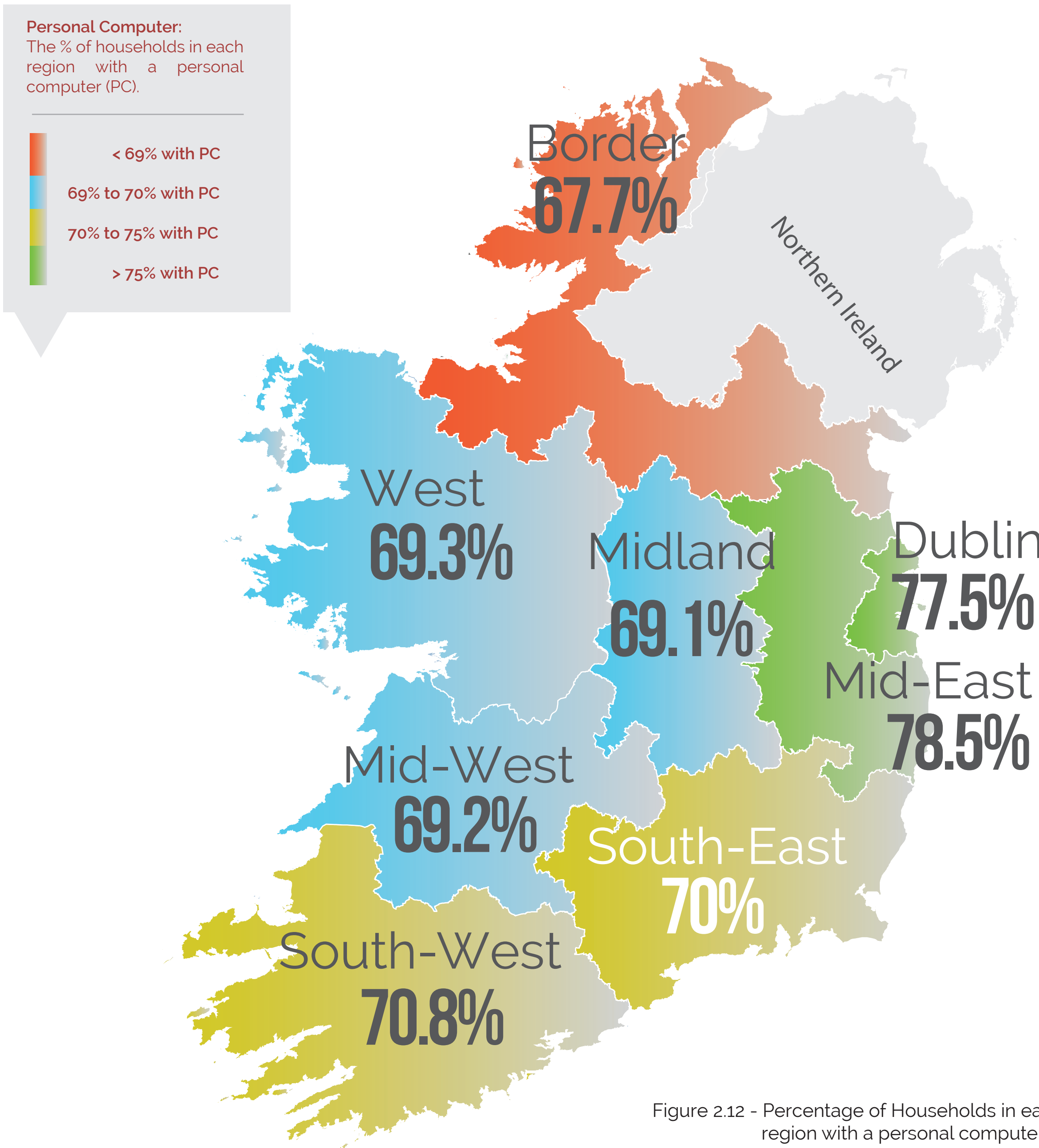


Figure 2.12 - Percentage of Households in each region with a personal computer.

TARGETS

71.5% the national average % of households with a personal computer (2011)

INCREASE the overall % of households with a personal computer

THEME
Economic Prosperity

INDICATORS

Personal Computer

Households with a personal computer per region.

(Sources: Profile 4 - The Roof Over Our Heads, Central Statistics Office, 2012)

IMPORTANCE OF THE INDICATOR

This indicator is important to demonstrate the potential that households have to access and utilise the internet. The issue, however, is that due to improvement in mobile technology, people are using the internet everywhere and, therefore, the household or indeed the business is no longer as relevant. The issue, however, is measuring this and accessing the data. In the absence of the data, we must work with what is readily available.

COMMENTARY

In terms of figures for household access to a personal computer across the regions in 2011, the South-West Region demonstrated a figure of 70.8%, in the South-East Region those with a personal computer accounted for 70% of all households, in the Mid-West 69.2%, Midland 69.1%, West 69.3%, Border Region 67.7%, Mid-East Region 78.5%, while in Dublin this figure is 77.5%. In future iterations of this report this indicator will become obsolete as people increasingly use mobile devices for work and accessing the internet, though quantifying this usage may be problematic. Some other metric (for example related to the 4G network etc.) must be examined as a replacement for this indicator.

OUTLOOK

The digital agenda is moving forward at a rapid pace and it will be at the centre of Ireland's recovery and positioning on a global stage. This is not one of the most important indicators that should be measured given that there is a lack of quality information available at NUTS II and III level. Therefore, when new and improved information becomes available for these areas, the indicators will be updated and amended accordingly.

Economic Prosperity

People and Places

Environment and Infrastructure

ECONOMIC PROSPERITY: SUMMARY

Clear targets have been set for population (total and by gender) aged 30-34 with tertiary education and employment rate of population aged 20-64. Therefore, it is possible to obtain a snapshot in time of whether these targets are being achieved or if there are challenges for regions in these areas. Tertiary education levels per region are high with all regions exceeding the Europe 2020 target of 40%. It is considered that higher levels of educational attainment will be critical to economic prosperity and a high quality of life and will enable the enhancement of the innovation capacity of the regions in line with RPG objectives. While the economic recession has undoubtedly had a negative effect in achieving employment targets, it is clear that achieving the targets provided will be a significant challenge for all regions.

The other Economic Prosperity indicators have provided baseline information from which trends can be measured in the future. By monitoring the direction of change it is possible to ascertain if regions are moving in the right direction or if the trend is undesirable and would require an appropriate response. Regional policy making must ensure that sustainable employment and measures which can create the conditions for additional jobs in SMEs and other companies are prioritised within their regions. This in turn should lead to increased productivity and will have a positive impact on achieving higher levels of GVA.

One of the key issues to emerge from this body of work on Regional Indicators is the lack of substantial information on broadband data per region. The best available indicators for broadband and internet coverage for the regions have been provided. However, this significant information gap should be addressed if we wish to effectively measure the innovation capacity of the regions.

It is clear that regional planning and policy must play an increasingly important role in the national economic recovery in terms of supporting the provision of appropriate infrastructure and a high quality environment in order to provide sustainable economic development. In this regard, managing the relationship between population and settlement will be important for infrastructural planning and economic prosperity.

People and Places

Indicators

31

Population

Population Change

Urban/Rural Share

Dependency Rates

Housing Stock

Housing Vacancy

Work-Related Communting

THEME: PEOPLE AND PLACES 03

DESCRIPTION

The primary focus of the RPGs in their current iteration is spatial planning, how the spatial dimension is utilised, managed and maintained. 'People and Places' focuses on how people interact with the spaces they occupy for different purposes. The theme examines the implications of land use planning on the efficient use of land, resources and infrastructure; and on the progress achieved in promoting the overall sustainability of the regions.

People make places. Demographic trends and spatial settlement patterns are important components of strategic regional and future policy planning. Population dynamics can provide valuable insights into the manner in which regions are developing and can set down markers for future needs. Critical mass in key settlements is important for regional prosperity and sustainable infrastructure planning whilst age structure can have implications for future planning needs surrounding health care, education and housing.

POLICY

The spatial planning policy contained in the RPGs is informed by numerous policy documents.

At a National level the key policy document is the **National Spatial Strategy** which provides a spatial framework for growth, defines the settlement hierarchy on which the RPGs are based and forms the basis for CSO/DECLG population target distribution at regional level.

At a Regional level, the **Regional Planning Guidelines** transpose national policy by implementing the strategic planning framework set out in the National Spatial Strategy and provide policy guidance to local authorities in the areas of settlement patterns, population and housing targets.

At a Local level, **City and County Development Plans** are required to set out a clear growth scenario for an area over the life of the plan and to inform decisions regarding future development patterns, consistent with the regional plans.

AIMS & OBJECTIVES

In order to refine the scope of population trends and determine high level indicators to monitor and track changes in those trends, the following key aims were developed:

- To manage spatial growth and distribution in line with the NSS and RPGs;

- To ensure suitable housing provisions and appropriate housing land requirements to meet the needs of regions.

THEME

People & Places

INDICATORS

Population   Population Change

Total Population by **Region**, Gateway, Hub & Tier 1 Settlement;

Regional Population Change by Region 1991 - 2011 & 2016-2022 Target

(Sources: Central Statistics Office, 2011[28])

IMPORTANCE OF THE INDICATOR

The appropriate distribution of population into spatial areas defined in the RPGs is central to the sustainable development of the regions in terms of establishing critical mass and the efficient delivery of services and infrastructure that impact on all other policy areas. Analysis of population growth is crucial to forward planning for the provision of services, facilities and infrastructure necessary to respond to the needs of growing populations. Population figures can be used to assess the performance of the RPGs in managing spatial growth and distribution in line with defined targets.

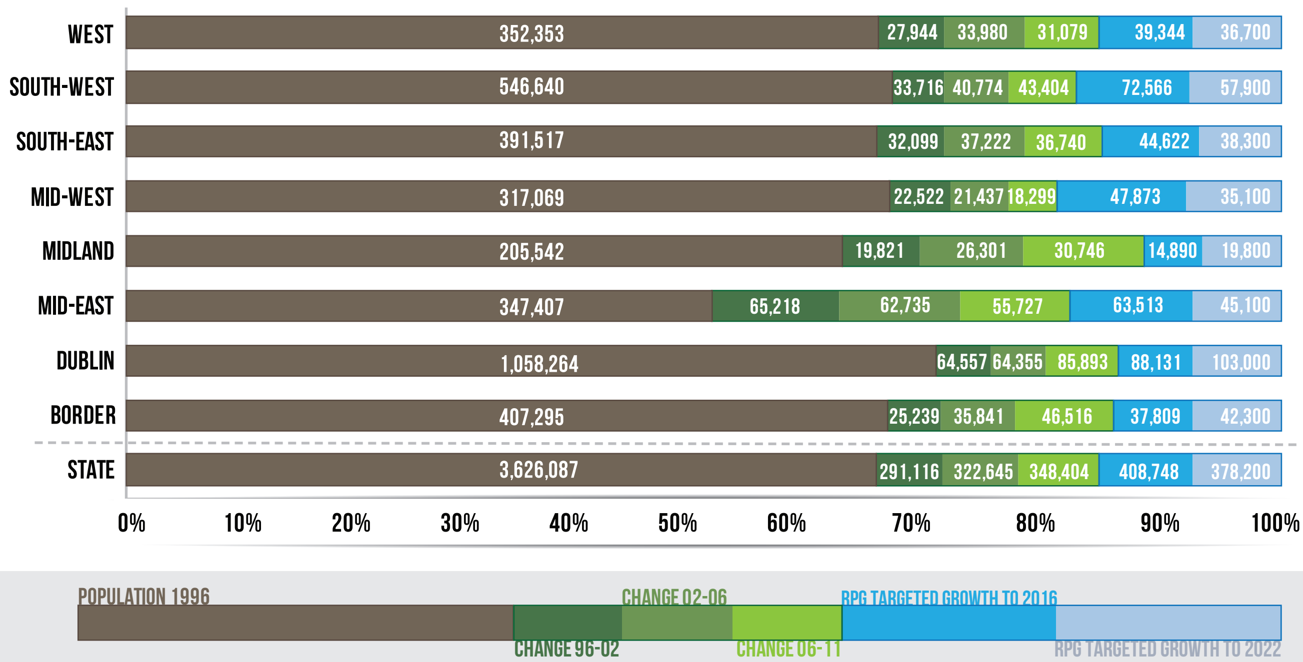


Figure 3.1 illustrates the total targeted population for 2022 in each region, the year-on-year growth from 1996 to 2011 and the proportional growth required to achieve the respective targets for 2016 and 2022.

This shows that the population of the Mid-East Region is expected to almost double from 1996 baseline and is on target with steady year-on-year growth. In some areas growth has not been at the rate anticipated (as illustrated by the size of the green colours), indicating significant challenges ahead if defined projected targets are to be achieved. While growth in the Dublin Region has been significant in absolute terms, this is not proportionally significant and will require a steady increase to meet required targets. Future population targets for the Mid-East Region should take cognisance of the extent of commuting patterns.

ACHIEVE

RPG population targets by 2016 and 2022

TARGETS

THEME
People & Places

INDICATORS

Population

Population Change

Total Population by **Region**, Gateway, Hub & Tier 1 Settlement;

Regional Population Change by Region 1991 - 2011 & 2016-2022 Target

(Sources: Central Statistics Office, 2011[29])

COMMENTARY

Monitoring population growth and change at a regional level is critical to understanding the demographic and settlement dynamics of regions within the state. While there has been consistent population growth in all regions in absolute terms, the rates of growth varies considerably over census periods and by geographical locations. The 1996-2002 census period and subsequent periods saw a notable increase in population growth rates across all regions. During subsequent census periods, some regions such as the Mid-East, saw further accelerated growth followed by a levelling off, while in other regions such as the Midland and Border Regions there has been consistent year-on-year growth post Celtic Tiger era. In contrast, the Mid-West Region has shown a slowdown in growth rates throughout this period. The inter-relationships and correlations of growth rates merit further study beyond this report but highlight the regional variations, dynamics and challenges regarding growth and population forecasting at a sub-national level. This will have implications for future policy planning, provision of services, amenities, job creation and economic development.

OUTLOOK

Figure 3.1 indicates that the Irish State has experienced a significant growth rate due to in-migration and natural increase. All regions have experienced growth over the studied period but the major conurbations of Dublin, Midlands, South-West and Mid-East have maintained consistent population growth during the last inter census period 2006-2011.The outlook based on the historical growth trends indicates that the state and the regions will continue to grow at a significant level.

29 Five-yearly census CSO Records and Reports

THEME

People & Places

INDICATORS

Population   Population Change

Total Population by Region, **Gateway, Hub** & Tier 1 Settlement;

Population Change by **Gateway, Hub** & Tier 1 Settlement 2006-2011.

(Sources: Central Statistics Office, 2011)

GATEWAYS & LINKED GATEWAYS*

Gateway		
Dublin Metropolitan Area [30]		
Population 2006	1,298,328	
Population 2011	1,394,126	
Percent Change '06-'11	+7.38%	
Galway		
Population 2006	72,414	
Population 2011	75,529	
Percent Change '06-'11	+4.30%	
Cork		
Population 2006	272,645	
Population 2011	289,739	
Percent Change '06-'11	+6.31%	
Limerick/Shannon		
Population 2006	99,979	
Population 2011	100,759	
Percent Change '06-'11	+1.15%	
Midlands		
Population 2006	46,398	
Population 2011	50,791	
Percent Change '06-'11	+9.47%	
Letterkenny		
Population 2006	17,586	
Population 2011	19,588	
Percent Change '06-'11	+11.38%	
Sligo		
Population 2006	27,370	
Population 2011	27,727	
Percent Change '06-'11	+1.30%	
Dundalk		
Population 2006	35,085	
Population 2011	37,816	
Percent Change '06-'11	+7.78%	
Waterford		
Population 2006	49,213	
Population 2011	51,519	
Percent Change '06-'11	+4.69%	

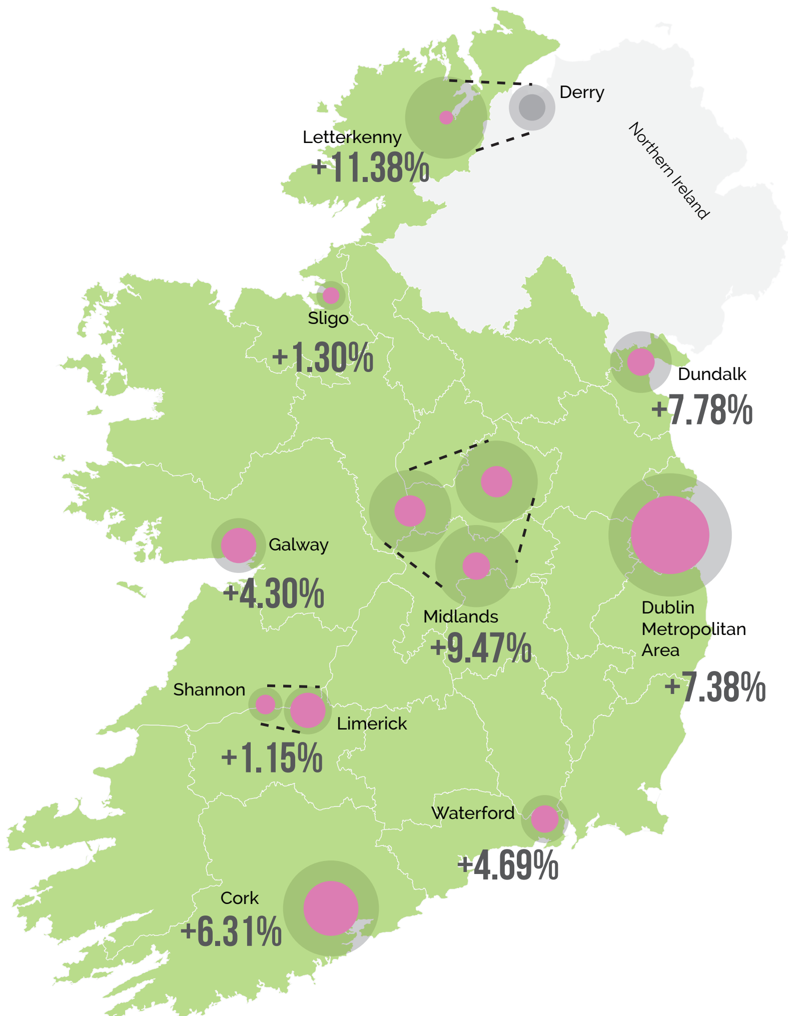


Figure 3.2 - Total population and change by gateway & linked gateway.

TARGETS

ACHIEVE RPG population targets by 2016 and 2022

INCREASE The overall % of people living in designated growth areas

30 Please note that these figures reflect Gateway definitions as per RPGs and Development Plans (i.e. they do not all reflect the CSO definition of town and environs).

* Dublin Metropolitan Area is located across Dublin and Mid-East regions.

THEME
People & Places

INDICATORS

Population   Population Change

Total Population by Region, Gateway, Hub & Tier 1 Settlement;

Population Change by Hub and Tier 1 Settlement 2006-2011

(Sources: Central Statistics Office, 2011)

HUBS & LINKED HUBS

Population:	2006	2011	% Ch.
Mid-West Region			
Ennis	24,253	25,360	+ 4.56%
West Region			
Ballina-Castlebar	22,300	23,404	+ 4.95%
Tuam	6,885	8,242	+ 19.71%
Border Region			
Monaghan	6,710	7,452	+ 11.06%
Cavan	7,883	10,205	+ 29.46%
South-West Region			
Tralee-Killarney [31]	33,785	33,548	- 0.70%
Mallow	10,241	11,605	+ 13.32%
South-East Region			
Kilkenny	22,179	24,423	+ 10.12%
Wexford	18,163	20,072	+ 10.51%

TIER 1 SETTLEMENTS

Tier 1 Settlements are towns below Hub level which are defined in the RPGs. Please note that not all RPGs contain this settlement category.

Population:	2006	2011	% Ch.
Mid-West Region			
Nenagh	7,415	8,023	+ 8.20%
Thurles	7,682	7,933	+ 3.27%
Midland Region			
Portlaoise	14,346	18,351	+27.67%
Longford	7,622	8,002	+ 4.99%
South-East Region			
Carlow	20,724	23,030	+11.13%
Clonmel	17,008	17,908	+ 5.29%
Enniscorthy	9,538	10,838	+13.63%
New Ross	7,709	8,151	+ 5.73%
Gorey	7,193	9,114	+26.71%
Dungarvan	8,362	9,427	+12.74%
Tramore	9,632	10,328	+ 7.23%
Border Region			
Drogheda	35,085	37,816	+ 7.78%
Carrick-on-Shannon	2,595	3,314	+ 27.71%
West Region			
Roscommon	5,017	5,693	+ 13.47%
Dublin Region			
Balbriggan	6,731	19,932	+196.12%
Cherrywood*	2,546	3,806	+ 49.49%
Mid-East Region			
Naas	20,044	20,713	+ 3.34%
Navan	24,851	28,559	+14.92%
Wicklow	11,919	13,320	+11.75%
Newbridge	18,520	21,561	+16.42%
Greystones*	14,569	17,468	+19.90%
Arklow	11,759	13,009	+10.63%
Dunboyne*	5,713	6,959	+21.81%
Maynooth*	10,715	12,510	+16.75%
Leixlip*	14,676	15,452	+ 5.29%

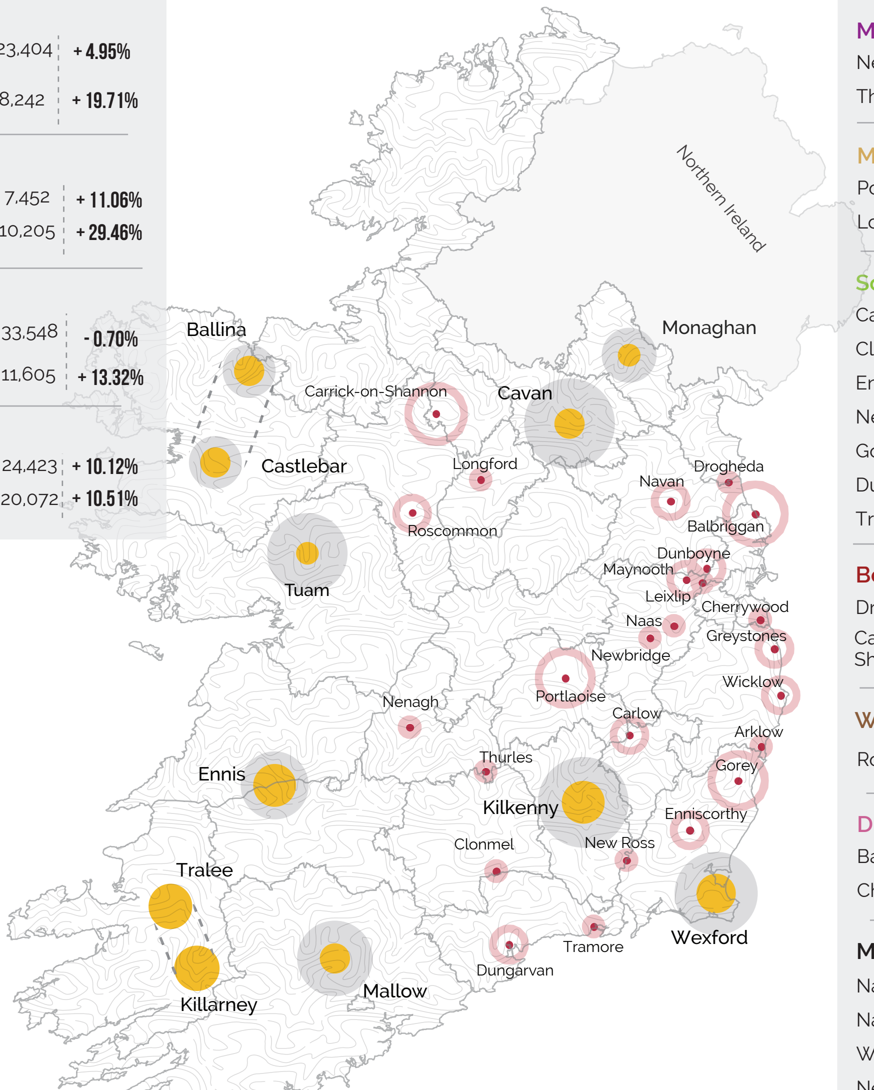


Figure 3.3 - Total population and change by Hub and Tier 1 Settlement.

TARGETS

ACHIEVE RPG population targets by 2016 and 2022

INCREASE The overall % of people living in designated growth areas

31 Tralee-Kilkenny, Towns only.

* Please note while Cherrywood, Greystones, Dunboyne, Maynooth and Leixlip fall within the definition of Tier 1 Towns, they are within the Dublin Metropolitan Area and are therefore already represented in Figure 3.2.

THEME

People & Places

INDICATORS

Population   Population Change

Total Population by **Region, Gateway, Hub & Tier 1 Settlement**;

(Sources: Central Statistics Office, 2011)

COMMENTARY

Figures 3.1, 3.2, and 3.3 illustrate the growth experienced in all regions in line with policy provision. All Gateways have experienced population growth over the last inter-censal period. The significance of cities and large urban centres as regional drivers of growth is evident, while RPG policy has been formulated to support these drivers and ensure that optimal conditions are provided that promote the achievement of the full potential of regions. From this perspective, overall population trends at regional level and within the defined urban centres that support the RPG goals are moving toward their respective targets. However, issues remain in some areas regarding the rate, as opposed to the direction, of this growth.

OUTLOOK

The overall trend of large urban centres anchoring the spatial development of their regional hinterlands looks set to continue in line with the aims and objectives of regional spatial planning policy. More analysis of regional and sub-regional employment, educational and population growth figures may be required to establish distinct cause/effect pathways, determine trends to achieve required results and formulate appropriate policy responses.

The uneven progress in the achievement of regional population targets (see Figure 3.1) suggests the need to review the effectiveness of regional planning policies and settlement strategies in some areas and highlights the need for more focused, regionally specific thinking in future policy development.

At a local level, City and County Development Plans are required to set out a clear growth scenario for an area over the life of the plan and to inform decisions regarding future development patterns, consistent with the regional plans. This is now happening through the development and implementation of Core Strategies. However, it will take some time to determine the impact of Core Strategies in influencing future settlement patterns. This will be developed further in the next iteration of this document and will continue to be reported through the National RPG Implementation Annual Reports.

THEME

People & Places

INDICATORS

Urban/Rural Share

Urban/Rural Share by **Population Ratio**[32] **and absolute share** for each Region.

(Sources: Central Statistics Office, 2012)

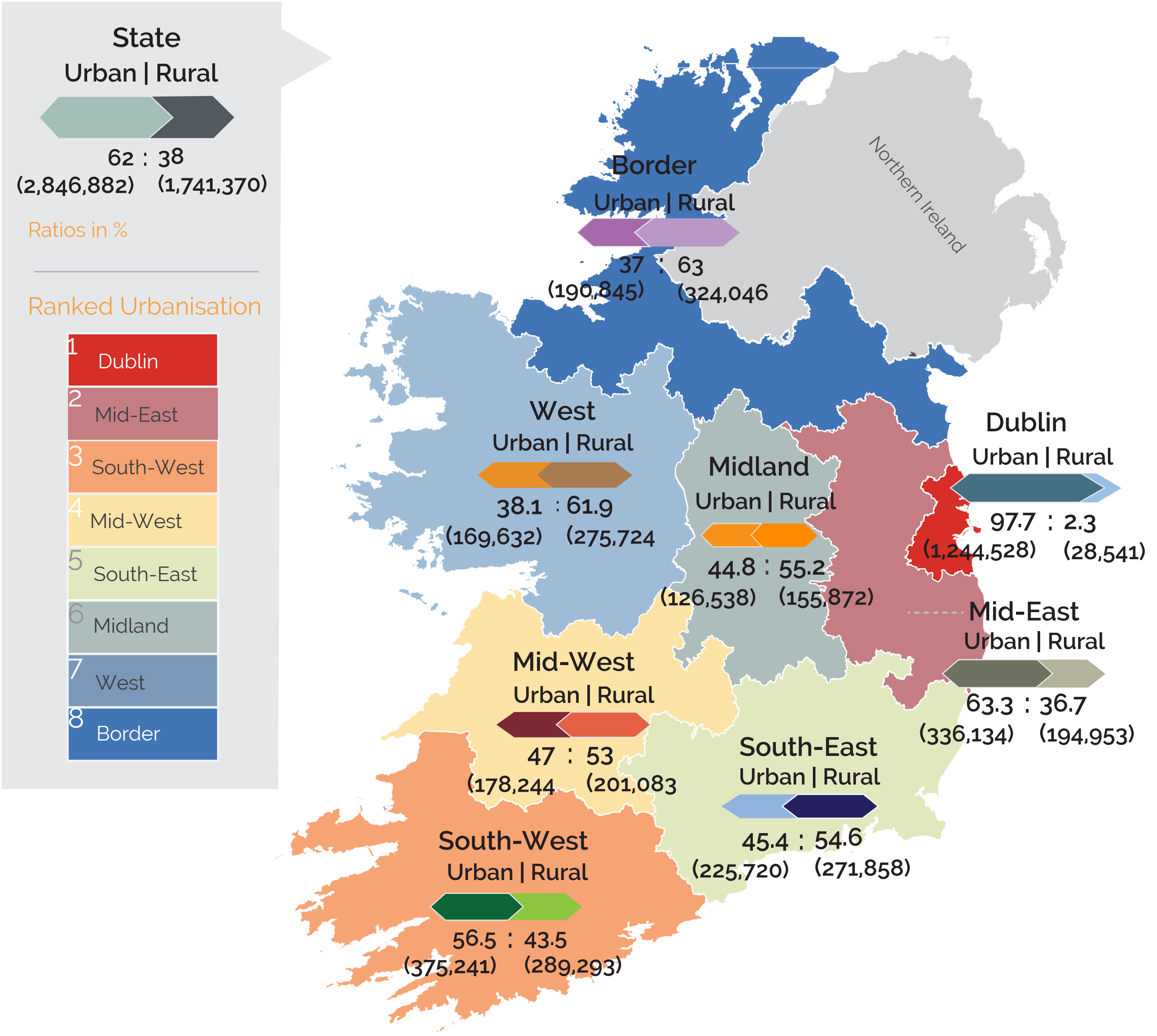


Figure 3.4 - Urban / Rural ratio and absolute share for each region. Ranked urbanisation is also shown.

PLEASE NOTE

32 **Urban/rural population ratio**
Absolute figures and relative percentage of those living in urban (towns above 1000) and rural areas by region 2011. Anything below 1000 persons is considered rural. The data used here include all settlements greater than 1000 persons. Please refer to the Glossary for further details.

INCREASE

The overall % of people living in designated urban growth areas (as compared to rural areas) within all of the regions in accordance with national and regional settlement hierarchies.

TARGETS

THEME

People & Places

INDICATORS

Urban/Rural Share

Urban/Rural Share by **Population Ratio**[33]
and absolute share for each Region.

(Sources: Central Statistics Office, 2012)

State
Urban | Rural

2011
62 : 38

2006
60.7 : 39.3

Ratios in %

1.3%
2006 - 2011
Increased
Urban Population

Highest Growth

1	Midland
2	Mid-East
3	Border
4	West
5	South-East
6	Mid-West
7	South-West
8	Dublin

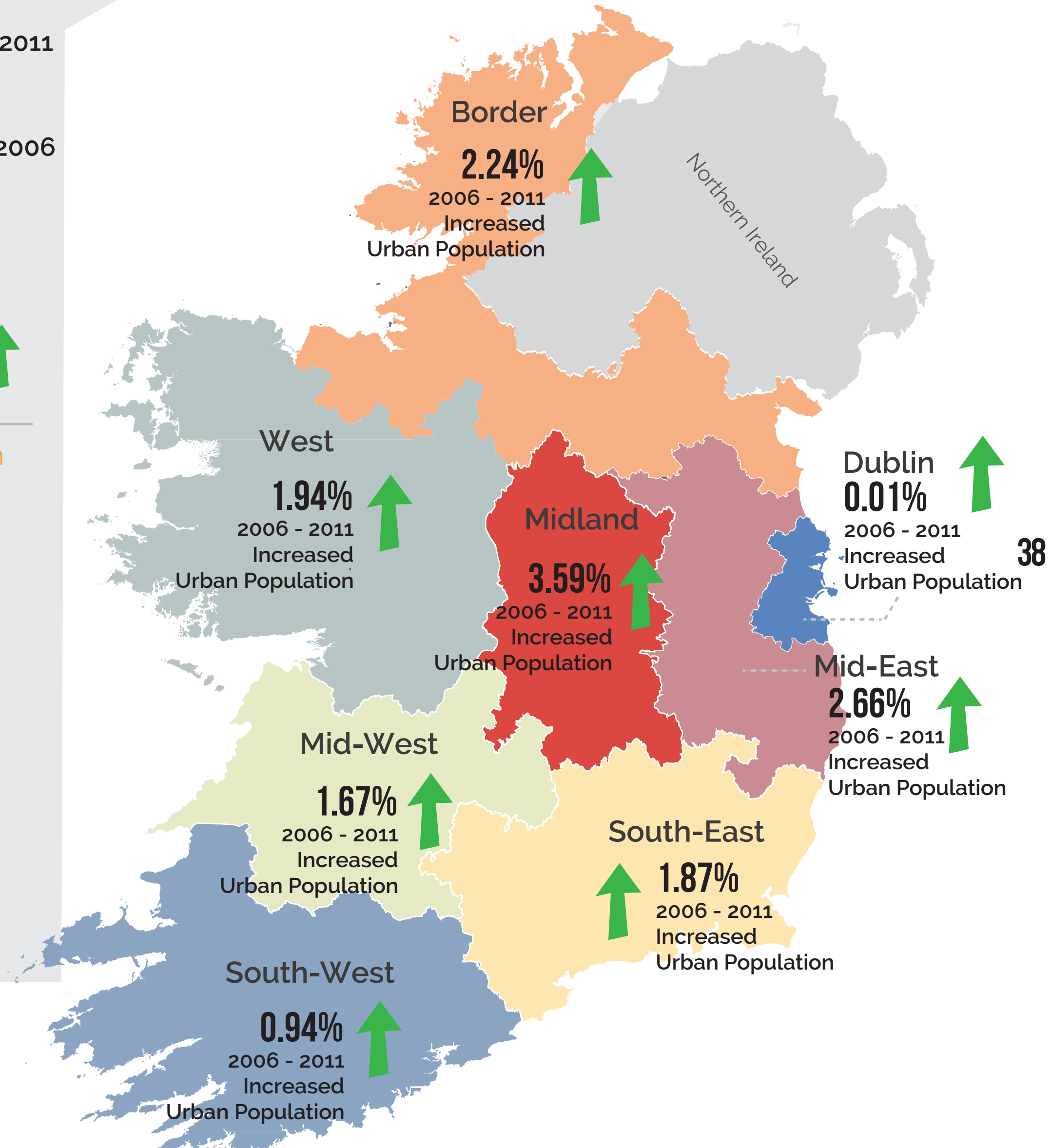


Figure 3.5 - Urban / Rural change for each region between the census 2006 and 2011.

PLEASE NOTE

33 **Urban/rural population ratio**
Absolute figures and relative percentage of those living in urban (towns above 1000) and rural areas by region 2011. Anything below 1000 persons is considered rural. The data used here include all settlements greater than 1000 persons. Please refer to the Glossary for further details.

INCREASE

The overall % of people living in designated urban growth areas (as compared to rural areas) within all of the regions in accordance with national and regional settlement hierarchies.

TARGETS

THEME

People & Places

INDICATORS

Urban/Rural Share

Urban/Rural Share by **Population Ratio and absolute share** for each Region.

Summary and Discussion

(Sources: Central Statistics Office, 2012)

IMPORTANCE OF THE INDICATOR

Structurally strong rural areas promote the development of cohesive communities and stabilise rural economies, enhancing potential for primary productivity and associated added value activities. Consolidated urban areas bring critical mass for the efficient and sustainable provision of services and infrastructure and a network for the distribution of benefits across the urban hierarchy and its rural hinterland.

The share of urban/rural population is an important part of the character of a region and a fundamental consideration in the formulation of policy across all sectors. The consideration of urban and rural population components is important at a regional level to facilitate the resolution of common issues through the alignment of core strategies under an adopted framework across county boundaries. Section 28 Guidelines [34] address generic development issues at Development Plan level based on the characteristics of a particular area, its function and population. This indicator presents the percentage change for settlements greater than 1,000 persons for all regions.

COMMENTARY

Analysis of the urban/rural ratios for the eight regions illustrates that the population of urban areas has increased in comparison to rural areas in each of the regions over the period from 2006 to 2011. This trend toward urbanisation is in line with RPG targets even if at a lower than anticipated rate in some instances. While this does not suggest a large scale move from the countryside to urban living there is a subtle combination of shifts in terms of the growth focus and densification of existing settlements.

OUTLOOK

The overall trend of large urban centres, e.g. Gateways, Hubs and significant County Towns, anchoring the spatial development of their regional hinterlands looks set to continue in line with the aims and objectives of regional spatial planning policy. The increases in urban ratios illustrated over the 2006-2011 inter-censal period show positive moves towards the overall sustainability of the regional settlement patterns, facilitating a gradual enhancement of service efficiencies and value for money in the provision of essential infrastructure. Further analysis on a regional basis, cross-referencing the indicator sets across the economic prosperity, environment and infrastructure sections could provide useful iinsights into the effects of the identified trends.

The uneven progress in the achievement of regional population targets suggests the need for a review of the effectiveness of existing regional planning policies and settlement strategies and highlights the need for more focused, regionally specific settlement policy development. It remains important that vibrant and functional rural areas are maintained and continue to have a fundamental role in the Irish economy and contribute to the maintenance of their respective characters. Efforts must be maintained to ensure that the welfare of rural communities is secured for the benefit of the entire region in which they are located.

[34] 'Sustainable Rural Housing Guidelines for Planning Authorities' and 'Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas (Cities, Towns & Villages)'.

THEME
People & Places
INDICATORS

Dependency Rates

Dependency Rates[35] (Population age dependency trends) by **Region;**

(Sources: Central Statistics Office, 2011[36])

IMPORTANCE OF THIS INDICATOR

This indicator examines the regional population growth trends and age cohorts distribution between census 2002 and 2011. It is a valuable tool for identifying population change and age dependency trends for the provision of future services, e.g. schools and education provision, senior citizen care and health facilities, and the planning of future economic and infrastructure needs of regions, based on empirical population growth records.

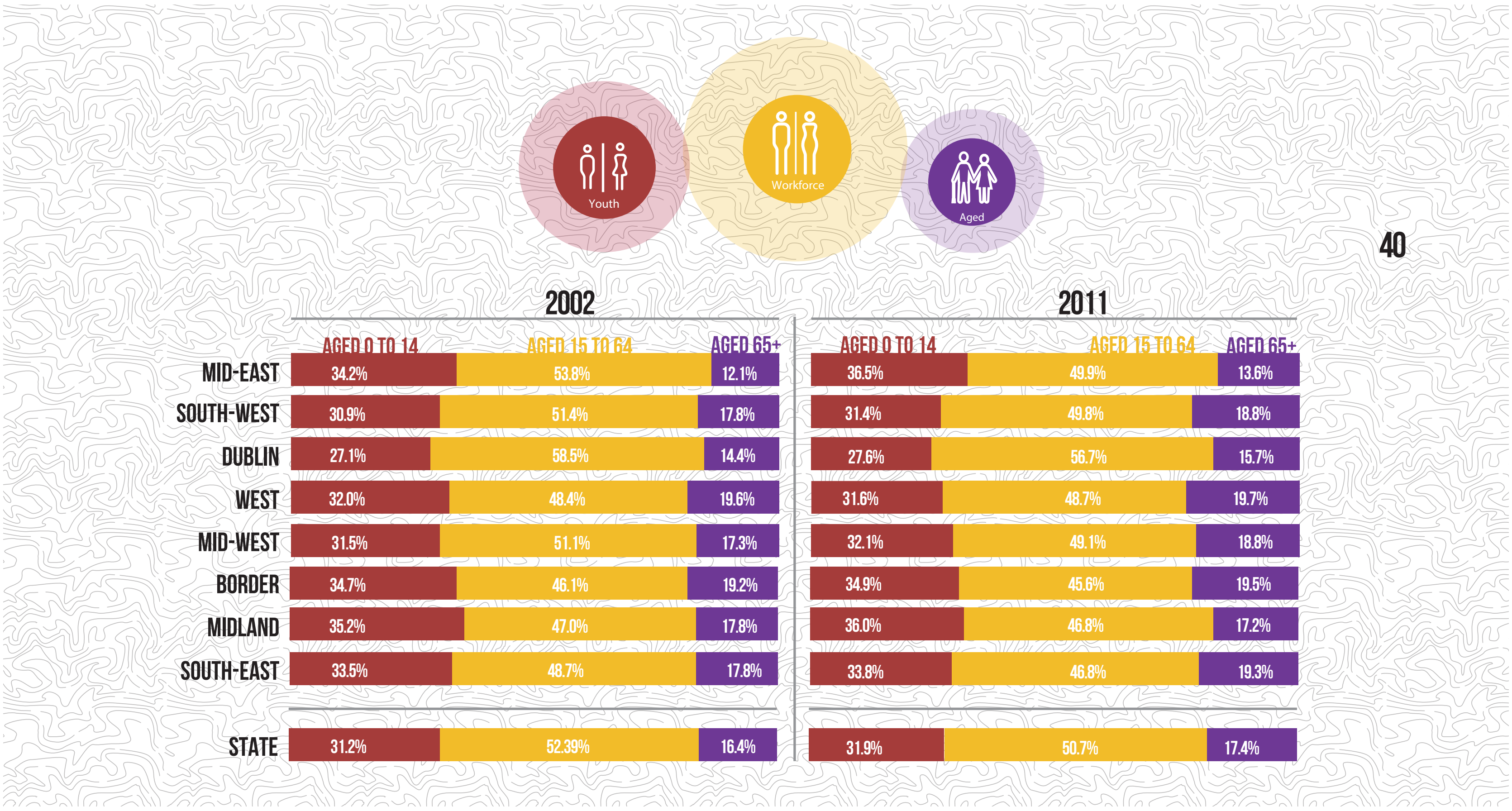


Figure 3.6 - Key Cohort Groups for Dependency Rates across NUTS III Regions 2002 and 2011.

35 Age dependency ratio is the ratio of dependents - people younger than 15 or older than 65 - **relative to the working-age population/labour force**, i.e. those aged 16-64. A dependency ratio is obtained through the application of the following equation: (Number of people aged 0-14 and/or 65) / (Number of people aged 15-65) x 100

36 Dependency data sourced from CSO Census 2011 Profile 2 Ages data for all age cohorts within each region.

THEME

People & Places

INDICATORS

Dependency Rates

Dependency Rates (Population age dependency trends) by **Region;**

(Sources: Central Statistics Office, 2011)

COMMENTARY

Figure 3.6 illustrates the considerable variation in key age cohorts between regions in 2002 and 2011. All regions have experienced an increase in categories 1-14 and 65+ cohorts as a result of the baby boom and ageing profile of Irish society. The key message emerging from an analysis of the 2002 and 2011 data is that there is now a greater squeeze on the working population (15-64) due to the increasing percentage of people in the older and younger categories. The current recession that we are experiencing further compounds this problem in that there are fewer people within the working age category and, therefore, the labour force is smaller and public finances are depending on a smaller working population to contribute to the economy.

To further this analysis, it is important to look at the dependency rates between regions. This information is provided in Figure 3.7.

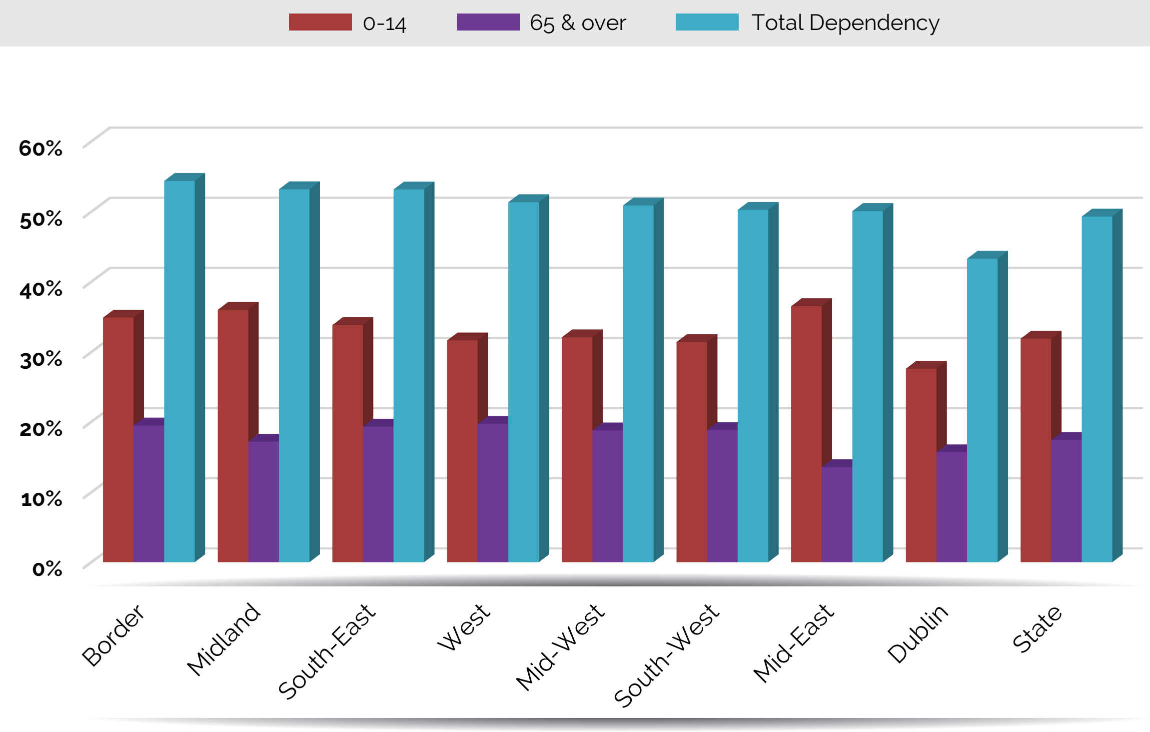


Figure 3.7 - Dependency Rates in NUTS III Regions in 2011.

THEME

People & Places

INDICATORS

Dependency Rates

Dependency Rates (Population age dependency trends) by **Region;**

(Sources: Central Statistics Office, 2011)

Not surprisingly, the chart demonstrates that the more rural regions have a higher total dependency when compared with regions that have larger settlements and, therefore, more jobs and are considered more economically active. While the larger city regions have the highest rates of economically active age cohorts which correlate with the GVA outputs and employment indicators set out under the Economic Prosperity theme, it is recognised that some Regions may provide more attractive quality of life options in which to rear families or for retirement, thus impacting on the dependency ratios. Such variations should be taken into account in the provision of the new RSES to be formulated under the revised National Spatial Strategy.

OUTLOOK

The key emerging trends identified from figure 3.6 and 3.7 are that there is a significant shift in the age profile of Irish society, towards a growing youth population and an ageing society. Such findings indicate that the potential working population will, in the medium term, shrink as a proportion of Irish society, with implications for age related spatial planning, housing provision, economic development and the future funding and provision of social services and amenities for future generations. It may also be beneficial in future studies to investigate the impacts of net migration and natural population increase to determine their potential impacts on the future age cohort distribution in the short to medium term.

The current baby boomers will over the next decades enter primary, secondary and tertiary education with significant implications for the type of education and skills training provided, housing and job creation. Consequently, it is considered that the inter-relationship between this indicator and the Economic Prosperity and Infrastructure themes should be studied further, particularly at sub- regional and local level.

THEME
People & Places

INDICATORS

Housing Stock Housing Vacancy

Housing Stock & Vacancy by **Region**, Gateway, Hub & Tier 1 Settlement;

Total **Housing Stock** by **Status of Occupation.**

(Sources: Central Statistics Office, 2011[37])

IMPORTANCE OF THE INDICATOR

Housing, specifically the location of new housing, is one of the key areas which can be managed and directed through application of RPG policy. Over provision in some areas and under provision in others is a significant issue to emerge from the 'Celtic Tiger' period.

The RPGs inform housing requirements at the county, city and town levels by translating anticipated population growth into housing needs, e.g. having regard to occupancy rates. This in turn provides a basis to inform housing land needs and the quantum and distribution of residential zoning required. In pursuit of sustainable regions, it is of critical importance that regional population growth is targeted at the largest urban centres within each region as set out in the various settlement hierarchies.

This indicator, which looks at housing stock in the context of location and occupation over time, provides a broad overview of this complex scenario. It should be noted that these outputs should be treated as a baseline measurement, as RPG policy provisions have only been incorporated into their subsidiary plans over the period from 2011-2012 and are, therefore, unlikely to have had a significant effect on the pattern of residential development at this point.

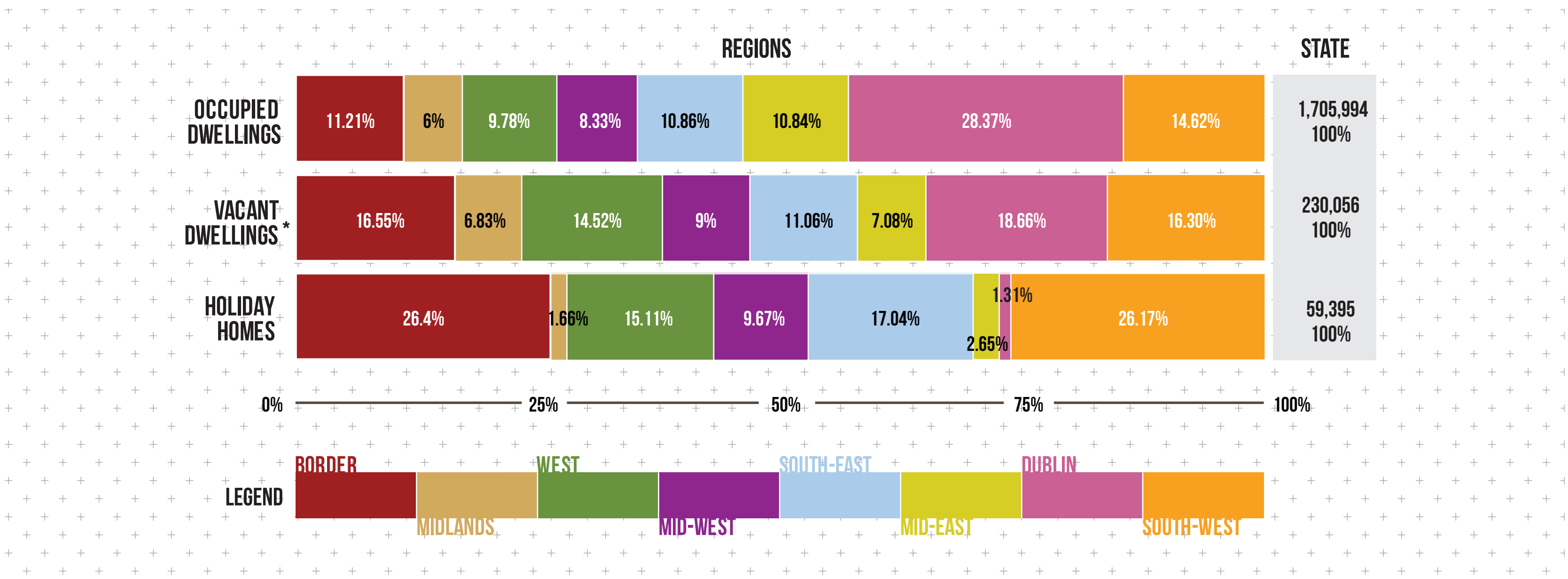


Figure 3.8 - Housing stock - Occupied, Vacant and Holiday Homes by Region as a percentage of the State.

REDUCE

Reduce overall residential vacancy to normal market conditions, c. 5.5% - 7%.

TARGETS

37 CSO Census 2011 - Profile 4 "the roof over our heads" table 1a. Central Statistics Office (2011).
* Note: Vacant Dwellings do not include holiday homes.

THEME

People & Places

INDICATORS

Housing Stock Housing Vacancy

Housing Stock & Vacancy by **Region**, Gateway, Hub & Tier 1 Settlement;

Summary and Discussion

(Sources: Central Statistics Office, 2011[38])

COMMENTARY

Figure 3.8 illustrates the relative proportion of occupied, vacant and holiday dwellings by region in 2011. Three regions, Dublin, the Mid-East and the South-West, account for over half of the occupied dwellings in the state, while 45% of vacant dwellings are located in the Border, Midland, West and Mid-West. Two regions, the Border and the South-West, collectively account for over half of Irish holiday homes which have been removed from the vacancy figures for the purpose of this analysis as they are generally not available for permanent occupation.

While the overall vacancy rate appears to be more evenly spread throughout the country, the important aspect of this graphic is the relationship in each instance between the proportion of occupied dwellings and vacancy and the implications of this relationship for the picture painted by Figure 3.1. that illustrates the progress in achieving RPG population targets.

Areas where targets are being reached or surpassed and that have a high ratio of vacant to occupied dwellings are a cause for concern, potentially indicating areas of housing over-supply without a commensurate demand into the future. Similarly, issues need to be addressed in areas that appear to struggle in meeting allocated targets and where vacancies still exist. These relationships require further sub-regional analysis to ascertain where vacant dwellings have been located relative to the provisions of the respective settlement strategies and how the dynamics of supply-demand location and need can be more sustainably aligned.

The complexity of this indicator should be emphasised as there are many aspects that cannot be measured in simple terms and require further in-depth analysis. The nature of the units that have been provided and their suitability as permanent housing units or the overall availability of housing land relative to the demand has not been addressed. The diverse nature of the regional housing markets means that these and other issues should be teased out at regional and sub-regional level, and cross-referenced with other indicators to provide a holistic picture.

As can be expected, there was a significant increase in the housing stock between 2006 and 2011 within all of the regions, with most areas having experienced growth in their housing stock of in excess of 10% over this five-year period. Upon closer scrutiny, multiple factors including the displacement of demand to areas outside the main regional growth areas (as envisaged within the NSS and RPGs) have given rise to a mixed picture regarding sustainable housing growth and the uneven distribution of housing oversupply around the Country.

REDUCE

Reduce overall residential vacancy to normal market conditions, c. 5.5% - 7%.

TARGETS

39 Permanent Housing Units by Occupancy Status (Census 2006, 2011), CSO.

THEME
People & Places

INDICATORS

Housing Stock   Housing Vacancy

Housing Stock & Vacancy by Region, **Gateway, Hub & Tier 1 Settlement**;

Summary and Discussion

(Sources: Central Statistics Office, 2011[39])

The statistics clearly illustrate that, at the regional level, there are significant variations between vacancy rates. The vacancy rates in the Dublin and Mid-East regions are the lowest of any of the regions and have fallen since 2006. A number of other regions have also experienced declines in vacancy rates since 2006, but there are a small number of regions which feature quite high vacancy rates, having experienced increases in vacancy since 2006.

These variations in vacancy rates are also borne out at the level of the Gateways and Hubs, where there are significant variations between Gateways and Hubs within different regions. It is interesting to note the differences in vacancy rates between differently sized towns in the same region in some instances, which could possibly highlight issues requiring further study at sub-regional level.

OUTLOOK

Taking account of the issues which currently exist surrounding housing, it is essential that the increases in the available housing stock are managed in a more sustainable manner and more closely aligned with targeted needs for specific unit types in particular areas.

The incorporation of evidence-based core strategies is the first step toward this alignment which provides broader links with infrastructural provision services and community facilities.

The continued efforts at a national and local level to address the legacy issues of unfinished housing development remain important to moving towards sustainable levels of vacancy and market supply. It is important to manage the supply of residential development and not repeat the mistakes of the past. The significant proportion of holiday homes in some regions requires sub-regional analysis and focus in terms of the medium to long term implications for rural settlement patterns and infrastructural investment.

REDUCE Reduce overall residential vacancy to normal market conditions, c. 5.5% - 7%. **TARGETS**

[39] Permanent Housing Units by Occupancy Status (Census 2006, 2011), CSO.

THEME

People & Places

INDICATORS

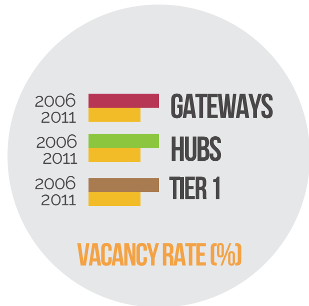
Housing Stock Housing Vacancy

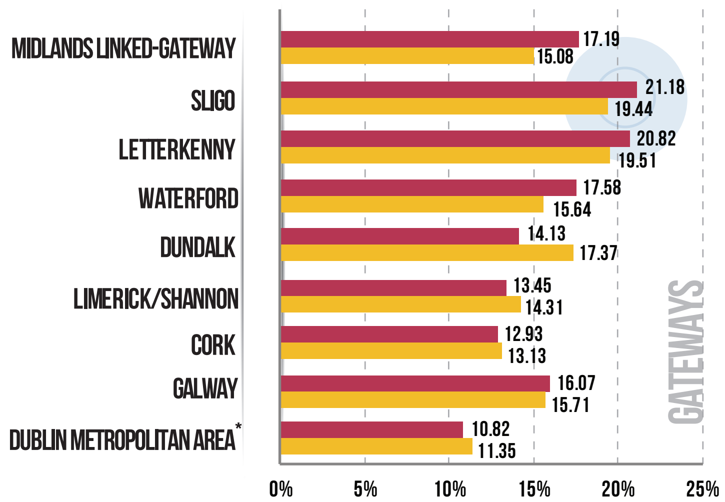
Housing Stock & Vacancy by Region, **Gateway, Hub & Tier 1 Settlement**;[40]

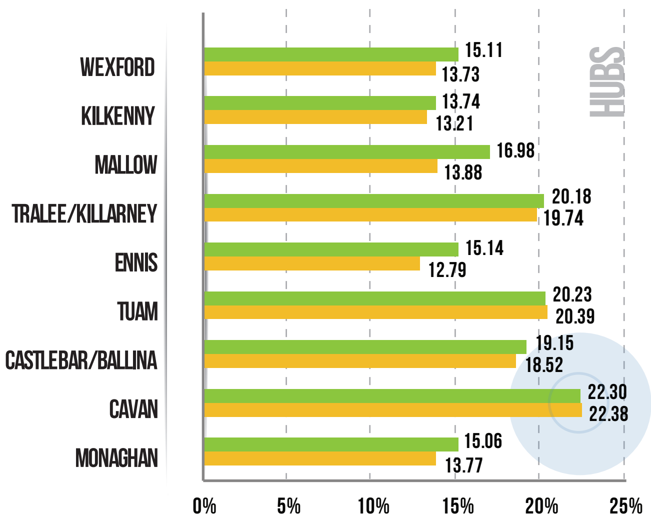
Housing Vacancy by **Gateways, Hubs and Tier 1 Settlements**.

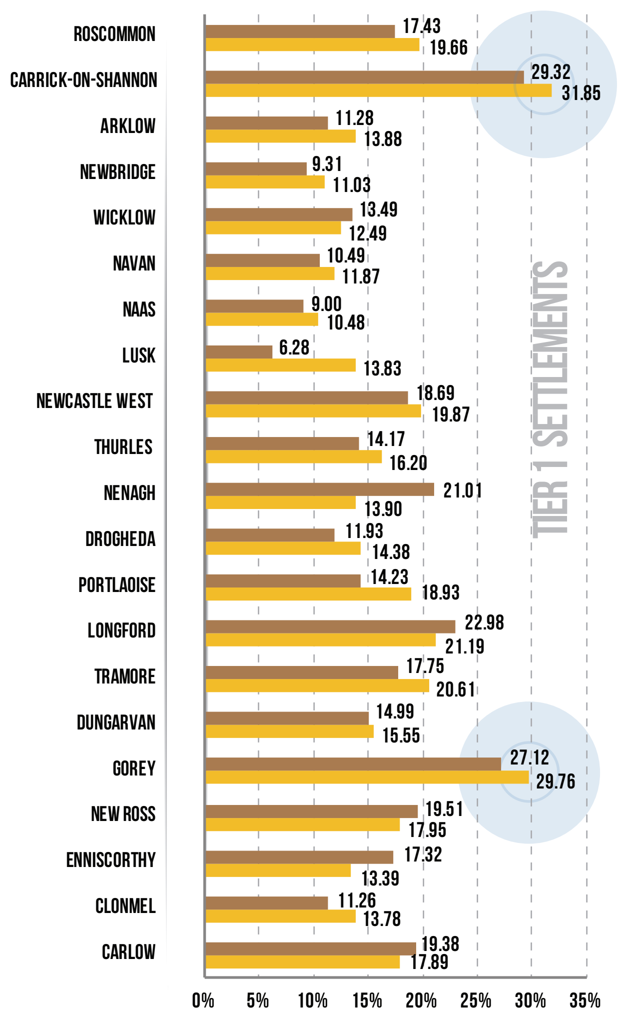
(Sources: Central Statistics Office, 2011[41])

Table 3.8 - Vacancy Rate per Gateway, Hub and Tier 1 Settlement by Census years 2006 and 2011.









REDUCE

Reduce overall residential vacancy to normal market conditions, c. 5.5% - 7%.

TARGETS

40 Towns below hub level defined as regionally important in RPGs.

41 Permanent Housing Units by Occupancy Status (Census 2006, 2011), CSO.

* Please note that while Cherrywood, Greystones, Dunboyne, Maynooth and Leixlip fall within the definition of Tier 1 Towns, they have been incorporated within the figures for the Dublin Metropolitan Area.

THEME
People & Places

INDICATORS

Work-Related Communting

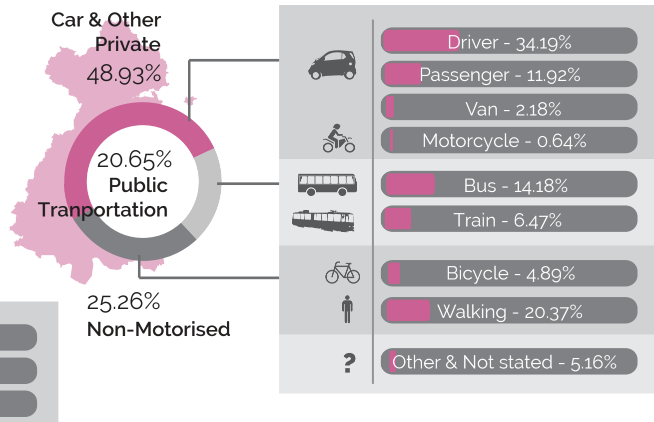
Work-related commuting by Region

Work-related commuting by private car, public transport, cycling or walking.

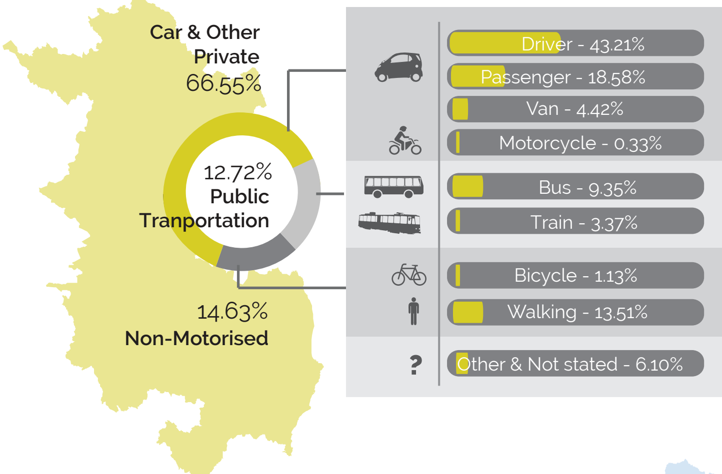
(Sources: POWSCAR, Central Statistics Office, 2011 [42])

Figure 3.9 - Work-related commuting per region (Dublin, Mid-East, South-East & South-West) by mode of transport.

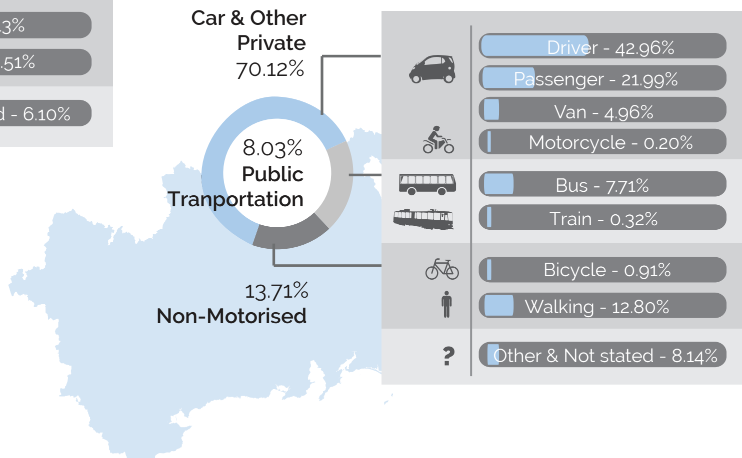
MODE OF TRANSPORT - DUBLIN REGION



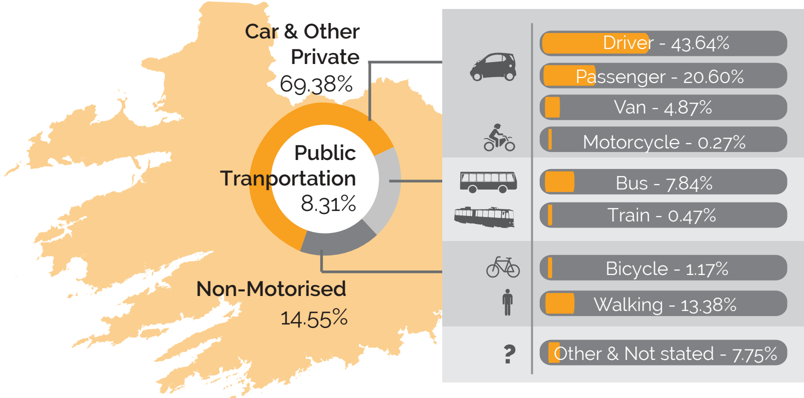
MODE OF TRANSPORT - MID-EAST REGION



MODE OF TRANSPORT - SOUTH-EAST REGION



MODE OF TRANSPORT - SOUTH-WEST REGION



REDUCE work-related commuting by private car from the current modal share of 65% to 45% by 2020 (Smarter Travel).

TARGETS

[42] Place of Work, School or College - Census of Annonymised Records (POWSCAR). Census 2011, CSO.

THEME
People & Places

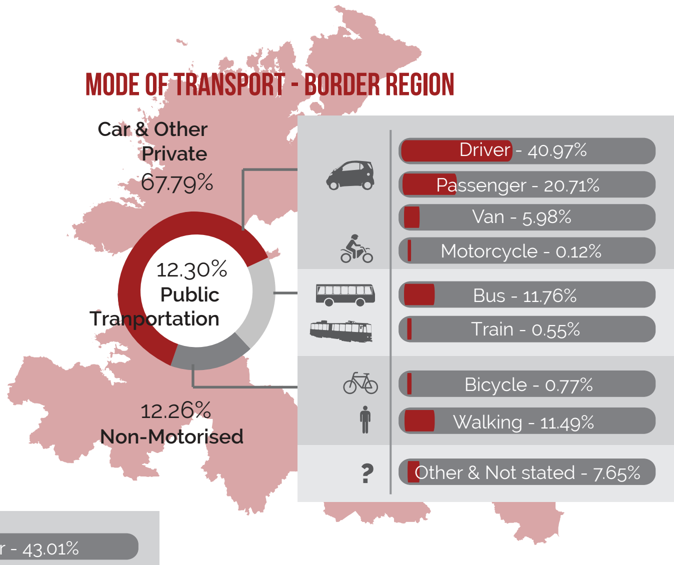
INDICATORS

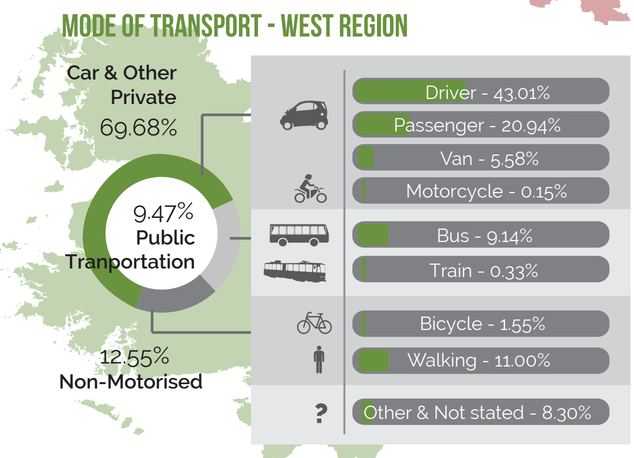
Work-Related Communting

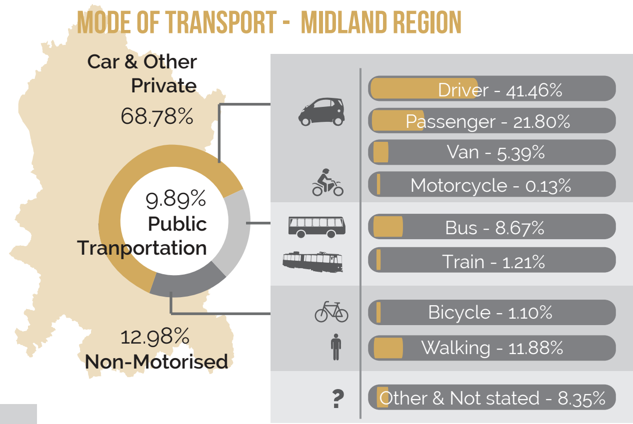
Work-related commuting by Region

Work-related commuting by private car, public transport, cycling or walking.

(Sources: POWSCAR, Central Statistics Office, 2011[43])







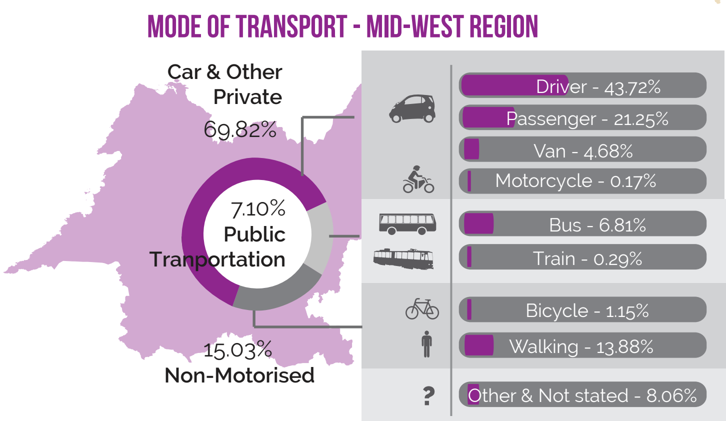


Figure 3.10 - Work-related commuting per region (Border, West, Midland and Mid-West) by mode of transport.

REDUCE work-related commuting by private car from the current modal share of 65% to 45% by 2020 (Smarter Travel).

TARGETS

[43] Place of Work, School or College - Census of Annonymised Records (POWSCAR). Census 2011, CSO.

THEME

People & Places

INDICATORS

Work-Related Communting

Work-related commuting by Region

Work-related commuting by private car, public transport, cycling or walking.

(Sources: POWSCAR, Central Statistics Office, 2011[44])

IMPORTANCE OF THE INDICATOR

This indicator provides a breakdown of the transport modes used by people within the regions to travel to work. High levels of public transport use, cycling and walking suggest that people live in close proximity to their workplace and these are the most desirable modes of travel in terms of environmental impact.

Amongst the key features of successful regions will be a good quality public transport network, with a high proportion of utilisation amongst residents and good pedestrian and cycle linkages, allowing for an adequate choice in transportation modes.

COMMENTARY

The private car remains the most popular choice of transport across all regions for travelling to work. Regions that exhibit the lowest levels of public transport usage, and are the most car dependent, are generally those with the more dispersed settlement patterns (see urban/rural share) and limited availability of public transport options.

Public transport and green modes of transport such as walking and cycling are usually highest in the more urban regions (though not always the case) given the general close proximity of workplaces (see figures 3.9 and 3.10) and wider offering of public transport available.

OUTLOOK

Increased provision and uptake of sustainable travel and transport modes are required, particularly in regions outside of Dublin which are experiencing strong population growth. Innovative solutions will be required to address public transport deficits in areas with a more dispersed population, an element that may form part of the restructuring of the rural transport schemes currently underway by the National Transport Authority.

A reappraisal of the hard infrastructure requirements to encourage sustainable travel patterns and the implementation of initiatives supporting higher levels of walking and cycling would serve to strengthen the regions in meeting Smarter Travel targets.

This indicator provides insight into the availablity of jobs within a catchment area, alongside the commuting patterns of its residents. A stong Gateway/Hub, and to a lesser extent Tier 1 Towns, should provide a variety of employment opportunities for its residents and, with a growing population, this will potentially create greater opportunities for the provision of sustainable travel and transport options.

[44] Place of Work, School or College - Census of Annonymised Records (POWSCAR). Census 2011, CSO.

PEOPLE AND PLACES: SUMMARY

Demographic analysis of population growth indicates greater challenges in some regions in terms of high age dependency rates where there is a limited available workforce to support these dependant populations.

The higher educational attainment of females in all regions as shown in Figure 2.9 may have implications for demographic structure into the future as higher order employment potentially influences family formation. The age composition of the regions is also critically important in other areas such as work-related commuting. For example, if there are a higher number of school-going children requiring drop-offs before work, limited available public transport choices become even less feasible.

Housing stock and vacancy is not always linked to population growth as outlined in the indicators. Regional disparities can disguise underlying trends that require further investigation and, again, focussed measures to address and reverse negative trends.

The ability of a region to reach its targeted population is a core element of the RPGs. Attainment of critical mass is a central theme and the indicators provided illustrate that there are significant regional disparities in the success of this policy. An important consideration in this regard is the attractiveness of a region from the perspective of those wishing to settle in a particular area.

The concept of "smart specialisation" in this regard comes into play when aligned with the indicator for GVA by sector that illustrates the individual breakdown of economic activity by sector for each region. These specialities were referred to in the NSS, refined by the 'Forfás Regional Competitiveness Agendas 2009' and incorporated into the respective RPGs. The diverse economic landscape of each region can surely reflect an equally diverse response in terms of land usage, settlement pattern, rate, intensity and temporal realisation. It is only through the measurement of these trends, that are facilitated in a strategic manner by the development of this baseline, that these subtleties can be identified and capitalised upon.

The 2006-2011 period represented a time of significant change across the Irish economy, simultaneously defining and fuelling population increases, shifting from natural increase to positive migration and back again. Altered demographic patterns illustrate significant dependency rates across most regions. These changing patterns will have associated implications for investment. These changes and how they are managed were, and continue to be, fundamental in the progress towards achieving sustainable regions.

The indicators outlined in this section provide a baseline, and a strategic overview of regions which identifies their diversity and uniqueness and provides a platform from which we can build upon, rather than resorting to, standardised approaches at a national level. While appearing to be similar at face value, these issues have specific underlying regional causes requiring regionally targeted solutions.

Environment and Infrastructure

Indicators

Status of Water Bodies

UWWTD Compliance

WTP/WWTP

Renewable

Energy

Managed & Unmanaged Waste

EU Habitats and Species

THEME: ENVIRONMENT & INFRASTRUCTURE 04

DESCRIPTION

Our economy and society are wholly dependent on the resources and services provided by the natural environment from the supply of clean water, production of food (e.g. agriculture, fishing), pest control, pollination, recycling of waste, carbon sequestration, to the provision of medicines. A high quality environment enhances our well-being and quality of life. It also offers a strategic competitive advantage in attracting businesses and encouraging economic activity in a region.

The RPGs seek to integrate sustainable economic and social development with the protection and enhancement of the natural environment through strategies which first and foremost avoid significant adverse effects on the environment. Much of our environmental policy stems from European and international legislation and many targets have now been established at regional level (e.g. water), with others at national level (e.g. waste and renewable energy).

POLICY

The relevant policies under this theme relate to the Water Framework Directive and achieving good ecological status for all waters in line with the River Basin Management Plans 2015 and meeting the targets of the Urban Wastewater Treatment Directive. The EU Energy Service Directive seeks a reduction in energy consumption of 9% by 2016 and the Renewable Energy Directive requires that renewable sources contribute 16% of final energy consumption by 2020. The national target is 40% of electricity to be generated from renewable sources by 2020.

Nationally, the DECLG's 'Changing Our Ways' target seeks to reduce the levels of 'unmanaged waste' and reach 'managed' waste targets in line with the Regional Waste Plans and the Waste Framework Directive. The EU Habitats and Birds Directives seek to protect and conserve threatened habitats and species which are of high biological diversity importance through the Natura 2000 network which is a pan-European network of sites called Special Areas of Conservation and Special Protection Areas.

AIMS & OBJECTIVES

In order to monitor environmental considerations, the following aims were established:

- To enable the achievement of regional environmental quality targets by coordinating spatial plans with other relevant environmental plans and strategies (e.g. water quality, climate change and waste); and

- To ensure that the development of the region progresses in a way that protects, maintains or enhances the quality of the natural environment in line with national and European legislation.

THEME

Environment & Infrastructure

INDICATORS

Status of Water Bodies

Status of all water bodies (groundwater, rivers, lakes, estuarine, coastal, bathing and drinking waters).

(Sources: Environmental Protection Agency, 2009/2013 [45])

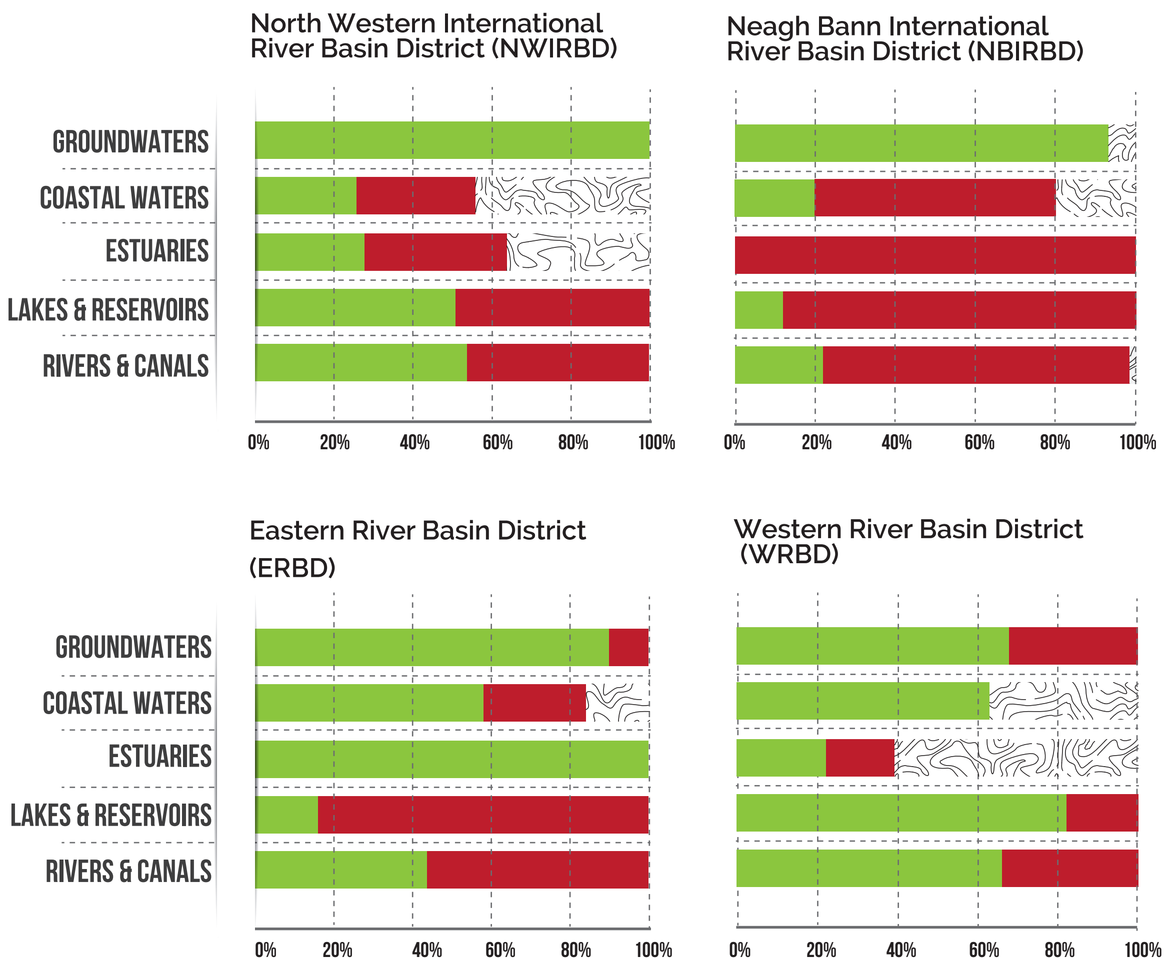


Figure 4.1 - Existing Water Ecological Status in NWIRBD, NBIRBD, ERBD & WRBD (RBDs). [46]

TARGETS

ACHIEVE 'good (ecological) status' by 2015 (or consecutive timeframes) as set out in each River Basin Management Plan and in accordance wth the Water Framework Directive.

[45] Data have been sourced and adapted from (a) status assessments carried out by the Environmental Protection Agency on behalf of the various River Basin Districts for their respective River Basin Management Plans; and (b) Surface water trends data for the period 2009 - 2011 (EPA, 2013).

[46] RBD or River Basin District: administrative areas for coordinated water management and are comprised of multiple river basins (or catchments), with cross-border basins (i.e. those covering the territory of more than one country) assigned to an international RBD under the Water Framework Directive.

THEME

Environment & Infrastructure

INDICATORS

Status of Water Bodies

Status of all water bodies (groundwater, rivers, lakes, estuarine, coastal, bathing and drinking waters).

(Sources: Environmental Protection Agency, 2009/2013 [47])

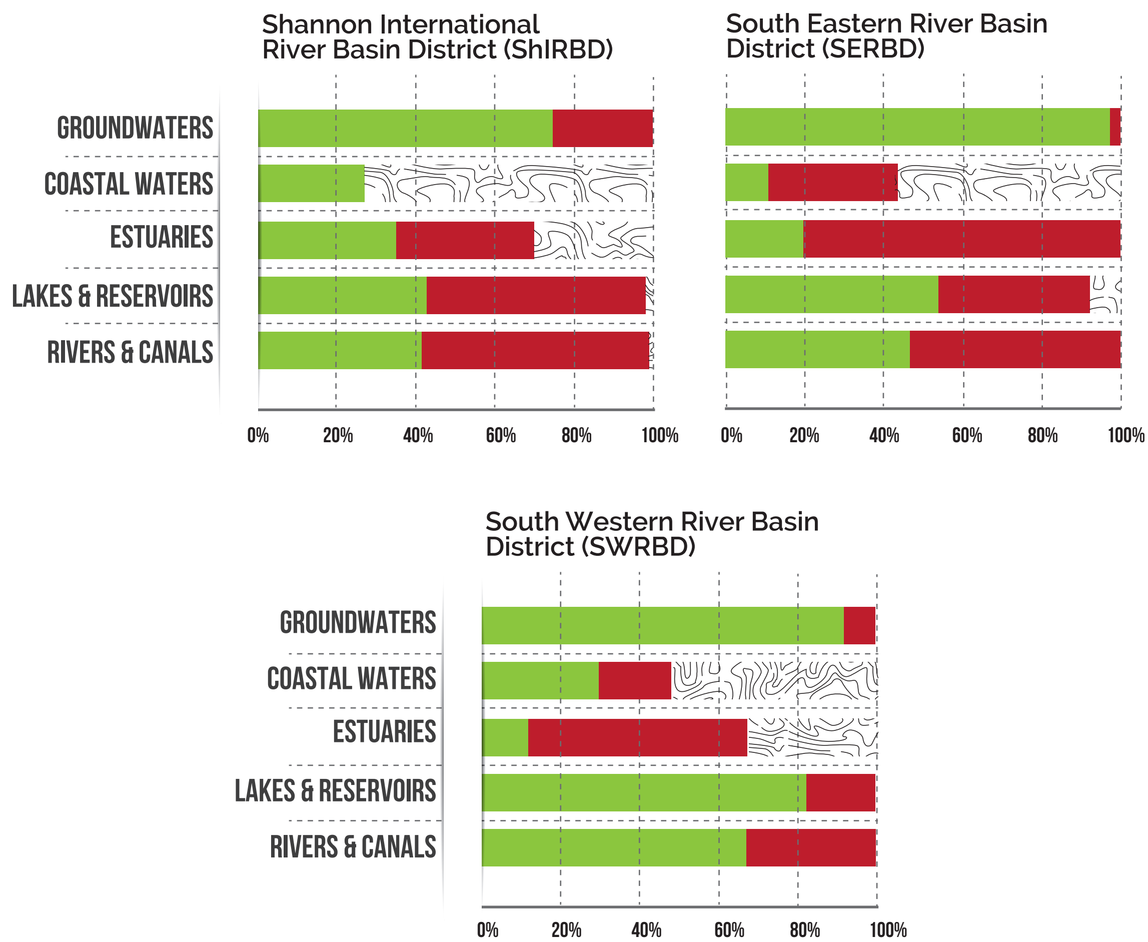


Figure 4.2 - Existing Water Ecological Status in ShIRBD, SERBD, SWRBD (RBDs). [48]

TARGETS

ACHIEVE 'good (ecological) status' by 2015 (or consecutive timeframes) as set out in each River Basin Management Plan and in accordance wth the Water Framework Directive.

Good Ecological Status	Bad Ecological Status	?
SATISFACTORY	NOT SATISFACTORY	NOT YET DETERMINED

47 Data have been sourced and adapted from (a) status assessments carried out by the Environmental Protection Agency on behalf of the various River Basin Districts for their respective River Basin Management Plans; and (b) Surface water trends data for the period 2009 - 2011 (EPA, 2013).

48 RBD or River Basin District: administrative areas for coordinated water management and are comprised of multiple river basins (or catchments), with cross-border basins (i.e. those covering the territory of more than one country) assigned to an international RBD under the Water Framework Directive.

THEME

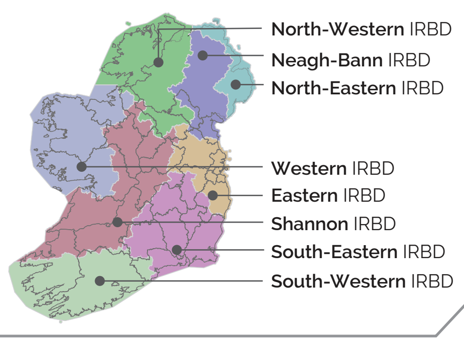
Environment & Infrastructure

INDICATORS

Status of Water Bodies

Status of all water bodies (groundwater, rivers, lakes, estuarine, coastal, bathing and drinking waters).

(Sources: Environmental Protection Agency, 2009/2013 [49])



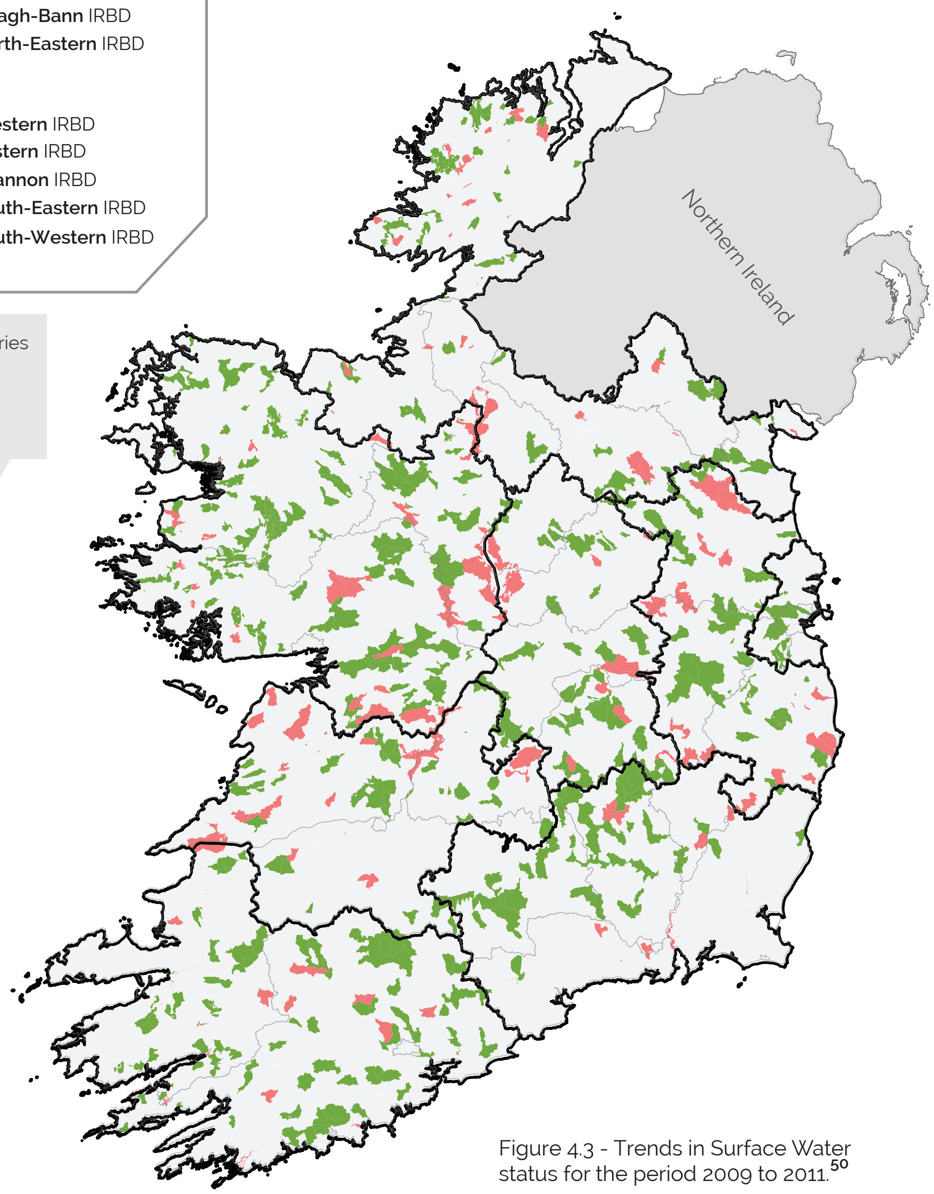


Figure 4.3 - Trends in Surface Water status for the period 2009 to 2011.[50]

TARGETS

ACHIEVE

'good (ecological) status' by 2015 (or consecutive timeframes) as set out in each River Basin Management Plan and in accordance wth the Water Framework Directive.

49 Data have been sourced and adapted from (a) status assessments carried out by the Environmental Protection Agency on behalf of the various River Basin Districts for their respective River Basin Management Plans; and (b) Surface water trends data for the period 2009 - 2011 (EPA, 2013).

50 RBD or River Basin District: administrative areas for coordinated water management and are comprised of multiple river basins (or catchments), with cross-border basins (i.e. those covering the territory of more than one country) assigned to an international RBD under the Water Framework Directive.

THEME

Environment & Infrastructure

INDICATORS

Status of Water Bodies

Status of all water bodies (groundwater, rivers, lakes, estuarine, coastal, bathing and drinking waters).

(Sources: Environmental Protection Agency, 2009/2013 [47])

IMPORTANCE OF THE INDICATOR

Water body status gives an indication of the impact of urban and rural development on water quality in the regions. Under the objectives of the Water Framework Directive (WFD), public bodies have an obligation to prevent the deterioration of all waters and to restore degraded waters to good status by 2015. Activities related to water management (protection, improvement and sustainable use) must be planned in an integrated and consistent manner across the EU. The WFD is relevant to surface water (i.e. inland - rivers, canals, lakes, reservoirs; coastal - estuaries and coastal waters), heavily modified water bodies (i.e. modified by anthropogenic activities), groundwater, coastal waters and estuaries (i.e. transitional waters). Please note that the Regional Authority boundaries do not correspond with the natural (watershed) boundaries of the River Basin Districts (refer to inset map in Figure 4.3).

COMMENTARY

Figures 4.1 and 4.2 identify whether the eight River Basin Districts are reaching 'satisfactory' ecological status as set out in the River Basin Management Plans 2009-2015. They show that groundwater status (which is heavily dependent on surface water status) is most likely to be of satisfactory condition across the RBDs, though there is significant variation among the general status of coastal waters, estuarines, lakes, reservoirs, rivers and canals.

Figure 4.3 provides an overview of surface water trends from 2009 to 2011. All of the RBDs have experienced a reduction in surface water quality (red areas) which is contrary to the target of the Directive, yet there is a greater amount of improving surface waters in the RBDs (green areas).

OUTLOOK

Given the obligations set out under the Water Framework Directive, improving the quality of water bodies is imperative to securing the long term protection and enhancement of the natural environment within the regions. It is also necessary to protect human health and sustain regional economies. Many water bodies will require longer timeframes to 2021 or 2027 in order to improve their status, which is a trend emerging across Europe.

Ireland and Irish Regions must improve the status of some 4,000 kms of rivers alone which are at less than good ecological status and special protection measures (including associated funding) are necessary to protect and restore all types of high-status waterbodies which are under pressure from a variety of pollution sources.

[51] Data have been sourced and adapted from (a) status assessments carried out by the Environmental Protection Agency on behalf of the various River Basin Districts for their respective River Basin Management Plans; and (b) Surface water trends data for the period 2009 - 2011 (EPA, 2013).

THEME

Environment & Infrastructure

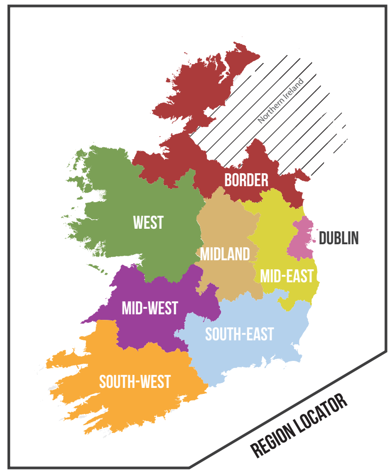
INDICATORS

WTP/WWTP & UWWTD Compliance

Water and Wastewater Treatment Capacities to accommodate 2016 Population Targets and **Compliance with the UWWTD Discharge Licences** in the Gateways, Hubs & Tier 1 Settlements.

(Sources: Local Authorities, 2013; EPA, 2013[52])

- **Infrastructure is sufficient** to achieve the RPG or Development Plan target for 2016
- **Some development may proceed** (subject to altered operational procedures or future investment in infrastructure) which will accommodate the RPG or Development Plan target for 2016
- **Investment in infrastructure is required** to accommodate the RPG or Development Plan target for 2016



CAPITAL WATER SERVICES INVESTMENT PROGRAMME (WSIP) 2010 - 2013 [53]

- CC — CONSTRUCTION COMPLETED
- CaC — CONTRACTS AT CONSTRUCTION
- CS — CONTRACTS TO START (INCLUDES TENDER STAGES)
- PS — SCHEMES AT PLANNING STAGE (INCLUDES DESIGN, PRELIMINARY REPORT OR STUDY PHASE)
- NW — SETTLEMENTS NOT LISTED ON CAPTIAL WSIP

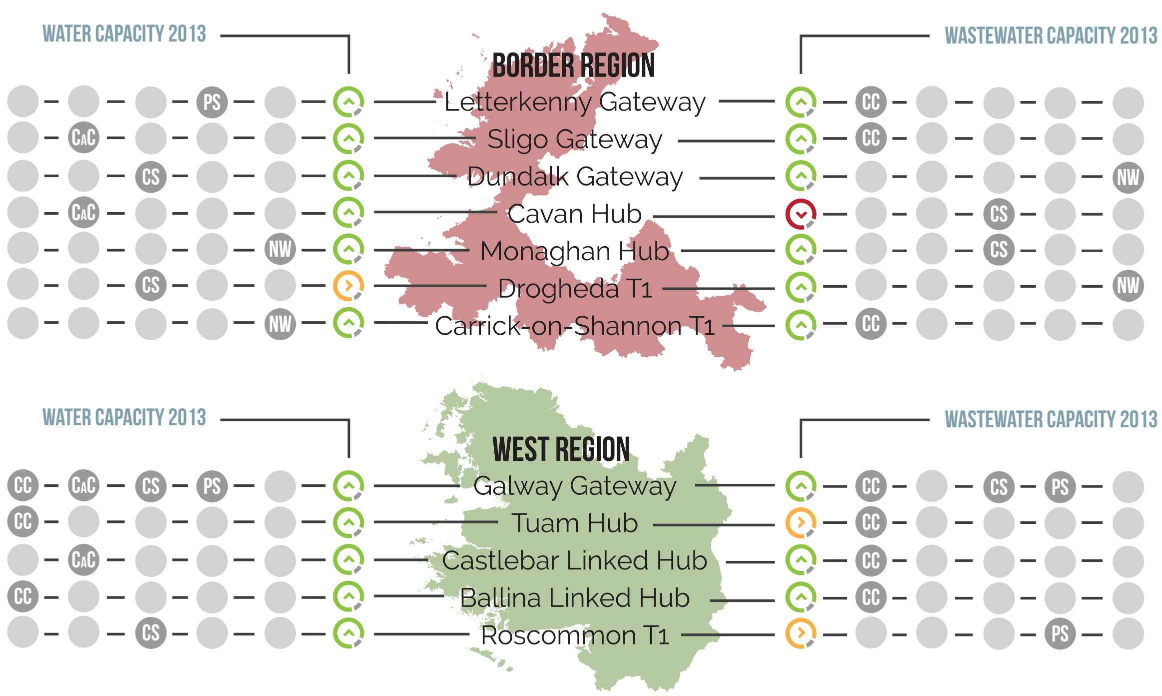


Figure 4.4 - Water & Wastewater capacities per Gateway, Hub and Tier 1 Settlement (T1).[54]

TARGETS

INCREASE the number of RPG settlements where infrastructure is sufficient to achieve the RPG or Development Plan population target for 2016.

INCREASE the number of RPG settlements that achieve compliance with UWWTD.

52 'Focus on Urban Waste Water Discharges in Ireland' - Urban Waste Water Treatment in 2011 (EPA, 2013).
53 Works can include plant or network upgrades or rehabilitation.
54 Towns below hub level defined as regionally important in RPGs.

THEME

Environment & Infrastructure

INDICATORS

WTP/WWTP & UWWTD Compliance

Water and Wastewater Treatment Capacities to accommodate 2016 Population Targets and Compliance with the UWWTD Discharge Licences in the Gateways, Hubs & Tier 1 Settlements.

(Sources: Local Authorities, 2013; EPA, 2013[55])

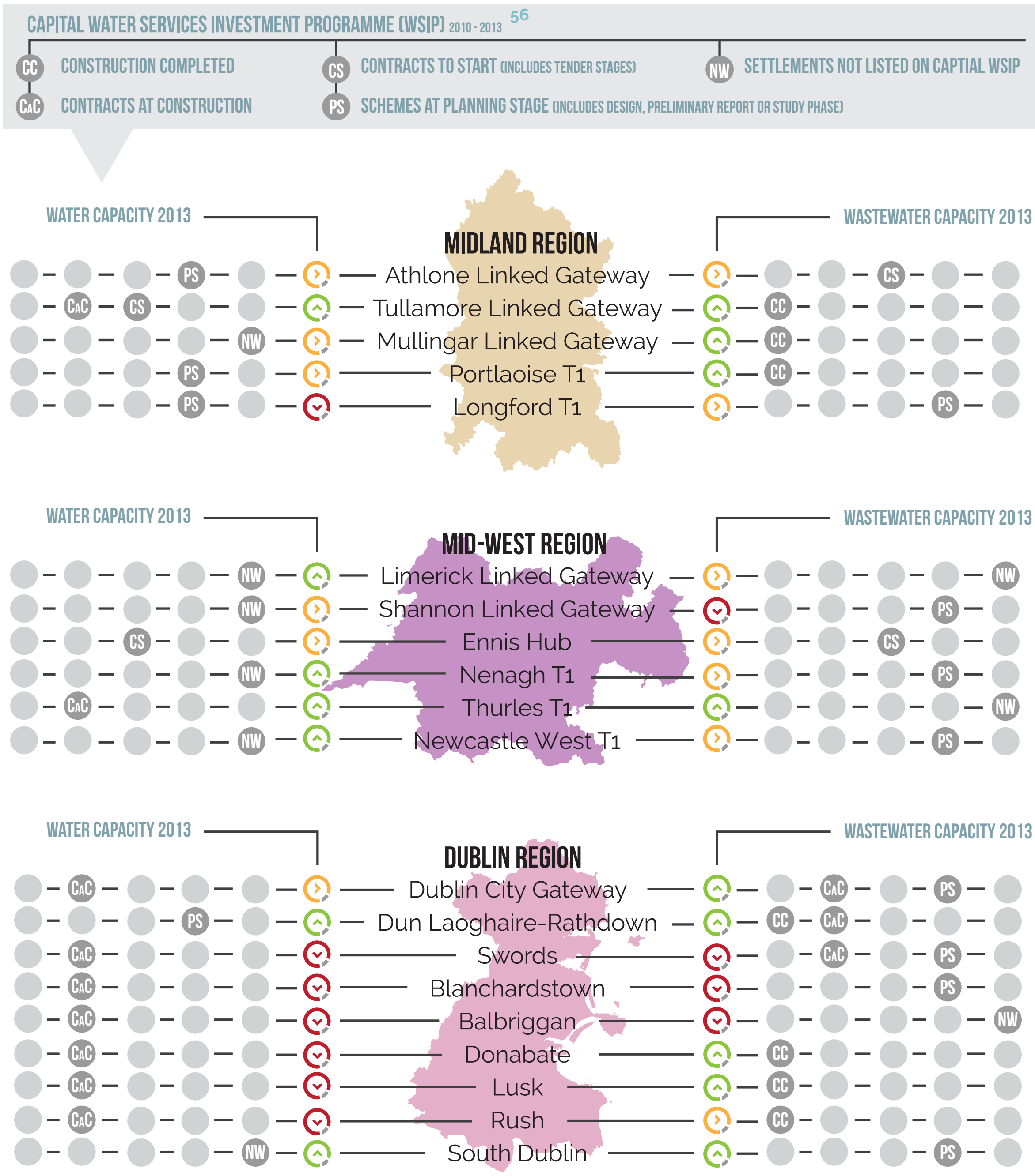


Figure 4.5 - Water & Wastewater capacities per Gateway, Hub and Tier 1 Settlement (T1).[57]

TARGETS

INCREASE the number of RPG settlements where infrastructure is sufficient to achieve the RPG or Development Plan population target for 2016.

INCREASE the number of RPG settlements that achieve compliance with UWWTD.

55 'Focus on Urban Waste Water Discharges in Ireland' - Urban Waste Water Treatment in 2011 (EPA, 2013).
56 Works can include plant or network upgrades or rehabilitation.
57 Towns below hub level defined as regionally important in RPGs. Please note that some additional settlements are listed in this indicator which are not Tier 1 towns, but which support the Dublin Region Gateway.

THEME

Environment & Infrastructure

INDICATORS

WTP/WWTP & UWWTD Compliance

Water and Wastewater Treatment Capacities to accommodate 2016 Population Targets and **Compliance with the UWWTD Discharge Licences** in the Gateways, Hubs & Tier 1 Settlements.

(Sources: Local Authorities, 2013; EPA, 2013[58])

Infrastructure is sufficient to achieve the RPG or Development Plan target for 2016

Some development may proceed (subject to altered operational procedures or future investment in infrastructure) which will accommodate the RPG or Development Plan target for 2016

Investment in infrastructure is required to accommodate the RPG or Development Plan target for 2016

CAPITAL WATER SERVICES INVESTMENT PROGRAMME (WSIP) 2010 - 2013 [59]

- CC — CONSTRUCTION COMPLETED
- CaC — CONTRACTS AT CONSTRUCTION
- CS — CONTRACTS TO START (INCLUDES TENDER STAGES)
- PS — SCHEMES AT PLANNING STAGE (INCLUDES DESIGN, PRELIMINARY REPORT OR STUDY PHASE)
- NW — SETTLEMENTS NOT LISTED ON CAPTIAL WSIP

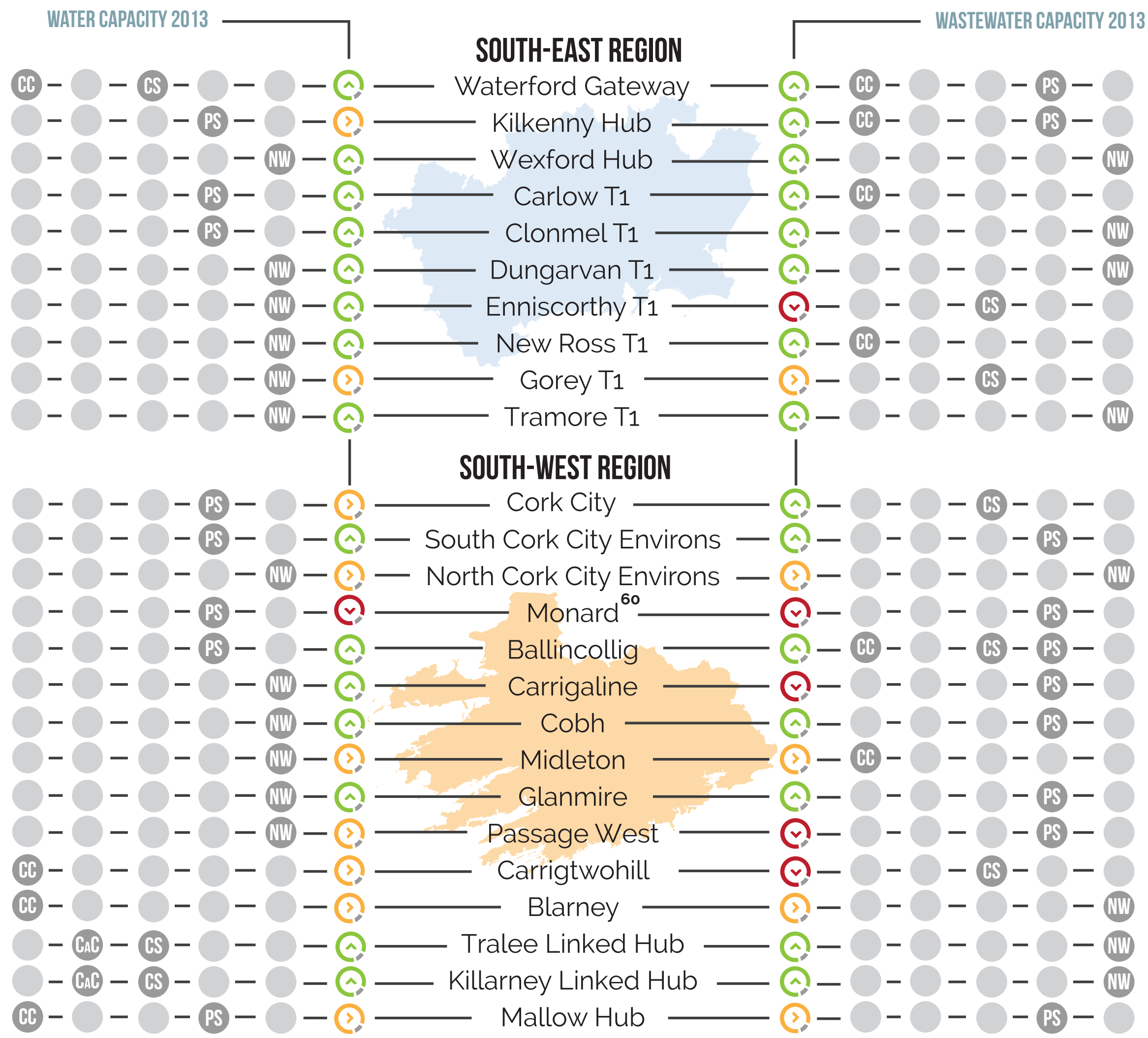


Figure 4.6 - Water & Wastewater capacities per Gateway, Hub and Tier 1 Settlement (T1).[61]

TARGETS

INCREASE the number of RPG settlements where infrastructure is sufficient to achieve the RPG or Development Plan population target for 2016.

INCREASE the number of RPG settlements that achieve compliance with UWWTD.

58 'Focus on Urban Waste Water Discharges in Ireland' - Urban Waste Water Treatment in 2011 (EPA, 2013).
59 Works can include plant or network upgrades or rehabilitation.
60 Monard is a proposed new settlement in Cork County.
61 Towns below hub level defined as regionally important in RPGs. Please note that some additional settlements are listed in this indicator which are not Tier 1 towns, but which support the Gateway in the South-West Region.

THEME

Environment & Infrastructure

INDICATORS

100%

WTP/WWTP & UWWTD Compliance

Water and Wastewater Treatment Capacities to accommodate 2016 Population Targets and **Compliance with the UWWTD Discharge Licences** in the Gateways, Hubs & Tier 1 Settlements.

(Sources: Local Authorities, 2013; EPA, 2013[62])

PLEASE NOTE

Water and wastewater information is provided for a specific point in time (October, 2013) and capacities can alter rapidly depending on development requirements. The 2013 EPA UWWTD dataset is the most up-to-date (published) report on Urban Wastewater Directive Discharges and refers to 2011 data. This must be considered when reviewing the information in Figure 4.10. It must also be noted that population figures are only one contributory factor to wastewater treatment plant loadings as industry and commercial sources also contribute significantly. In certain settlements there may also be seasonal changes in water and wastewater capacity requirements.

CAPITAL WATER SERVICES INVESTMENT PROGRAMME (WSIP) 2010 - 2013 [63]

- CC — CONSTRUCTION COMPLETED
- CaC — CONTRACTS AT CONSTRUCTION
- CS — CONTRACTS TO START (INCLUDES TENDER STAGES)
- PS — SCHEMES AT PLANNING STAGE (INCLUDES DESIGN, PRELIMINARY REPORT OR STUDY PHASE)
- NW — SETTLEMENTS NOT LISTED ON CAPTIAL WSIP

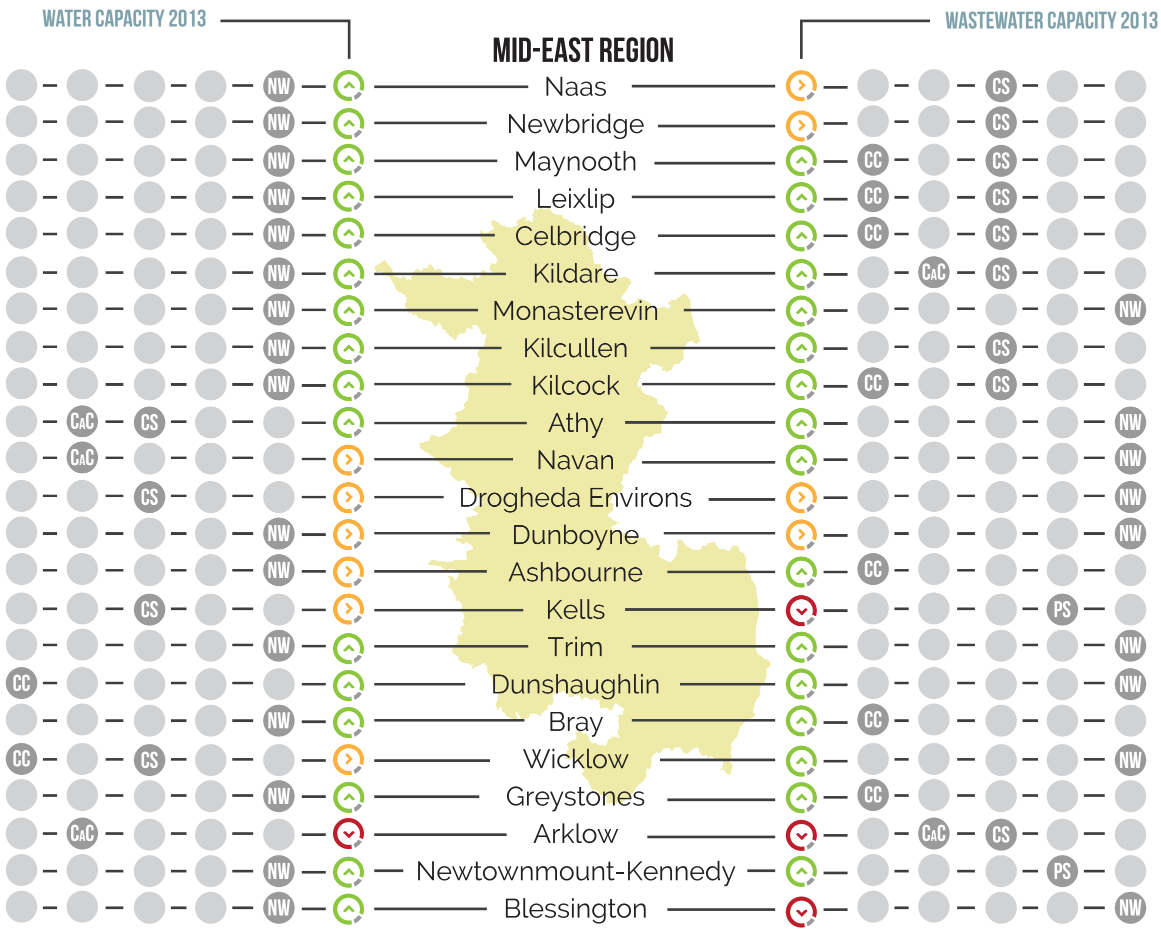


Figure 4.7 - Water & Wastewater capacities per Gateway, Hub and Tier 1 Settlement (T1).[64]

TARGETS

INCREASE the number of RPG settlements where infrastructure is sufficient to achieve the RPG or Development Plan population target for 2016.

INCREASE the number of RPG settlements that achieve compliance with UWWTD.

62 'Focus on Urban Waste Water Discharges in Ireland' - Urban Waste Water Treatment in 2011 (EPA, 2013).

63 Works can include plant or network upgrades or rehabilitation.

64 Towns below hub level defined as regionally important in RPGs. Please note that some additional settlements are listed in this indicator which are not Tier 1 towns, but which support the Gateway in the Mid-East Region.

THEME

Environment & Infrastructure

INDICATORS

WTP/WWTP & UWWTD Compliance

Water and Wastewater Treatment Capacities to accommodate 2016 Population Targets and **Compliance with the UWWTD Discharge Licences** in the Gateways, Hubs & Tier 1 Settlements.

(Sources: Local Authorities, 2013; EPA, 2013)

IMPORTANCE OF THE INDICATOR

These data outlines the water and wastewater capacities for RPG settlements under the following categories;

- Infrastructure is sufficient to achieve the RPG or Development Plan target for 2016
- Some development may proceed (subject to altered operational procedures or future investment in infrastructure) which will accommodate the RPG or Development Plan target for 2016
- Investment in infrastructure is required to accommodate the RPG or Development Plan target for 2016

Details in relation to the Capital Water Services Investment Programme (WSIP) are provided in Figures 4.4 - 4.7 to supplement the information on the water and wastewater capacities. While the WSIP provides a valuable indicator of future capital works and their current status, in certain circumstances additional infrastructure which was not included in WSIP may be required to facilitate sustainable settlement growth in line with population targets. A number of projects listed as part of the WSIP may be delayed for financial reasons.

The 2013 Environmental Protection Agency Urban Waste Water Treatment Directive (UWWTD) dataset is the most up-to-date (published) report on Urban Wastewater Directive Discharges and refers to 2011 data. The level of compliance with UWWTD Discharge Licences as reported by the EPA is contained in Figure 4.10. The UWWTD concerns the collection, treatment and discharge of urban wastewater, with the primary objective of protecting the environment from related adverse effects. The legislation specifies the minimum type of treatment to be provided and sets the maximum emission limits for major pollutants. Implementation of this Directive will support the environmental objectives of the Water Framework Directive and Marine Strategy Framework Directive (IRO, 2013). It outlines levels of reported compliance, identifying areas of poor performance where there could be related impacts on water quality.

THEME

Environment & Infrastructure

INDICATORS

WTP/WWTP & UWWTD Compliance

Water and Wastewater Treatment Capacities to accommodate 2016 Population Targets and **Compliance with the UWWTD Discharge Licences** in the Gateways, Hubs & Tier 1 Settlements.

(Sources: Local Authorities, 2013; EPA, 2013)

COMMENTARY

The pie chart in Figure 4.8 (Water Capacity for all Regions) shows that the majority of settlements (61.25%) have sufficient infrastructure to accommodate planned growth, i.e. target population growth which is envisaged under the RPGs or by the Local Authority. 27.5% of the settlements require infrastructure to accommodate the planned population target but it is important to note that some development can proceed and be accommodated. However, for 11.25% of settlements it has been identified that planned development may not proceed due to infrastructural deficiencies in water capacity.

The second pie chart in Figure 4.9 (Wastewater Treatment Capacity for all Regions) shows that 61.25% of settlements have sufficient infrastructure to accommodate planned growth while 22.5% of settlements can accommodate some growth but require investment in infrastructure in order to achieve the planned population target. Planned development cannot proceed in 16.25% of settlements due to identified infrastructural deficiencies in wastewater treatment capacity.

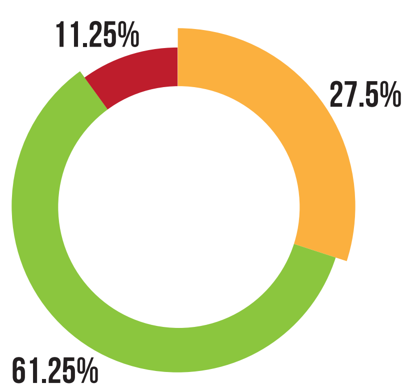


Figure 4.8: Water Capacity for all RPG Settlements (2013)

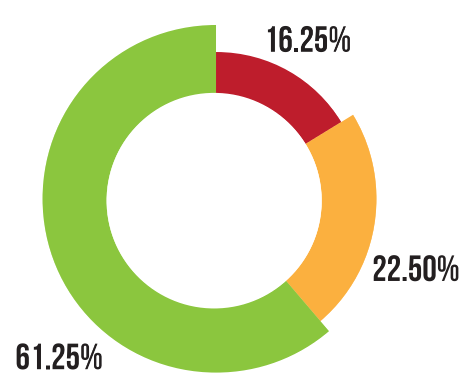


Figure 4.9 – Wastewater Treatment Capacity for all RPG Settlements (2013)

Infrastructure is sufficient to achieve the RPG or Development Plan target for 2016

Some development may proceed (subject to altered operational procedures or future investment in infrastructure) which will accommodate the RPG or Development Plan target for 2016

Investment in infrastructure is required to accommodate the RPG or Development Plan target for 2016

THEME

Environment & Infrastructure

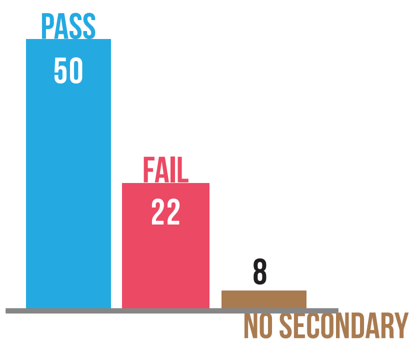
INDICATORS

WTP/WWTP & UWWTD Compliance

Water and Wastewater Treatment Capacities to accommodate 2016 Population Targets and **Compliance with the UWWTD Discharge Licences** in the Gateways, Hubs & Tier 1 Settlements.

(Sources: Local Authorities, 2013; EPA, 2013)

From the chart provided in Figure 4.10 (UWWTD Compliance for all RPG Settlements) it is evident that the majority of RPG settlements have met the UWWTD standards. 22 have failed to meet the standards set in the Directive while 8 received no treatment or a basic level of treatment prior to discharge and, consequently, the effluent could not achieve the quality standards specified in the Directive.



UWWTD Status

- **PASS** – effluent quality standards met and sufficient number samples taken.
- **FAIL** – effluent quality standards not met and/or an insufficient number of samples collected.
- **NO SECONDARY** – waste water received no treatment or a basic level of treatment which was below quality standards.

Figure 4.10: Urban Waste Water treatment Directive (UWWTD) Compliance for all RPG Settlements (2011) [65]

OUTLOOK

This indicator has close links to other environmental indicators. Improved compliance with respect to urban wastewater treatment is integral to safeguarding and improving water quality across regions. Where improvement works are being carried out to ensure compliance with licences, options to upgrade treatment plants to provide additional capacity will be actively examined. This will have a direct effect on achieving the objectives of the River Basin District Management Plans. It will also have a direct or indirect impact on the status of EU protected habitats and species, the overall natural environment and the quality of human health.

This indicator also has synergies to the 'People and Places' indicators as the achievement of the RPG population targets and settlement strategy is heavily dependent on the sustainable provision of critical infrastructure. While the indicator shows that the majority of RPG settlements have infrastructural capacity to accommodate planned development, the shortfalls identified in water and wastewater treatment capacities emphasise the need for critical investment in many RPG settlements. The effective implementation of the RPGs and Development Plans is reliant on addressing these infrastructural deficiencies which points to the requirement for the alignment of Irish Water's investment priorities with the RPGs, Development Plans and the new National Spatial Strategy.

[65] Note (Figure 4.10): This chart includes Cobh and North Cobh as both are reported by the EPA. This chart does not include Monard which is a proposed new settlement in Cork and thus is not reported by the EPA.

THEME

Environment & Infrastructure

INDICATORS

Renewable   Energy

Renewable Energy Capacity (Onshore Wind Energy and Energy Consumption by Region).

(Sources: Irish Wind Energy Association, 2013; Sustainable Energy Authority of Ireland, 2012)

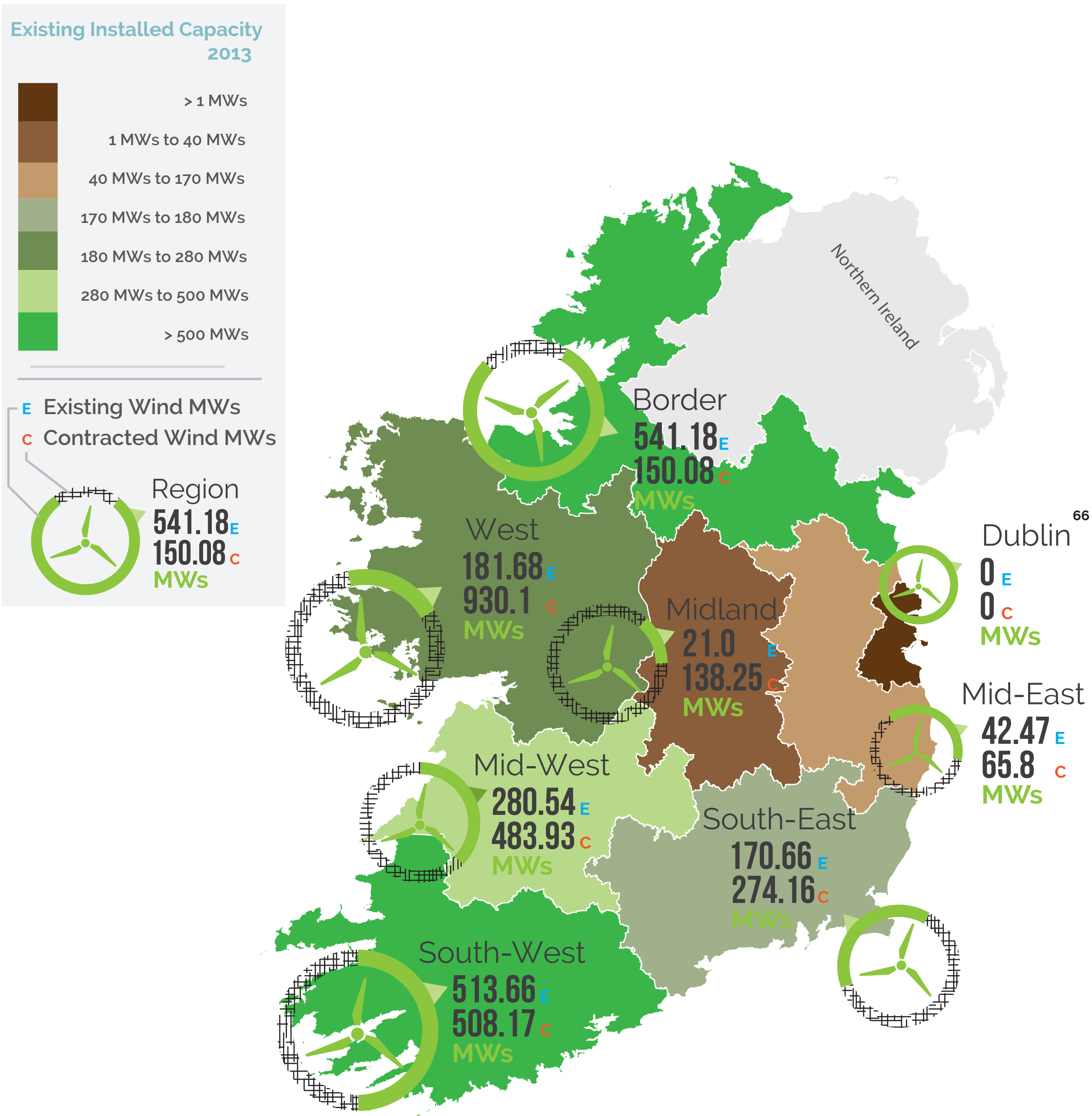


Figure 4.11 - Installed Renewable Capacity in Megawatts (Onshore Wind Energy) (February, 2013) and Gate 2 and Gate 3 Contracted Wind Energy (October, 2013)

TARGETS

10,228MW of energy to be generated from onshore wind by 2020, in line with table 10 of the National Renewable Energy Action Plan.

40% of electricity to be generated from renewable sources by 2020 [National Target]

66 Note: Due to the built up and dense nature of this region there is currently no 'onshore windfarms' located in the Dublin Region

THEME

Environment & Infrastructure

INDICATORS

Renewable | Energy

Renewable Energy Capacity (Onshore Wind Energy and Energy Consumption by Region).

(Sources: Irish Wind Energy Association, 2013; Sustainable Energy Authority of Ireland, 2012)

IMPORTANCE OF THE INDICATOR

Renewable energy development across the regions is integral to Ireland's Climate Change Strategy (EPA, 2012). The total use of renewable energy nearly trebled between 2003 and 2011 (16% annual average growth), largely due to the increasing contribution from wind energy which accounted for 44% (SEAI, 2011, 2012 and Renewable Energy in Ireland, 2011) of total renewable energy production in the country. While renewable energy sources are generally defined as wind, hydro, biomass, waste, tidal, solar and wave, this report focuses on wind energy generation as the main indicator for renewable energy. This is not to understate the importance of other renewable sources. However, wind energy production provides an important barometer on renewable energy production across the regions, in the context of overall national targets.

Figure 4.12 identifies total energy consumption by region, providing an important basis to compare energy supply and demand factors, in the context of national requirements.

Current National Energy Balance 2012

Fuel Type	Coal	Peat	Oil	Natural Gas	Renewables	Non Renewables	Electricity	Total
Ktoe[67]	1,482	802	6,244	4,018	824	44	36	13,450

Source: SEAI Provisional Energy Balance 2012

Current Regional Energy Balance 2013

Energy Unit Ktoe (1)[68]	Border	Dublin	Mid-East	Midland	Mid-West	South-East	South-West	West	Total
COAL	166	411	172	92	123	161	215	144	1,484
PEAT	90	222	93	50	66	87	116	78	802
OIL	700	1,731	722	385	516	678	904	606	6,242
NATURAL GAS	451	1,114	465	248	332	436	582	390	4,018
RENEWABLES	92	228	95	51	68	90	119	80	823
NON - RENEWABLES	5	12	5	3	4	5	6	4	44
ELECTRICITY	4	10	4	2	3	4	5	4	36
Total	1,508	3,728	1,556	831	1,112	1,461	1,947	1,306	13,449

Figure 4.12 - Current regional energy balance, 2013

TARGETS

9% total improvement in energy-efficiency by 2016 when per annum improvements are totalled.

IMPROVE energy-efficiency by 1% per annum, as per the EU Energy Services Directive.

67 Analysis by RPN based on SEAI Provisional Energy Balance 2012 data. which was apportioned to each region based on CSO population data for 2011.

68 (1) A tonne of oil equivalent (toe) is a unit of energy roughly equivalent to the energy content of one tonne of crude oil or the energy obtained from burning 1,000 metric tones of oil. The definition in energy terms is that 1 toe = 107 kilocalories = 41.868 gigajoules (GJ) = 11.63 Mega Watt hours (MWh)= 11,630 kilo-Watt-hours (kWh)

THEME

Environment & Infrastructure

INDICATORS

Renewable

Energy

Renewable Energy Capacity (Onshore Wind Energy and Energy Consumption by Region).

(Sources: Irish Wind Energy Association, 2013; Sustainable Energy Authority of Ireland, 2012)

COMMENTARY

An examination of total wind renewable energy generation in Mega Watts (MW) for 2013, derived from Irish Wind Energy Association figures, has revealed significant inter-regional variation across the country. The Border and South-West Regions generated the highest levels of output at 541.18 MWs and 513.66 MWs respectively. Whilst the largest wind resource is located along Ireland's western coastline, potential capacity is tempered by the environmental sensitivity of these landscapes.

Figure 4.11 shows both the installed renewable capacity which is operational and the Gate 2 and Gate 3 renewable capacity which is contracted but not yet connected. The Gate 3 Offer Project refers to the third round of national grid connection offers that are being issued to both renewable and conventional energy generators. Ireland currently has around 1,751.19 MW of installed wind energy across the Republic, with over 2,550 MW contracted. It should be acknowledged that it is likely that a portion of the contracted (but not yet connected) renewable projects, unsigned Gate 2 offers and projects in Gate 3 will not be constructed. The Commission for Energy Regulation does not require the applicant to be in receipt of planning permission as a criterion for inclusion of applicants in Gate 3 (Eirgrid, 2013).[69]

Lower relative provision of onshore wind energy does not necessarily reflect underperformance. A number of factors are relevant in the sector, including the built up nature of the Dublin Region for example, the availability of technology to take advantage of the resource and offshore provisions. On-going infrastructural provisions in the context of the Grid25 transmission strategy will distribute the benefits of wind energy generation on a more balanced regional basis.

In general terms, the percentage breakdown of consumption across regions (Figure 4.12) keenly reflects the percentage proportion of the total national population distributed within these areas due to the method of disaggregation used.

TARGETS

10,228MW of energy to be generated from onshore wind by 2020, in line with table 10 of the National Renewable Energy Action Plan.

40% of electricity to be generated from renewable sources by 2020 [National Target]

9% total improvement in energy-efficiency by 2016 when per annum improvements are totalled.

IMPROVE energy-efficiency by 1% per annum, as per the EU Energy Services Directive.

69 Eirgrid (2013) Gate 3 Status Report and ESB Networks Distribution Contracted Wind Farms.

THEME

Environment & Infrastructure

INDICATORS

Renewable Energy

Renewable Energy Capacity (Onshore Wind Energy and Energy Consumption by Region).

(Sources: Irish Wind Energy Association, 2013; Sustainable Energy Authority of Ireland, 2012)

OUTLOOK

The contribution of renewable energy to overall energy demand rose from 2.3% to 5.6% between 1990 and 2010, and reached 6.5% in 2011. Ireland's target is to achieve 16% by 2020 under EU Directive 2009/28/EC (SEAI, 2012). Although 2013 figures are unavailable, this contribution has continued to increase as new wind energy developments become operational.

The use of renewable energy also supports the avoidance of carbon dioxide (CO_2) emissions. CO_2 avoided through renewable energy use increased by 6.7% per annum on average over the period 1990 to 2010 reaching 2.8 Mt CO_2 in 2010 and provisionally 3.6 Mt CO_2 in 2011. Wind energy use gave rise to the largest avoidance of emissions in 2010 (60%) followed by solid biomass and hydro (SEAI, 2012). Given the importance of renewable energy in securing competitive energy supplies and reducing dependency on fossil fuels which produce greenhouse gases that are causing global climate change, it is vital to increase levels of renewable energy output in a sustainable manner. This will also support the a low carbon economy and efforts to meet national and international targets.

In terms of energy consumption, supply and demand factors are integral to ensuring security of energy supply nationally and across regions. Efforts to balance the levels of renewable production relative to total energy consumption will foster improved levels of self sufficiency across regions.

TARGETS

10,228MW of energy to be generated from onshore wind by 2020, in line with table 10 of the National Renewable Energy Action Plan.

40% of electricity to be generated from renewable sources by 2020 [National Target]

9% total improvement in energy-efficiency by 2016 when per annum improvements are totalled.

IMPROVE energy-efficiency by 1% per annum, as per the EU Energy Services Directive.

THEME

Environment & Infrastructure

INDICATORS

Managed & Unmanaged Waste

Managed Waste (collected and brought municipal waste); and **Unmanaged Household Waste.**

(Sources: National Waste Reports, EPA, 2010, 2011)

National Average:
30% unmanaged and uncollected waste (EPA, 2012)

17,770 t — Waste Collected in tonnes (t)
0.27 — Per Capita Waste

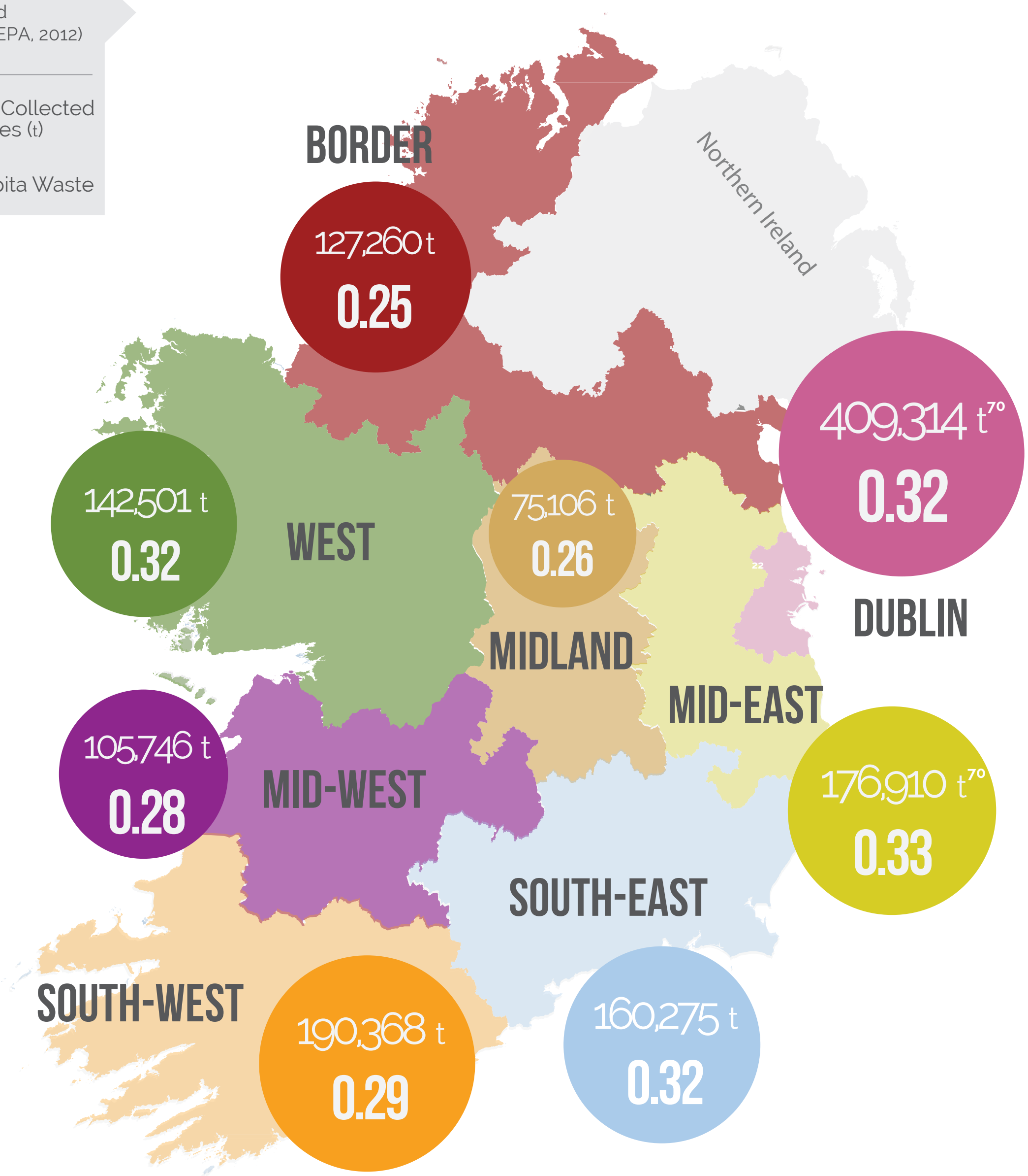


Figure 4.13 - Waste Collected per region in tonnes (t) (2011) and per captia.

TARGETS

REDUCE levels of unmanaged waste, and meet other municipal (household waste) targets in line with "**Changing Our Ways**" (DECLG) or future national waste policies, existing Regional Waste Management Plan targets and the Waste Framework Directive (S.I. 126/2009)

70 Waste tonnage figures using data from Wicklow (2010 and 2011) and Dun Laoghaire-Rathdown (2010) are considered to be underestimates. The cause of this is due to four operators failing to report their data in time for consideration and publishing of the National Waste Report.

THEME

Environment & Infrastructure

INDICATORS

Managed & Unmanaged Waste

Managed Waste (collected and brought municipal waste); and
Unmanaged Household Waste.

(Sources: National Waste Reports, EPA, 2010, 2011)

IMPORTANCE OF THE INDICATOR

While current economic activity has reduced the volume of waste being produced, the Economic and Social Research Institute (ESRI) ISus model forecasts an increase in waste generation in line with economic recovery. This indicator identifies the inter-regional level of managed and unmanaged waste and it functions as an important barometer on progress towards regional, national and EU waste targets. Household waste is the largest component of Municipal waste.

However, a distinction is drawn between municipal waste 'generated' and 'managed'. Managed waste is either collected through waste services, brought directly to waste facilities or home composted. It is important to consider the 'unmanaged' waste component as this is a valuable indicator on the availability of regional waste infrastructure and informs the level of municipal waste collected and brought.

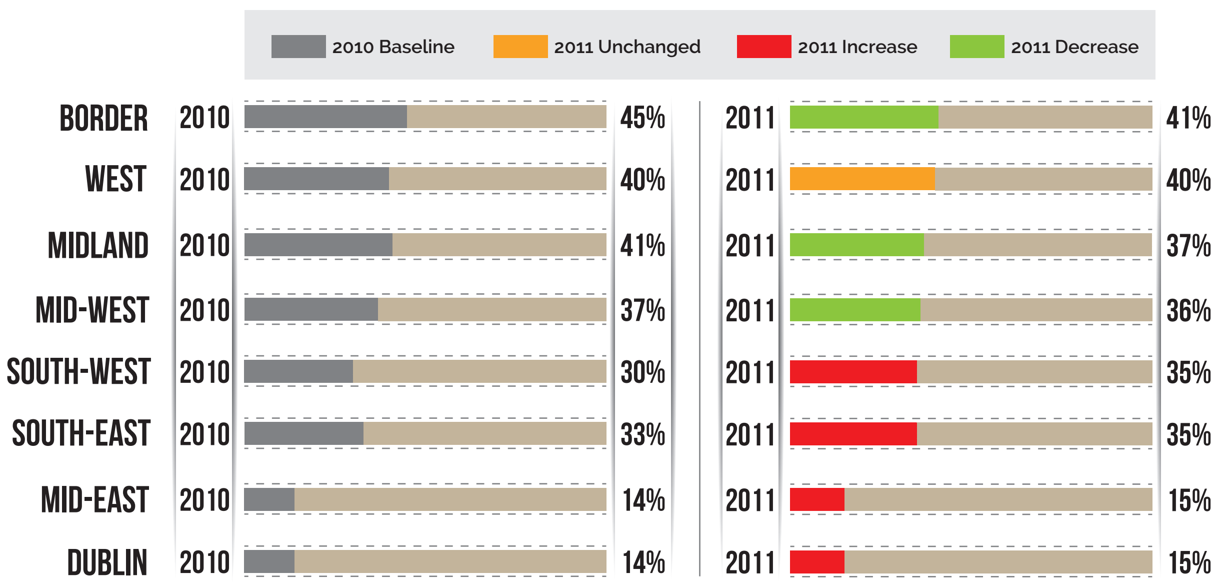


Figure 4.14 - Percentage of unmanaged regional waste in 2010 and 2011.

TARGETS

REDUCE levels of unmanaged waste, and meet other municipal (household waste) targets in line with "**Changing Our Ways**" (DECLG) or future national waste policies, existing Regional Waste Management Plan targets and the Waste Framework Directive (S.I. 126/2009)

THEME

Environment & Infrastructure

INDICATORS

Managed & Unmanaged Waste

Managed Waste (collected and brought municipal waste); and
Unmanaged Household Waste.

(Sources: National Waste Reports, EPA, 2010, 2011)

COMMENTARY

This indicator determines if managed and unmanaged household waste (including its component elements, e.g. black bin or recycling) is increasing or decreasing. The 2011 National Waste Reports (EPA, 2012) indicate that the majority of regions were performing below the state average of 0.30 tonnes of managed waste per capita. A total of 586,224 tonnes of municipal waste were collected in the Dublin and Mid-East Regions in 2011, with the Midland Region recording the lowest collection levels at 75,106 tonnes. Nationally the total collected and brought (managed) waste decreased by 1%.

In 2011 there was a national average of 30% unserviced occupied households (i.e. unmanaged or uncollected waste). However, many households share kerbside bin services with neighbours and other households opt to bring their waste to Bring Banks or Civic Amenity Sites. It also includes illegal disposal of waste and other factors. On average, there was a marginal increase in unmanaged waste for the period 2010-2011. While the West Region has exhibited relative stability over the period, maintaining its level at 40%, the Mid-East and Dublin Regions witnessed a rise of 1%. The South-East Region had a hike of 2% and the South-West Region exhibited a 5% increase over the same period. There was a comparatively small incidence of decline in the level of unserviced households across the country during the same period, with the Border and Midland Regions each experiencing a 4% drop and the Mid-West Region experiencing a 1% decrease in its total.

OUTLOOK

The availability of waste infrastructure, services and cost are key determinants in behavioural approaches to domestic waste disposal. Reducing the levels of occupied households that are unserviced will help eradicate the risk of environmental pollution in such areas and foster a more sustainable approach to development across regions. There are now three waste regions. A new national waste policy and Regional Waste Management Plans in 2014 will inform the new Regional Spatial and Economic Strategies and regional waste infrastructure considerations. The regions must continue to implement the requirements of national and EU waste legislation.

TARGETS

REDUCE levels of unmanaged waste, and meet other municipal (household waste) targets in line with "**Changing Our Ways**" (DECLG) or future national waste policies, existing Regional Waste Management Plan targets and the Waste Framework Directive (S.I. 126/2009)

THEME

Environment & Infrastructure

INDICATORS

EU Habitats and Species

Status of EU protected habitats and species (national level).

(Sources: Status of Species in Ireland, DAHG NPWS, 2008)

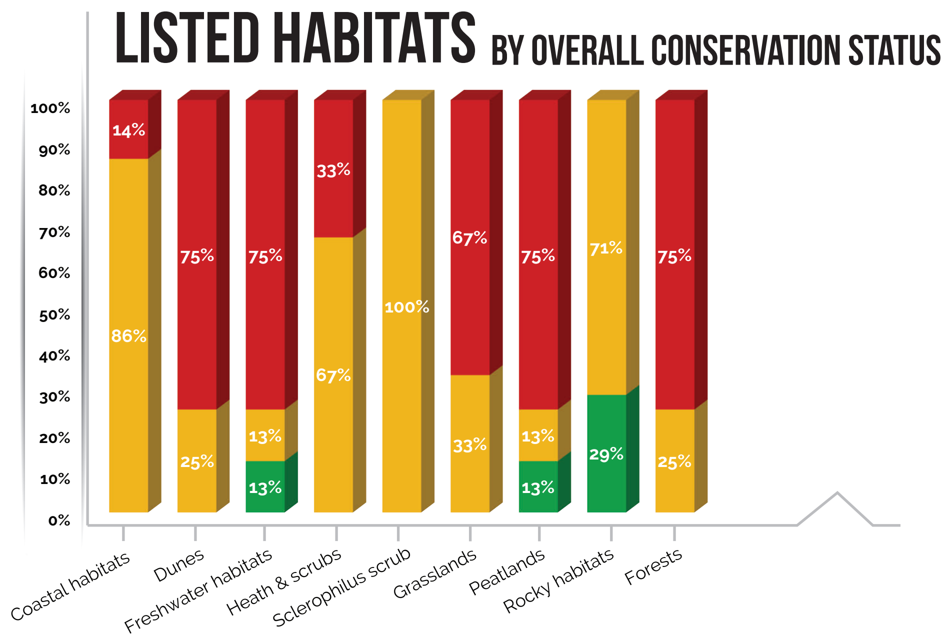


Figure 4.15 - Overall conservation status of listed habitats.

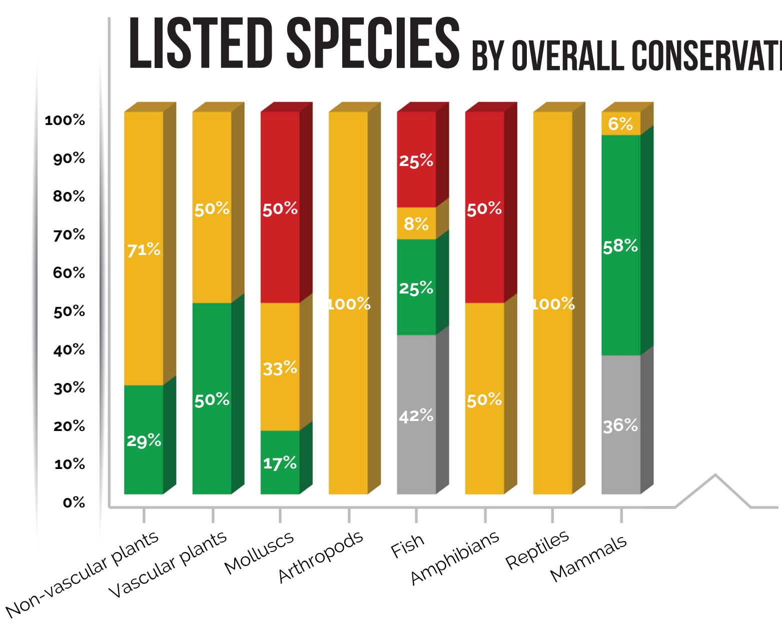


Figure 4.16 - Overall conservation status of listed species.

HALT further deterioration.

ACHIEVE favourable conservation status of protected European habitats and species in each region in line with the EU Habitats and Birds Directives and Ireland's National Biodiversity Plan 2011-2016.

MAINTAIN

TARGETS

THEME

Environment & Infrastructure

INDICATORS

EU Habitats and Species

Status of EU protected habitats and species (national level).

(Sources: Status of Species in Ireland, DAHG NPWS, 2008)

IMPORTANCE OF THE INDICATOR

Member States are obliged to report to the European Commission on the status of habitats and species protected under the Habitats Directive every six years. This indicator outlines the assessed quality of both habitats and species protected under European Legislation, functioning as an important barometer to gauge the impacts of regional development on natural environmental quality and related compliance with the Directive.

COMMENTARY

Figure 4.9 and 4.10 identify 'overall conservation status' for protected habitats and species.

- The categories applied are 'good-poor-bad-unknown'. For 'Habitats', the latest available figures suggest that the majority of habitats across all the regions are in a poor and deteriorating condition. In particular, forests, peatlands, grasslands, freshwater habitats and dunes have been assessed as being in predominantly bad condition. Those habitats which are classified as being in good condition are certain rocky habitats (29%), freshwater habitats and peatlands (at 13%) and are well below acceptable levels.

- The condition of protected species varies. The status of reptiles and arthropods (which include insects and beetles) were found to be poor. 58% of the mammal species, 50% of vascular plant species (which include flowering plants), 29% of the non-vascular plant species (which include mosses), 25% of the fish species and 17% of the mollusc species (such as mussels or scallops) were in 'good condition'. Overall, there was a much higher incidence of species in good condition, when compared to the overall status of habitats.

Human activity has always impacted on biological diversity (or biodiversity) which provides society with food, water, building materials and other essentials that we cannot survive without. Biodiversity underpins vital economic sectors such as agriculture and tourism. However, the pressure on natural systems has intensified and is undermining these systems. The rate of biodiversity loss is unprecedented, thus threatening our own future. The current marginal value of services provided by environmental systems (also called ecosystem services) in Ireland in terms of their contribution to productive output and human utility is estimated at over €2.6 billion per annum (DEHLG, 2008). [71]

OUTLOOK

While the habitats and species protected under EU law are already threatened, their condition is indicative of the impact of development across the regions and the difficulty in meeting the requirements of the Habitats and Birds Directives. While European sites known as Special Areas of Conservation and Special Protection Areas seek to protect these threatened habitats and species, there is significant pressure on biodiversity across the country. The value of the services provided by the environment is not captured in commercial markets like manufactured products or economic services and are therefore undervalued in policy decision-making (EC, 2013).[72] In the current economic climate it is essential to highlight the value of biodiversity (including the economic value) and the services provided by environmental systems. Greater integration of biodiversity concerns in landuse and sectoral policy development and implementation is required at all levels.[73]

71 DEHLG (2008) The Economic and Social Aspects of Biodiversity - Benefits and Costs of Biodiversity in Ireland.
72 European Commission (May, 2013) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - Green Infrastructure (GI) - Enhancing Europe's Natural Capital. European Commission.
73 Costanza, R., d'Arge, R., de Groot, R. et al. (15 May 1997) 'The value of the world's ecosystem services and natural capital' Nature. Vol. 387, p.253-260.

Economic Prosperity

People and Places

Environment and Infrastructure

ENVIRONMENT AND INFRASTRUCTURE: SUMMARY

Whilst some environment and infrastructure indictors show a positive regional baseline, there are a number of areas for concern. These include the limited capacities in existing water and wastewater infrastructure which serve the key RPG settlements and the level of compliance with the Urban Wastewater Treatment Directive which is low at a national level when compared to other European countries. The newly formed Irish Water and forthcoming NSS must consider the implications for settlements which have been targeted for growth and key investments must be made in regionally strategic settlements to support sustainable regional economic growth. Spatial policy must lead the allocation of strategic investment in water services infrastructure.

The decline in the number of high status water bodies and the inability of many water bodies to meet 'good ecological status' by 2015 in line with the Water Framework Directive are both regional and national concerns. These pressures are witnessed across Europe and are as a consequence of development challenges among other factors.

The deterioration in the overall condition of protected habitats and many species is a trend which will be difficult to reverse and concerted efforts are needed to integrate environmental protection considerations into spatial planning at all scales. The real value of protecting environmental systems must be considered to support sustainable societal and economic growth. Greater availability of data on biodiversity is required at a regional and sub-regional level (such as Management Plans for European Sites) to inform policy. It is hoped that other biodiversity-related indicators will be available for future iterations of this report.

The availability of waste infrastructure and services is essential to influence societal behaviour and achieve regional, national and EU municipal (household) waste targets and other waste targets.

Wind energy generation has expanded in the last decade and the regions have significant potential to increase the sustainability of energy supply, meeting consumption demands and reducing dependency on non-renewable fossil fuels.

Greater availability of data on biodiversity at a regional and sub-regional level (such as Management Plans for European Sites) which can inform policy is required. Other biodiversity-related indicators should be considered in future iterations of this report. Although the indicators show that infrastructure is improving across the regions, they also illustrate that future pressure for development will need to be better managed to achieve compliance with national and European targets and legislation and to support regional populations and economic prosperity.

CONCLUSION 05

Economic Prosperity

People and Places

Environment and Infrastructure

The 24 indicators were developed around the three themes of **economic prosperity**, **people and places** and **environment and infrastructure** and the common aims and objectives of the RPGs. They provide a strong base from which to monitor the impact of regional planning and provide answers to the question as to whether we are achieving sustainable regions.

The summaries provided at the end of each theme contain an outlook for the indicators and associated baseline data. While the project has identified many valuable indicators, there are a number which should be replaced in future iterations of regional monitoring should the relevant data become available.

The gap-analysis conducted by the RPN identified critical, yet 'missing', information. In particular, there was an absence of disaggregated local and regional data on broadband speeds, travel accessibility, a quantitative measure of serviced residential zoned land and regional or county level data on habitat and species conservation status. Details of the many indicators considered during the process are outlined in Appendix I. Data providers, which include a range of government departments, agencies and other bodies must review the list provided in this report in order to address the 'gaps' in regional spatial monitoring.

Appendix I also contains a list of indicators which originally considered and then removed through a filtering and refining process for various reasons, including insufficient data at a range of scales and across the regions, due to the difficulty in acquiring the datasets or because they were not focused on 'key' indicators linked to the aims and objectives of the project. It was also important to reduce the number of indicators to ensure that the monitoring framework remained manageable.

Final datasets as illustrated in this report will be made available on the DECLG's website **www.MyPlan.ie** and are accessible to all levels: national, regional and local government, private sector and members of the public.

The RPN has created a framework for monitoring the RPGs in the absence of national spatial planning indicators. A systematic method of developing indicators has been created taking into account a plethora of other indicator projects and experience of key stakeholders while focusing on those indicators which are applicable at different scales.

This monitoring framework is only the beginnning of the process and is not the complete picture but provides a baseline for reviewing the RPGs, enabling spatial analysis at a range of scales. It will inform policy and is a tool which can be used to make evidence-based planning decisions. There is an opportunity to focus the debate on regionally strategic issues in the review of the RPGs and in the preparation of a new National Spatial Strategy.

GLOSSARY OF TERMS

The following is a glossary associated with the Regional Indicators.

THEME: ECONOMIC PROSPERITY

Indicators

- Population (total and by gender) aged 30-34 with tertiary education

Comments: The indicator reflects the National Reform Programme which in turn is consistent with Europe 2020.

Glossary: The Eurostat Regional Yearbook 2012, which refers specifically to Europe 2020 targets, defines Tertiary education as follows: "Tertiary education is the level of education offered by universities, vocational universities, institutes of technology and other institutions that award academic degrees or professional certificates."

- Employment rate of population aged 20-64

Comments: This indicator reflects the National Reform Programme which in turn is consistent with Europe 2020.

- GVA per person in each region at basic prices
- GVA contribution by sector at basic prices

Glossary:

• Gross Value Added (GVA): A productivity metric that measures the difference between output and intermediate consumption. Gross value added provides a value for the amount of goods and services that have been produced, less the cost of all inputs and raw materials that are directly attributable to that production.

• GVA at basic prices is output at basic prices minus intermediate consumption at purchaser prices. The basic price is the amount receivable by the producer from the purchaser for a unit of a product minus any tax on the product plus any subsidy on the product.

• GVA can be broken down by industry. The sum of GVA at basic prices over all industries plus taxes on products minus subsidies on products gives gross domestic product. Gross value added of the total economy usually accounts for more than 90 % of GDP.

- Small and Medium Enterprises (SMEs) as a proportion of population per region
- Employment in IDA supported companies per region as a proportion of population per region
- Number of IDA supported companies as a proportion of population per region

Glossary: SMEs are defined variously in terms of employment, turnover and asset thresholds. The preferred definition in Lawless, M., McCann, F., McIndoe Calder, T. (February 29, 2012) "SMEs in Ireland: Stylised facts from the real economy and credit market" and one often used by Eurostat, relates to employment. The paper cited above defines micro-firms as those with less than 10 employees, small firms with between 10 and 49, medium-sized firms with between 50 and 249 and large firms with over 249 employees. The lending and credit data presented in the paper from the Central Bank of Ireland and the Credit Review Office data use a combination of employment (<250 employees), turnover (<€50m) and balance sheet (<€43m) criteria to define SMEs.

In short, SMEs within the Regional Indicators are defined as firms below 250 employees.

Indicators

- Households with a personal computer
- Households with internet access
- Broadband coverage

Comments: Sources of data on these indicators relate to internet usage, broadband accessibility and user breakdown at a national level. These are used for national broadband planning and in ranking Ireland against other countries; but unfortunately, are not useful in examining broadband access levels and speeds at regional or county level.

THEME: PEOPLE AND PLACES

- Total Population by Region, Gateway, Hub & Tier 1 settlement

Comments: This indicator set utilises readily available datasets and yields information that is directly relevant to RPG objectives and can be tiered for greater analysis within the remit of the RPGs and further down into county and local level as required. This can also be mapped with relative ease and provides a strong visual statement with clear comparative results in terms of absolute values and historical trends.

- Population change by Region, Gateway, Hub & Tier 1 settlements (i.e. key regionally significant settlements as per RPGs)

Glossary:
- Gateways and Hubs are Settlements as so defined in the NSS
- Tier 1 Towns are those settlements below Hub level, defined as regionally significant urban areas in the various RPGs
- Urban/ Rural definition is as per CSO Census of Population
- Geo-Directory is point data for all households in the country complied by An Post and Ordnance Survey Ireland.

- Urban/ rural population ratio

Glossary:
The country is divided up into eight strata based on population density. These areas are further classified into urban and rural areas as follows:

Urban includes:
- Cities
- Suburbs of cities
- Mixed urban/rural areas bordering on the suburbs of cities
- Towns and their environs with populations of 5,000 or over (large urban)
- Mixed urban/rural areas bordering on the environs of larger towns
- Towns and their environs with a population of 1,000 to 5,000 (other urban)

Rural includes:
- Mixed urban/rural areas and
- Rural areas.

Indicators

• Gateway and Hub/ rural population ratio

Comments: Dataset for this indicator available from CSO to SAP level facilitating analysis to sub-county level. It is useful to indicate alignment of services with existing and/or future potential need such as access to targeted healthcare facilities in the case of areas with a higher old age dependency ratio and education where the young age dependency ratio is high.

• Dependency Ratio

Glossary: Young age dependency is the proportion of the population aged under 14, while old-age dependency is defined as those over 65.

• Total housing stock by Region, Gateway, Hub & Tier 1 settlement

Commentary: Populated by CSO data. This indicator illustrates the relationship between housing stock, vacancy rates and, when combined with the other indicators in this section, regional population targets and the dwellings required to achieve these in designated areas.

• Housing vacancy by Region, Gateway, Hub & Tier 1 settlement

Glossary: The CSO definition of vacant applies.

• Work-related commuting by car, bus, rail, bicycle and walking

Commentary: This indicator outlines the patterns of car use and the difference between regions. Changes over time will be important in this regard, particularly in terms of the designated settlements and their surrounding areas. A central principle in the RPGs, this indicator is expected to illustrate the pattern of alignment between people and places which will facilitate comparison with historical patterns and potential future scenarios based on RPG objectives.

THEME: ENVIRONMENT & INFRASTRUCTURE

• Status of all water bodies (groundwater, rivers, lakes, estuarine, coastal, bathing, drinking waters)

Comments: This indicator determines whether each River Basin District (RBD) is reaching 'satisfactory' ecological status and whether RBD objectives for 2015, 2021 and 2027 are being met. The indicator data will be available every six years and is scientifically sound. Many water dependent habitats will be improved if overall water quality improves (e.g. Register of Protected Areas – nutrient sensitive or salmonid waters) and this is therefore a proxy indicator for the 'status of habitats and species'.

Glossary: The Water Framework Directive (WFD) sets out four core objectives to be achieved by 2015 for all waters which are:

- Prevention deterioration;
- Restore good status;
- Reduce chemical pollution; and
- Achieve protected areas objectives.

Indicators

• Renewable Energy capacity (Onshore Wind)

• Total Energy consumption by region

Comments: EirGrid produces key statistics related to the electricity transmission system and electricity usage patterns (energy consumption and generation). Details of 'Installed Renewable Capacity (MW)' (wind, hydro, other) are available by county/region. Supplementary information on Gate 2 and Gate 3 contracted wind energy is provided. The 'Gates' refer to the separate application processes to connect to the national electricity grid.

Glossary: The global aim is to tackle climate change resulting from the effect of GHGs (produced from burning peat, coal etc.) which are changing the composition of the earth's atmosphere. Renewable energy includes wind, solar, geothermal heat etc. and Installed renewable energy refers to structures such as wind turbines. The EU Energy Service Directive requirement is to reduce energy consumption by 9% by 2016. There is also a national target to have 40% of electricity to be generated from renewable sources by 2020.

• Settlements (Main RPG settlements) in compliance with Discharge Licences.

• Actual and surplus wastewater treatment capacities in Gateway, Hub & Tier 1 settlements

Comments: Data on current water and wastewater capacities in the Gateways, Hubs, Tier 1 and a number of other settlements from the local authorities. It identifies whether there is sufficient capacity to accommodate the RPG or Development Plan population target to 2016. Please note that this is based on local authority estimation (October, 2013) and may not include new industry capacity additions etc.). This information is supplemented by information from the Capital Water Services Investment Programme (WSIP) and includes those projects which have been recently completed, are under construction etc.

Separately the level of compliance of the settlements with the Urban Waste Water Treatment Directive as reported by the EPA in 2011 is provided in the categories of pass/ fail or no secondary treatment.

Glossary: Wastewater discharges from agglomerations greater than 500 population equivalent (p.e.) require a wastewater discharge licence and discharges less than 500 p.e. require a certificate of authorisation.

• Unserviced occupied households (unmanaged waste arising)

• Collected and Brought Municipal (Household) waste (managed waste)

Comments: Household waste is the largest component of Municipal Waste. However, a distinction is drawn between municipal waste 'generated' and 'managed', the latter concerning itself only with municipal waste that is either collected or brought directly to waste facilities or home composted. In 2011 there was a national average of 30% unserviced occupied households (i.e. unmanaged and uncollected waste) (EPA, 2012) (though many households share a kerbside bin service with neighbours and other households opt to bring their waste to bring banks/civic amenity sites, so are not necessarily illegally disposing of their waste etc.).

The EPA has statistics on household waste collected/person/(t) by county (managed waste) but does not have total household waste generated (unmanaged waste). The analysis will determine if achievements have been met for municipal (household) waste and whether unmanaged waste (including its component elements, e.g. black bin or recycling) is increasing or reducing.

Indicators

• Status of EU protected habitats and species (National level only)

Comments: The national EU protected habitats and species indicator is provided in the study, as regional or county data are unavailable (or not delineated). Habitats Directive Article 17 Status of EU Habitats and Species (2008 NPWS Report) is the source of the data. (The Birds Directive Article 12 Report to Europe is expected in 2013).

This indicator serves as a proxy indicator in relation to the overall integrity of the Natura 2000 sites as there is no Special Area of Conservation or Special Protection Area level reporting at present. It is also proposed to cross-reference this with WFD status as a proxy indicator.

National conservation objective monitoring (monitoring of national resources and the status of all habitats (including European Sites) will be conducted in the future and may be a suitable addition/ replacement for this indicator.

• Ecosystem services

Glossary: Natura 2000 Network consists of proposed Special Protection Areas (SPAs) and full SPAs and candidate Special Areas of Conservation (SACs) and full SACs across Europe where the aim is to assure the long-term survival of these valuable and threatened species and habitats.

Glossary: Ecosystem services are the benefits people obtain from ecosystems which are the communities of flora and fauna that develop in a wide variety of conditions. (Examples of ecosystems include woodlands or grasslands).

• Conservation Status of a Habitat and Species

Comments: Article 1 of the Habitats Directive states conservation status (of a species) will be taken as 'favourable', when:

• population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
• the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and
• there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

The conservation status of a natural habitat will be taken as 'favourable' when:

• its natural range and areas it covers within that range are stable or increasing; and
• the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future; and
• the conservation status of its typical species is favourable as defined above.

Source: EC (2012) Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

APPENDIX I - OTHER INDICATORS

Other Indicators Considered or Currently Unavailable

A series of other indicators were considered during various iterations of the regional indicators development process, but have been removed. The reasons for their removal are summarised below.

It must be noted that some are indeed useful but may have been removed in an overall aim to ensure that the number of regional indicators was kept to a minimum, were focussed on 'key' indicators to address the common RPG aims and objectives, were applicable across the regions, had sufficient data availability and were easily accessed. Other indicators which may be available at a future date are also outlined below.

Indicators which may be suitable for future analysis but are currently unavailable	What will it provide?
• Population (total and by gender) aged 25-64 with tertiary education	The age cohort in this indicator was very wide and inconsistent with national or EU level targets, i.e. the cohort in the National Reform Programme and Europe 2020 is the '30-34 age cohort'. The indicator was amended to match this.
• Employment rate • Unemployment rate • Employment rate by sector • Unemployment rate of population aged 20-64	Preferred indicator was that which looks at the employment rate of population aged between 20-64 as it relates directly to the National Reform Programme targets and which can be mapped at county and regional level.
• GVA per capita	Information on the two indicators proposed is available at a regional level and replaces this particular one.
• Foreign Direct Investment	This indicator was considered too general and was replaced with those in Figures 2.3, 2.4, 2.5a and 2.5b which provide more detailed information about investment at regional level.
• % Population both living and working in Gateways, Hubs and Tier 1 settlements • Population potential within 30min travel time of Gateways • Population potential within 15min travel time of Hubs/Tier 1 settlements	Work is continuing with the NTA to establish and define appropriate indicators which consider the cost function of travel.

Indicators which may be suitable for future analysis but are currently unavailable	What will it provide?
• Expenditure on Research and Development (R&D) by Business and Higher Level Institutions per region	This type of information is sensitive and can create confidentiality issues for some businesses.
• Population with accessibility to High-speed Broadband (1 megabit per second up and down)	Information on broadband coverage and speeds is not disaggregated below national level data with the exception of some very basic information. The indicators provided under the 'Economic Prosperity' theme provide the most accurate and relevant information currently available to populate indicators at the regional and county level.
• Broadband Speeds	This is considered critical information and details on county level broadband speeds may be made available in Q.4 2013 or in 2014 from ComReg. A pilot method of measuring actual broadband speeds at a county level by service provider and package is being developed. ComReg currently report aggregate data on broadband speeds on a national basis only.
• Serviced residential zoned land by Region, Gateway, Hub & Tier 1 settlement; and Unserviced residential zoned land by Region, Gateway, Hub & Tier 1 settlement	This indicator was originally proposed as part of the final Regional Indicators set. However, suitable data are unavailable at present. It is expected to be made available from the DECLG's MyPlan and, therefore, will be found in the next National RPG Implementation Annual Report. Outputs from this indicator would provide a clear overview on the effects of local and regional level policy alignment on the residentially zoned landbank and its relationship with identified infrastructural investment priorities, potentially illustrating changes over time.
• Population Density	This indicator was initially considered as an appropriate measurement of the application of RPG policy in the achievement of compact and sustainable development patterns. In populating this indicator it became apparent that, applied on a strategic basis, densities are less meaningful, particularly when compared across regions. (For example, the physical size of a region has a significant impact on population density at this level). It was concluded that this indicator worked best at a sub-county level, thereby making it inappropriate for inclusion as part of a regionally focussed indicator set.

Indicators which may be suitable for future analysis but are currently unavailable	What will it provide?
• Accessibility potential to Primary and Secondary schools, Accessibility to hospitals	These accessibility indicators were initially included in the People and Places Section to illustrate regional development patterns in the context of sustainable travel. Investigation of the datasets that this indicator produced illustrated the following: • Highly dispersed local nature of primary schools • Primarily urban distribution of secondary schools • Definition of Hospitals problematic (general, A&E, specialist etc.) In each case it was considered that the relationship to the objectives of the RPGs was unclear and further investigation of these indicators unwarranted in this section, particularly when similar more regionally relevant travel indicators were developed under the economic prosperity section. It is considered that the Pobal Deprivation Index (available at https://www.pobal.ie/Pages/Home.aspx) which includes a GIS element could be explored as an alternative resource. However, updating of information tends to be aligned with census periods.
• Travel time to motorway interchanges, Airport, rail stations and bus stops	Following detailed consideration of the dataset that would be generated by these indicators, and the level of definition that would be required, e.g. national, local, regional bus stop - its relevance to sustainable development patterns was unclear in its current form. It was determined that more appropriate travel related information would be generated by the indicators proposed in the economic prosperity section.
• Travel Accessibility and Origin and Destination indicators	The National Transport Authority is developing national (including city) travel models which will be available in 2014/2015. Accessibility indicators data (modal split, journey time and network capacity); and origin/ destination (trip purposes) indicators which will be very useful for future regional monitoring, will be available.
• Greenhouse gas emissions (incl. Atmospheric CO2 and Kyoto Protocol limit)	Not available at a regional level (though will be discussed in relation to energy consumption).
• Coastal erosion infrastructure expenditure by region	Total energy consumption and production by region (climate change indicator) considered sufficient alternative for regional indicators.
• Building Energy Rating	Currently applies to a portion of the national housing stock, so it is not considered sufficiently robust.
• Air Quality at Gateway/Hub level	EPA monitoring 'zones' are not consistent with Regional Authority areas, so it is difficult to determine air quality in all of the Gateways and Hubs.
• Municipal (household) waste generated	Quality and availability of this regional dataset vary considerably.

Indicators which may be suitable for future analysis but are currently unavailable	What will it provide?
• Municipal (household) waste recovery rate	Quality and availability of this regional dataset vary considerably.
• Remaining life expectancy and location of landfills by waste region	Considered that an alternative indicator based around the 'source' of waste is appropriate.
• Extent of Electric Infrastructure/ No. of electric cars operating in Ireland	An alternative indicator relating to 'total energy consumption and production' by region (climate change indicator) is considered to be sufficient.
• WFD Register of Protected Areas (RPAs) (water dependent SACs, SPAs etc.)	No specific monitoring of RPA water-dependent habitats, only overall water quality under the RBMPs, so this cannot be used.
• Levels of afforestation	Not relevant to all of the Regional Authority areas.
• Visitor numbers to heritage sites	Not specifically linked with aims and objectives of this theme.
• Status of the Gaeltachts (population, employment)	More general (non-specific) indicators in the 'People and Places' theme considered more appropriate.
• No. of Strategic Flood Risk Assessments by Regional Authority	Usefulness of indicator is considered to be limited. Properties at risk would be more useful but difficult to determine.
• Unaccounted for Water	This is a useful indicator. However, this was removed to reduce overall number of indicators on water.
• National Conservation objective monitoring (i.e. the monitoring of the qualifying interest status) in EU protected sites	This could provide an indication of the status of protected habitats and species at a regional or county level. It could identify trends in relation to development or other external impacts such as climate change.
• Habitats Directive 'Imperative Reasons of Overriding Public Interest (IROPI)' Cases	This could provide information as to the amount of habitat or species lost and is related to the previous indicator on national conservation objective monitoring.
• Mixed Residual Waste	The EPA is considering the use of a new waste indicator which assesses whether 'mixed/residual collection (black bins)' is delivered directly to landfill or is subject to pre-treatment (e.g. bulking). An increase in pre-treatment would be beneficial and data can be collected from the Annual Environmental Returns (waste) to the EPA.

APPENDIX II - ACKNOWLEDGEMENTS

NATIONAL RPG IMPLEMENTATION STEERING COMMITTEE (NSC) MEMBERS

Mr. Tom Byrne	Chairman (NSC) and Director	South-East Regional Authority
Mr. Danny McLoughlin	Designated County Manager	Dublin Regional Authority
Mr. Eddie Sheehy	Designated County Manager	Mid-East Regional Authority
Mr. Joe MacGrath	Designated County Manager	Mid-West Regional Authority
Ms. Martina Moloney	Designated County Manager	West Regional Authority
Mr. Pat Gallagher	Designated County Manager	Midland Regional Authority
Mr. Seamus Neely	Designated County Manager	Border Regional Authority
Mr. Tim Lucey	Designated City Manager	South-West Regional Authority
Mr. Tom Barry	Designated County Manager	South-East Regional Authority
Mr. Niall Cussen	Senior Advisor	Department of Environment,
Mr. Patrick O'Sullivan	Assistant Principal Officer	Community and Local Government
Mr. Liam Conneally	Director	Mid-West Regional Authority
Mr. Mark O'Donnell	Director	West Regional Authority
Ms. Caroline Brady	Director	Border Regional Authority
Ms. Ruth McNally	Director	Midland Regional Authority
Mr. John Forde	Director	South-West Regional Authority
Mr. John Byrne	Director	Mid-East Regional Authority
Mr. Jim Conway	Director	Dublin Regional Authority

REGIONAL PLANNERS

Ms. Teresa O'Reilly	RPG Officer	West Regional Authority
Ms. Aoife Moore	RRG Officer	Midland Regional Authority
Mr. Padraig Maguire	RPG Officer	Border Regional Authority
Mr. James Lavin	RRG Officer	South-East Regional Authority
Mr. Colm McCoy	RPG Officer	Dublin Regional Authority
Mr. Bryan Riney	RPG Officer	South-West Regional Authority
Mr. John Bradley	RPG Officer	Mid-West Regional Authority

ORGANISATIONS AND INDIVIDUALS WHO WERE CONSULTED

All-Island Research Observatory (AIRO)
Border, Midland and Western Regional Assembly
Central Statistical Office (CSO)
City and County Councils
City and County Managers
ComReg
Department of Arts Heritage and Gaeltacht (DoAHG)
Department of Environment, Community and Local Government (DoECLG)
Department of Regional Development Northern Ireland
Economic and Social Research Institute (ESRI)
Eirgrid
Enterprise Ireland
Environmental Protection Agency (EPA)
Forfás
IDA Ireland
Irish Central Border Area Network (ICBAN)
Irish Wind Energy Association
National Institute for Regional and Spatial Analysis, National University of Ireland - KITCASP Project Team
National Parks and Wildlife Service (NPWS)
National Transport Authority (NTA)
Southern and Eastern Regional Assembly
South Eastern River Basin District (SERBD)
Sustainable Energy Authority of Ireland
University of Limerick
International Centre for Local and Regional Development (ICLRD)
University of Ulster Jordanstown (UUJ)

CONSULTANTS

Future Analytics Consulting

Notes

Notes

Economic Prosperity

People and Places

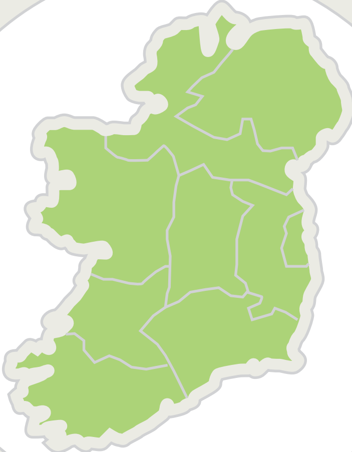
Environment and Infrastructure

FutureAnalytics

Planning + Research + Economics

23 Fitzwilliam Square South, Dublin 2, Ireland
+353 (0) 1 639 4836
info@futureanalytics.ie
www.futureanalytics.ie

CONTACT INFORMATION



DUBLIN REGIONAL AUTHORITY

1st Floor, Mainscourt, Main Street,
Swords, Co. Dublin
+ 353-(0)1-807-4482
+ 353-(0)1-890-1355
info@dra.ie
www.dra.ie

MID-EAST REGIONAL AUTHORITY

County Buildings, Wicklow Town,
Co. Wicklow
+ 353-(0)404-66058
+ 353-(0)404-61670
mera@eircom.net
www.mera.ie

MIDLAND REGIONAL AUTHORITY

Bridge Centre, Bridge Street,
Tullamore, Co. Offaly
+ 353-(0)57-935-2996
+ 353-(0)57-935-2998
info@midlands.ie
www.midlands.ie

SOUTH-WEST REGIONAL AUTHORITY

Innishmore, Ballincollig, Co. Cork
+ 353-(0)21-487-6877
+ 353-(0)21-487-6872
swra@swra.ie
www.swra.ie

BORDER REGIONAL AUTHORITY

Corlurgan Business Park,
Ballinagh Road, Cavan
+ 353-(0)49-436-2600
+ 353-(0)49-432-6434
borderregion@eircom.net
www.border.ie

MID-WEST REGIONAL AUTHORITY

Friar Court, Abbey Street, Nenagh,
Co. Tipperary
+ 353-(0)67-33197
+ 353-(0)67-34401
info@mwra.ie
www.mwra.ie

WEST REGIONAL AUTHORITY

1st Floor, Woodquay Court,
Woodquay, Galway
+ 353-(0)91-563-842
+ 353-(0)91-561-328
westrega@eircom.net
www.wra.ie

SOUTH-EAST REGIONAL AUTHORITY

Middle Floor, County Hall, Emmet Street,
Clonmel, Co. Tipperary
+ 353-(0)52-612-6200
+ 353-(0)52-612-4355
dir@sera.ie
www.sera.ie

Economic Prosperity

People and Places

Environment and Infrastructure

Employment Rate

SMEs

IDA Companies

IDA Employment

Sectoral GVA Contribution

GVA Per Person

Tertiary Education

Broadband Coverage

Internet Access

Personal Computer

Population

Population Change

Urban/Rural Share

Dependency Rate

Housing Stock

Housing Vacancy

Work-Related Communting

Status of Water Bodies

Compliance with UWWTD

WTP/WWTP

Managed & Unmanaged Waste

EU Habitats and Species

Renewable

Energy

Developed in conjunction with

FutureAnalytics

On behalf of the eight Regional Authorities in Ireland.