

Project Ireland 2040



Fore	word	2
Chap	oter 1: Overview	3
1.1	Context	3
1.2	Introduction	4
1.3	The National Planning Framework and the National Development Plan	7
1.4	The National Development Plan in Context	7
1.5	Cross-Border and Brexit	8
1.6	Housing Challenge	8
1.7	Transitioning to a Low-Carbon and Climate-Resilient Society	9
1.8	Sustainable Employment Challenge	9
1.9	Preparing Ireland for the Knowledge Economy	9
1.10	Role of Public Investment	9
1.11	Expenditure Management Framework	12
1.12	Investment Priorities and the Planning Process	12
Chap	oter 2: Foundations	13
2.1	Introduction	13
2.2	Review of Existing Capital Plan	14
2.3	Infrastructure Demand and Capacity Analysis	14
2.4	IMF Public Investment Management Assessment	14
2.5	Shareholder Management Framework	16
2.6	Public Private Partnership Review	16
2.7	Conclusion	16
Chap	oter 3: Resourcing and Funding Reform	17
3.1	Overview	17
3.2	Public Investment Target	18
3.3	Exchequer Resources 2018-27	18
3.4	Total Resources: Exchequer and State-backed investment	19
3.5	Funding Linked to the Achievement of Strategic Outcomes under the NPF	19
3.6	Reform of the Capital Funding Model	19
3.7	Rural, Urban, Technology and Climate Action Funds	23
Chap	oter 4: A Connected Island	25
4.1	Brexit - Investing for Peace and Prosperity	25
4.2	A Strong All-Island Partnership	28
4.3	Investing in the Border Region	29
4.4	Advancing North-South Co-operation	29

Chap	eter 5: National Strategic Outcomes and Public Investment Priorities	31
5.1	National Planning Framework: National Strategic Outcomes	31
5.2	Alignment with the National Development Plan	32
	National Strategic Outcome 1. Compact Growth	33
	National Strategic Outcome 2. Enhanced Regional Accessibility	39
	National Strategic Outcome 3. Strengthened Rural Economies and Communities	45
	National Strategic Outcome 4. Sustainable Mobility	53
	National Strategic Outcome 5. A Strong Economy, supported by Enterprise, Innovation and Skills	58
	National Strategic Outcome 6. High-Quality International Connectivity	66
	National Strategic Outcome 7. Enhanced Amenity and Heritage	69
	National Strategic Outcome 8. Transition to a Low-Carbon and Climate-Resilient Society	74
	NationalStrategicOutcome9.SustainableManagementofWaterandotherEnvironmentalResources	83
	National Strategic Outcome 10. Access to Quality Childcare, Education and Health Services	86
	Other Public Investment Sectors	93
Chap	ter 6: Oversight and Implementation	99
6.1	Overview	99
6.2	Evidence-base for the National Development Plan	100
6.3	Role of Regional Investment Plans	100
6.4	Financial Oversight	100
6.5	Strengthened Governance Arrangements	101
6.6	Protecting the Quality and Value of Past Investment	101
6.7	Outcome of the Public Private Partnership Review	102
6.8	Investment by the Commercial State Sector	102
6.9	Construction Sector Working Group	103
6.10	Equality Budgeting	103
6.11	Headquarters of New State Bodies and Agencies	103
Anne	ex 1	104
List c	of Acronyms	105

Foreword

We are delighted to publish *The National Development Plan 2018–2027*. This ambitious plan will drive Ireland's long term economic, environmental and social progress across all parts of the country over the next decade. The plan is fully integrated with the new approach to spatial planning in Ireland in the National Planning Framework.

Spatial planning guides, informs and influences the choices we make which affect the fabric of our daily lives. It impacts on the distribution of people, on our jobs, businesses, houses, roads, public transport, education and health infrastructure, and on social, cultural and sporting facilities. Such planning must be supported by a significant commitment of investment resources, while also allowing for the flexibility to respond to future challenges.

By 2040 the population of Ireland is expected to grow by over 1 million to 5.7 million people. The spatial planning approach set out in the National Planning Framework will support this growth. Its successful delivery will be critical to securing Ireland's economic, social and environmental sustainability over the next two decades.

This National Development Plan sets out the significant level of investment, almost €116 billion, which will underpin the National Planning Framework and drive its implementation over the next ten years. €91 billion in Exchequer funding for public capital investment has been allocated and will be supplemented with substantial investment by commercial State Owned Enterprises. This increased level of resources is expected to move Ireland close to the top of the international league table for public investment.

This funding has the potential to transform the experience of all of our daily lives over the coming years. Whether we realise this potential will depend on our commitment to deliver on the ten National Strategic Outcomes detailed in the National Planning Framework. This document outlines, under corresponding Strategic Investment Priorities, how the new configuration for public capital investment over the next ten years will secure the realisation of each of the National Strategic Outcomes.

The integrated strategy presented in the National Planning Framework and the National Development Plan moves beyond the business-as-usual approach that has contributed to unrestricted urban sprawl and the failure of previous spatial plans. This failure was a major contributory factor to the serious problems in the housing market and the major congestion and lengthy commute times experienced in our cities as well as the slow progress in meeting climate change objectives.

Our decisions as a society on how we make use of land and geographic space are among the most important decisions we will make. They impact on almost all aspects of our lives and those of the communities we live in. The National Development Plan underpins the overarching message of the National Planning Framework. We now have the opportunity to shape a new model of the physical development of our country which can drive substantial progress in economic, social and environmental terms as an island in a European and in a global context.

The performance of the Irish economy and our ability to realise its full growth potential in a sustainable way are all inextricably linked and critically dependent on the quality of spatial planning. The National Planning Framework highlights the employment challenge in terms of enterprise, innovation and skills of creating in excess of 660,000 additional jobs in the period up until 2040. Our future success rests on ensuring our readiness for a changing world and the continued successful development of the knowledge economy. Responding to this and to the risks and opportunities provided by Brexit highlights the importance of adopting a strongly strategic approach to public capital investment in the National Development Plan.

This National Development Plan is clearly aligned with the delivery of the objectives of the National Planning Framework. The investment plans detailed in this publication are an unequivocal demonstration of the Government's commitment to making the National Planning Framework a reality.





Taoiseach



Parle Julue

Paschal Donohoe TD
Minister for Finance and
Public Expenditure and
Reform



Chapter 1: Overview

1.1 Context

The National Development Plan 2018–2027 is the most recent in the series of such capital plans adopted since 1988. This included three multi-annual National Development Plans which spanned the period to 2006. The substantial levels of public investment undertaken under these plans over that period played a central role driving the economic convergence of the Irish economy and in enabling the substantial social progress achieved.

Following the onset of the economic and fiscal crisis, the public infrastructure that had been put in place over the past two decades played a very important role supporting the resilience and recovery of the economy. However, in the years following the crisis public investment was significantly constrained to safeguard the provision of essential public services. As highlighted in the 2017 review of the

2015 capital plan, and also by a number of national and international assessments, this has led to the development of some important shortfalls in the volume and quality of Ireland's public capital infrastructure.



The National Development Plan represents a forceful response to these deficits and identifies the strategic priorities for public capital investment for all sectors. It is also anchored in learning some important lessons from previous experience in relation to public investment, including:

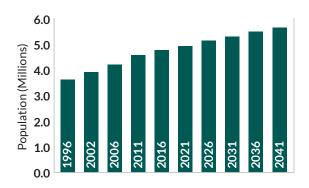
- the need to identify priority areas for public investment with a strategic importance in terms of the economy's long-term growth, development and sustainability needs;
- the requirement for a sharp focus on the achievement of value-for-money from public investment: and
- the importance of ensuring the affordability and sustainability of capital spending plans to minimise the risk of overheating.

A fundamental underlying objective of the National Development Plan is, therefore, to focus on continued investment to yield a public infrastructure that facilitates priorities such as high-speed broadband and public transport in better cities and in better communities. The public goods generated through investment in physical infrastructure will be critical to strengthening Ireland's human capital and to fostering the development of clusters in important growth areas in order to attract new investment.

1.2 Introduction

The National Development Plan sets out the investment priorities that will underpin the successful implementation of the new National Planning Framework (NPF). This will guide national, regional and local planning and investment decisions in Ireland over the next two decades to cater for an expected population increase of over 1 million people as detailed in figure 1.1.

Figure 1.1: Ireland's Population, 1996-2041



Source: 1996-2016 Central Statistics Office Census, 2021-2041 NPF Projections

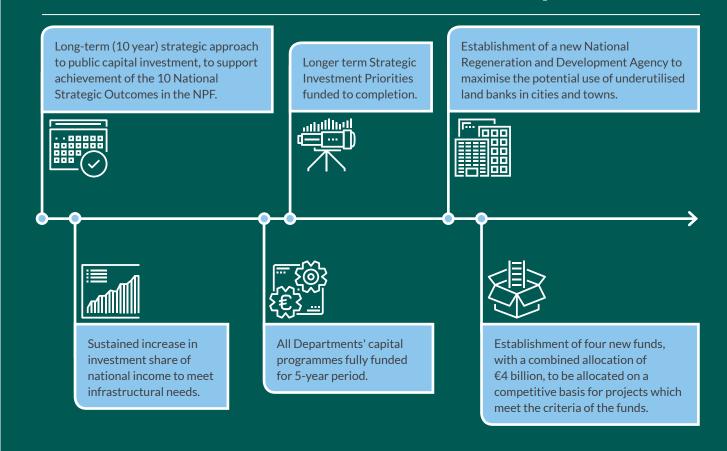
The National Development Plan demonstrates the Government's commitment to meeting Ireland's infrastructure and investment needs over the next ten years, through a total investment estimated at €116 billion over the period. This represents a very substantial commitment of resources and is expected to move Ireland close to the top of the international league table for public investment¹.

This level of capital spending will ensure ongoing employment maintenance and creation with appropriate regional development. It will also provide clarity to the construction sector, allowing the industry to provide the capacity and capability required to deliver Government's long-term investment plans.

The National Development Plan also illustrates the commitment to reforming how public investment is planned and delivered. This will be achieved through a decisive shift to integrated regional investment plans, stronger co-ordination of sectoral strategies and more rigorous selection and appraisal of projects to secure

¹ This is outlined in further detail in chapter 3.

New Innovations in National Development Plan



value-for-money. A new funding model for Exchequerfunded public investment is being put in place to ensure that resources are allocated to projects and programmes that meet NPF priorities.

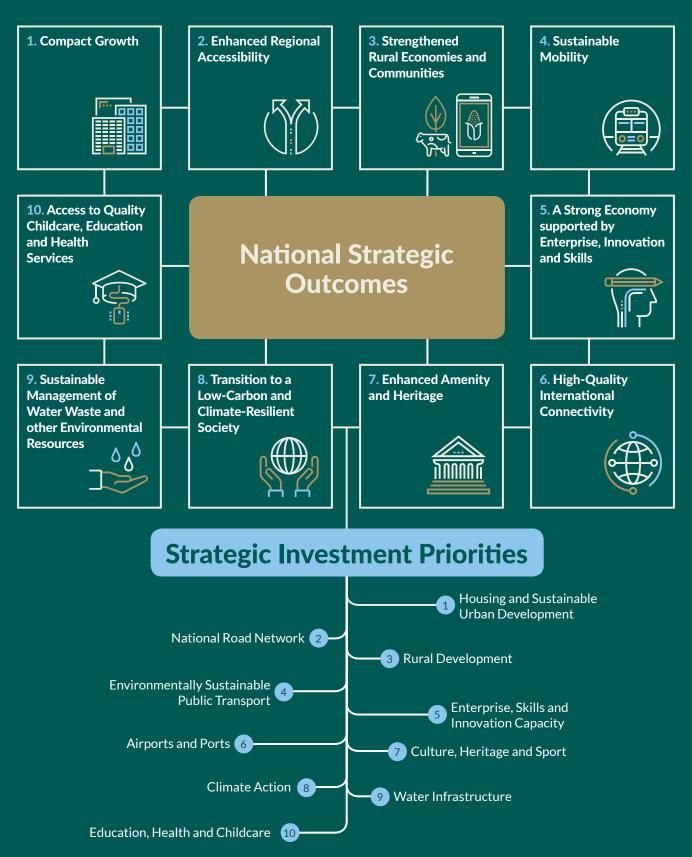
A major new initiative in this regard, in the National Development Plan, is the establishment of four new funds to help drive the specific core priorities detailed in the NPF. These four funds, with a combined allocation of €4 billion over the lifetime of the National Development Plan, will be allocated on the basis of a competitive bidding process, designed to encourage collaborative bidding/proposals, and which will also, where appropriate and practical, seek to leverage additional private investment. Resources will be allocated in support of project proposals which demonstrate a strategic vision aimed at delivering on the NPF objectives in the areas of rural renewal, urban regeneration, the achievement of climate action objectives and in drawing on research and development activities to develop new technologies on a commercial basis which could potentially be 'game-changers' in terms of existing and new market opportunities (so called 'disruptive technologies'). Further details in relation to the four funds are set out in chapter 3, and under the relevant National Strategic Outcome (NSO) in chapter 5.

A further important new initiative in the National Development Plan and the NPF, intended to assist with urban and rural renewal, is the establishment of a proposed new public body, the National Regeneration and Development Agency. This agency will work closely with the local government sector, central Government, a range of existing agencies and public bodies, and the Semi-State sector, with a view to identifying publicly owned or controlled lands (and strategic land in private ownership, if relevant) in key locations which have the potential for masterplanning and re-purposing for strategic development aligned to the NPF. Further details on this proposed new agency are set out in chapter 5, under NSO 1: Compact Growth.

In this way, the National Development Plan will support the achievement of more balanced development of:

- Ireland's three regions: the Northern and Western Region; the Southern Region; and the Eastern and Midland Region;
- Ireland's main cities, Dublin, Cork, Limerick,
 Galway and Waterford, whose success is central to the success of these regions;
- Other large urban centres including Sligo in the North-West and Athlone in the Midlands,

National Planning Framework and its National Strategic Outcomes and Priorities of the National Development Plan



which fulfil the role of regional centres, and Letterkenny in the context of the North-West Gateway Initiative and Drogheda-Dundalk in the context of the Dublin-Belfast economic corridor, as important cross border networks for regional development;

- Ireland's towns and villages, whose growth and development is critical to maintaining the fabric of our rural communities, in which 37% of the population currently live²; and
- the North-West of the country, to strengthen the all-island economy against the backdrop of both the risks and the opportunities arising from Brexit.

1.3 The National Planning Framework and the National Development Plan

Government is committed to the delivery of the NPF as a blueprint for spatial planning in Ireland to 2040. In setting out a strategic framework for public capital investment, the National Development Plan will support its delivery over the next ten years.

Ten NSOs are outlined in the NPF and these are shown in the illustration on the previous page along with corresponding Strategic Investment Priorities. The National Development Plan outlines, in chapter 5, the new configuration for public capital investment over the next ten years which will contribute to securing the realisation of these ten NSOs.

The fundamental objectives of the NPF are listed below:

- Carefully managing the sustainable growth of compact cities, towns and villages to achieve effective density and consolidation through a streamlined and co-ordinated approach to their development.
- Reinforcing accessibility between key urban centres of population and their regions.
- Ensuring that the fabric of rural areas is strengthened and the contribution of rural communities is harnessed as a major part of Ireland's strategic development.
- Continuing to enhance Ireland's public transport and the environmental sustainability of our mobility systems.
- Fostering enterprise and innovation and attracting investment and talent by building regional economic drivers and by supporting opportunities to diversify and strengthen the rural economy.

- Further supporting Ireland's high-quality international connectivity which is crucial for overall international competitiveness and addressing opportunities and challenges from Brexit through investment in our ports and airports.
- Enhancing amenities and heritage linked to and integrated with our built, cultural and natural heritage.
- Achieving a transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050.
- Safeguarding Ireland's abundant natural and environmental resources through the sustainable management of water, waste and other environmental resources.
- Improving access to quality education and health and childcare services.

The NPF highlights the importance of planning for and investing in compact rather than sprawling development.

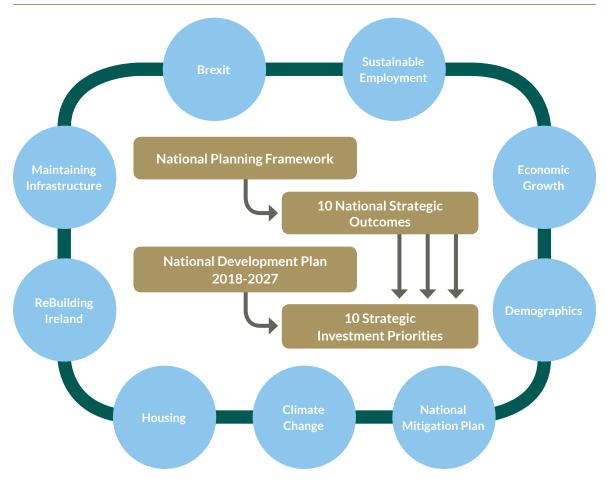
1.4 The National Development Plan in Context

The following sections summarise the major challenges that form the context for the NPF and the National Development Plan's Strategic Investment Priorities. These include, for example:

- demographic change;
- the need for Ireland to move to being a lowcarbon, climate-resilient society;
- Brexit; and
- realising our sustainable growth potential through the opportunities generated by a significantly larger workforce projected by 2040.

The National Development Plan context diagram illustrates the integration of the planning and investment strategies. It highlights some of the major contextual challenges surrounding the integrated approach being taken and some of the main strategies that have influenced their development.

Context of the National Development Plan



1.5 Cross-Border and Brexit

The NPF stresses the cross-border and all-island dimension of spatial strategy. The continued strengthening of the economic relationship between Dublin and Belfast can help reinforce the competitiveness of the Eastern and Midland Region, while also helping to mitigate the adverse effects of Brexit.

The NPF highlights the actions required to strengthen the Northern and Western Region against the backdrop of the UK's exit from the EU.

Chapter 4 details how targeted investment under the National Development Plan will have a particular focus on building economic resilience and linkages in the cross-border regions. Notwithstanding current uncertainty regarding the final arrangements for the UK's exit from the EU, it is very clear that Brexit will pose significant challenges for Ireland. However, the strong recognition and acknowledgement by both our EU-partners and the UK of the unique factors arising for the all-island economy from Brexit provides a very important basis for mitigating the adverse impacts and seeking to maximise the potential opportunities arising.

1.6 Housing Challenge

Resolving the systemic factors underlying the current housing crisis is at the heart of the NPF and reflecting this, housing and sustainable urban development is a priority for the National Development Plan.

By 2040 the population of Ireland is expected to reach almost 6 million with a need for 550,000 more homes and the creation of 660,000 additional jobs to achieve and maintain full employment. The need to provide in excess of half-a-million more homes over the period to 2040 corresponds to a long-term trend of 25,000 new homes every year. A higher level of output is needed in the short- to medium-term to respond to the existing deficit that has given rise to the housing crisis.

The continuation of existing patterns of development accentuates the serious risk of economic, social and environmental unsustainability through, for example, placing more distance between where people work and where people live, and increasing energy demand.

The NPF highlights the urgent requirement for a major uplift of the delivery of housing within the existing built-up areas of cities and other urban areas. It has a particular focus on brownfield development, targeting derelict and vacant sites that may have been developed before but have fallen into disuse.

1.7 Transitioning to a Low-Carbon and Climate-Resilient Society

Transitioning to a low-carbon and climate-resilient society and achieving sustainable mobility are vital strategic outcomes identified in the NPF. This reflects the Government's 2014 National Policy Position on Climate Action and Low-Carbon Development which establishes the fundamental national objective of achieving transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050. Achieving this long-term vision will require fundamental societal transformation and, more immediately, the allocation of resources and sustained policy and behavioural change.

While Ireland clearly faces a very significant task in reducing its greenhouse gas emissions, the current profile of which reflects the particular structure of our economy, action can be taken now to position Ireland to harness significant benefits from realising a low-carbon economy. These include, for example, the creation of sustainable green jobs, sustainable food production, deepening our energy security, and making the environment healthier. Delaying action will put these potential benefits at risk, undermine the green reputation of exports, compromise our capacity to attract foreign direct investment, and make achieving the transition more costly.

It is with this clear rationale in mind that climate action has been identified as a Strategic Investment Priority. How investment will be channelled to tackle this is detailed in chapter 5.

1.8 Sustainable Employment Challenge

The NPF projection of an additional 660,000 at work in Ireland by 2040 is ambitious but eminently achievable. Delivering it will, however, require the sustainability of existing employment and supporting employment opportunities for new entrants to the labour force. It also necessitates a sharp focus on ensuring Irish-based enterprises, indigenous or multinational, are increasingly innovative, productive and competitive in international markets. This ensures the availability of well-paid employment to secure living standards for households and quality of life for communities for the future.

Continued and relentless adaption and responsiveness to the rapid pace of technological change and disruption is essential for the benefit of our enterprises and society. This must be achieved through strengthened investment in research and development, and greater collaboration between the public and private sectors, particularly in relation to regional enterprise development, driving competitiveness and export diversification and supporting the research, development and innovation agenda.

1.9 Preparing Ireland for the Knowledge Economy

Ireland's modern economy has added layers of investment and success at different points in its history. The journey away from a closed economy was led by the export of goods. To this, excellence in the trading of services across many different sectors have been added. The more recent layer of development has been the development of the knowledge economy and the increasing importance of investment and trade in intangible assets. In order to continue to succeed in the new knowledge economy, and to build on that success, it is vital to have the right infrastructure in the right places. This will make Ireland a better place to live and work, attracting investment from abroad and encouraging the growth of new Irish companies.

1.10 Role of Public Investment

The National Development Plan yields clarity and certainty regarding the scale of infrastructural investment over the next ten years. It underpins the NPF through the strict alignment and clear consistency between public capital investment plans over the next decade and the ten NSOs detailed in the NPF.

The review, published in September 2017, of the 2015 capital plan, *Building on Recovery: Infrastructure and Capital Investment* 2016-2021, emphasises the compelling international evidence that efficient public capital investment is the 'wheels if not the engine' of long-term economic growth strategy. Efficient public capital investment allows the economy to grow faster on a sustainable basis by raising productivity and supply capacity. This has a very important role to play in alleviating capacity constraints that might otherwise restrict economic growth and increase overheating risks.

Public investment plays a major role in creating a supportive and attractive environment for enterprise growth and employment creation. It is crucial to strengthening Ireland's resilience to major risks, in particular Brexit. It enables continued improvements in living standards and social provision by strengthening international competitiveness. Boosting the quality of Ireland's public infrastructure is also central to the effective and efficient delivery of high quality public services.

Public investment is also essential to tackling the major risks to the sustainability of Ireland's growth performance from an intensification of the major congestion and bottlenecks that would be expected to arise from a continued concentration of economic and population growth in the Eastern and Midland Region and, in particular, the Greater Dublin Area (GDA). The National Development Plan positions appropriate

Major National Infrastructure Projects

Selection of major National Infrastructure Projects included in the National Development Plan for appraisal and delivery

Sustainable Mobility

- BusConnects for Ireland's Cities
- Dart Expansion Programme
- Metro Link

High Quality International Connectivity

- New parallel runway for Dublin Airport
- Regional Airports Programme
- Investment at Dublin Port, the Port of Cork and Shannon Foynes Port

Regional Connectivity

- Galway Ring Road
- M20 Cork to Limerick
- N4 Collooney to Castlebaldwin
- N8 Dunkettle
- N5 Westport to Turlough
- N22 Ballyvourney to Macroom
- A5 Road Development











Transition to a Low-Carbon and Climate-Resilient Society

- Climate Action Fund
- New Renewable Electricity Support Scheme
- Investments in energy efficiency of existing commercial and public building stock
- Enhanced electricity interconnection, including the Celtic Interconnector to France and further interconnection to the LIK
- Conversion of Moneypoint electricity generation plant to end the burning of coal
- Cork City Flood Relief Scheme

Sustainable Management of Water and other Environmental Resources

- Eastern and Midlands Water Supply Project
- Greater Dublin Drainage Project
- Athlone Main Drainage Project

Strengthened Rural Economies and Communities

- Rural Regeneration and Development Fund
- National Broadband Plan
- Investment in Regional and Local Roads
- Local Link Programme for Public Transport in Rural Areas
- Agricultural/On Farm investment

Compact Growth

- Deliver 112,000 new social houses by 2027
- Urban Regeneration and Development Fund
- National Regeneration and Development Agency

Access to Quality Childcare, Education and Health

- Childcare to ensure quality and supply of sufficient childcare places
- 20,000 permanent school places to be delivered annually
- 2,600 additional acute hospital beds
- Primary Healthcare Centres Programme













A Strong Economy, supported by Enterprise, Innovation and Skills

- Disruptive Technology Innovation Fund
- Advanced Manufacturing Supports
- Investments planned for all of Ireland's Universities
- Development of Technological Universities

Other Sectors

- Garda ICT Programme
- Ongoing Naval Service vessel renewal and replacement programme: mid-life refit of the LÉ Roisín and LÉ Niamh and acquisition of a new multi-role vessel

Enhanced Amenity and Heritage

- Investment in National Cultural Institutions
- Investment in National Heritage
- Large Scale Sport Infrastructure Fund

regional development, sustainable growth of Ireland's cities, support for Ireland's rural communities and the achievement of climate action objectives at the heart of public capital investment plans for the next ten years.

Public capital investment plays a major role in supporting the delivery of key public services and promoting the achievement of key socio-economic objectives by connecting citizens to productive opportunities and serving as a catalyst for inclusive growth by supporting the greater integration of individuals and households into social and economic life.

The preceding graphic summarises some of the major projects detailed in chapter 5, of this National Development Plan, which will underpin the achievement of these objectives.

1.11 Expenditure Management Framework

The National Development Plan is a high-level financial and budgetary framework, which sets out the framework and broad direction for investment priorities over the period 2018 to 2027. It includes indicative Exchequer allocations to support the delivery of the ten NSOs identified in the NPF. Within these objectives, the National Development Plan also contains expenditure commitments to secure a wide range of Strategic Investment Priorities which have been determined by the relevant Departments as central to the delivery of the NPF vision.

The ambitious programme of investment set out in the National Development Plan is underpinned by the multi-annual Exchequer Capital allocations announced in Budget 2018. These cover the four-year period 2018 to 2021 and provide an additional €4.3 billion in capital funding, increasing total capital investment for the period by 17.3% to €29.2 billion. These allocations were based on the detailed analysis and the assessment of infrastructure and investment priorities discussed in the review of the 2015 capital plan. Detailed information on the infrastructure projects and investment programmes to be provided by each Department on the basis of these allocations is available on the Budget 2018 website www.budget.gov.ie.

As set out in chapter 3, the multi-annual Exchequer capital allocations agreed in Budget 2018 are being extended under the National Development Plan for a further year and so will now underpin each Department's capital planning process for a five-year period from 2018 to 2022. These five-year allocations will be reviewed and extended annually on a rolling basis to include a fifth year, as part of the annual Estimates process. This will provide Government with an annual opportunity to review the allocations in light of any implementation issues arising and/or new priorities which may emerge as the National Development Plan is implemented.

A full mid-term review of the National Development Plan will be undertaken in 2022, to allow Government to:

- take stock of progress in terms of delivery of the planned projects and programmes; and
- review and reaffirm investment priorities of Government.

The review will be carried out in order to prepare and publish a new updated 10-year plan for public capital investment in 2023, covering the period 2023 to 2032.

1.12 Investment Priorities and the Planning Process

The National Development Plan, as a budget and financial plan, is not part of the physical planning process. Projects funded under the National Development Plan will be subject to planning law and may require Strategic Environmental Assessment. These requirements do not arise in relation to the National Development Plan itself. Each Government Department is responsible for ensuring that its proposed projects meet with appropriate regulatory requirements including those related to planning law and environmental impact assessments.

Departments must also ensure that individual projects and investment proposals meet all of the relevant appraisal processes and value-for-money tests required under the Public Spending Code, before Exchequer resources are ultimately expended on the relevant projects. In addition, under the Public Spending Code, all capital-investment projects and programmes with an estimated cost in excess of €100 million are subject to a further level of scrutiny, requiring specific Government approval before final contracts are agreed.



Chapter 2: Foundations

2.1 Introduction

The National Development Plan builds on the analysis detailed in several major Government policy statements and sources. The graphic below illustrates some of the main messages which emerged from these and further detail is provided in the remainder of this chapter.

Evidence and Analysis

"The review of the Capital Plan provides an evidence-based assessment of infrastructural priorities against the backdrop of a changed economic and fiscal environment."

Mid-Term Review of the Capital Plan 2016-2021, Department of Public Expenditure and Reform 2017 "The sectoral demands and constraints identified in this analysis further highlight the need for a concerted focus on getting project selection right in order to ensure that the underlying problem is addressed and that value-for-money is achieved."

Infrastructure Demand and Capacity Analysis, Irish Government Evaluation and Economic Service, 2017

"By international standards, infrastructure levels and infrastructure management practices in Ireland are generally well developed, but there are a number of areas where significant improvements can be made."

Public Investment Management Assessment for Ireland, IMF 2017 "This Framework ... is a key tool for delivering State infrastructure objectives in energy, water and transport (e.g. ports and airports)."

The Shareholder
Management Framework,
the mechanism used by
Government to influence
investment by State Owned
Enterprises

"The potential use of PPP should continue to be assessed (and encouraged) for all large scale projects ... However, the very large scale and significant ambition of the Government's new 10-year plan should not be supplemented by any additional parallel programme of PPP investments."

The Public Private Partnership Review, Department of Public Expenditure and Reform 2018

2.2 Review of Existing Capital Plan

The recent review of the 2015 capital plan, *Building on Recovery: Infrastructure and Capital Investment* 2016–2021, published in September 2017:

- confirmed the compelling case for increased public capital investment to strengthen Ireland's public capital infrastructure and build the resilience of the economy in terms of significant risks such as Brexit;
- emphasised the need in the context of the implementation of the National Development Plan to closely monitor and manage potential overheating risks and to continue to build the economy's supply capacity and competitiveness;
- highlighted the requirement to increase the efficiency and value-for-money of public capital investment to make best use of scarce Exchequer resources in light of competing needs; and
- stressed the societal transformation required to transition to Ireland's climate change objectives.

The review also drew attention to the successful delivery of a number of significant capital projects summarised in the illustration following.

2.3 Infrastructure Demand and Capacity Analysis

The Infrastructure Demand and Capacity Analysis undertaken by the Irish Government Economic and Evaluation Service as part of the review of the 2015 capital plan identified a number of significant drivers of future infrastructure demand, specifically those listed here:

- **Demographics**: population growth and the changing demographic profile.
- **Spatial Considerations**: the regional distribution of employment and population growth.
- Economic Growth: increased demand for economic infrastructure in line with increased economic activity.
- Climate Change: the need for investment to support the achievement of climate action objectives and discourage investment in highcarbon technologies.
- Technology: changes in technology can have an impact on demand for infrastructure such as high speed information and communications and energy usage.
- Socio-Cultural Factors: changing societal priorities and objectives will impact on public investment choices.

- Geopolitical Developments: investment to mitigate the potential impact of Brexit and /or developments in the international trade or tax environment.
- Maintenance: investing to maintain the quality and performance of existing infrastructure and extend its lifespan.

The Infrastructure Capacity and Demand Analysis also identified the priority areas listed below for future public capital investment:

- Transport: maintenance and upgrading of the road network and public transport to protect asset quality and value, meet demand forecast, ease congestion and to meet climate action objectives.
- **Education**: higher education and the schools building programme.
- **Health**: subject to further analysis of the totality of health capacity and infrastructure.
- **Housing**: on the basis of the review of the Action Plan for Housing and Homelessness.

These priorities were reflected in the multi-annual capital allocations amounting to an additional €4.3 billion of public investment announced in the Estimates for 2018 and detailed in the Exchequer Capital Envelopes 2018-2021: Outcomes of the Midterm Review of the Capital Plan published at Budget-time.

2.4 IMF Public Investment Management Assessment

The IMF Public Investment Management Assessment (PIMA) for Ireland published in October 2017 was carried out in July 2017 by the IMF at the invitation of the Minister for Public Expenditure and Reform and concluded:

- by international standards, infrastructure levels and infrastructure management practices in Ireland are generally well developed, but there are a number of areas where significant improvements can be made;
- there is a proliferation of sectoral strategies often with a weak framework for assessing results and generating limited information on cost estimates;
- implementation of multi-year budgeting has improved the allocation of resources for public investment projects but planning of projects is inadequately linked to decisions on funding;
- the overall level of capital investment proposed has been adequate, even under the ongoing fiscal consolidation process, and general good project management practices are in place;

Recently Delivered Major Projects

In 2016 and 2017 over €8.7 billion of Exchequer funding was invested in Irish capital infrastructure. Examples of some recent major projects delivered are:



The M17/M18 Gort to Tuam Motorway opened in September 2017. This PPP has an overall investment of €550 million. This new, toll-free, 57 km four-lane motorway replaces the existing N17/N18 roads and reduces end-to-end journey times by around 20 minutes.



Luas Cross City opened in December 2017. Creating an interchange between the Green and Red lines, and costing €368 million, it will provide 10 million additional passenger journeys per year.



The Phoenix Park Rail Tunnel opened in November 2016, improving services for rail commuters in Kildare and Dublin. With investment of €13.7 million, the new 692 m line will allow for direct connection between stations in southwest Dublin and north Kildare and between Connolly Station and Grand Canal Dock.



Páirc Uí Chaoimh reopened in July 2017 following redevelopment which included €30 million
Exchequer-funding. Aside from a sporting venue, the 45,000 capacity stadium has been redeveloped as a conference centre and concert venue.



A new Emergency Department in University Hospital Limerick opened in May 2017. Costing €24 million, featuring the most advanced diagnostic equipment of any such facility in Ireland or the UK and over three times the size of the old department it will serve over 64k attendees.



The new state-of-the-art **Sport Ireland National Indoor Arena** was opened in January 2017. Funding included **€23 million** Exchequer-investment. It is designed to accommodate over 20 sports.



The Decade of Centenaries commemorative programme received over €40 million Exchequer capital investment for nine flagship capital projects to serve as permanent reminders of the 1916 Easter Rising including the GPO Interpretative and Exhibition Centre and the restoration of Richmond Barracks.



A combined Exchequer and private industry investment totalling over €300 million in 17 large-scale Science Foundation Ireland Research Centres.



Major Flood risk management projects completed at Mallow, Fermoy, Clonmel, Bray, Waterford and Foynes with investment of €45 million in 2017.

- greater attention needs to be given to the management of existing assets, including our prioritising of spending on the maintenance of our existing infrastructure; and
- the efficiency¹ of public investment in Ireland falls short of international best-practice benchmarks, highlighting the need for project selection to be based on robust project appraisal.

2.5 Shareholder Management Framework

The Shareholder Management Framework which manages the relationship between the Government as shareholder and State Owned Enterprises (SOEs) is a crucial tool for delivering State infrastructure objectives in such sectors as energy, water and transport. These sectors are crucial to the achievement of a component of Ireland's public infrastructure and a very important element of securing the strongly integrated co-ordinated and collaborative approach to Exchequer and Statebacked investment on a national, regional and city basis required to achieve NPF objectives.

2.6 Public Private Partnership Review

The recent Public Private Partnership (PPP) review, to be published in parallel with the National Development Plan, finds that PPPs have been very useful in facilitating the delivery of important infrastructure. This was particularly the case when the Exchequer was seriously constrained in terms of its ability to fund infrastructure directly, given their use of private finance, on an off-balance sheet basis. This enabled projects to proceed which would not otherwise have been deliverable on the basis of Exchequer funding alone.

Looking to the future and given the significant increase in planned Exchequer capital investment over the coming years, which will see public investment in Ireland as a share of national income moving to among the highest in the EU, the PPP review concludes that PPPs can play a very important role in the delivery of public capital investment projects contained in the National Development Plan.

Noting the benefits that PPPs can deliver, the review recommends that PPPs should remain as an effective procurement option for appropriate public capital investment projects within the suite of capital investment mechanisms available to Departments. The review highlighted that it was important that PPPs should be assessed on a level-playing field basis as compared to traditional procurement.

All large-scale projects included in the new National Development Plan should, therefore, continue to be assessed in terms of suitability for procurement by PPP and/or alternative financing, in particular projects which involve user charges or which offer the potential to generate significant third party income. Further details of the findings and recommendations of the PPP review are set out in chapter 6.

2.7 Conclusion

The National Development Plan is a blueprint, setting out a strategic framework for public capital investment over the next ten years with a particular focus, alongside the underpinning of the NPF, on the achievement of the following over-arching objectives.

 Meeting Ireland's infrastructure and investment needs over the next ten years as identified in the recent review of the 2015 capital plan, Review of the Capital Plan 2016-2021: Building on Recovery, through a total investment (including Exchequer and SOEs) amounting to an estimated €116 billion over the next ten years.

This level of resources is expected to move Ireland to close to the top of the international league table for public investment ensuring ongoing employment maintenance and creation with appropriate regional development. It will also provide clarity to the construction sector which will allow the industry to plan to provide the capacity and capability required to deliver Government's long-term investment plans.

 Reforming how public investment is planned and delivered through a decisive shift to integrated regional investment plans, stronger co-ordination of sectoral strategies to secure mutually reinforcing outcomes and more rigorous selection and appraisal of projects to secure value-formoney drawing on the recommendations of the recent PIMA for Ireland conducted by the IMF. As discussed in the next chapter, a new funding model for Exchequer-funded public investment is being put in place to ensure that resources are allocated to projects and programmes that are sharply focused on meeting NPF priorities.

¹ The IMF concluded that the quality and quantity of Ireland's capital stock is lower than that of some other countries which spend the same on a per-capita basis.



Chapter 3:

Resourcing and Funding Reform

3.1 Overview

The total investment of almost €116 billion under the National Development Plan is designed to meet Ireland's infrastructure and investment needs over the next ten years. Exchequer funding accounts for 79% of total investment with the remainder coming from non-Exchequer State-backed enterprises and bodies. Investment over the lifetime of the National Development Plan is expected to move Ireland close to the top of the international league table for public investment.

This chapter outlines how the public investment target for Ireland will move to being among the highest in the EU. It provides a breakdown of the total investment of almost €116 billion over the next ten years and how this funding will be linked to the achievement of priority outcomes under the National Planning Framework (NPF). A breakdown of

indicative allocations associated with these priorities is set out. The chapter also describes how the capital funding model has been reformed to support stronger long-term planning by Departments directed to the achievement of spatial policy priorities.

3.2 Public Investment Target

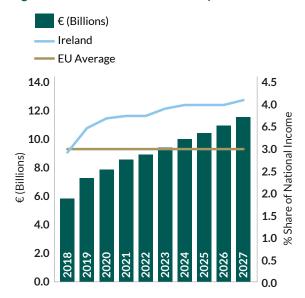
Substantial growth is planned in public capital investment over the coming years. The extent to which the planned increase meets the economy's needs, consistent with the fundamental requirements of overall economic and fiscal sustainability, is a critical consideration.

The Review of the Capital Plan 2016-2021: Building on Recovery noted that a long-established approach is to seek to identify from a 'top-down' or macro-economic perspective an appropriate target level of public capital investment. This typically corresponds to a long-term average level of public investment relative to national output or national income; compared to historic national trends or comparable EU countries.

Over the period 1995 to 2015, Gross Fixed Capital Formation (GFCF²) as a share of Gross Domestic Product (GDP) in Ireland was in the region of 3% equating to the average for the EU15 over the same period. This indicates that a value of 3% of an appropriate measure of national income can be considered as an appropriate target for the long-term average level of public capital spending for Ireland.

As set out in figure 3.1 and table 3.1, under the National Development Plan, it is projected that public capital investment³ will reach 3.8% of Gross National Income (GNI*)⁴ in 2021 and 4% by 2024, with sustained investment averaging 4% on an annual basis over the period 2022 to 2027. Public capital investment in Ireland will therefore move from relatively low levels following the recent recession to being among the highest in the EU. This reflects the 'bottom-up' demand for increased public capital investment identified in the review of the 2015 capital plan, while also ensuring that public investment underpins the sustainability of economic growth and avoids contributing to economic instability and exacerbating any risks of unbalanced and inflationary growth. It is important to adopt a prudent and measured approach to increased public capital spending as reflected in the National Development Plan, particularly in circumstances where there is a high degree of uncertainty regarding the cyclical position of the economy and the risk of overheating.

Figure 3.1 Ireland's Planned Public Capital Investment



Source: Eurostat, Department of Finance and Department of Public Expenditure and Reform

3.3 Exchequer Resources 2018-27

The Government has committed to increasing public capital investment to about 4% of GNI* and then maintaining investment at this level over the remaining period of the National Development Plan. Using current estimates this will yield Exchequer capital resources of €91 billion.

This is assessed in terms of national experience and international evidence to set public capital investment at an appropriate and sustainable level, relative to economic growth and identified infrastructure needs. It will also smooth out spending on investment projects over future economic and fiscal cycles and will help prevent a return to the pro-cyclical approach to public investment previously experienced in Ireland.

This very substantial level of investment will enable the achievement of the National Strategic Outcomes (NSOs) of the NPF as well as:

- realise the economy's growth potential and sustainable full employment on a balanced regional basis;
- allow the construction sector to plan to provide the capacity and capability needed to deliver the infrastructure projects over the coming years;
- build strength and resilience among indigenous enterprises and broaden the global exporting footprint;
- build the capacity of the economy to mitigate inflationary pressures;
- provide high-quality public services that rely on the quality of public infrastructure;

² The long-term average of public Gross Fixed Capital Formation (GFCF), the increase in public physical assets within a measurement period, is regarded as a good proxy for the equilibrium level of public investment as it removes the effects of cyclical developments which have contributed to significant volatility.

³ As measured by Gross Voted Capital Expenditure

⁴ The Economic Statistics Review Group recommended the use of GNI* to measure the size of the Irish economy.

- respond decisively to risks such as Brexit; and
- assess and take advantage of the evolving global foreign direct investment and outward direct investment landscape.

3.4 Total Resources: Exchequer and State-backed investment

The table below shows the breakdown of total investment in public capital expenditure over the next ten years. Exchequer funding allocated for public capital investment over the period 2018 to 2027 will amount to €91 billion. This Exchequer investment will be supplemented with State-backed investment by commercial SOEs to generate a total 10-year investment programme estimated at €116 billion.

The Exchequer resources allocated for investment under the National Development Plan are based on projected nominal growth in national income (GNI*) averaging 4% over the period 2022-2027 (2% real and 2% inflation). This is consistent with long term growth forecasts for the Irish economy produced by international organisations.

3.5 Funding Linked to the Achievement of Strategic Outcomes under the NPF

A fundamental purpose of the National Development Plan is ensuring that public capital investment is clearly aligned to the delivery of the objectives and priorities detailed in the NPF. Table 3.2 illustrates how the overall funding of €116 billion for the lifetime of the National Development Plan is being allocated on a thematic basis to each of the ten NSOs set out in the NPF. These indicative resource allocations reflect the investment priorities identified by Departments when the review of the 2015 capital plan was being

undertaken. These investment priorities are described in detail in chapter 5.

The allocations for the delivery of the different NSOs will be updated and adjusted where necessary as the National Development Plan is implemented, in light of:

- progress achieved in relation to public capital investment priorities currently underway or planned;
- the ongoing assessment of longer-term infrastructural priorities across sectors underpinning the implementation of NPF priorities; and
- the different planning horizons applying to different types of capital expenditure (for example, major infrastructural projects as compared to the provision of capital grants under particular spending programmes).

This will allow for appropriate flexibility and responsiveness of capital allocations to changing circumstances and priorities.

3.6 Reform of the Capital Funding Model

Chapter 5 details the 10-year strategic investment priorities aligned with each of the ten NSOs. Taken together these constitute the strategic vision for public capital investment in Ireland.

These priorities comprise both the development and expansion of existing investment programmes as well as the identification of some major new investment projects. As discussed above, very substantial Exchequer resources amounting to €91 billion is being made available for the delivery of these priorities. Over 30% or €29.6 billion of this Exchequer funding has, following Estimates 2018, already been allocated to Departments to deliver their infrastructure

Table 3.1: Public Capital Expenditure Split between Exchequer and non-Exchequer for 2018-2027

€ billion*	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
Exchequer-Gross Voted	5.8	7.3	7.9	8.6	8.9	9.4	10.0	10.5	11.0	11.6	91.0
Non-Exchequer**	2.6	2.7	2.6	2.6	2.4	2.4	2.4	2.4	2.4	2.4	24.9
Total Capital Expenditure	8.4	10.0	10.5	11.2	11.3	11.8	12.4	12.9	13.4	14.0	115.9
Exchequer as % of GNI*	2.9%	3.5%	3.7%	3.8%	3.8%	3.9%	4.0%	4.0%	4.0%	4.1%	

^{*}Rounding effects.

^{**}Note: Commercial Semi-State Bodies, SOEs and other non-Exchequer bodies make their investment decisions in line with business plans which for the vast majority do not extend past 2021 at this point in time. A conservative estimate has therefore been made that Non-Exchequer investment will remain constant at €2.4 billion annually over the period 2022 to 2027.



investment programmes consistent with NPF priorities.

Multi-annual four-year ceilings for gross voted capital expenditure for each Ministerial Vote Group were published in December 2017 in the Revised Estimates for Public Services 2018⁵. This was intended to facilitate more systematic and structured capital investment planning by Departments. It represented a decisive shift from agreements with Departments over capital allocations on a year-to-year basis to a multi-annual model, providing a high-degree of clarity and certainty regarding multi-annual funding allocations for medium-term planning purposes.

These multi-annual ceilings are now being extended to cover an initial five-year period 2018 to 2022 for all Departments, which will further facilitate Departments in planning their investment programmes over the medium term. The agreed ceilings for 2019 to 2021 are also being revised somewhat, to facilitate the early commencement of a number of new funds which are being established under the National Development Plan (described in section 3.7 below). These five-year multi-annual ceilings will, in future, be maintained on a rolling basis for the period of the National Development Plan, updated annually in the annual Estimates to include a new fifth year.

The addition of a fifth year to the multi-annual ceilings, and the adjustment to the ceilings for 2019-2021, brings to €38.5 billion the amount of the €91 billion overall Exchequer allocation that has now been committed by Government. The Departmental

allocations for 2018 to 2022 are set out in Annex 1. This leaves a further €52.5 billion for the remaining five years of the National Development Plan. This represents a transformation in the volume of resources available for public capital investment compared to the last ten years.

Of this €52.5 billion, €45.1 billion is allocated under the National Development Plan for major strategic investment priorities of Government (included in table 3.2) across all of the NSOs in the period 2023 to 2027.6 This demonstrates the Government's commitment to the delivery of the Strategic Investment Priorities identified in the National Development Plan. The remaining €7.4 billion has been retained to meet other ongoing capital expenditure requirements over the second half of the period and as a contingency reserve to meet unanticipated funding requirements and/or new emerging priorities that may arise as the National Development Plan is implemented. This reserve will be allocated through the annual Estimates process, as the rolling five-year multi-annual ceilings are updated.

This funding reform was introduced to encourage Departments to develop investment proposals directly targeted at the achievement of NPF priorities and which contribute to the clear articulation of a strategic 10-year vision for Ireland's public capital infrastructure. The identification of this destination can then guide and inform the design and implementation of their investment spending from 2018 onwards.

⁵ http://www.per.gov.ie/en/revised-estimates-for-public-ser-vices-2018-published/

⁶ Including in respect of PPP payment commitments.

Table 3.2 Indicative resource allocations for the delivery of NSOs, and for named Strategic Investment Priorities under each NSO, over the period 2018-2027

€ billion	Exchequer	Non- Exchequer	Allocation
1. Compact Growth (Lead Department: DHPLG: Related Departments, DTTAS, DRCD)			14.5
of which: Social Housing Provision	11.6		
Urban Regeneration and Development Fund	2.0		
2. Enhanced Regional Accessibility (Lead Department: DTTAS)			7.3
of which: M20 Cork to Limerick	0.9		
National Roads	5.7		
3. Strengthened Rural Economies and Communities (Lead Departments: DRCD, DAFM. Related Departments: DBEI, DTTAS, DCHG, DCCAE)			8.8
of which: Regional and Local Roads	4.5		
Rural Regeneration and Development Fund	1.0		
National Broadband Plan	Confidential		
Agriculture	0.8		
Tourism	0.3		
State Owned Enterprises (for example, Coillte, Bord na Móna)		0.8	
4. Sustainable Mobility (Lead Department: DTTAS)			8.6
of which: Dart Expansion	2.0		
Metro Link	3.0		
BusConnects Programme	2.4		
5. A Strong Economy, supported by Enterprise, Innovation and Skills (Lead Departments: DBEI, DES)			9.4
of which: Higher/Further Education	3.1		
University Investment		2.0	
BEI Programmes	3.0		
Challenge Based Disruptive Innovation Fund	0.5		
Enterprise Agencies		0.8	
6. High-Quality International Connectivity (Lead Departments: commercial SOEs, DTTAS)			4.8
of which: Airports		3.8	
Ports		1.0	
7. Enhanced Amenity and Heritage (Lead Departments: DCHG, DHPLG, DTTAS)			1.4
of which: Cultural Infrastructure	0.7		
Heritage	0.3		
Sport	0.3		

8. Transition to a Low-Carbon and Climate-Resilient Society (Lead			04.0
Departments: DCCAE, DTTAS, DAFM, OPW, commercial SOEs)			21.8
of which: Energy Efficiency - housing retrofit	3.0		
Energy efficiency in public buildings	0.8		
Boiler replacement	0.7		
Support Scheme for Renewal Heat	0.3		
Climate Action Fund		0.5	
Electric vehicles	0.2		
Flood Defences	1.0		
Energy Investment (renewables, interconnection, etc)		13.7	
9. Sustainable Management of Water and other Environmental Resources (Lead Departments: DHPLG, DCCAE)			8.8
of which: Irish Water	6.8	1.7	
10. Access to Quality Childcare, Education and Health Services (Lead Departments: DCYA, DES, DH)			20.1
of which: Childcare	0.4		
Education (Schools)	8.8		
Health	10.9		
11. Other sectors (including DD, DJE, DFAT, DFinance, DPER etc.)			3.0
of which: Justice	1.3		
Defence	0.5		
12. Contingency/Reserve			7.4

The Strategic Investment Priorities listed above do not represent an exhaustive list of capital funding allocated under the relevant NSOs.

Acronyms: Department of: Agriculture, Food and the Marine (DAFM); Business, Enterprise and Innovation (DBEI); Communications, Climate Action and Environment (DCCAE); Education and Skills (DES); Culture, Heritage and the Gaeltacht (DCHG); Finance (DF); Foreign Affairs and Trade (DFAT); Defence (DD); Health (DH); Housing, Planning and Local Government (DHPLG); Justice and Equality (DJE); Rural Community and Development (DRCD); Public Expenditure and Reform (DPER); Transport, Tourism and Sport (DTTAS); Office of Public Works (OPW); State Owned Enterprise (SOE)





3.7 Rural, Urban, Technology and Climate Action Funds

A major innovation in the reformed funding model for the National Development Plan is the establishment of four funds to drive the delivery of specific core priorities detailed in the NPF. The four funds, which will be allocated resources amounting to an estimated €4 billion over the 10-year period of the National Department Plan, are:

- Rural Regeneration and Development Fund:
 €1 billion, under the Department of Rural and
 Community Development, will promote rural
 renewal in order to enable towns, villages and
 outlying rural areas to grow sustainably and
 support delivery of the strategic objectives of the
 NPF.
- Urban Regeneration and Development Fund:
 €2 billion, under the Department of Housing,
 Planning and Local Government will support the
 co-development of the NPF's growth enablers
 for the five cities and other large urban centres.
 Examples of projects that have the potential to
 receive support under the Fund would include
 the development of the Cork Docklands (City
 Docks and Tivoli and associated mobility and
 bridge access), the Limerick 2030 initiative,
 the Waterford North Quays SDZ regeneration
 project, the plans for Galway City Centre
 regeneration, and the Portlaoise urban design and
 renewal initiative.

- Disruptive Technologies Innovation Fund: €500 million, under the Department of Business Enterprise and Innovation; and
- Climate Action Fund: €500 million, under the Department of Communications Climate Action and Environment.

Further details in relation to the operation of the funds are set out in chapter 5, under the relevant National Strategic Outcome.

In determining the allocation of resources between the urban and rural regeneration and development funds a number of different factors were considered including:

- the proportion of the population currently living in urban (63%) and rural areas (37%) respectively as defined by the CSO;
- the objective under the NPF to influence the growth pattern for cities, towns and rural areas;
- the higher costs and greater challenges that often arise in relation to the development of urban areas reflecting, for example, higher land values, more physically constrained sites, the scale of underground services; and
- the scope in cities and large towns to provide services for a wider area.

These factors might suggest a ratio approaching 3:1 in considering the size of the urban as compared to the rural fund. However, it is important to take into account that the NPF adopts a broader definition of 'rural' including smaller settlements with a population between 1,500 and 10,000 which are not county towns or major employment centres and tend to be closely integrated with their surrounding rural catchment. This indicates that a 2:1 ratio is more appropriate in allocating resources between the two funds. This approach also enables smaller towns (i.e. those in the 1,500 - 10,000 population) category to be eligible for the rural fund rather than having to compete with cities and major towns. Such towns will be eligible to apply to either fund, although funding will only be provided under one fund for any particular project.

It is envisaged that each of the funds would be established from 2019, on the basis of an initial aggregate funding allocation approaching €200 million, and built up over a three-to-four year period to their full scale of operation. Each of the funds will include a significant competitive-bidding element and, where appropriate and practical, will seek to leverage additional private investment, drawing on current and previous national experience and international good practice.

The priority objectives set out in the NPF require the adoption of a whole-of-government approach at central level along with the intensification and strengthening of mechanisms for closely integrated and cohesive planning and delivery structures. Such structures would involve central government, regional authorities, local authorities and the private sector. The establishment of the four designated funds, with a specific focus on the achievement of particular public policy objectives, has in several instances proved to be very effective in encouraging the adoption of a collaborative and co-operative approach by public bodies and private organisations to achieve important shared goals.

This approach will facilitate competitive bidding but on a collaborative basis for significant additional investment resources on the basis of the formulation of a strategic vision aimed at delivering on the NPF objectives, in such areas of rural renewal, urban regeneration and the achievement of climate action objectives. It will also draw on research and development activities in the Higher-Education sector to develop new technologies on a commercial basis, which could potentially be 'game-changers' in terms of existing and new market opportunities.

The intention is that the funds will play an important role in moving away from providing funding resources to individual organisations, essentially on the basis of current investment patterns, in favour of supporting collaborative bids for funding important projects on a competitive basis. This offers the prospect of being able to maximise the potential of the very substantial level of Exchequer resources available to 2027 for public investment with a view to targeting the delivery of some of the most important objectives and priorities detailed in the NPF.

It is envisaged that resources from these funds will be allocated through the annual Estimates process, to investment projects and programmes, in many instances, developed conjointly by, for example, government departments, public bodies, state agencies, regional and local authorities (and in the case of the Disruptive Technological Innovation Fund, educational institutions and research bodies) and private organisations. The process for selection of projects for support will ensure that the resources available are utilised to best support the achievement of the NPF under the various themes or priorities set out in the NPF which are highlighted as investment priorities in the National Development Plan.



Chapter 4:

A Connected Island

The National Development Plan and the National Planning Framework (NPF) set out a positive vision for the future of the island of Ireland.

By planning, working and investing together, we can see huge benefits for the North-West, the Central Border region and the area along the Dublin-Belfast economic corridor.

We can also confidently face the challenges posed by Brexit, and ensure Ireland can be a connected island at the centre of the world.

4.1 Brexit - Investing for Peace and Prosperity

In looking forward to the challenges posed by Brexit, the central tenets of the Government's Economic Policy will remain:

- strong and sustainable public finances;
- commitment to growing our indigenous enterprises;
- promoting balanced regional and rural development;
- creating and sustaining jobs;

- an economy that is open to trade and investment, benefiting from a global network of EU Free Trade Agreements;
- a society that is open to talented people who come here to live, to work, to study or to start a business;
- a core member of the European Union and the Eurozone; and
- providing the resources we need to invest in our public services.

This NPF and the National Development Plan underpin those economic objectives.

Good long-term planning supported by investment in Ireland's public capital infrastructure has a very important role to play in ensuring the resilience of Ireland's economy in the face of Brexit. It will help to mitigate the adverse effects of Brexit by:

- enhancing Ireland's international competitiveness in trade;
- encouraging foreign investment;
- improving access to international markets; and
- supporting domestic firms' investment decisions.

Ireland's national approach to the challenge and opportunities of Brexit has two essential elements:

- we will negotiate as part of the EU27 to protect Ireland's interests in the Brexit negotiations; and
- we will plan and invest at home to ensure our economy is strong and resilient.

Negotiating to Protect Ireland's Interests

The Government identified four key priorities for Ireland following the result of the Brexit referendum in June 2016.

- Trade and the economy.
- The peace process.
- The common travel area.
- Future of Europe.

Since then, good progress has been made on meeting Ireland's objectives.

In December 2017, the EU-UK Joint Report on Progress during phase 1 of the Brexit negotiations secured the following commitments:

- the protection of the Good Friday Agreement in all its parts;
- there will be no hard border, including any physical infrastructure or related check and controls;
- there will be arrangements that are specific to the unique circumstances on the island of Ireland;
- continued support for North-South and East-West co-operation;
- protection of the rights of EU citizens from Northern Ireland;
- protection of the rights, safeguards and equality provisions of the Good Friday Agreement;
- the continuation of the Common Travel Area between Britain and Ireland;
- the continuation of PEACE and INTERREG funding for Northern Ireland and the border region;

- a commitment that possibilities for future PEACE and INTERREG funding will be looked upon favourably; and
- a distinct Irish strand in the next phase of the negotiations, including dealing with issues related to the transit of goods (to and from Ireland via the UK).

Paragraph 49 of that Joint Report states that the UK remains committed to protecting North-South cooperation and to its guarantee of avoiding a hard border. Any future arrangements must be compatible with these overarching requirements. The UK's intention is to achieve these objectives through the overall EU-UK relationship. Should this not be possible, the UK will propose specific solutions to address the unique circumstances of the island of Ireland. In the absence of agreed solutions, the UK will maintain full alignment with those rules of the Internal Market and the Customs Union which, now or in the future, support North-South co-operation, the all-island economy and the protection of the 1998 Agreement.

The current phase of the Brexit negotiations is concerned with:

- the withdrawal agreement;
- the transition arrangements, for the period immediately after the UK leaves the EU in March 2019; and
- the shape of the future relationship between the EU and the UK.

In this phase, Ireland will ensure that previous commitments on issues such as avoiding a hard border are implemented.

The Government will also prioritise our interests in seeking to ensure that the future relationship between the EU and the UK is as close as possible.

We will negotiate as part of a strong and united EU27 team, although we recognise that the outcome is not fully in our control, as it depends on the positions of the British Government and our EU27 partners.

This makes it all the more important that we make the correct policy decisions at home.

The NPF and the National Development Plan are a crucial part of the foundations for a successful, prosperous and peaceful island after Brexit.

Initial Brexit Priority Investment Actions

Developing North-South Research and Innovation capability

- Seven INTERREG Research and Innovation Strand projects
- Funding totalling €53 million will be provided over the next four years
- High level research will be undertaken on health and life sciences and renewable energy

Assisting SMEs to prepare for Brexit

- €300 million Brexit Working Capital Loan scheme
- Developing longer-term loan finance initiatives to support business transformation
- El will assist 1,000 firms to develop and implement sustainability and growth plans
- InterTrade Ireland, will continue their supports for SMEs trading across the Border
- Bord Bia to work with food and beverage firms in regions to strengthen strategic marketing

Development of Science Expertise in the North-West

- Two purpose-built facilities were provided in Derry and Letterkenny as part of the previous INTERREG programme, to enhance technical research and commercialisation of innovation
- This successful initiative will continue to be supported over the coming years

Promoting Research and Innovation for SMEs

- INTERREG Research and Innovation Strand specific initiative to assist SMEs
- Funding of €18 million will be provided over the next four years
- A total of 1,408 companies will receive basic support

Attracting new Investment

- IDA Ireland will actively market the regions for opportunities arising from Brexit
- IDA Regional Property facilities and advanced provision in Border regions will be enhanced

North-South Capital Investment in Tourism

• Investment in digital infrastructure for all island tourism marketing

Facilitating Cross-Border Sustainable Transport

- North-West Multi-modal Mobility Hub
- North-West Greenways
- Carlingford Lough Greenway
- Ulster Canal Greenway

Planning and Investing for the Implications of Brexit

While Brexit is a British policy and will not benefit Ireland, we will face the challenges it poses with optimism and determination.

We will also work hard to seize the opportunities that change presents.

We are planning for significant population growth on the island of Ireland and for sustainable economic growth to continue. Our investment priorities will ensure that our economy remains competitive and resilient.

This includes significant investment in:

- connectivity through improved roads and public transport;
- international access and supply chains through our ports and airports;
- key services such as broadband and energy interconnection;
- the skills of our people through our education and training institutions;
- our enterprise base;
- our natural resources and our world class agrifood industry;
- science, innovation and research facilities;
- housing for a growing workforce;
- our culture and heritage; and
- our global footprint.

By implementing the investment decisions contained in the National Development Plan, we can ensure we have a strong, productive and resilient economy for the years ahead.

4.2 A Strong All-Island Partnership

The northern part of the island of Ireland has been transformed over recent decades, in part through the enhanced economic linkages developed since the Good Friday Agreement in 1998, with significant benefit for the Border counties in particular. The daily lives of communities have been changed and employment opportunities expanded through enhanced cross-Border economic, social and cultural connections, which have been beneficial for everyone.

Much progress has been made on developing economic partnerships to the benefit of the competitiveness and productivity of both parts of Ireland. This includes positive developments in terms of international access, energy networks and security of supply, agriculture and tourism, environment,

telecommunications and connectedness between key urban centres, labour market flows and education and skills and healthcare.

Against the backdrop of Brexit, it is all the more necessary to continue to build enduring partnerships in key areas of economic and social mutual interest. Working together on mutually beneficial areas of economic, innovation and business activity will support both the competitiveness of the Border regions and self-sustaining growth. It will maximise the benefits from the outcomes of such partnerships in terms of job creation, skills development, productivity, trade and services for people on both sides of the border.

From a business and enterprise investment perspective, strong regions and business ecosystems of scale and quality are important to supporting enterprise innovation and productivity growth. Over recent years, businesses both North and South have benefitted from the larger all-island market. Clustering and agglomeration in the Border region will continue to be an important channel for innovation and job creation. Firms located close to others in the same industry tend to find out more rapidly about new technologies and markets and therefore have the potential to be more productive. There are key sectors where businesses can co-operate further for mutual benefit and to develop their competitive advantage. For example, in the engineering sector where the development of supply and apprenticeship programmes on both sides of the Border is of mutual benefit.

More generally, it is essential that the economic, social and cultural ties that are so deep, are the daily reality for many along the Border, North and South, and have flourished in recent years, are sustained and that areas of partnership are also deepened, securing prosperity for all. We will continue to strengthen the functional areas of the key urban centres in the Border counties, through co-operation in education, health and business areas of mutual benefit.

The development of effective partnerships will, into the longer-term, continue to be of significant importance to economic development and prosperity, North and South. As recognised in the NPF it is essential that sufficient emphasis continues to be placed on the role of regions and centres as parts of an interconnected system on the island. It will be a priority through the implementation of the NPF and National Development Plan to continue to encourage better co-ordinated planning and development, to ensure that trade and commerce can continue in the functional areas of the main urban centres, so that every region can build and strengthen their contribution to national prosperity.

4.3 Investing in the Border Region

The National Development Plan represents a particular step change for the northern part of the island of Ireland, including the border counties and the North-West.

As set out in the NPF, the Government wants to work with the Northern Ireland authorities across three main dimensions:

- working together for economic advantage;
- co-ordination of infrastructure investment; and
- managing our shared environment.

Working together, we can realise the full potential of the North-West, the Central Border Region and the Dublin-Belfast Corridor.

That is why the NPF explicitly recognises:

- Sligo in the North-West fulfills the role of a regional centre;
- Letterkenny, with Derry City and Strabane, functions as a cross-border city region;
- Dundalk and Drogheda are key centres on the Drogheda-Dundalk-Newry cross-border network and in the context of the Dublin-Belfast economic corridor; and
- that the North-East is a functional area that comprises part of two Regional Assembly areas that also includes most of Co. Cavan and Co. Monaghan, with strong links to the Dublin-Belfast economic corridor.

The National Development Plan provides for investment to support the ambition for development of the border region, including:

- the N2/A5 road, serving Meath, Monaghan and Donegal;
- the N14 Manorcunningham to Lifford;
- the N52 Ardee Bypass;
- the N2 Slane Bypass;
- the N4 Collooney to Castlebaldwin;
- the N5 Westport to Turlough and Ballaghdereen to Scramogue;
- the N56 Dungloe to Glenties and Mountcharles to Inver;
- an examination of opportunities for improvements in journey times and investment in high-speed rail links between Belfast, Dublin and Cork:
- the next phase of the restoration of the Ulster Canal in Co. Monaghan;

- support for the Narrow Water Bridge project in Co. Louth;
- support for the North-West Strategic Partnership between Donegal and Derry;
- the continued development of integrated North-South energy networks;
- improved access to health services on a crossborder basis; and
- increased linkages between higher education institutions.

4.4 Advancing North-South Co-operation

The institutional framework for North-South cooperation will be more important than ever in helping to realise the objectives of this plan and to tackle the issues arising from Brexit.

North-South Ministerial Council

There is a detailed strategic framework already in place with the North-South Ministerial Council (NSMC) acting as the main forum for advancing North-South co-operation.

North-South co-operation on planning and on capital investment can play a central role in delivering significant economic efficiency improvements for both economies on the island. Investment in infrastructure can help unlock the full potential of the island economy in particular for those living in border areas.

The framework provided by the NSMC is especially important in the context of the economic uncertainties arising from Brexit. In the wake of the UK referendum on EU membership, the NSMC agreed on a number of important common principles for dealing with Brexit on an all-island basis, scoping out the sectoral implications for Ireland, North and South, and agreeing to work together to optimise North-South planning in the phases preceding and following Brexit

The Radiotherapy Unit at Altnagelvin Hospital

This unit is now operational and is a flagship exemplar of the benefits to citizens of North-South co-operation. This jointly funded unit is now providing access to radiotherapy services to over half-a-million people across the North West of the island. Paediatric cardiac care on the island is also benefitting from strong collaboration between the respective Health Departments, North and South.

Investment Commitments under the Fresh Start Agreement

The November 2015 Fresh Start Agreement contained a number of commitments to provide support and funding for North-South infrastructure projects, including support of £25 million in 2019 to complete the first part of the A5 road project in addition to the £50 million already committed. The Government is committed to participation in the further development of the A5 and will continue to engage with the Northern Ireland Executive in relation to this project.

In Fresh Start the Government also agreed to undertake, together with the Northern Ireland Executive, a review of commitments for targeted investment in cross-border economic infrastructure. The review will include identifying options for the future development of the Narrow Water Bridge and Ulster Canal projects.

The Fresh Start Agreement contained a commitment to establish a North-West Development Fund to which €2.5 million has been allocated by the Government to support regional development and to help create jobs and promote investment including the North West Gateway Initiative work of Donegal County Council and Derry City and Strabane District Council.

The Government will update and enhance its commitment to jointly funding cross-border investment, in the event of an agreement to restore the Northern Ireland political institutions.

EU Funding

Ireland and the UK are currently partners in two EU-funded cross-border co-operation programmes. PEACE and INTERREG, with a combined value of €550 million over the period 2014 to 2020 managed by the Special EU Programmes Body, one of the North-South Implementation Bodies established under the Good Friday Agreement

The programmes are important drivers of regional development in a cross-border context. Through EU-funded co-operation, a range of Departments and agencies, North and South, have engaged in and benefitted from a variety of cross-border and cross-community projects.

Support from the European Regional Development Fund is an important source of funding for PEACE and INTERREG. It is also a central element of the European Union's continuing commitment to the process of building peace and reconciliation in the region over the last quarter of a century.

The Government is committed to the successful implementation of the current programmes and to successor programmes post-2020.

North-South Implementation Bodies

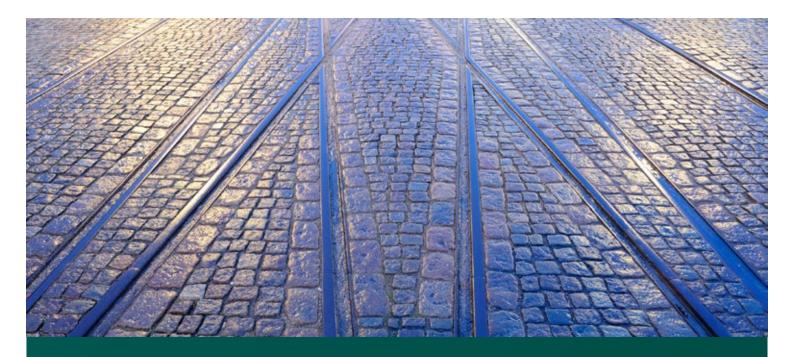
Six areas of North-South co-operation are taken forward through North South Implementation Bodies established under the Good Friday Agreement. The North-South Implementation Bodies operate under the overall policy direction of the NSMC, with clear accountability lines back to the council and to the Oireachtas and the Northern Ireland Assembly.

The six bodies are:

- Waterways Ireland: management, maintenance, development and restoration of specified inland navigable waterways principally for recreational purposes.
- Food Safety Promotion Board: promotion of food safety research into food safety, communication of food alerts, surveillance of food borne disease, promotion of scientific co-operation and laboratory linkages, and development of cost-effective facilities for specialised laboratory testing.
- InterTradeIreland: promotion of trade and business on an all-island and cross-border basis and the enhancement of the global competitiveness of the all-island economy to the mutual benefit of Ireland and Northern Ireland.
- Special EU Programmes Body: managerial and oversight functions in relation to EU programmes including PEACE and INTERREG.
- North/South Language Body: Foras na Gaeilge is responsible for the promotion of the Irish Language throughout the island with The Board of Ulster-Scotch promoting Ulster-Scots.
- Loughs Agency: promotion and development of Lough Foyle and Carlingford Lough for commercial and recreational purposes in respect of marine, fishery and aquaculture matters.
- Tourism Ireland: a publicly owned limited company, is responsible for marketing the island of Ireland overseas as a holiday and business tourism destination.

The North-South bodies demonstrate what can be achieved through the pooling of resources in strategic areas highlighting that the opportunities for further and enhanced co-operation to the mutual benefit of border economies and the wider all-island economy.

In addition to the work carried out by the North-South Implementation Bodies, common policies and approaches are agreed in the NSMC in relation to the environment, health, agriculture, transport, education and tourism (including Tourism Ireland). Other areas of co-operation include energy, telecommunications, fisheries, justice and security, higher education and sport.



Chapter 5:

National Strategic Outcomes and Public Investment Priorities

5.1 National Planning Framework: National Strategic Outcomes

The new National Planning Framework (NPF) published alongside the National Development Plan yields ten National Strategic Outcomes (NSOs) as follows:

- 1. Compact Growth
- 2. Enhanced Regional Accessibility
- 3. Strengthened Rural Economies and Communities
- 4. Sustainable Mobility
- 5. A Strong Economy, supported by Enterprise, Innovation and Skills
- 6. High-Quality International Connectivity
- 7. Enhanced Amenity and Heritage
- 8. Transition to a Low-Carbon and Climate-Resilient Society
- 9. Sustainable Management of Water and other Environmental Resources
- 10. Access to Quality Childcare, Education and Health Services

These NSOs represent the overarching priorities which the NPF is designed to achieve. The background to and rationale for each NSO is set out in the NPF.

The fundamental mission and purpose of the National Development Plan is to set out the new configuration for public capital investment over the next ten years to secure the realisation of each of the NSOs. This will improve the way public capital investment is planned and co-ordinated in a modern and growing society, leading to improved public services and quality of life.

This new model and approach to public capital investment is essential to support the achievement of this objective. Significant reform and innovation is required in Ireland's system of public capital investment as set out in the National Development Plan to ensure that it operates as a cornerstone to the successful and effective implementation of the NPF.

5.2 Alignment with the National Development Plan

This chapter details the main investment projects, programmes and priorities envisaged under the National Development Plan over the next decade in order to drive the implementation of the NPF.

It highlights the specific Strategic Investment Priorities relating to each of the NSOs to which the Government is committed to deliver over the 10-year period of the National Development Plan. These are presented below on a thematic basis alongside the NSOs. This emphasises the strongly integrated and cohesive approach to public capital investment now required to mobilise all the sectors of the public service undertaking major programmes of public capital spending to secure the benefits identified in the NPF.

Sectoral investment strategies and policies are being knitted together into a single national investment strategy set out in the National Development Plan to ensure that all elements of public capital spending are sharply focused on securing the investment priorities that will determine that we make sustainable choices for the future.

Each NSO is summarised in this chapter alongside the Strategic Investment Priorities which Departments have determined will drive their achievement.

It is very important to note that many of the Strategic Investment Priorities have benefits which, directly or indirectly, will accrue to all households and communities irrespective of their location that will support the achievement of several of the NSOs set out in the NPF. For example, investment in schools, the road network, ports and tourism will underpin the development of our cities and towns, regions and rural areas. However, to avoid repetition, the Strategic Investment Priorities are included in the National Development Plan under the NSO to which they primarily relate.

The National Development Plan provides
Departments with far greater clarity in relation to
their investment capacity over the medium-term.
This follows the Departmental allocations made out
to 2021 in Budget 2018, which are now being further
extended to include a fifth year, that is 2022, under
the National Development Plan.

There is also now a commitment to maintaining these five-year multi-annual investment allocations on a rolling basis, updated annually as part of the annual Estimates process, with a further commitment that public capital investment will be maintained at approximately 4% of GNI* for the remainder of the period of the National Development Plan (table 3.1). The indicative resources which are currently expected to be allocated under each NSO of the NPF over the period 2018 to 2027 are set out in table 3.2.

The investments outlined in this chapter include projects and programmes which will be delivered or commenced by 2021, as well as projects which will be prioritised between now and 2027. Further investments in the later stage of the plan will be developed over time following the production of Regional Spatial and Economic Strategies and new Metropolitan Area Strategic Plans as required under the NPF.

The Major Capital Projects Tracker, which is published on the Department of Public Expenditure and Reform's website, details the capital investments due to commence in the next four years, and will be updated following the publication of the National Development Plan.

National Strategic Outcome 1

Compact Growth

This outcome aims to secure the sustainable growth of more compact urban and rural settlements supported by jobs, houses, services and amenities, rather than continued sprawl and unplanned, uneconomic growth. This requires streamlined and co-ordinated investment in urban, rural and regional infrastructure by public authorities to realise the potential of infill development areas within our cities, towns and villages. This will give scope for greater densities that are centrally located and in many cases publicly owned, as well as bringing life and economic activity back into our communities and existing settlements. Creating critical mass and scale in urban areas with enabling infrastructure, in particular increased investment in public and sustainable transport and supporting amenities, can act as crucial growth drivers. This can play a crucial role in creating more attractive places for people to live and work in, facilitating economic growth and employment creation by increasing Ireland's attractiveness to foreign investment and strengthening opportunities for indigenous enterprise.

Strategic Investment Priorities 2018–2027: Housing and Sustainable Urban Development, €14.5 billion

Public capital investment must, as a top priority, support the delivery and location of the homes that society will need over the next decade and beyond, while also ensuring that in the future the pattern of housing development underpins the development of more compact higher-density cities, towns and other areas. It is also a priority to enable infill development, with up to 50% of future housing in our cities and major urban centres and 30% elsewhere to be provided within existing built-up areas. This urban, compact growth will be supported through investment in high quality integrated public and sustainable transport systems and supporting amenities.

To help achieve this objective, effective engagement in the management and building up of a reserve of development land is required. This will allow us to meet society's housing land requirements, smooth supply, ease pressure on building land costs, and facilitate the delivery of sufficient public and private housing in the locations and of the types that people need and at prices and rents people can afford. It will also enable the capture of gains in land value from the development process, for investment in necessary public infrastructure. Over the next decade, €11.6 billion will be provided for investment in social housing.

Housing and Sustainable Urban Development



Building an average of 25,000–30,000 new homes annually to meet future planned needs and also deal with the demand-supply imbalance over recent years – in effect a doubling of annual housing output from 2016/2017 levels.



Provision of 112,000 social housing homes by 2027, maintaining increased outputs to be delivered under Rebuilding Ireland.



€2 billion allocated for an Urban Regeneration and Development Fund – to promote co-ordinated investment in the renewal and redevelopment of our cities and towns. This fund will support the co-development of the NPF's growth enablers for the five cities, examples could include Cork Docklands (City Docks and Tivoli and associated mobility and bridge access), Limerick 2030, Waterford North Quays Strategic Development Zone (SDZ), and Galway City Centre regeneration.



A new National Regeneration and Development Agency working with local authorities to release strategically located land banks suitable for redevelopment and designation for future public and private housing provision that will be affordable for housing providers to develop, and for people to buy or rent.



A package of strategic publicly owned sites being developed for public housing purposes primarily, but with a mix of private housing and affordable homes as part of mixed-tenure communities.

Main Investment Actions

Housing

Rebuilding Ireland, the Government's Action Plan for Housing and Homelessness published in July 2016, committed to increasing overall housing supply to a baseline level of 25,000 new homes by 2020. In line with the long-term housing demand of at least 500,000 new homes forecast within the NPF models, this level of housing supply will, at a minimum, need to be maintained to 2040.

Looking beyond 2020, sustained economic growth and a growing population and rate of projected household formation will likely require an increase in annual housing output in the following years to 30,000-35,000 homes annually up to 2027, to address the supply deficit that has built up since 2010 from an underperforming housing market.

In terms of social housing, the National Development Plan will, through a planned capital investment of over €4.2 billion for the period 2018 to 2021, support the delivery of some 40,000 new social housing homes by that date. This will be achieved through direct Local Authority build, acquisitions, rejuvenation of formerly empty homes and provision by housing bodies, to reduce social housing waiting lists and ensure sustainable supply of social housing through future appropriate investment in line with projected demand. The needs of almost 26,000 families/people on the waiting list were met in 2017, with the aim to meet a similar level of social housing needs in 2018.

Looking to the future, by 2021, local authorities and approved housing bodies will be making about 12,000 social housing homes available to those on social housing waiting lists annually. This level of provision will be maintained over the remainder of the period of the National Development Plan, resulting in 112,000 households having their housing needs met in a social housing home over the next decade.

A concerted and collaborative approach, through integrated actions by central Government, Local Authorities, Approved Housing Bodies, National Asset Management Agency, National Treasury Management Agency, Housing Finance Agency and the Housing Agency, to secure expanded and accelerated delivery of social housing is a central tenet of the overall approach, through:

- the active targeting, with Local Authorities, other State-landowners, National Asset Management Agency and private owners, of residentially zoned but undeveloped lands to deliver social and more affordable housing; and
- new dedicated structures and initiatives within the Department of Housing Planning and Local Government, to drive delivery and to identify and resolve potential impediments.

Reflecting where the majority of social housing need arises, these homes will be primarily located in compact urban locations in cities and towns as required by the NPF in order to ensure the achievement of NSO 1: Compact Growth.

In addition to the focused investment in social housing over the coming years, the NDP investment will also facilitate the delivery of more affordable homes to buy and rent, through for example, co-ordinated and efficient provision of enabling infrastructure and services on publicly owned sites, leveraging the value of the land to provide mixed-tenure developments and providing flexibility on design and density, particularly in our urban cores, to enable more cost-efficient construction and variety of homes aimed at firsttime buyers. Such enabling capital investments will be supported by other policies and initiatives that will help to provide more choice and more supply of new homes at affordable rates, enabling first-time buyers and households to live much closer to where they work and in well-planned and well-serviced communities.

Mechanisms will be put in place to ensure a plan-led and delivery focused approach to securing compact growth, including:

- new strategic planning approaches for cities and their regions to manage growth and prevent sprawl;
- sectoral investment in infrastructure and place making initiatives to make it very attractive to deliver the homes and job locations that people want in our established city, town and village cores, and in both urban and rural settings;
- a new regeneration and development initiative (explained below), which will further encourage and reward sharing of capital investment allocations; and
- the establishment of a National Regeneration and Development Agency that will work with local authorities, other public bodies and capital spending departments and agencies to secure the best use of public lands and catalyse the further renewal of strategic areas not being utilised to their full potential.

Achieving these housing targets, in the locational manner set out under the NPF are crucial not only for its coherent implementation, but also to underpin the achievement of other core NPF objectives relating to climate change, compact growth and regional connectivity.



Local Infrastructure Housing Activation Fund/Affordable Sites

Under the Local Infrastructure Housing Activation Fund (LIHAF), lands with the potential to make a significant contribution to increasing and accelerating the supply of new homes have been identified, particularly in and around urban areas. 30 projects have been approved across 14 Local Authority areas under the existing fund of just under €200 million to provide the necessary infrastructure for the delivery of some 20,000 houses by 2021.

Given the success of the approach to date, LIHAF funding will continue to focus on providing public enabling infrastructure to open up and facilitate the delivery of large-scale private housing projects at more affordable prices. A further €50 million is being provided for a second tranche of LIHAF, to be matched by €17 million in local authority contributions. Phase 2 of LIHAF has the potential to stimulate the supply of mixed-tenure homes on private and State-owned lands by in excess of 5,000 additional new homes in the coming years. As well as additional LIHAF funding, a separate Serviced Sites Fund of €25 million (with an additional €8 million in Local Authority contributions) will enable the servicing of sites to be specifically provided for affordable housing, targeted at households facing the greatest affordability challenges in the housing market.

Experience gained with the competitive-bid process under LIHAF, and the co-ordinated approach across key agencies, will help inform the design of the Urban Regeneration and Development Fund. This fund

will supersede LIHAF to encompass wider urban regeneration across both residential and commercial developments, once the main areas for renewal and investment are identified under regional and local planning approaches that will be developed in 2018 and beyond.

Urban Regeneration and Development

A recast RAPID (Revitalising Areas by Planning, Investment and Development) Programme relating to capital projects only is available for projects in disadvantaged urban areas and in provincial towns. The Dublin North-East Inner City funding is being drawn from the existing budgetary allocation for the programme.

Some €211 million is being made available out to 2021 under the National Regeneration Programme to support direct delivery of new social housing units. Projects being funded under the programme target the country's most disadvantaged communities, including those defined by the most extreme social exclusion, unemployment and anti-social behaviour.

Major regeneration projects are underway in Dublin including O'Devaney Gardens and also in cities and towns across the country, including the Limerick Regeneration Framework Implementation Plan which will now prioritise refurbishments and the delivery of targeted, high-quality new housing construction, along with a continued focus on community and economic supports.

Limerick Regeneration Programme

Current Status: In progress

Estimated Cost: €170 million

Estimated Completion Date: 2023

Continued investment in the Limerick Regeneration Programme will see the completion of the works identified in the 2013 Limerick Regeneration Framework Implementation Plan, with the delivery of some 400 new homes and the upgrading of 900 homes across the areas of Moyross, Southill, Ballinacurra Weston and St Mary's Park. A programme of social and economic initiatives will also be advanced over the coming years. The scheme is scheduled to be completed by 2023.

O'Devaney Gardens Housing Development

Current Status: In procurement

Estimated Cost: TBC, following public procurement process.

Estimated Completion Date: 2020

The development of O'Devaney Gardens in Dublin is a clear example of the urban infill development which is proposed under the NPF. This project is a major mixed-tenure site under Rebuilding Ireland and is currently being progressed with Phase 1 allowing for the delivery of 56 social houses, with construction commencing in 2018. Dublin City Council has commenced a competitive dialogue process regarding the remainder of the site which could accommodate a further 530 homes, comprising 119 social, 117 affordable and 296 private homes. It is expected that the final tender should issue to competitive dialogue candidates in April 2018, with expected evaluation of tenders and awarding of contract in June 2018. The full scheme is scheduled for completion by 2020.

New Regeneration and Development Fund Initiative

As indicated in chapter 3, drawing on the positive experience and delivery achieved under the LIHAF, which incentivised Departments and agencies to pool resources in delivering a major enhancement of supply of serviced lands for housing, a new €3 billion Regeneration and Development Fund Initiative will be delivered under the National Development Plan, with two funds being established, one for urban areas and a second for rural areas.

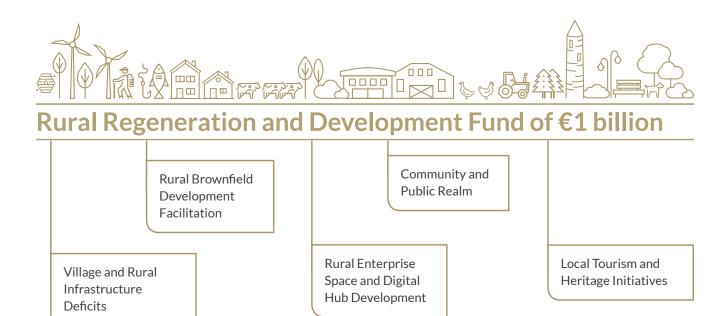
The €2 billion Urban Regeneration and Development Fund will aim to achieve sustainable growth in Ireland's five cities and other large urban centres, by putting in place a centrally managed mechanism to drive collaborative, co-ordinated and complementary packages of investment between Departments, agencies, Local Authorities and other public bodies in pooling their assets and working with local communities and the private sector to transform our cities and towns. This will be complemented by a Rural Regeneration and Development Fund to target smaller urban centres, rural towns and villages and outlying rural areas.

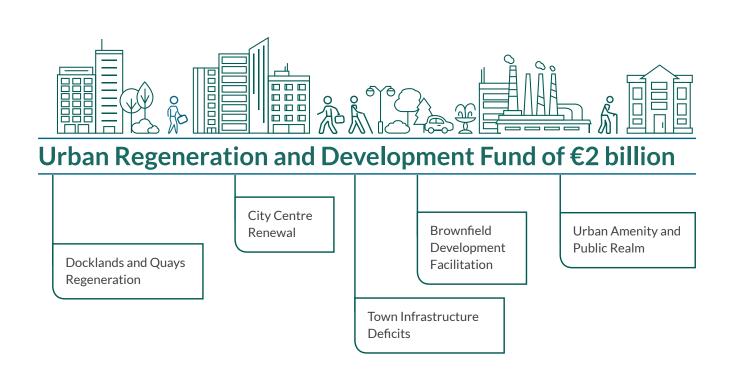
A funding allocation of €100 million is being provided in 2019 to establish the Urban Regeneration and Development Fund and to fund a number of initial projects. The funding allocation will be increased incrementally over the following three-to-four years to reach its full scale. The funding will be allocated on the basis of a competitive bid-based approach, based on quantifiable and measurable progress towards NPF objectives. Proposals being submitted for co-funding from the fund will have to demonstrate a significant participant contribution in the form of a combination of wider Exchequer and/or state-sector capital expenditure, Local Authority investment and/ or land, or other asset contributions. In the case of the urban fund, there will also be a requirement to demonstrate at least 100% (euro-for-euro) leveraging of committed wider private sector investment in the delivery of homes or commercial floor space in city or town centres, as a result of the investment to be made in enabling public infrastructure and other qualifying economic/social related expenditure. A strongly evidence-based appraisal of investment projects will be undertaken ex-post to confirm demonstration of delivery of NPF objectives.

All forms of public investment provided for in the National Development Plan will be eligible for inclusion in the initiative. A particular objective of the urban fund will be to support the co-development of the NPF's growth enablers for the five cities and other urban centres. There are a number of examples of urban redevelopment projects that are already in train and that have the potential to benefit from the new Fund, for example:

- the development of the Cork Docklands (City Docks and Tivoli and associated mobility and bridge access);
- the Limerick 2030 initiative;
- the Waterford North Quays SDZ regeneration project
- plans for Galway City Centre regeneration;
- the Portlaoise urban design and renewal initiative.

New Regeneration and Development Funds





The Government recognises the importance of these redevelopment projects for their respective cities and towns, and is strongly supportive of the objectives which these projects are seeking to achieve. It will be open to these, and similar, projects to seek support from the Urban Regeneration and Development Fund.

As the fund develops beyond the pilot phase, and also takes over the functions of the LIHAF and the urban renewal fund, it will be expanded significantly with \in 2 billion in funding committed for the fund over the 10-year period of the National Development Plan.

National Regeneration and Development Agency

Effective land management, particularly publicly owned lands, is a central element of the National Development Plan's commitment to compact and sustainable development.

The Government recognises that the State must take a stronger role in strategically managing and enhancing the development potential of its own lands to deliver on wider public policy and planning aims to ensure overall development needs are met, and particularly that housing is economic to provide, by the state and wider housing providers, and affordable to buy and rent by our people.

There is an urgent need for a more agile and strategic approach to be adopted in managing and developing publicly owned lands so that development requirements can be met within a smaller physical footprint and provide an economic alternative to long-distance commuting.

There have been successes in the past, such as the redevelopment of the former mental health facility in Grangegorman as a new university campus, rejuvenation of run-down areas in many regional locations and the revitalisation of Dublin's dockland areas. Past rejuvenation of both cities and rural towns and other locations and the role that strategic management and co-ordination of the development of public lands has played, provide valuable lessons to strengthen the State's capacity to drive rejuvenation and proper planning in an ongoing, rather than stopstart, approach and in urban or rural contexts.

Learning from past experiences, the Government will establish a proposed new public body, the National Regeneration and Development Agency. This agency will work closely with the local government sector, central Government, a range of existing agencies and public bodies and the Semi-State sector, to place a spotlight on how specific land holdings, in public ownership, can and will be used to the maximum potential to deliver on the objectives of the NPF and National Development Plan. The body will also identify a clear and practical sequence of steps to be taken by the relevant stakeholders in achieving the tasks set for it and all relevant public bodies by Government.

The new agency will be established under existing public bodies legislation and with a clear Government mandate to work with local authorities, relevant Departments and agencies, and the Office of Public Works (OPW) in identifying an initial tranche of publicly owned or controlled lands, and strategic land in private ownership if relevant, in key locations and with both a city and wider regional and rural focus, with potential for master-planning and re-purposing for strategic development purposes aligned to the NPF.

The Government intends that such a body will enhance and enable, rather than in any sense usurp, the roles of local authorities, various Government Departments and agencies, and Commercial State Companies through new co-ordination and delivery arrangements, which will also link to wider infrastructure funding arrangements through the National Development Plan and strategic investment vehicles like the Ireland Strategic Investment Fund. A proposed demonstration project to show how the new Agency can make a difference in relation to urban regeneration is set out in the Box below.

A significant benefit of such an agency would be to create a national centre of expertise in strategic master-planning, development and renewal, adding to and complementing existing public sector expertise and with a roving remit to advise the Government and key stakeholders on how to get the best strategic return on the development of the state's land portfolio.

There will be a close link between the functions of this body and strategic planning at metropolitan and other levels and the operation of the regeneration and development funds, in both urban and rural development contexts which will be further developed between the relevant Departments in 2018.

Detailed proposals in relation to the establishment of the National Regeneration and Development Agency will be published later in 2018.

Regeneration Demonstration Project - Portlaoise

Towns like Portlaoise witnessed very rapid expansion of new housing areas and retail centres outside the traditional town core during the early 2000s. Like many other towns that went through similar periods of growth, there is a marked contrast between the type of development that occurred in the historic town core and that which took place in the surrounding ring roads and outlying parking areas.

In regional and rural towns and villages, there are many opportunities to address these issues and turn around the fortunes. There is now a need for a major focus on regenerating original town centres and main street areas and how they relate to the expanded town, with a view to creating more attractive, desirable places that people want to live and spend time in, for shopping or re-creational purposes.

A Demonstration Project will be initiated on a community-and locally-led urban design and renewal initiative. The national Regeneration and Development Agency, with investment from the Urban Regeneration and Development Fund and wider community and local businesses, will create and deliver a new vision for the centre of Portlaoise, to show how the best quality planning, urban design and implementation can create rejuvenated towns. There will be a particular focus on self-sustaining and community-driver renewal.

National Strategic Outcome 2

Enhanced Regional Accessibility

A core priority under the NPF is the essential requirement to enhance and upgrade accessibility between urban centres of population and their regions, in parallel with the initiation of compact growth of urban centres. This has a crucial role to play in maximising the growth potential of the regional urban centres and the economy as a whole.

Strategic Investment Priorities 2018-2027: Regional Roads Network and Accessibility to the North-West, €7.3 billion

Substantial progress has been made since the year 2000 in improving the road linkages between Dublin and most of the other urban areas and regions. Under the National Development Plan, the objective is to complete those linkages so that every region and all the major urban areas, particularly those in the North-West, which have been comparatively neglected until recently, are linked to Dublin by a high-quality road network. As detailed in chapter 4, a commitment has been made to provide support and funding for the first part of the A5 road project. The Government is committed to participation in the further development of the A5 and will continue to engage with the Northern Ireland Executive in relation to this project.



Furthermore, the other major objective is to make substantial progress in linking our regions and urban areas not just to Dublin but to each other. This will be a major enabler for balanced regional development to occur. A particular priority in this is substantially delivering the Atlantic Corridor, with a high quality road network linking Cork, Limerick, Galway and Sligo. The programme of investment set out in the National Development Plan, and as illustrated by figure 5.2, aims to achieve these objectives.

This will be delivered progressively as projects in planning/design/construction are delivered and as the additional projects move through the appraisal and planning process to create a pipeline of projects for delivery. This investment in regional access will be complemented by investment in, and maintenance of, local and regional routes throughout the country, enabling local communities to access local, national and international markets and services. This is further detailed under NSO 3: Empowered Rural Economies and Communities.

In addition, there are sensitive areas where their environmental and tourism value mean that major new alignments are neither feasible nor appropriate. On those routes, there will be targeted improvements to address bottlenecks and enhance safety, for example, the N59 in Mayo on the Wild Atlantic Way and the N26 linking Ballina to the N5. Key roads projects will also connect with existing public transport networks, and facilitate the delivery of the vision for high-quality public transport in the major urban centres, by providing the capacity for high-quality, rapid and frequent bus services, the plans for which are set out under NSO 4: Sustainable Mobility.

At the same time, the restoration of funding to maintain, on an on-going basis, the valuable investment already made and to be made will protect these vital national assets and keep them safe and fit for purpose. Following the publication of the NPF, the Department of Transport, Tourism and Sport is undertaking a strategic infrastructure plan, Planning Land Use and Transport Outlook (PLUTO) 2040, in order to assess the future needs for land transport in Ireland, based on NPF population projections. This will identify required infrastructure and service provision to meet the needs of the 2040 population. A draft PLUTO strategy will be published for consultation in Q4 2018.

Investment Actions

Protecting the Quality and Value of Past Investments (Maintenance and Renewal)

It is an investment priority to ensure that the existing extensive transport networks, which have been greatly enhanced over the last two decades, are maintained to a high level to ensure quality levels of service, accessibility and connectivity to transport users. Prioritisation of this type of investment is a recommendation of the recent Public Investment Management Assessment (PIMA), conducted by the International Monetary Fund (IMF).

The Department of Transport, Tourism and Sport's Strategic Investment Framework for Land Transport (SIFLT) analysis established the investment level required to maintain, manage and renew the existing transport infrastructure to keep it in an adequate condition. This is known as Steady State investment. While the Steady State investment requirements for the existing road and rail network is expected to be substantially achieved by 2021, the cumulative effect of Steady State investment not meeting the required level for the previous decade, will continue to impact upon the road and rail networks. Furthermore, maintenance and renewal expenditure will increase over the lifetime of the National Development Plan to meet the required investment levels for the current transport network and as new projects are developed.

Investment in the Inter Urban Rail Network

Building on from the recommendations in the recent PIMA study and the findings set out in the *Rail Review* 2016, the funding priority for the inter-urban rail network is to protect the investment already made in our national railway system by funding maintenance and safety projects needed to maintain safety and service levels in railway operations. This requires a significant level of spending directed toward maintenance and rehabilitation expenditure to prevent further degradation of the existing capital stock in order to regain and maintain at a steady-state.

Inter-Urban Roads



Accessibility to the North-West

- M20 Cork to Limerick
- N6 Galway City Ring Road
- M7 Naas to Newbridge bypass widening,
 Osberstown interchange and Sallins Bypass
- N8/N25 Dunkettle Interchange
- N69 Listowel Bypass
- N28 Cork to Ringaskiddy Road
- N21/N69 Limerick to Adare to Foynes
- N22 Ballyvourney to Macroom
- N72/N73 Mallow Relief Road
- N59 Moycullen Bypass
- N25 New Ross Bypass
- M11 Gorey to Enniscorthy

- N4 Collooney to Castlebaldwin
- N5 Westport to Turlough
- N5 Ballaghaderreen to Scramogue
- N52 Ardee Bypass
- N2 Slane Bypass
- N56 Dungloe to Glenties
- A5 Road Development
- N56 Mountcharles to Inver

Rail $\left(\Box \right)$ Network

- Protect investment in existing inter-urban rail network
- A feasibility study of high speed rail between Dublin Belfast, Dublin Limerick Junction/Cork and an evaluation of its economic benefits against improvements to existing line speeds will also be carried out against relevant appraisal processes and value-for-money tests required under the Public Spending Code to commence within a year.

The following sections of the **national road network** will be progressed through pre-appraisal and early planning during 2018 to prioritise projects which are proceeding to construction in the National Development Plan.

- N2 Clontibret to the Border
- N2 Rath Roundabout to Kilmoon Cross
- N2 Ardee to south of Castleblaney
- N3 Virginia Bypass
- M4 Maynooth to Leixlip
- N4 Mullingar to Longford
- N4 Carrick on Shannon
- M11 from Jn 4 M50 to Kilmacanogue
- N11 Oilgate to Rosslare
- N13 Ballybofey Stranorlar Bypass
- N13/N14/N56 Letterkenny Bypass and Dual Carriageway to Manorcunningham

- N14 Manorcunningham to Lifford
- N17 Knock to Collooney
- N21 Newcastle West Bypass
- N21 Abbeyfeale
- N24 Cahir to Limerick Junction
- N24 Waterford to Cahir
- N25 Waterford to Glenmore
- N25 Carrigtohill to Middleton
- N52 Tullamore to Kilbeggan
- N3 Clonee to M50
- M50 Dublin Port south access

Currently a contract is underway to introduce 28 rail carriages that are expected to re-enter service in 2019. Additionally, Irish Rail and the National Transport Authority (NTA) are assessing the availability of additional fleet that could be introduced to passenger service on the rail network in Ireland in the short-term, prior to the delivery of new diesel electric trains expected in 2022. This programme of new diesel electric trains would enable the enlargement of the rail fleet by approximately some 300 new rail carriages.

Over the period of the National Development Plan it will be very important to examine the role the interurban rail network can play in enhancing regional connectivity. This has a particular significance in an all-island context, in developing the wider economic and societal potential of the island by strengthening linkages between Belfast, Dublin and Cork.

Opportunities will therefore be examined on the Dublin–Belfast rail line to move to higher speeds through improvements to the infrastructure and rail fleet. The Dublin–Galway and Dublin–Limerick Junction/Cork rail lines will also be subject to an examination to move to higher speeds leading to improved connectivity to regional cities through improved rail journey times. An evaluation of the economic benefits of high speed rail between Dublin-Belfast, Dublin-Limerick Junction and Dublin-Cork against improvements to existing line speeds will also be carried out against relevant appraisal processes and value-for-money tests required under the Public Spending Code by 2020.

In 2016 as part of the preparation of the GDA Transport Strategy, a cost benefit analysis of an extension of the Dunboyne/M3 Parkway line to Dunshauglin and Navan was conducted by the National Transport Authority (NTA). The NTA is required to review its Greater Dublin Area Transport Strategy before the end of 2021. This review will include a reappraisal of the project taking into account the scale of new and planned development along the route and will allow for its consideration during the Mid Term Review.

The Western Rail Corridor Phase 2 from Athenry to Tuam, and phase 3 to Claremorris could play an important role in the Atlantic Economic Corridor. The extension of the WRC could increase passenger, tourist and commercial use. In line with the Programme for Government an independent review will be undertaken immediately. If the findings of the review are approved by Government, the project will be prioritised during this plan.

Increased Investment in Roads Programmes

Investment in national, regional and local road infrastructure will be delivered in accordance with the NPF.

It will be guided by the findings of the Department of Tourism, Transport and Sport's SIFLT analysis.

- Roads will be maintained to a high quality.
- Roads will be improved to reduce journey times, remove bottlenecks and improve safety.
- New roads will be built to connect communities and encourage economic activity.

A number of the major road developments to be delivered under the National Development Plan are set out earlier in this chapter.

A full list of projects and programmes included in the National Development Plan, including costs and planned completion dates will be set out in the Major Capital Projects Tracker on the Department of Public Expenditure and Reform website www.per.gov.ie.

Figure 5.1: National Road Network, 2003 and 2015

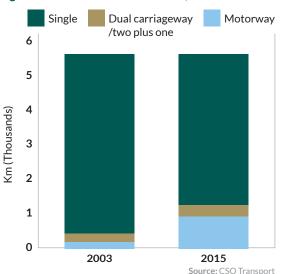
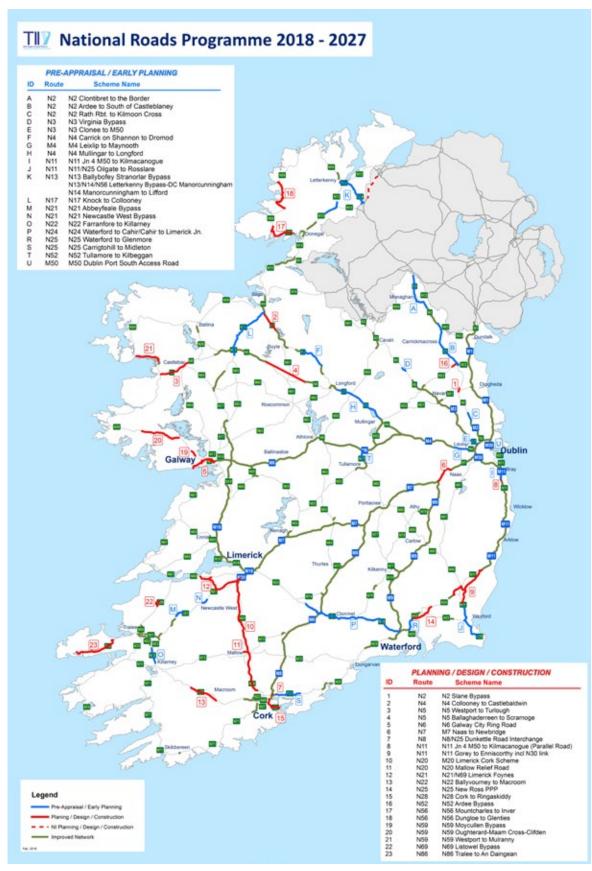


Figure 5.2: National Roads Programme 2018-2027



Source: TII

N6 Galway City Ring Road

Current Status: Design and Environmental

Assessment Phase

Estimated Cost: €550 to 600 million

Estimated Completion Date: 2025

Galway City and County Councils has established that there is a need to provide relief from traffic congestion in order to implement smarter mobility and public transport measures, such as Galway BusConnects including a network of park-and-ride sites. Previous studies have indicated that this cannot be achieved without another River Corrib bridge crossing. The N6 Galway City Transport Project confirms that such a crossing is possible and has identified a preferred location for this crossing.

The scheme is currently at Phase 3 Design and Phase 4 Environmental Impact Statement (EIS) Environmental Assessment Report (EAR) and The Statutory Processes. These two phases run concurrently. The objective of Phase 3 Design is to develop the design of a scheme, following the selection of a Preferred Route Corridor, to a stage where sufficient levels of detail exist to establish landtake requirements and to progress the scheme through the statutory processes.

The objective of Phase 4 EIS/EAR and The Statutory Processes is to complete an environmental assessment of the design developed in Phase 3, identify the potential impacts of the proposed development on the receiving environment and establish mitigation measures required. Legal documentation for land acquisition is also completed as part of this phase, in addition to the statutory processes necessary to confirm that the proposed scheme is in accordance with planning and environmental legislative and procedural requirements.

M20 Cork to Limerick Road

Current Status: Due to commence planning

Estimated Cost: €850 to 900 million

Estimated Completion Date: 2027 subject to

appraisal, planning and procurement

Cork and Limerick are Ireland's second and third largest cities located in the southwest and mid-west respectively. The two cities are approximately 100 km apart yet at present the economic interaction and inter-relationships between the cities is limited with poor transport connectivity being a factor. An opportunity exists to provide better connectivity between the two cities by improving the quality of the transport network which will address road safety issues associated with the existing N20 route and provide for safer and more efficient journey times. The solution for the M20 corridor will be identified through the appraisal process by the development of a business case for the scheme. This process will examine the inclusion of the Cork North Ring Road linking the N20 to Dunkettle. The Cork North Ring Road is a complementary scheme to the M20 and consideration of the North Ring Road could best be assessed as part of an overall transport strategy for the metropolitan Cork area which would include the examination of public transport and demand management options.

Transport Infrastructure Ireland (TII) will engage with Local Authorities in 2018 to undertake pre-appraisal/appraisal on a range of projects to be commenced over the lifetime of the National Development Plan. The prioritisation of individual schemes, leading ultimately to decisions as to which schemes to progress through planning, statutory approval and ultimately to construction, is a complex task.

Building on the requirements of the Public Spending Code and the Department of Transport, Tourism and Sport Common Appraisal Framework, TII has developed detailed Project Appraisal Guidelines which describe the processes and detailed methodologies required for the appraisal of projects and programmes. This in turn informs the prioritisation of projects and programmes. It is worth noting that the determination is an ongoing process, which requires regular updating to take account of changing circumstances.

These projects are at various stages of planning and are subject to appraisal in accordance with the Public Spending Code and in the light of the NPF to determine their prioritisation.

National Strategic Outcome 3

Strengthened Rural Economies and Communities

The full participation of rural communities in the strategic development as envisaged under the NPF is imperative to achieving the full potential of a broad range of strategic outcomes detailed in the National Development Plan. This applies both in terms of the traditional pillars of the rural economy, the natural resource and food sector, as well as those emerging from such developments as improved connectivity, broadband and rural economic development opportunities.

Under this theme, the National Development Plan is building on the progress achieved through:

- Realising Our Rural Potential. Action Plan for Rural Development, which focuses on supporting enterprise and employment in rural areas, improving infrastructure and connectivity, and supporting sustainable rural communities;
- The Government's Tourism Policy, People, Place and Policy Growing Tourism to 2025 and subsequent Tourism Action Plan 2016-2018, which recognise the important contribution of tourism to the economy, and the significant investment in the development of tourism projects and attractions through Fáilte Ireland's Tourism Development & Innovation. A Strategy for Investment 2016-2022, including investment in the experience brands of the Wild Atlantic Way and Ireland's Ancient East;
- Our Communities: A Framework Policy for Local and Community Development in Ireland which sets out a vision of building vibrant, sustainable selfdetermining communities; and
- Investment in the agri-food sector, including in schemes operated through the Rural Development Programme, Seafood Development Programme and Forestry Programme, which will empower rural communities and underpin the sustainable growth of the agri-food sector as set out in Food Wise 2025: A 10-year Vision for the Irish Agri-Food Industry.

This section highlights the main initiatives to be undertaken under the National Development Plan in relation to the achievement of this NSO.

Important elements of Strategic Investment Priorities set out in other sections of this National Development Plan will also have a central role to play in achieving Strengthened Rural Economies and Communities. For example investments in the schools building programme, further upgrading of the national roads network including improving accessibility and

connectivity on the emerging Atlantic Economic Corridor that links major centres on the western seaboard, investment in ports and airports, deploying enterprise initiatives to support regional development objectives and the proposed establishment of Technological Universities.

Strategic Investment Priorities 2018–2027: Strengthened Rural Economies and Communities, €8.8 billion

Securing regional balance is the fundamental purpose of the NPF targeting a level of growth in the Northern and Western, and Southern regions combined, to match that projected in the Eastern and Midland Region. Public capital investment has a vital role to play to support the regions, including rural areas, in achieving their economic and social potential, and in particular to facilitate the jobs growth necessary to support future population growth.

Broadband, Roads, Rural Regeneration and Development Fund, Agriculture, Tourism, Gaeltacht and Islands

National Broadband Plan

Investment in regional and local roads

Rural Regeneration and Development Fund

Agricultural / On Farm investment

Investment in Tourism

The Irish Language, the Gaeltacht and the Islands investment in:

- Gaeltacht Language Planning Process;
- Irish Language Networks and in Gaeltacht Service Towns
- island marine infrastructure
- Údarás na Gaeltachta's annual capital programme;

Investment Actions

Rural Regeneration and Development Fund: €1 billion

A new Rural Regeneration and Development Fund will be established under the Department of Rural and Community Development, to invest an additional €1 billion to promote rural renewal in order to enable towns, villages and outlying rural areas to grow

sustainably and support delivery of the strategic objectives of the NPF.

The fund will provide the opportunity for co-funding of suitable investment projects in towns and villages with a population of less than 10,000, and outlying areas, with all forms of public investment provided for in the National Development Plan being eligible for inclusion in the initiative. Depending on the nature of the proposal, a project in a town of between 1,500 and 10,000 in population may qualify under either the Urban or Rural Regeneration and Development Fund initiative, but funding will only be provided under one fund for any particular project.

The objective of the new Rural Regeneration and Development Fund will be to drive collaborative, coordinated and complementary packages of investment between Departments, agencies, Local Authorities and other public bodies in pooling their assets and working with local communities, and the private sector where appropriate, to transform our rural towns and villages and their outlying areas. Funding of €315 million is being allocated to initiate the Fund over the period 2019 to 2022, which will allow both further activity under existing initiatives as well as the introduction of new investment initiatives under the Fund to be supported during this period.

As the fund develops beyond the pilot phase, it will be expanded significantly with €1 billion in funding committed for the fund over the 10-year period of the National Development Plan.

There are a number of rural redevelopment projects already in train that will have the potential to benefit from the new Fund, for example:

 Boyle, in County Roscommon, where plans are being put in place to turnaround a historic and strategically located rural town whose urban core has been underdeveloped in recent years.

- The visitor resort project near Ballymahon, Longford, intended to create new tourism and visitor experiences in conjunction with bodies such as Fáilte Ireland and Waterways Ireland.
- Plans advancing in the Midlands to convert former Bord na Móna peat railways and trackways into cross country walking, cycling and peatway routes, coupled with strengthening nearby towns and villages as hubs for tourism activity and local businesses.

The Government recognises the importance of these redevelopment projects for their respective areas and is strongly supportive of the objectives which these projects are seeking to achieve. It will be open to these, and similar, projects to seek support from the Rural Regeneration and Development Fund.

Allocations from the fund will be made on a competitive bid-based approach, based on quantifiable and measurable progress towards NPF objectives. Proposals being submitted for funding will have to demonstrate a participant contribution in the form of a combination of wider voted and/or Statesector capital expenditure, Local Authority investment and/or assets, and/or other local contributions.

As set out in the following table, the Government is also supporting rural towns and villages across the country and their communities, through a broad range of other initiatives delivered by the Department of Rural and Community Development, in order to support rural revitalisation and a return to economic growth. Over time, the Rural Regeneration and Development Fund will integrate schemes such as the Town and Village Renewal Scheme, Ceantair Laga Árd-Riachtanais (CLÁR), Revitalising Areas by Planning, Investment and Development (RAPID), the Rural Recreation Scheme and the Community Facilities Fund, to ensure more strategic use of this funding.



Scheme/Programme	Summary
LEADER Programme	LEADER forms part of Ireland's Rural Development Programme 2014-2020. LEADER is programmed to provide €250 million in capital funding to support projects aimed at economic development and job creation, social inclusion and environmental protection in rural areas. It is expected that the LEADER programme will provide investment in 3,000 rural communities and contribute to the creation of 3,100 jobs. The programme is co-financed by the EU and approximately 63% of the €250 million for the programme will be recouped from the European Commission.
Town and Village Renewal Scheme	The Town and Village Renewal Scheme aims to support the revitalisation of towns and villages across Ireland, in order to increase their attractiveness as places in which to live and work. The central aim of the scheme is to support the revitalisation of towns and villages in order to improve the living and working environment of their communities and increase their potential to support increased economic activity into the future. A second element of the initiative is set to examine ways in which to encourage increased residential occupancy in town and village centres.
Rural Recreation Infrastructure Scheme	The Rural Recreation Infrastructure Scheme supports the development and necessary maintenance, enhancement or promotion of recreational infrastructure throughout Ireland in light of the huge potential to develop the economic value of Activity and Recreational Tourism by Local Authorities, State Agencies and communities. Initiatives funded covered a broad spectrum, and range from walking trails to greenways and blueways.
Local Improvement Scheme	The Local Improvement Scheme supports improvement works to non-public roads which are not subject to normal maintenance by Local Authorities. The scheme provides up to 90% funding for works and is delivered through Local Authorities.
CLÁR Programme	The CLÁR programme is a targeted investment programme which provides funding for small scale infrastructural projects in rural areas that have suffered the greatest levels of population decline. The aim of CLÁR is to support the sustainable development of identified CLÁR areas by making them attractive for people to live and work there. The funding works in conjunction with local funding and on the basis of locally identified priorities.
RAPID programme	The RAPID programme provides funding for capital projects in disadvantaged urban areas and in provincial towns.
Communities Facilities Scheme	The Communities Facilities Scheme funds projects in disadvantaged areas (rural and urban) aimed at enhancing communities, addressing disadvantage and improving social cohesion. Investment is provided to each Local Authority to address needs identified by Local Community Development Committees, including community centres, youth centres, parks and housing estate improvements.
Libraries Investment	Capital funding for libraries will support implementation of the new Public Library Strategy (2018-2022) and strengthen libraries as essential community facilities, providing services that underpin the attractiveness, liveability and sustainability of communities. Funding supports new buildings, renovations, technology investment, continued roll out of My Open Library Services, and new initiatives that seek to increase user numbers.
PEACE IV Programme (2014-2020)	PEACE IV is a cross-border Programme co-financed by the EU through the European Regional Development Fund. The programme supports peace and reconciliation and promotes social and economic stability in Northern Ireland and the Border Region of Ireland.

The National Broadband Plan

The Government recognises that access to quality high speed broadband is essential for today's economy and society, to ensure that Ireland's citizens and businesses continue to enjoy the opportunities and benefits that flow from this transformational digital age. The National Broadband Plan reflects the Government's ambition to ensure that the opportunities presented by this digital transformation are available to every community in Ireland.

Under the National Broadband Plan, the delivery of access to high speed affordable broadband to every home and business in Ireland will be achieved through a combination of accelerated commercial investment and a State intervention in those parts of the country where there is no certainty that the private sector will invest. Commercial investment continues to improve and expand the breadth of broadband and mobile telecoms services available in the State. Complementing this commercial investment, the Government is committed to investing through the National Broadband Plan intervention in the delivery of a future-proofed network to support high-quality affordable broadband services to those areas where commercial investment has not been demonstrated.

The focus of the National Broadband Plan intervention is predominately on communities in rural areas in every county in Ireland.

The National Broadband Plan will play a major role in empowering rural communities through greater digital connectivity, which will support enterprise development, employment growth and the diversification of the rural economy. It will deliver a step? change in digital connectivity and ensure that coverage extends to remoter areas including villages, rural areas and islands.

By delivering high speed connectivity in the Intervention Area, the National Broadband Plan will support greater remote working, broaden citizens choices in where to live and allow SME's to grow their businesses in rural and urban areas. It will enable citizens throughout Ireland to benefit from technology advances including in eHealth and eEducation. For rural areas it will also bring new opportunities in smart farming and tourism.

The National Broadband Plan

Current Status: In Procurement

Estimated Cost: Confidential

Estimated Completion Date: Contract to be awarded in 2018 for a 25-year contract

The State has committed to intervene and subsidise the building of a new high speed broadband network in areas of the country where there is no existing or planned commercial high-speed broadband. The formal process to engage a company who will roll-out this network within the State Intervention Area is at an advanced stage, working towards a contract award in 2018.

The Intervention Strategy is designed to deliver a high speed broadband network that is operated as a wholesale, open access network, so as to ensure consumers have a choice of retail service provider and can avail of affordable and competitive high speed services. Ensuring equal access for retail providers will promote strong competition at retail level resulting in comparable price with more urban areas.

The NBP has acted as a catalyst in encouraging commercial investment in high-speed broadband infrastructure and commercial operators have invested over €2.75 billion in upgrading and modernising networks over the past 5 years. As a result 69% of the 2.3 million premises in Ireland had access to a high-speed broadband service at the end of 2017. By end 2018 this is set to increase to over 77% of premises and to more than 90% by the end of 2020.

Transport

Regional and local roads will benefit from an estimated €4.5 billion investment under the National Development Plan. This is a significant increase in funding in comparison to recent years. Critical national road developments already underway and committed to are outlined under the NSO 2: Enhanced Regional Accessibility.

The following regional and local roads will be progressed over the course of the National Development Plan.

- The Sallins Bypass
- Adamstown and Nangor Road Improvements
- Portlaoise Southern Distributor Road
- Shannon Crossing
- Laytown to Bettystown Link Road
- Garavogue Bridge Scheme
- Dingle Relief Road
- Athy Southern Distributor Road
- Sligo Western Distributor Road
- Coonagh to Knockalisheen Main Contract
- Realignment of R498 Nenagh/Thurles road at Latteragh
- Killaloe Bypass/R494 upgrade
- Carrigaline Western Distributor Road

Furthermore Local Authorities are planning to progress a wide range of regional and local roads projects across the country. These projects are at various stages of planning and appraisal.

Examples of projects currently subject to appraisal are set out below:

- R157 Maynooth Road, Dunboyne (safety upgrade)
- R162 Navan to Kingscourt road (safety upgrade)
- Thurles Relief road
- Carlow Southern Relief Road
- Tralee Northern Relief Road

A Local Improvement Scheme has also been established by the Department of Rural and Community Development to assist local communities in the surfacing and maintenance of local private roads.

While there is capital investment for public transport in rural communities, the main emphasis for investment in these areas is subvention for services for the operation of Public Service Obligation routes in rural areas and the Local Link Programme (previously known as the Rural Transport Programme) and this investment will continue over the lifetime of the National Development Plan. Subject to availability of operational funding support, it is intended that new town bus services will be provided in certain large towns to enable their development growth and provide a public-transport option for residents and visitors. This will require investment in bus fleet and road infrastructure including bus stops and bus shelters. It is intended to introduce these services over time in other urban centres, for example, Carlow. Kilkenny and Mullingar, in addition to other similar sized urban centres. From July 2019, diesel only

buses will no longer be purchased for these services and lower emission alternatives, including electric or electric hybrid vehicles, will be introduced.



Tourism

Measures will be delivered to support further regional investment in the existing experience brands, the Wild Atlantic Way and Ireland's Ancient East, and a new brand for the Midlands region. Investment in activity-based tourism, including greenways, will be a priority over the period of the National Development Plan.

Appropriate investment in the development and enhancement of tourist attractions, including historical and heritage sites, will also be important in providing the type of experience that visitors are seeking. Examples of investments such as these which are due to be opened in 2018 include Fanad Lighthouse and the Sliabh League Visitor Centre in Co. Donegal. Measures such as these will assist in growing tourism in rural communities, which is a central component of national tourism policy.

Almost €108 million has been allocated to Fáilte Ireland for capital investment in Tourism Product Development over the next four years and it is intended that this level of funding will, at a minimum, be maintained over the lifetime of the National Development Plan. Fáilte Ireland will continue to invest in the priority areas that will deliver sustainable growth in the Irish tourism sector resulting in higher revenue and more jobs.

In line with, Tourism Development & Innovation. A Strategy for Investment 2016-2022, Fáilte Ireland's delivery mechanisms for this investment include Large and Small Grant Schemes (for amounts greater than €200,000 and less than €200,000 respectively), strategic partnerships with a range of State bodies, and investment in development of signature experiences. Fáilte Ireland will announce new rounds of the Large and Small Grant Schemes at various stages over the coming years.

Greenways Strategy

Current Status: Publication expected in Q1/Q2 2018.

Estimated Cost: Subject to proposals received in new funding call following completion of the strategy. Almost €56 million has been made available in the capital plan from 2018-2021.

Estimated Completion Date: Development of greenways will be ongoing over the period of the National Development Plan.

Projects to be delivered in 2018/2019 include the completion of the Kildare and Meath sections of the Galway to Dublin Greenway. It is expected that a number of new greenways projects will be funded and delivered over the period of the National Development Plan, the funding for which will be allocated on the basis of a competitive bid-based approach. The goal of an iconic coast-to-coast greenway from Dublin to Galway remains a priority for the Government and in light of the development of the Greenways Strategy.

Irish Language, the Gaeltacht and the Islands

The role of Irish Language, the Gaeltacht and the Islands will be recognised as part of the National Development Plan through a €178 million investment. Investment in the Irish language will support and strengthen its use as the principal community language in the Gaeltacht and increase opportunities for its more widespread use outside traditional Gaeltacht areas.

Gaeltacht Language Planning

The language planning process, prescribed in the Gaeltacht Act 2012, represents the primary driver in support of the Government's commitment to the achievement of the objectives set out in the 20-Year Strategy for the Irish Language 2010-2030. The first stage of the process, which began in 2014, involves the preparation of language plans at community level across 26 Gaeltacht Language Planning Areas. Capital funding underpinning the implementation of language plans will be prioritised. Priority areas for investment in this regard include:

- the upgrade of a number of Irish Summer College campuses, in an industry which attracts over 26,000 students to the Gaeltacht annually;
- the provision of strategically located language support and childcare facilities;
- the construction of new co-operative offices and community facilities on Inis Meáin in the Aran Islands; and
- the development of strategic tourism facilities in Sliabh Liag, An Earagail and Fanad in County Donegal and in Ceantar na nOileán in the Connemara Gaeltacht, the completion of Ionad na hEachléime in County Mayo and the development of the Slí Chorca Dhuibhne walking route in County Kerry, thus complementing other tourism facilities already developed or planned in Gaeltacht counties along the Wild Atlantic Way.

Údarás na Gaeltachta

The investment under the National Development Plan will allow An tÚdarás to continue to play its important role in employment creation in Gaeltacht areas over the period of the plan. Delivering on objectives set out in its own economic development strategy and on a range of objectives as set out in the Action Plan for Jobs, Harnessing our Ocean Wealth, Action Plan for Rural Development and in other national policies.

Given Údarás' role in promoting enterprise and employment in remote rural areas, some of which were identified in Census 2016 as being disadvantaged and employment blackspots, it will be necessary to create in the region of 1,000 jobs annually to maintain the social and economic fabric of the Gaeltacht. In order to achieve this, the incremental increase in the annual capital allocation to €12 million will enable the creation of an additional 400 jobs annually, bringing to over 1,000 the number of jobs created annually in Gaeltacht areas across counties Donegal, Mayo, Galway, Cork, Kerry, Waterford and Meath. In addition, significant investment will be made in order to bring Údarás' property and infrastructure portfolio to an appropriate standard to attract new enterprise.

Investment in Irish Language Networks and Gaeltacht Service Towns

In accordance with the provisions of the Gaeltacht Act 2012, it is proposed to provide statutory recognition to up to 16 Gaeltacht Service Towns. These are strategically located towns both within and close to Gaeltacht Language Planning Areas, and in which public services used by Gaeltacht communities are located. The Act also provides for the designation as Irish Language Networks of areas outside the Gaeltacht with a critical mass of language-related infrastructure such as naoinraí and primary and secondary level Irish medium schools. The investment in this area will focus primarily on the development of Irish Language and Cultural Centres in these towns and networks, thus complementing infrastructure already in place.

In addition, a flagship project will be the development of a language and cultural hub in Dublin city centre which will offer new opportunities to further build the already growing Irish language community in the capital.

Investment in Island Marine Infrastructure

The maintenance of sustainable island communities off our coast is closely aligned with the National Planning Framework's national policy objective of supporting the growth and development of the maritime economy in coastal communities and on the

islands. Safe access by sea for island communities is crucial to the achievement of this aim. Accordingly, the development, in conjunction with the Local Authorities, of improved pier infrastructure on Inis Oírr and Inis Meáin in the Aran Islands and at Machaire Rabhartaigh, and the provision of a new passenger ferry vessel for Oileán Thoraí, will be the main priorities in this strand of investment.

Agriculture, Food and the Marine

Investment in the agri-food sector is required to improve competitiveness, ensure the maintenance of Ireland's landscape, improve biodiversity and water quality, contribute to climate change goals and the development of our Fisheries Harbour Centres and research infrastructure.

Public capital investments in the agri-food sector will seek to enable the sustainable development of the sector in accordance with the ambition in Food Wise 2025 and any successor strategy. These objectives will be supported by the EU Common Agricultural and Common Fisheries Policies operating after 2020 which are expected to focus on supporting these sectors in a way that delivers enhanced economic, environmental and social sustainability, with a particular emphasis on climate change mitigation and adaptation actions.



Food Company Investment Support

Continued support for food companies adapting and optimising their production facilities will maximise the contribution the sector makes to the rural and national economy.

Rural Development Programme and On-Farm Investment

Ireland's Rural Development Programme (RDP) 2014–2020 will provide some €4 billion of support to rural communities in Ireland over its lifetime up to 2020. In addition, at EU level a priority to 2020 will be to influence the development of a new Common Agriculture Policy in order to secure a meaningful cofunded RDP beyond 2020.

In the 2018 to 2021 period alone, Targeted Agricultural Modernisation Scheme (TAMSII) is expected to make up to €350 million available to Irish farmers for investing in infrastructure, facilities and equipment to enhance growth and competitiveness, address climate and environmental issues, improve animal welfare and farm safety and target young farmers to address the age profile of the sector.

The drawdown of the TAMSII budget, which partially funds investments and must be complemented by private funding, would result in a total public and private investment in the agricultural sector of some €670 million across up to 17,400 farm holdings over the duration of the scheme.

Fishery Harbour Centres

Major development projects in Castletownbere and Killybegs have been initiated and will be undertaken in 2018 and 2019. Overall, a capital investment programme of up to €180 million across all six Fishery Harbour Centres, at Howth, Dunmore East, Castletownbere, Dingle, Ros an Mhíl and Killybegs, encompassing ongoing safety and maintenance and necessary new developments is set out for commencement up to 2022. Ongoing improvements will be required thereafter.

Local Authority Harbours

Capital projects will also be considered in Local Authority owned Harbours such as Greencastle for activities associated with the Fishing and Aquaculture sectors.

European Maritime and Fisheries Fund Operational Programme

The present EU co-funded European Maritime and Fisheries Fund Operational Programme is providing €240 million (€147 million EU) to support the development of the seafood sector over the period 2014 to 2020 and similar levels of investment are planned for the following programme period 2021 to 2027. The capital element of the current programme

 $(\le 104 \text{ million})$ is supporting essential investment in productive capacity in aquaculture, with a national growth target for 2023 of an additional 45,000 tonnes of seafood (+122%).



Forestry Programme

Forestry is a vital resource for the Irish economy. In addition to their economic, social and recreational role, Ireland's forests play an essential role in helping with climate change mitigation, through carbon sequestration in forests and the provision of renewable fuels and raw materials.

The current Programme for a Partnership Government has targets for afforestation which rise incrementally to 8,100 hectares per annum in 2020. More than €100 million will be invested in 2018 alone.

A publicly funded capital programme for afforestation beyond the lifetime of the current Forestry Programme 2014–2020 will be provided for under this National Development Plan.

Research and Innovation Facilities

Greater innovation both inside and outside the farm gate to enhance both economic and environmental efficiency will be central to achieving the targets set down in Food Wise 2025. Specific priorities include the funding of a National Food Innovation Hub and a Prepared Consumer Food Innovation Centre. The latter will include an initial €5 million capital investment in 2018. In respect of marine-research, investment in research facilities at the Marine Institute will include a replacement specialist research vessel.

National Strategic Outcome 4

Sustainable Mobility

An environmentally sustainable public transport system will enable growth and change, meet the significant increase in travel demand and urban congestion while also contributing to our national policy vision of a low-carbon economy.

A step change is required under the NPF in putting in place environmentally sustainable public transport systems in order to secure Ireland's climate action goals. These must represent a decisive shift away from polluting and carbon-intensive propulsion systems to new technologies such as electric vehicles and introduction of electric and other alternatively fuelled systems for public transport fleets.

The expansion of attractive and sustainable public transport alternatives to private based car transport will reduce congestion and emissions and enable the transport sector to cater in an environmentally sustainable way for the demands associated with longer term population and employment growth envisaged under the NPF. Furthermore, the provision of safe alternative active travel options such as segregated cycling and walking facilities can also help alleviate congestion and meet climate action objectives by providing viable alternatives and connectivity with existing public transport infrastructure.

Strategic Investment Priorities 2018–2027: Public Transport, €8.6 billion

Public investment in environmentally sustainable public transport systems in major urban areas and nationally is a primary enabler to NSOs under the NPF relating to Compact Growth in urban areas and Improved Regional Connectivity and is one of a number of most important priorities to achieve climate action objectives.

The National Development Plan will deliver a public transport network that will provide high-quality passenger interchange points, which facilitate convenient transfer between efficient and integrated public transport services. All the planned investment in public transport combined will add greatly to the choice and experience of the travelling public, connecting more people with more places and ease congestion in Ireland's cities.

Public Transport



Metro Link (Dublin)

BusConnects Dublin

BusConnects Cork

BusConnects Galway

Priority elements of DART Expansion



Investment Actions

Protecting the Quality and Value of Past Investments (Maintenance and Renewal)

As already outlined under NSO 2: Enhanced Regional Accessibility, a significant priority must be to maintain the existing network of road, rail and bus infrastructure to ensure acceptable levels of service to transport users given a number of years of underinvestment reflecting the severe constraints on public capital investment. This investment will increase over the lifetime of the National Development Plan as new projects are developed. Furthermore, because public transport capital infrastructure is very largely used for the provision of State-subvented public transport services, there is a strong link between expanded infrastructure investment and an increased need for more current funding for the provision of additional services using that infrastructure.

Increased investment in the public transport programmes

Under the National Development Plan investment in public transport infrastructure will be accelerated to support the development of an integrated and sustainable national public transport system consistent with the NPF NSOs of Sustainable Mobility as well as Compact Growth.

It will be a particular priority, in line with the Department of Transport, Tourism and Sport's SIFLT analysis, to reverse escalating congestion problems to secure a significant improvement in transport service to the public.

A number of sustainable transport projects will be delivered over the period to 2027 across the five cities Dublin, Cork, Limerick, Galway and Waterford to provide additional sustainable travel options to complement increased capacity and faster higher quality public transport in the cities. These will include traffic management, bus priority and other smarter travel projects along with new urban cycling and walking routes to allow transport infrastructure to function more effectively and relieve congestion.

Investment plans will also be guided by transport strategies and wider Government policies to promote balanced regional development and social inclusion objectives. The programmes and underlying projects proposed for delivery during the period to 2027 are set out below.

- Continued investment in bus and train fleets, as well as infrastructure, to maintain safety and service levels including further expansion where required.
- Delivery of the full BusConnects programme for all of Ireland's cities (inclusive of ticketing systems, bus corridors, additional capacity, new bus stops and bus shelters etc.).
- Transition to low emission buses, including electric buses, for the urban public bus fleet, with no diesel-only buses purchased from July 2019, while promoting commercial bus services and small public service vehicle industry to pursue low emission fleet.
- Complete construction of Metro Link.
- Delivery of priority elements of the DART Expansion Programme including investment in new train fleet, new infrastructure and electrification of existing lines.
- Park-and-Ride Programme: strategic park and ride sites plus investment in parking facilities at rail, Luas and bus locations, for example, Swords, Finglas, Dunboyne, Liffey Valley, Naas Road, Carrickmines, Woodbrook and Greystones and with national development of BusConnects, for example, Galway, Cork, Limerick and Waterford.
- Complete construction of the National Train Control Centre.
- Delivery of comprehensive cycling and walking network for Ireland's cities.
- Supporting programmes of rail and bus station improvement/development, traffic management investment, passenger information programmes, public bicycle share schemes, accessibility enhancements and similar.
- In line with the National Transport Authority's Transport Strategy for the Greater Dublin Area 2016–2035, undertake appraisal, planning and design of LUAS network expansion to Bray, Finglas, Lucan, Poolbeg and a light rail corridor for Cork in the later stages of the period of the Cork Transport Strategy which is being finalised.
- Provide additional charging infrastructure for targeted growth in electric vehicles.

Figure 5.3: Greater Dublin Area Public Transport Network 2027 **Public Transport** Drogheda Bettystown Network 2027 **Proposed Heavy Rail** Julianstown Diesel Rail Future Electric/Diesel Hybrid Rail • • • Proposed DART Underground (delivery post-2027) Bellewstown Stamullen **Proposed Light Rail** Existing Luas Green Line Balbriggan Proposed Luas Green Line Extensions Existing Luas Red Line Clonalvy Proposed Luas Red Line Extensions Naul ••• Proposed Luas to Lucan Proposed Metro Barons Hall Lusk Rush Ballyboughal Dunshaughlin Ratoath Drumree **Blakes Cross** Portrane Rolestown Malahide **Dublin Airport** Dunboy Blanchardstown Santry Howth Broombridge (Leixlip Docklands Lucan Proposed Luas to Lucan Ballyfermot Celbridge Crumlin Clondalkin Terenure Clonskeagh Blackrock Dun Laoghaire Tallaght Rathfarnham Dalkey Saggart Jobstown Sallins Cherrywood

Metro Link

Current Status: Arising from an option analysis and selection study of possible metro alignments and station locations, a final route and station location will be established, after which a public consultation process will be undertaken on the Emerging Preferred Route in early 2018.

Estimated Cost: €3 billion

Estimated Completion Date: 2027

As envisaged by the NTA's Transport Strategy for the Greater Dublin Area (GDA), a light rail system from Swords, via Dublin Airport to Dublin's south city centre (operating in tunnel under the city centre) and onwards to Sandyford using the existing LUAS Green Line to ensure that growth along this corridor can be accommodated. This will provide Dublin with a high capacity, highfrequency cross-city rail corridor, serving critical destinations such as Swords, Dublin Airport, Dublin City University, Ballymun, the Mater Hospital and existing destinations along the LUAS Green Line to Sandyford. Metro Link will provide faster reliable journey times to and from these key destinations while offering interchange with other rail, DART Expansion, light rail and bus services.

DART Expansion Programme

Estimated Cost: €2 billion

Estimated Completion Date: 2027

The DART Expansion Programme is a series of projects that will create a full metropolitan area DART network for Dublin with all of the lines linked and connected. The initial sequencing of investment will focus on delivery of nonunderground tunnel elements of the programme using the recently opened rail link and existing connector tunnel under the Phoenix Park. This includes buying additional fleet for the DART network and measures such as re-signalling, junction and station changes to provide expanded services. The next step will be to provide fast, high-frequency electrified services to Drogheda on the Northern Line, Celbridge/Hazelhatch on the Kildare Line, Maynooth and M3 Parkway on the Maynooth/Sligo Line, while continuing to provide DART services on the South-Eastern Line as far south as Greystones. It will also include new stations to provide interchange with bus, LUAS and Metro networks.

The significant benefit to using the recently opened rail link and existing connector tunnel under the Phoenix Park and the proposed sequence of investment, is that it will enable additional passenger services to be put in place much earlier using existing infrastructure with some enhancements. This integrated rail network will provide a core, high-capacity transit system for the region and will deliver a very substantial increase in peak-hour capacity on all lines from Drogheda, Maynooth, Celbridge/Hazelhatch and Greystones. The route for the remaining element of the overall DART Expansion Programme, the DART Underground Tunnel, will be established and protected to allow for its future delivery.



Investment in BusConnects

BusConnects aims to overhaul the current bus system in Ireland's cities by implementing:

- a network of 'next generation' bus corridors (including segregated cycling facilities) on the busiest bus routes to make bus journeys faster, predictable and reliable;
- a complete redesign of the bus network;
- simpler fare structures;
- cashless payment system and a state-of-the-art ticketing system;
- new bus branding, integrating bus vehicles of different operators and types;
- park-and-ride facilities;
- new bus stops and shelters; and
- transitioning to low-emission vehicles.

The BusConnects programme will be delivered by the NTA. The NTA was established in 2009 with the purpose of bringing a more focussed and integrated approach to the planning and delivery of integrated transport infrastructure and services, both on a national basis generally and especially in the GDA where the NTA has a more detailed remit and in respect of which in 2016 the NTA published the *Transport Strategy for the Greater Dublin Area*, 2016–2035.

The NTA has worked in partnership with a number of local authorities in Ireland's cities to prepare transport related strategies or implement transport related projects. An example of this is the Galway Transport Strategy which was developed in 2016 by Galway City Council and Galway County Council in partnership with the NTA. The strategy concluded that bus-based public transport represents the most appropriate system for Galway.

A Cork Transport Strategy is also being finalised by the relevant Local Authorities in partnership with the NTA which includes proposals for a revised bus system for Cork and enhancements to the commuter rail service in Cork including additional stations and rail fleet. This transport strategy will also evaluate the potential of a Bus Rapid Transit or Light Rail corridor to serve the increased population growth as envisaged by the NPF and subject to the necessary development consolidation by the Local Authorities to support the appraisal, planning and design for provision of such a high capacity corridor in the later stages of the period of the strategy. BusConnects programmes will be delivered for Galway and Cork to include new bus fleets; bus lanes with segregated cycling; revised bus service networks; and park-and-ride facilities.

As the other cities develop transport strategies, investment will be available for transport related projects.

Galway BusConnects

Current Status: Galway Transport Strategy 2016 in place, planning and design underway.

Estimated Cost: €200 million

Estimated Completion Date: 2027

Galway BusConnects will deliver a rationalised network of five high-performing cross-city routes. All routes will serve major city centre attractions as well as linking all major destinations across the city. Galway BusConnects will comprise next generation bus lanes, enhanced services, cashless fares and account-based ticketing. As part of this programme delivery, a network of park and ride sites, serviced by the more efficient bus network, will be put in place. Galway BusConnects will also encompass a variety of city centre public realm enhancements, will enhance the overall transport experience and improve the attractiveness of the city centre.

Cork BusConnects

Current Status: Cork Transport Strategy being developed in partnership with the NTA.

Estimated Cost: €200 million

Estimated Completion Date: 2027

A revised bus network for Cork City is being developed as part of the Cork Transport Strategy. Cork BusConnects will comprise the delivery of crucial bus corridors, enhanced services, cashless fares and account-based ticketing. As part of this programme delivery, a network of park and ride sites, serviced by the more efficient bus network, will be put in place. Cork BusConnects has enormous potential to radically transform the bus system in Cork, making it much more efficient, reliable and attractive to new passengers.

Dublin BusConnects

Current Status: GDA Transport Strategy 2016-2035 in place, planning and design underway.

Estimated Cost: €2 billion

Estimated Completion Date: 2027

Dublin BusConnects will deliver a transformational redesign of the bus system in Dublin. It will comprise a network of 'next generation' bus corridors on the busiest routes with segregated cycling facilities, a complete redesign of the bus network, cashless and simpler fare structures, and state-of-the-art ticketing systems, account-based ticketing, new bus branding, integrating bus vehicles of different operators and types, new bus stops and shelters, and use of low-emission vehicles.

National Strategic Outcome 5

A Strong Economy, supported by Enterprise, Innovation and Skills

A competitive, innovative and resilient enterprise base is essential to provide the jobs and employment opportunities for people to live and prosper in all regions. Achieving the ambitious employment targets in the NPF in the context of increased global uncertainty, Brexit and technological disruption, underlines the importance of building competitive regional clusters and generating an uplift in enterprise export competitiveness to secure sustainable jobs and growth.

The vision for national enterprise policy as set out in *Enterprise 2025: Innovative*, *Agile*, *Connected* is for Ireland to be the best place to succeed in business, delivering higher standards of living for all. Specifically, the national policy goal is to: achieve sustainable full employment; bring unemployment rates down to within 1% of the national average in all regions; and, achieve regional productivity convergence so all regions are within 10% of the average outside Dublin and with international comparators.

National Development Plan Priority: Enterprise, Skills and Innovation

The NPF sets the ambition of ensuring that jobs growth in the Eastern and Midland Regional Assembly area is at least matched by that of the Northern and Western and Southern Regional Assembly

areas combined, a total of 660,000 new jobs. This ambition for Ireland's regions will be achieved by investing, through the National Development Plan, in making places attractive for enterprise investment, developing deeply rooted sectoral clustering driven by effective collaborations and built around investments in Higher Education and Further Education and Training (FET). The way in which skills and talent are nurtured, developed, deployed and retained is central to both national and regional ambitions.

Enterprise and innovation strategy will be aligned to NPF strategy with a particular focus on regional economic and employment growth to secure competitive and innovative regional enterprises. Investment in Higher Education and FET in each region will have a crucial role to play in achieving this objective in terms of the pipeline of skills and talent that sustains enterprise clustering and new investments. This will be achieved under the National Development Plan:

- by supporting entrepreneurialism and building competitive clusters in strategic sectors and activities;
- through collaborative actions at regional and local level:
- by realising a significant uplift in the performance of enterprises in terms of innovation, export potential and productivity; and
- by attracting further investment to the regions.



Strategic Investment Priorities 2018–2027: A Strong Economy, supported by Enterprise, Innovation and Skills, €9.4 billion

Business Enterprise Innovation Expansion of Advanced Manufacturing Supports, New cycles of the Programme for Research linking centres and capacity across all regions in Third Level Institutions, benefiting Higher Education in all regions New Regional Sectoral Clusters to scale and internationalise enterprise in all regions Disruptive Technologies Innovation Fund New regional 'Technology and Innovation Poles', led through the Institutes of Technologies Strengthened SFI Research Centres and EI Brexit Business Transformation through firm level Technology Centres in higher education in all supports regions Expanding Enterprise Ireland budget for research and development Participation in EU High Performance Computing Programme Expanding IDA Regional Property Programme, to attract investment to regions Upgrading of the Tyndall National Institute in Cork A National Design Centre New Space Technologies Programme, to the Seed and Venture Capital Funding to support benefit of firms in the regions regional start-ups and growth eHubs for entrepreneurship and start-ups in every Membership of CERN county Investments in Enterprise, Innovation and Skills Public Private Partnership Investments in 11 Institutes of Technology Consolidation of the DIT campus at Grangegorman Enabling emergence of technological universities Consolidation of further education and training in modern, fit-for-purpose facilities Refurbishment and expansion of higher education facilities Capital supports for new apprenticeship syllabi and courses Support for research, guided by Innovation 2020: Ireland's Strategy for Research and Development, Science and Technology

Investment Actions

Investing in Regional Growth Potential

Future employment growth will require a major focus on boosting regional growth potential to secure sustainable quality employment. This necessitates the generation of growth that is sustainable, driven by exports and underpinned by innovation and competitiveness in all regions.

A comprehensive and integrated programme of measures will be initiated to strengthen growth and employment potential with a particular focus on balanced regional development by building competitive and innovative enterprises including the ten initiatives detailed below.

Regional Sectoral Clustering supports the development of business-led Regional Sectoral Clusters of competitive advantage, through collaboration between SMEs and Multinational Corporations, higher education and the enterprise agencies. In 2018, a second €30 million Enterprise Ireland (EI) Regional Enterprise Development Fund call for proposals will be launched.

New 'Technology and Innovation Poles' (TIPs) will also be developed through EI and the Industrial Development Authority (IDA) to drive regional and rural development. The Institutes of Technology will lead these TIPs, as partners with enterprise, by developing strategic agendas for key sectors and areas of regional potential, supporting SMEs productivity and innovation transformation and accelerating the levels of entrepreneurship and start-up performance and success. This will be implemented through EI and the IDA Ireland.

Regional Entrepreneurship. The goal of achieving a one-third increase in levels of entrepreneurship and survival of start-ups that are trading in all regions will be pursued through the Local Enterprise Offices and EI, through new eHubs, mentoring and collaborative initiatives at sector level and through the Regional Enterprise Development Funds.

Increasing the scale and internationalisation of indigenous enterprise, through EI support for productivity growth, innovation and market diversification will aim to increase export intensity of agency assisted firms from half of sales to over two-thirds. In order to support the transformation of Irish enterprise to compete and grow in a post-Brexit era there will be a specific focus on upgrading the industrial base and increasing new product and service innovation and productivity in all regions.

IDA property solutions, strategic sites and grants in all regions will deliver new Foreign Direct Investment and high-quality jobs. Since it is more challenging to win new investment outside metropolitan areas, advanced planning and provision of property solutions will be expanded in all regions with a particular focus in the near term on the Border and Midland Regions. Ireland's ability to secure significant new large-scale capital investment in all regions is partly dependent on the ready availability of serviced sites of scale with appropriate zoning and capacity for required utilities to match the needs of large capital intensive projects. The IDA's investment in strategic sites to date has yielded significant projects that would not have been possible unless such sites were available for investors. It is also evidenced by the clustering of companies in locations such as Ringaskiddy in Cork and Parkmore in Galway. This action will build on IDA's current €150 million regional property investment programme that has delivered new advanced buildings in Athlone, Castlebar, Sligo, Galway, Limerick, Tralee and Waterford, among other locations. The property programme will be complemented with IDA Grants programmes across the regions.

The expansion of Advanced Manufacturing Supports across all regions is intended to develop Ireland as a leader in advanced manufacturing technological innovation, application and training including pilot lines and demonstration facilities to build on the capacity throughout the country. Capacity has been funded by EI and Science Foundation Ireland (SFI) to date in research, development and demonstration across the country, including most recently through investment in the Irish Manufacturing Research centre in Mullingar. These investments are to drive the transformation of Irish manufacturing to new areas including Industry 4.0, 3D and discrete manufacturing.

A national design centre will be established as an incubation, training and demonstration capacity in the regions to support market-led innovation in Irishbased enterprises to grow international sales.

Funding for the Seed and Venture Capital Scheme will support technology start-ups and early stage companies with high growth potential across the regions.

Increase output of Science and Technology

Researchers. The Programme for Research in Third Level Institutions (PRTLI), will be expanded, increasing research capacity with additional PhD and MSc enrolments in third-level institutions in all regions. Aligned to refresh of research prioritisation, the rollout of a successor programme to PRTLI 5 is to build the scale and depth of research in technology areas of relevance to Ireland for the future and increase the quantity and quality of human capital through SFI.

Scaling-up SFI and Enterprise Ireland Research Centres and Technology Centres in higher education in all regions, will support collaboration with companies in the regions. The objective is to support up to 20 SFI world-class Research Centres, collaborating with several hundred companies in all regions. We will also upgrade and expand the Tyndall National Institute in Cork to stay at the forefront of new technologies and build on its successful industry engagement model in sectors such as health and life sciences, ICT, energy and agri-tech.

Strengthen International Science Technology and Innovation Collaboration to intensify Ireland's participation internationally, using a wide range of initiatives such as the European Space Agency programmes, to support increasing strengths in aerospace and aeronautics in, for example, the east, midlands and mid-west. This is intended to include full membership of international scientific organisations including the European Southern Observatory, CERN, EuroHPC (high performance computing) and investment in national HPC facilities and infrastructure to connect all regions to international markets.

Finance for Growth. Market failures in financing and working capital for enterprise will be responded to through a range of innovative measures including El's direct equity investments and Seed and Venture Funds. Schemes will be designed alongside stakeholders to improve access to finance for SMEs at affordable costs and with reasonable terms and conditions. These will address identified market failures such as Brexit risk (the Brexit loan scheme), availability of longer term financing (a potential development loan scheme), availability of financing for an innovative business model (the Credit Guarantee Scheme) and availability of microfinance.

€60 million El Regional **Enterprise Development Fund**

In May 2017, with funding from the Department of Business, Enterprise and Innovation, El launched the first phase of the €60 million Regional Enterprise Development Fund designed to support Regional Action Plans for Jobs. The results of

Twenty-one collaborative projects involving a range of enterprises and public bodies were successful, totalling €30.5 million in aggregate grant support. The second call will fund projects from the remaining €30 million and is expected to issue in Q2 2018. Of the funding allocated to date, €14.3 million was won in the Southern Regional Eastern and Midlands Regional Assembly area and €5.1 million was won in the Northern and Western Regional Assembly area.

approved include KerrySciTech in Kerry/Cork, in Tipperary, Emerald AeroCluster in Limerick/

Innovation and technology partnership Network Centre in Carlow, AgriTech Centre of Excellence in Kerry plus, Irish Manufacturing Research in Westmeath and ThreeD (design develop disseminate) Waterford.

eHubs and entrepreneurial space including Monaghan County Enterprise Fund, Leitrim County Enterprise Fund, Donegal Digital Innovation, Bia Enterprise and Technology Centre Dublin, Ghala Dublin and the Social and Local Enterprise Alliance



Regional Innovation - EI, IDA Ireland and SFI Technology and Research Centres

Funded by the Department of Business, Enterprise and Innovation, the EI/IDA Technology Centres programme run by EI and IDA Ireland supports industry-led technology development agendas, with a focus of close to market activities. Examples from the existing portfolio of 14 centres include those listed below.

- Meat Technology Centre: focusing on applied areas such as genomic predictions, meat safety, meat characterisation and health, involving University College Cork (UCC), Dublin City University (DCU), Dublin Institute of Technology (DIT) and Teagasc.
- Irish Manufacturing Research: Manufacturing 4.0 agenda, for example, collaborative robotics, Augmented Reality/Virtual Reality, informatics, cyber security, in Dublin and Westmeath with partners across Ireland.
- Pharmaceutical Manufacturing: research across pharmaceutical manufacturing chain, continuous and powder processing, advanced rapid micro-analytical techniques, partners include UCC, University of Limerick (UL), IT Sligo, IT Tralee, Cork IT (CIT), Waterford IT and IT Tallaght.
- Microelectronics: with focus on Analogue, Radio Frequency and Mixed-Signal circuit research, hosted by Tyndall National Institute with CIT and National University of Ireland Maynooth (NUIM).
- Learnovate: focusing on e-learning technologies including corporate, school, higher education and non-formal learning, hosted by Trinity College Dublin (TCD) with regional spread of industry and academic partners.

- SFI Research Centres complement the EI/IDA tech centres and are located across Ireland's higher education institutions in all regions, linking academia and industry. They address crucial research questions, ultimately supporting new and existing companies to create innovative products leading to job creation in the regions. Examples of the 17 existing centres include those listed below.
 - APC Microbiome Institute undertaking gastrointestinal health research addressing the interface between food and medicine, in UCC in partnership with Teagasc and CIT.
 - INSIGHT: research across data analytics, machine learning, artificial intelligence and related ICT challenges, hosted across University College Dublin (UCD), DCU, National University of Ireland Galway (NUIG), UCC, NUIM, TCD and Royal Irish Academy.
 - INFANT: perinatal research centre addressing research challenges relating to pregnancy, birth, infancy and childhood, hosted by UCC in partnership with Royal College of Surgeons of Ireland (RCSI).
 - CONFIRM: research centre for advanced, smart manufacturing; application of sensor technology to manufacturing and industry 4.0 – hosted by UL in partnership with Tyndall National Institute, UCC, CIT, NUIG, Athlone IT, NUIM and Limerick IT.
 - CURAM: research into next generation medical devices, biomaterials, drug delivery, device design – hosted by NUIG with UCD, UCC, TCD, UL and RCSI.

Research, Development and Innovation

Research, development and innovation capacity is central to sustaining and building competitiveness in international markets. Therefore, a continuing sharp focus on maintaining and improving standards of research is critical. The research and development and science and technology strategy, Innovation 2020, sets the objective for Ireland to become a Global Innovation Leader including in research in strategically important areas such as, for example, improving the quality of our public services; protecting the environment, natural resources and the climate; and ensuring food security and sustainability of energy supply. Accelerating investment in research and development in support of Innovation 2020 and beyond will also be delivered through the actions listed below.

- Aligned to refresh of research prioritisation, the roll-out of a successor programme to PRTLI 5 is intended to build the scale and depth of research in technology areas of relevance to Ireland for the future and increase the quantity and quality of human capital through SFI. The objective is to support up to 20 SFI world-class, internationally recognised research centres, collaborating with several hundred companies.
- Roll-out of the new Programmes for Postgraduate Researcher Enrolments at Masters and PhD levels in higher education in all regions with an extra 500 to be delivered by 2020 through SFI.



- Driving the increase in the transfer and commercialisation of research by enterprise across the regions, with stretch targets for new products and services launches, licence and collaboration agreements, spin-out and jobs created through Knowledge Transfer Ireland.
- Ireland's membership of international research organisations, facilities and collaborations will include the European Southern Observatory, CERN and EuroHPC and further developing the ICHEC.
- Upgrade to the Tyndall National Institute to respond to evolving ICT-related technology opportunities.
- Significantly ramp-up of Ireland's participation in European Space Agency programmes so as to deliver on the opportunities for Irish-based companies in the space sector.

Disruptive Technologies Innovation Fund

A very significant initiative in developing Ireland's innovation ecosystem and responsiveness is the establishment of a €500 million challenge based Disruptive Technologies Innovation Fund implemented through DBEI and its agencies, working with other research funding bodies. The impact of technological innovation is enabling significant transformation across the global economy and the pace is expected to accelerate. These technologies are transforming business models in a broad range of areas including healthcare, financial services, energy and food production, and business services. The Disruptive Technologies Innovation Fund will see investment in the development and deployment of disruptive innovative technologies and applications, on a commercial basis, targeted at tackling national and global challenges. The fund will drive collaboration between our world class research base and industry as well as facilitating enterprises to compete directly for funding in support of the development and adoption of these technologies, and seeding a new wave of start-ups.

Higher Education and Further Education and Training (FET)

Within the FET sector, the medium-term priority is to secure the consolidation of FET provision in modern fit for purpose facilities, and for expansion, upgrade and renewal of facilities and equipment required to meet the growing demand for a broadly based apprenticeship system. Further expansion of FET facilities will be informed by the population and job growth objectives of the NPF and will focus on enabling the delivery of high quality integrated programmes. A capital upgrade programme will be initiated with an allocation of €300 million over the period of the plan.

Two priorities are envisaged for the higher education sector. The first priority envisages a significant increase in the funding available to support refurbishment, maintenance and equipment renewal across the higher education system. The second priority is the establishment of a clearly prioritised Exchequer-supported higher education building programme, which will include the following objectives:

- bolster the capacity of multi-campus
 Technological Universities and of Institutes
 of Technology. Four consortia are seeking to
 become designated in due course as Technological
 Universities, which will deepen the talent pool
 for distinctive regional sectoral clusters and drive applied research and innovation. These consortia are:
 - » Technological University for the South-East (TUSE), consisting of WIT and IT Carlow (see case study below);
 - » Munster Technological University, consisting of CIT and IT Tralee;
 - » Connacht Ulster Alliance, consisting of Galway-Mayo Institute of Technology (GMIT), IT Sligo, and Letterkenny IT; and
 - » TU4Dublin, consisting of DIT, IT Tallaght and IT Blanchardstown.
- generate the additional capacity necessary on a system-wide basis to support the projected increase in enrolments and to be fully responsive to skills needs at a regional and national level, including life-long learning.

Technological University for the South-East

The Technological University for the South-East (TUSE) project was initiated in 2011 and consists of a consortium of two institutes of technology: IT Carlow and WIT. Already, these two institutions cater for in excess of 14.500 students.

The establishment of TUSE will have particular significance, as it will be the first time for a university to be located in that region. Building on the strengths and mission of the existing Institutes of Technology, the new TUSE will be designed to drive regional development, foster innovation, build and retain the skills base in the region, and provide more opportunities for individuals and industry in the South-East. It will also aim to compete in the challenging international research environment, including in the EU research area and in taking advantage of other opportunities at European level, including initiatives such as the proposed network of European Universities.

The Government has already announced a number of capital investments which will support the TUSE consortium members in their bid to achieve Technological University status. Significant new buildings will be provided in IT Carlow and WIT as part of the Higher Education PPP programme. These new buildings will support both institutions in expanding and enhancing their STEM-related provision. In addition, funding has been allocated for the acquisition of a site in Wexford to facilitate the development of a purpose-built campus for IT Carlow in that location.

Eleven major infrastructure projects will be delivered around the country as part of a PPP Programme for the higher education sector at Athlone IT (AIT), IT Blanchardstown, IT Carlow, CIT, Dun Laoghaire Institute of Art, Design and Technology, GMIT, Limerick IT, Letterkenny IT, IT Tallaght, IT Tralee and WIT. For example, the investment in a significant new STEM building in AIT directly responds to the skills needs of the life sciences cluster in the midlands and will further strengthen the role of AIT as a driver of economic development in its region. Investments in both higher education and FET will also support the new delivery modes necessary to facilitate reskilling and reinvention of the existing workforce in a world of rapid technological change.

Private finance also plays an important role in the delivery of infrastructure in the higher education sector. Over the ten-year period of the National Development Plan, the seven existing universities plan to deliver projects (including those awaiting sanction) involving a total investment of over €3 billion, to be funded with a mix of own resources, borrowing (including from the EIB), philanthropy and exchequer grants.

Examples of projects being planned by universities include:

- University College Cork: New business school, student accommodation, Innovation Park and ICT services, upgrade and expansion of the Tyndall National Institute and new dental hospital.
- Dublin City University: Enhanced capacity in teaching, research and innovation, new Student Centre, new sports facilities, additional oncampus accommodation and 21st-century Digital Campus
- Trinity College Dublin: New business school, E3 learning foundry, student accommodation, Trinity Technology and Enterprise Campus.

- NUI Galway: New student residences, completion of the Human Biology building and other campus upgrades.
- University of Limerick: New student centre, sports facilities, new and refurbished student residences.
- Maynooth University: International Centre for Science, Technology and Innovation, new student residences, refurbishment of South Campus accommodation.
- University College Dublin: New Teaching and Learning Building, Science Centre Phase 3, Centre for Creative Design.

Exchequer funding of €2.2 billion will be provided in support of infrastructure priorities in the higher education sector over the period of the National Development Plan. This will be alongside continued investment in human capital through research funding.



DCU Development

Current status: Commenced

Estimated cost: €236 million

Estimated completion: 2021

The DCU Capital Development Plan will physically transform the multi-campus university and provide a platform to realise its ambitions in research, teaching and learning, student experience and enterprise engagement.

The university has been successful in securing long-term loan and bridging finance to drive its programme of infrastructural improvements over the next five years. This will significantly enhance capacity in research and innovation, the construction of a new student centre, provision of new sports facilities, additional on-campus accommodation and 21st-century digital teaching spaces. The remainder is being provided by philanthropic donations, government grants, student contributions and funding from the university itself.

The investment will allow for the upgrade of facilities on the All Hallows Campus and the construction of student accommodation. It has also facilitated the construction of two new floors on the F Building on the St Patrick's College campus which provided additional capacity to support the incorporation of St Patrick's College, Mater Dei Institute of Education and the Church of Ireland College of Education into DCU.

On the Glasnevin campus, the finance will facilitate a buy-back of existing campus residences and construction of a further 560 on-campus student accommodation. This will bring the total capacity to over 2,200 student bed units across the university's campuses, helping to address the pressing issue of student accommodation across the greater Dublin region.

National Strategic Outcome 6

High-Quality International Connectivity

As an island, continued investment in our port and airport connections to the UK, the EU and the rest of the world, is integral to underpinning international competitiveness. It is also central to responding to the challenges as well as the opportunities arising from Brexit.

Strategic Investment Priorities 2018–2027: Airports and Ports, €4.8 billion

Investments will strongly support the continued development and improvement in Ireland's ports and State airports by the relevant responsible commercial State Owned Enterprises (SOEs), consistent with sectoral priorities already defined through National Ports Policy and National Aviation Policy, in addition to continued Exchequer support for the small regional airports.

Significant investment in Ireland's airports and ports will play a major role in safeguarding and enhancing Ireland's international connectivity which is fundamental to Ireland's international competitiveness, trading performance in both goods and services and enhancing its attractiveness to foreign direct investment. The importance of this objective cannot be understated in the context of the UK's exit from the EU in 2019.

Maritime services programmes will support aids to navigation, and Coast Guard search and rescue and pollution prevention activities.

Airports



Second parallel runway for Dublin Airport

New Visual Control Tower at Dublin Airport

Regional Airports Programme which provides financial support towards safety and security projects at the smaller regional airports

Ports



Dublin Port is progressing a c. €230 million infrastructural investment at the port to accommodate larger sea-going vessels; and increase capacity

The Port of Cork is also investing c. €90 million in the redevelopment of its existing port facilities at Ringaskiddy to accommodate larger sea-going vessels and increase capacity

Shannon Foynes Port Company will be investing €27 million towards capacity extension works at the Port

Investment Actions

Airports

- DAA is planning the delivery of a new runway for Dublin Airport by 2021 at an estimated cost of €320 million which will continue to be developed as an international hub (see box right).
- The Irish Aviation Authority has commenced work on a €50 million investment in a new visual control tower at Dublin Airport to facilitate tower control services in a parallel runway environment.
- In line with the 2015 A National Aviation Policy for Ireland, the roles of the Cork and Shannon airports as key tourism and business gateways for their regions, and particularly with regard to the development of niche markets, will be supported.

Continued Exchequer support for smaller regional airports is planned under the Regional Airports
Programme (Ireland West Airport Knock, Waterford Airport, Donegal Airport and Kerry Airport). Given its scale of operation, Ireland West Airport Knock plays a more regional role in terms of international access than the other smaller airports given its location in the North-West. Knock is proposing two significant developments over the coming years, namely, an overlay of the main runway and an apron safety extension. In addition, Knock Airport's designation as an SDZ will contribute to the long-term development of the airport and the regional economy.

Based on an average annual growth rate of 3%, the airport network is expected to deliver in the region of 45 million passengers by 2027.

Second Parallel Runway Project at Dublin Airport

Current Status: Project commenced

Estimated Cost: €320 million

Estimated Completion Date: 2021

In 2007, An Bord Pleanála granted Dublin Airport planning permission to build a 3110 m runway, 1.6 km north of the existing main runway. Due to the economic downturn, the project was put on hold.

However, the recovery in the economy has seen passenger numbers reach record levels to over 29 million passengers travelling through Dublin Airport in 2017 to over 180 destinations worldwide. As traffic has grown at Dublin Airport, the need to progress this project has become more important and immediate and the decision to progress the runway was taken in April 2016.

North Runway will be delivered within the airport's existing land bank, a result of careful planning which has allowed this land to be safeguarded for over 40 years.

Preliminary works on this project have begun with the new runway scheduled to be delivered by 2021. The project will support up to 1,200 jobs during the development phase as well as generating significant employment opportunities in the local supply chain for construction materials.

Shannon Group

Current Status: Project commenced

Estimated Cost: €150 million

Estimated Completion Date: 2022

Shannon Group through its subsidiaries Shannon Airport Authority, Shannon Commercial Enterprises and Shannon Heritage have plans to invest in excess of €150 million in its capital programme over the period to 2022.

This includes €100 million for the development of the property portfolio which is designed to deliver high quality advanced manufacturing, warehousing and office space solutions. This programme will assist the IDA and EI in their drive for inward investment and increase employment in the region.

Also included in this capital programme, is the construction of a wide body paint hangar at Shannon Airport. This is in accordance with the National Aviation Policy to "encourage the development of the International Aviation Services Centre (IASC) at Shannon". This will be the first new wide body hangar constructed at an Irish airport in over 20 years and is the kind of expansion that was envisaged in order to grow a globally recognised and internationally competitive aviation industry cluster in and around the airport campus. Cross agency co-operation will continue to develop further hangars at Shannon to meet industry demand.

Shannon Heritage is committed to creating compelling tourist attractions in the West of Ireland and the plan includes the €10 million redevelopment of Bunratty Castle in partnership with Fáilte Ireland.

Ports

Three major capital infrastructure programmes are currently ongoing in Tier 1 Ports, namely Dublin, Cork and Shannon Foynes. These will enhance national and international connectivity, provide for future increases in trade and national port capacity requirements by facilitating more vessels, larger sized vessels and increased tonnage and throughput. None of these projects receive exchequer funding. Furthermore, a strategic review is currently underway in relation to Rosslare Europort.

Strengthening access routes to Ireland's ports through investment to upgrade and enhance the road transport network to improve journey times is and remains a Government priority. Examples of such investments include the ongoing development of the M11, in terms of improving connectivity to Rosslare in the southeast; the planned N28 Cork to Ringaskiddy Road, in terms of improving access to the Port of Cork;

and the N21/N69 Limerick to Adare to Foynes Road, to improve access to Shannon Foynes Port. The UK's exit from the EU in 2019 highlights the importance of this NSO and the importance of continuing investment to further improve the quality of port facilities, particularly those in the South-East such as Rosslare and the Port of Waterford given their role in maintaining transportation linkages with crucial EU markets.

Alexander Basin Redevelopment Project - Dublin Port

Status: Commenced

Cost: €230 million

Estimated Completion Date: 2022

Dublin Port received planning in 2015 in respect of the first phase of its Masterplan, the Alexander Basin Redevelopment Project. This is a c. €230 million infrastructural investment at the port, along with conservation works related to the port's Victorian industrial heritage. The redevelopment comprises significant landside restructuring to quays and berths etc. to facilitate larger vessels and also enhance the port's current cruise vessel experience. The works also involve significant elements of capital dredging alongside the newly reconstructed berths as well as the port's navigable channel deepened from its current 7.8 m draught to 10 m draught. The investment will help future-proof the port in terms of being able to facilitate larger sized vessels into the future (in terms of both length and draft) and provide for increased capacity.

Ringaskiddy Redevelopment – Port of Cork

Status: Commenced

Cost: €90 million

Estimated Completion Date: 2020

The Port of Cork is investing c. €90 million in the redevelopment of its existing port facilities at Ringaskiddy. Planning permission was granted in 2015 towards this development. The development will enable the Port to accommodate larger vessels and further develop it as an international gateway for trade. The project will alleviate the physical constraints (for example, water depths) of current operations at City Quays and Tivoli, allowing the Port to increase capacity and throughput, diversify customers, cater to the trend of increasing vessel sizes and free the City Quays and Tivoli properties for development and/or divestment.

Capacity Extension Works – Shannon Foynes Port Company

Status: Commenced

Cost: €27 million over next five years

Estimated Completion Date: 2022

Shannon Foynes Port Company's Infrastructure Development Programme is well underway and will consist of a jetty expansion program, the joining of the East and West Jetties and the infill behind, land purchase and site development at Foynes in light of the land bank shortage at Foynes Port and the Foynes Rail Reinstatement. Phase 1 of part of this development has been completed and a planning application for part of Phase 2 will be lodged in 2018. The investment programme will improve international connectivity and increase capacity through the construction of new quay walls and associated port infrastructure and external connectivity with the upgrade of the N69 and the reinstatement of the Limerick-Foynes rail line.

Maritime Services

Commissioners of Irish Lights will continue its programme for navigation aids (lighthouses, buoys and beacons), including the replacement in due course of the vessel, ILV Granuaile. The Irish Coast Guard will continue to provide search and rescue and pollution services and to refurbish and modernise Coast Guard stations and their equipment throughout the country as well as centrally undertake a programme of communications and IT development projects.



National Strategic Outcome 7

Enhanced Amenity and Heritage

The NPF recognises the value of cultural heritage as a key component of, and contributor to, the attractiveness and sustainability of our cities, towns, villages and rural areas in terms of developing cultural creative spaces, private inward investment, and attracting and retaining talent and enterprise. This includes all elements of living space including streets, public spaces, built heritage and natural amenity areas, cultural and sporting opportunities and sustainable transport networks, all of which play a central part in defining the character and attractiveness of places. Ireland's national parks and nature reserves showcase some of Ireland's most beautiful landscapes and precious habitats. These settings are important reserves for nature conservation and biodiversity and provide quality opportunities for sustainable recreational tourism and eco-tourism.

Strategic Investment Priorities 2018–2027: Enhanced Amenity and Heritage, €1.4 billion

Investment in culture, heritage and sports, appropriately aligned with other NSOs included in the NPF, can play a very important role in improving amenities and the attractiveness and liveability of different areas, whether in cities, other urban areas, small towns and rural areas. This investment can complement and reinforce the impact of investment in sustainable public transport networks and in other amenities.

Plans for investment in culture and heritage recognise that high quality infrastructure is critical for a vibrant heritage and culture sector and that investment in our cultural heritage underpins social cohesion and supports strong, sustainable economic growth. In terms of regional objectives, specific priorities are to enhance arts and culture centres throughout the country, develop the sustainable tourism potential of our culture and heritage infrastructure and improve Ireland's outdoor recreation infrastructure and natural heritage.

In recognition of the vital role of culture, heritage and sport in our national life, total funding allocated to strategic investment priorities in this area is in excess of €1 billion.

Culture and Heritage



Investment in National Cultural Institutions

- National Library of Ireland renovation
- National Archives of Ireland
- National Museum of Ireland
- National Concert Hall renovation
- Crawford Art Gallery renovation
- National Gallery of Ireland
- Abbey Theatre redevelopment
- Irish Museum of Modern Art renovation
- Chester Beatty Gallery

Investment in regional arts and culture facilities

Digitisation of National Collections

Galway European City of Culture

Investment in National Heritage

- Developing a masterplan for the development of our National Parks and National Reserves
- Safeguarding Ireland's Historic Environment through Built Heritage Investment Scheme and Historic Structures Fund
- Conservation and Preservation of National Monuments
- Natural Heritage and Biodiversity implementation of the National Biodiversity Action Plan 2017-2021

Restoration of Ulster Canal and investment in our waterways and related infrastructure

Investment in media production and audio visual industry

Sport



Large Scale Sport Infrastructure Fund

Other Amenity



The Cork Event Centre

Phoenix Park Investment Plan

Culture

Ireland 2040 sets out its vision for Ireland as a creative, innovative and culturally attuned society, whose people, businesses and communities are equipped to further our national economic output and creative endeavour. It will provide for high quality, well managed built and natural environments that contribute to public confidence and quality of life. The Creative Ireland Programme provides a clear mechanism for the delivering on this vision by ensuring creativity is at the heart of public policy and by the implementation of actions under the five pillars.

The National Cultural Institutions will undertake a €460 million phased investment programme over ten years specifically focused on investment in Ireland's iconic cultural centres, building on the progress already underway in institutions such as the National Gallery, which re-opened its historic Dargan and Milltown Wings in 2017, and the National Library renovation project which has recently commenced.

In specific terms progress will be made on the renovations of the National Library, National Archives, Natural History Museum and the Crawford Art Gallery. Appraisal, planning and design work will also be delivered on flagship projects at the National Concert Hall, the Chester Beatty Library, the Irish Museum of Modern Art, the National Museum of Ireland, Kildare Street and the National Theatre with a view to moving to the construction phase over the duration of the National Development Plan. During this period, these projects will be sequenced and prioritised having regard to the outcome of the evaluation planning processes and in line with the Public Spending Code.

The Arts and Culture Capital Scheme will also be expanded. This scheme supports the maintenance and development of an extensive network of regional arts infrastructure and will provide funding to regional arts centres, theatres, regional museums, galleries, archives, multi-use facilities, artist studios etc. in all parts of Ireland. This investment has a very important role to play in improving access to and participation in arts and culture for communities in all parts of the country.

Digitisation also has a major role to play in the conservation, preservation, and dissemination as well as facilitating access to and research on our National Collections.

Measures to enable the employment and growth potential of Ireland's media production and audio visual industry is a further important priority and will focus on Ireland's potential to be a global leader in film production, TV drama, documentary, children's storytelling, and animation for the screen.

Support will also be provided to Galway as European City of Culture. The Department will also explore options to appropriately record and reflect Ireland's Protestant cultural heritage as part of the wider Decade of Centenaries commemorative programme. The aggregate level of investment in Ireland's cultural infrastructure over ten years is estimated at €725 million.

National Museum of Ireland -**Natural History Museum**

Current Status: In development

Estimated cost: €15 million

Estimated Completion Date: 2021

The National Museum of Ireland's overall draft masterplan for all of its sites, (estimated cost of €210 million over a 15-year period), will see a significant redevelopment of its four location campus. For example, the plan for the renovation of the Natural History Museum, Kildare Street involves the construction of a new extension to include café, storage, lifts and additional visitor toilets. Separately, the OPW intends to replace the roof of the building in 2019, further enhancing the sustainability of the building and the protection of its valuable collection.

The National Library of Ireland Renovation

Current Status: Under construction

Estimated Cost: €12 million

Estimated Completion Date: 2021

The project called 'Reimagining the National Library' will allow the library to create the storage and preservation conditions necessary to keep the national collections safe for the long-term. At the same time, the library will benefit from enhanced public spaces and services.

The enhanced public spaces will enable new and continued engagement with the national collections, and universal access to our services. The renovated West Wing will include a new exhibition space, a new lecture room, a public lift to all floors and a new café and retail space.

The Crawford Art Gallery Cork

Current Status: In development

Estimated Cost: €22 million

Estimated Completion Date: 2021

Phase 1: 2018 to 2021, €4 million

The Crawford Gallery is housed in an early 18thcentury building and has significant infrastructural deficits. It requires an essential overhaul and rehabilitation to meet modern health and safety standards expected from a public museum. The gallery has prepared a preliminary development plan for the building which, it is estimated, will cost in the region of €22 million over the period 2018 to 2025. The first phase of this plan, which involves the completion of essential compliance work, following the transfer of ownership of the building to the OPW, will cost in the region of €4 million and will be completed in the period 2018 to 2021.

Phase 2: 2022 to 2027, €18 million

This would involve the complete refurbishment of the existing building and the development of further office and gallery space, including the construction of a new block for education, conservation and storage purposes etc.



Heritage

The State's heritage portfolio represents a significant tourism asset, as well as reflecting Ireland's past, its identity and the sense of place it creates. The State's natural heritage, biodiversity and built heritage will be protected and enhanced as part of this ten-year plan through a €285 million investment. Substantial investment will take place to enhance Ireland's Natural Heritage through the national parks and reserves, and outdoor recreation facilities.

Ireland's 6 national parks and 78 natural reserves currently attract four million visitors every year and are a focal point for tourism and enterprise in local communities. Their dispersed location bring economic and employment opportunities to rural communities across the State. The balance between nature conservation, biodiversity and visitor amenity will be carefully managed by prudent investment. A significant investment in visitor facilities, with a strong emphasis on conservation and protection of biodiversity, is a priority in this plan. Specific projects within the plan include the improvement of visitor facilities at Connemara and Glenveigh National Parks, the delivery of new walking and cycling trails in Ballycroy National Park, investment in outdoor recreational facilities in Killarney National Park, investment in interpretation at Coole Park and other Reserves, visitor and traffic management plans for the Burren National Park and the enhancement of the visitor experience at Wicklow National Park. We will also invest in county biodiversity action plans and peatlands restoration.

Significant investment will also be undertaken in relation to Ireland's historic environment including to:

- revitalise the vital historic cores of our cities, towns and villages, bringing historic buildings back into use and contributing to urban and rural revitalisation:
- work with owners and custodians to maintain and protect heritage assets that are precious to local communities and important contributors to wellbeing and social cohesion, such as the Valentia Island Cable Station; and
- provide better public access to our historic, built and natural environment.

Investment will include targeted supports such as the Built Heritage Investment Scheme and the Historic Structures Fund which help the owners and custodians of our heritage buildings to protect our valuable built heritage and ensure that vital traditional building skills are not lost.

To protect and enhance Irelands' heritage estate which extends to 780 monuments and sites, investment will be made in Ireland's National Monuments and work will be undertaken by the OPW to ensure that these sites are conserved and presented to the highest quality. Where feasible, additional sites and monuments will be acquired and access improved. Funding priorities include projects to improve visitor facilities, enhance animation of the sites and upgrade visitor infrastructure at all of our primary national monument sites and to carry



out significant work on interpretation facilities. It is envisaged that improvements to the visitor experience and interpretation will be delivered at sites such as: Brú na Bóinne; Tara; Céide Fields; Clonmacnoise; Skellig Michael; Valentia Cable Station; the Rock of Cashel; and other important monastic, armada and medieval sites.

The quality of Ireland's tourism and recreation sectors is fundamentally dependent on Ireland's natural heritage and biodiversity. Investment is being provided to support the objectives of the recently published *National Biodiversity Action Plan 2017-2021* including the stepping up of conservation measures to restore peatlands and wetlands, combat the spread of invasive alien species, implement Local Biodiversity Action Plans and invest in agri-environment schemes.

Other heritage and waterways investment priorities, consistent with *Realising our Rural Potential: Action Plan for Rural Development* include critical investment in national parks and waterways, further supports to deliver compliance with the Habitats' Directive as it applies to our unique peatlands, as well as measures to mitigate the impact of Brexit in border areas.

Sport

Over €100 million in capital funding has been allocated for the Sport Capital Programme (SCP) for the coming four years. This is the primary mechanism for providing funding to sport and community organisations at local, regional and national level. This programme will be further expanded over the period 2022 to 2027 which will allow for the continued development of new and improved sports facilities in both urban and rural areas. Enhanced sports facilities represents a significant improvement to the community infrastructure in these areas making them more attractive places to live, work and visit.

Sport Ireland is currently reviewing the Master Plan for the National Sports Campus to inform the future development of the Campus. This review involves consultation with the sporting bodies to identify what facilities are most necessary to support the continued development of Irish sport at elite and participation levels. Recognising the major contribution Irish Sport HQ has made to the modernisation of Irish sports organisations and in response to demand from sporting bodies, Sport Ireland have plans to develop additional office facilities at the campus. The importance of athlete accommodation is highlighted in the existing Campus Master Plan, and Sport Ireland intends to further develop facilities for elite boxers, swimmers and others training at the campus on an incremental basis. Consistent with the co-location approach to training facilities, which optimises utility and spreads operating costs, Sport Ireland are also considering a proposed indoor training facility for

cricket and tennis at the campus, which for modest investment could have a huge impact for both high performance teams and wider participation in these sports.

The provision of world-class facilities for our elite athletes will continue with investment being made to complete the National Indoor Arena, to build the National Velodrome and Badminton Centre.

Continued Development of Sport Ireland National Sports Campus

Current Status: In development

Estimated Cost: €42 million

Estimated Completion Date: 2021

The provision of world-class facilities for our elite athletes will continue with investment being made to complete the National Indoor Arena, to build the National Velodrome and National Badminton Centre.

The SCP is the primary means of providing Government support to sports clubs and organisations for sports capital works. The most recent allocations under the Programme were made at the end of 2017, with €60 million allocated to sporting clubs and organisations throughout the country. The SCP is primarily designed for smaller scale projects with the maximum grant provided under the most recent round being €150,000.

Outside of the SCP, in recent times state support has also been provided for significant sporting infrastructure including the Croke Park redevelopment, the Aviva Stadium and Thomond Park. At present, the Department of Transport, Tourism and Sport is administering the Government grants towards the redevelopment of Páirc Ui Chaoimh, (total contribution €30 million), and the Kerry Sports Academy, (total contribution €7.5 million).

In the longer term, funding of sports facilities is being considered as part of the Sports Policy Review which is expected to be finalised in early 2018. It is clear, however, that a number of the Sport National Governing Bodies have ambitious plans for large scale sport developments in the coming years. Accordingly, a new Large Scale Sport Infrastructure Fund of €100 million is being established for larger sports projects where the proposed Government contribution exceeds amounts available under the SCP.

National Strategic Outcome 8

Transition to a Low-Carbon and Climate-Resilient Society

The NPF highlights the centrality of this NSO to all other elements of spatial policy. The themes highlighted in the NPF are focused on the role of spatial policy in influencing where we live, where we work, and how we travel. These are all directly relevant to the pattern of energy use and in particular the current level of harmful greenhouse gas emissions to which Ireland is committed to achieving substantial reductions.

However, as highlighted in strategies such as the National Mitigation Plan and National Adaptation Framework: Planning for a Climate-Resilient Ireland, Ireland's ambition must go further than a focus on achieving compliance with international commitments. It is imperative that a detailed and coherent roadmap is put in place containing an integrated set of actions with the destination of achieving a low-carbon, climate-resilient and environmentally sustainable economy and society.

The National Policy Position on Climate Action and Low-Carbon Development identifies the achievement of a climate-resilient economy and society by 2050 as a central objective. The pathway for low-carbon transition to 2050 requires a roadmap for achievement of 80% to 95% reduction in carbon-dioxide emissions by 2050.

The delivery of the investment priorities included in this chapter, building on the approach set out in the Government's National Mitigation Plan, would represent a step-change in Ireland's performance in relation to climate-action objectives delivering a significant reduction in carbon emissions over the period to 2030 as compared to the baseline 'no policy change' position. They would comprise a decisive shift in the direction of the achievement of a decarbonised society demonstrating the Government's unequivocal commitment to ensuring that Ireland is on a sustainable trajectory towards securing the National Policy Position.

Strategic Investment Priorities 2018–2027: Transition to a Low-Carbon and Climate-Resilient Society, €21.8 billion (€7.6 billion Exchequer/€14.2 billion non-Exchequer)

The national objective of transitioning by 2050 to a competitive, low-carbon, climate-resilient and environmentally sustainable economy and society must influence public capital investment choices over the next ten years.

On account of the inherently cross-sectoral and integrated nature of the decisions required in such areas as transport, energy, agriculture and the built environment, addressing climate change is a unique challenge for public policy. Investment choices across different sectors must, therefore be coherent and highly integrated with each other requiring a strong co-ordinated approach between the relevant responsible State bodies and SOEs. They must also be closely aligned and mutually reinforcing in terms of the critical role of complementary taxation and regulatory measures, as well as private investment.



Energy Efficiency



Renewable Energy



Investment in energy efficiency, with upgrades to homes increasing from 30,000 to 45,000 per annum from 2021 to achieve a minimum BER Rating 'B'

New Renewable Electricity Support Scheme to support up to 4,500 megawatts of additional renewable electricity by 2030

Investments in energy efficiency of existing commercial and public building stock with a target of all public buildings and at least one-third of total commercial premises upgraded to BER Rating 'B'

Energy research funding to accelerate diversification away from fossil fuels to green energy, including wind, wave, solar, biomass, biofuels, biogas and hydrogen

Supports for changing out oil-fired boilers to heat pumps, along with the provision of roof solar, in at least 170,000 homes

Full roll-out of the new Support Scheme for Renewable Heat

Climate Action Fund to leverage investment by public and private bodies in climate action measures

Transport



Commercial & Private Sector Investments



At least 500,000 electric vehicles on the road by 2030 with additional charging infrastructure to cater for planned growth

Enhanced electricity interconnection, including the Celtic Interconnector to France and further interconnection to the UK

No new non-zero emission vehicles to be sold in Ireland post 2030

Conversion of Moneypoint electricity generation plant to end the burning of coal by 2025

Transition to low emission, including electric buses, for the urban public bus fleet with no diesel only buses purchased from 1 July 2019

Expand the refueling network for alternately fueled vehicles to address freight emissions

BusConnects Programme

Conversion of peat power plants to more sustainable low-carbon technologies by 2030

No NCT Cert will be issued for non-zero emission cars post 2045

Roll-out of the National Smart Energy Metering programme to commence in 2019

Sustainable travel measures, including comprehensive Cycling and Walking Network for metropolitan areas of Ireland's cities, and expanded Greenways

Development of gas infrastructure projects to support regional and rural development and the low-carbon transition

Comprehensive integrated public transport network for Ireland's cities connecting more people to more places (see NSO 4)

Ongoing reinforcement of existing power grid

Agriculture



Town-scale pilots of food and agricultural waste to gas in agricultural catchments for local gas networks supply and biogas production

Piloting of 'climate-smart countryside' projects to establish the feasibility of the home and farm becoming net exporters of electricity through the adaptation of smart metering, smart grids and small-scale renewable technologies, for example, solar, heat pumps and wind

Flood Defences - €940 million



Investment Actions

Cross-Sectoral Climate Action Investment

Decisively responding to the challenges posed by climate change requires a whole-of-society and whole-of-government approach, encompassing:

- taxation measures;
- expenditure;
- · regulation; and
- behavioural change.

Climate change objectives will need to fundamentally shape our public capital investment choices across a range of sectoral areas, as well as those relating to spatial policy.

Climate mitigation and adaptation are cross-cutting priorities. A number of vital directions for public investment by relevant sectoral Departments and Local Authorities to underpin Ireland's response to global climate change will be prioritised and accelerated over the lifetime of the National Development Plan.

Private-sector investment will have a crucial role to play in the achievement of a low-carbon climate-resilient transition, alongside the substantial contribution made through public investment. In this regard, in order to support private investment decisions, the price of carbon should act as an appropriate signal. In parallel to this, the work underway in line with the commitment in the *National Mitigation Plan* to review the price of the carbon parameter in the investment appraisal model under the Public Spending Code will have a very important

role to play in ensuring that decision-making in relation to public capital investment projects is guided and informed by an appropriate price of carbon.

Decarbonising Energy

Ireland's energy system requires a radical transformation in order to achieve its 2030 and 2050 energy and climate objectives. This means that how we generate energy, and how we use it, has to fundamentally change. This change is already underway with the increasing share of renewables in our energy mix and the progress we are making on energy efficiency.

Investment in renewable energy sources, ongoing capacity renewal, and future technology affords Ireland the opportunity to comprehensively decarbonise our energy generation. By 2030, peat and coal will no longer have a role in electricity generation in Ireland. The use of peat will be progressively eliminated by 2030 by converting peat power plants to more sustainable low-carbon technologies.

Investment in renewable energy must be complemented by wider measures to moderate growth in energy demand, diversify supply sources by greater interconnection to international energy networks, and increase adoption and utilisation of electricity storage and smart meters.

This will significantly increase our capacity to electrify heat and transport and promote less energy intensive/low-carbon heating solutions, including biomass and biogas.

Measures required to decarbonise energy generation and enhance energy efficiency include those listed below.

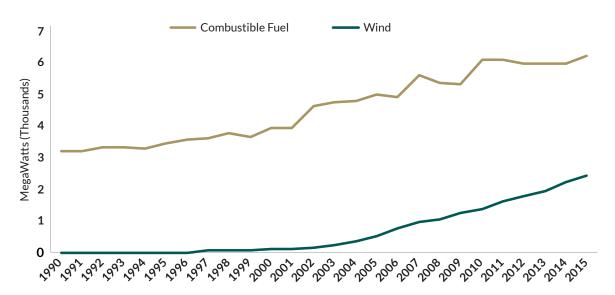


Figure 5.4: Electrical Capacity in Ireland from Combustible Fuels and Wind, 1990-2015

Source: Eurostat. Note: Main Activity Producers Only



- Decarbonising electricity generation.
- Develop further interconnection to increase energy security and facilitate more variable electricity generation on the grid.
- Use of energy research funding to accelerate diversification away from fossil fuels to green energy.
- Deploying broadband, smart meters and new technologies to facilitate more distributed energy generation and 'smart buildings'.
- Deep retrofitting of existing housing, commercial and public building stock, including supports for changing out of oil-fired boilers to heat pumps, while regulating new build to the highest energy efficiency standards.
- Promotion of less energy intensive/low-carbon heating solutions, including biomass, biogas and the electrification of heat.
- Support new initiatives in district heating (such as the Dublin Docklands' District Heating Scheme) in cities and large towns, with a leading role for State bodies, for example, Gas Networks Ireland, and Local Authorities.

Making our Built Environment Energy Efficient

Ireland has the potential to become a global leader in decarbonising the built environment, which international analysis indicates is the most cost-effective way to tackle climate change. This is why improving the energy efficiency of the built environment is a central plank of Ireland's action on climate change. Energy efficiency will also realise benefits for air quality, health, social inclusion,

business competitiveness and better public services, all of which will make a real and positive impact on people's lives.

Exchequer investment of €4 billion in the period 2018 to 2030, along with taxation and regulatory measures, would see a step change in the energy performance in the residential sector, with upgrades to homes increasing from 30,000 to 45,000 per annum from 2021.

The completion of a comprehensive €750 million retrofit programme would place the public sector built environment on a sound trajectory for 2050 and lead the way in developing Ireland's sustainable energy supply chain.

The Sustainable Energy Authority of Ireland (SEAI) and OPW continue to collaborate to develop a scalable model for making our public sector built environment energy efficient, thereby reducing emissions and saving public money. The focus to 2020 is on heating and lighting, with a schedule of deep retrofit opportunities being identified on an ongoing basis.

New Climate Action Fund

Given the very significant levels of investment required to fund the necessary climate action measures identified in the National Development Plan, a new Climate Action Fund will be established that will leverage investment by public and private bodies. The fund will have an initial allocation of €100 million and with annual income of at least €50 million thereafter. To finance the fund and ensure it remains capable of replenishing its resources, the Government will repurpose part of the existing petroleum products levy (commonly known as the NORA levy) of 2 cents per litre that has been in place since 2007. The fund

will focus on climate action projects where it can augment existing public or private investment. It will have a strong focus on interventions in the transport sector.

Commercial State Sector Investments

In addition to the public investment measures listed above, a range of major commercial state sector energy projects will be undertaken over the period of the plan. SOEs are expected to invest in excess of €13 billion in energy related investments, with a particular focus on investment in regulated energy network infrastructure to provide smart reliable electricity networks to support security of electricity supply, SMART metering and enable increased renewable generation. The remainder of the investment will be in conventional and renewable power generation assets and other energy related areas.

The focus of the investment in regulated network infrastructure, the majority of which is expected to be funded by the ESB, is to ensure that Ireland's network infrastructure is maintained to the highest international safety standards, that it is fit for purpose in the medium- to longer-term in order to meet projected demand levels, and that it meets the challenge of integrating world-leading levels of renewable energy. The ultimate objective of the investment is to assist in ensuring a long-term, sustainable and competitive energy future for Ireland. This investment in the networks will deliver positive benefits for the overall economy, as it is a fundamental component in providing the energy/power capacity to support new investment and jobs whilst seeking to deliver that capacity in an affordable manner to ensure that Ireland remains competitive from an energy cost perspective. Investment in these assets is acknowledged as an important enabler of economic

growth and, as such, the sector has a critical role to play in meeting priority infrastructural needs.

EirGrid, who manage, develop and operate the transmission grid, will continue to progress a number of important projects within the All-Island Electricity Market, and will continue to assess opportunities for interconnection with neighbouring electricity markets, for example, the Celtic Interconnector to facilitate the diversification of our electricity supply sources. Increased interconnection would also be expected to put downward pressure on wholesale electricity prices.

ESB, Bord na Móna and Coillte are active in the power generation sector and are currently planning to continue to invest in renewable energy technologies. The harnessing of these technologies will contribute to decarbonising Ireland's electricity generation and meeting Emissions Trading System emissions targets. The main renewable energy technology that the companies have invested in to date is on-shore wind. The companies had 438 megawatts at the end of 2016, estimated to be c. 15% of the overall operational wind farm fleet in the State. These companies plan to continue to invest in these technologies over the coming years, with some investments expected to be delivered on a joint-venture basis. This investment is currently expected to be predominantly in wind generation assets but opportunities in other renewable technology options will also continue to be explored.

A high proportion of Ireland's electricity needs have historically been met through gas-fired power generation. However, the growth in renewable power generation as part of the overall decarbonisation agenda along with increased interconnection has meant a reduction in the volume of gas-fired power



generation and, in turn, a lower volume of gas being transported through Ireland's gas infrastructure. A significant proportion of this renewable power generation is being delivered from wind energy but, given the intermittent nature of this technology, a proportion of Ireland's electricity needs will likely continue to be generated from gas over the medium to longer term. It will therefore remain necessary for a certain level of gas fired generation to continue to be available to ensure continuity of supply and the integrity of the electricity grid during the transition towards a low-carbon energy system.

Continued investment by Gas Networks Ireland in the gas network, to ensure it remains fit for purpose, will also be made in the years ahead. Any further investment over and above maintenance levels will primarily be driven by future gas consumption levels. In this regard, Gas Networks Ireland is also exploring investment in gas demand growth opportunities, including the potential for extending its gas network.

From a gas-supply perspective, the delivery of indigenous gas from the Corrib gas field has enhanced the security of supply but Ireland will still need to import gas via the UK on a long-term basis as Corrib production is projected to decline over the medium term. An important project in this regard that is now nearing completion is the c. €100 million gas pipeline twinning project (South-West Scotland On-shore System project), which involves the construction of 50 km of gas transmission pipeline from Cluden to Brighouse Bay, Scotland.

Potential to reconfigure existing power generation assets to lower carbon fuel sources

Certain large-scale thermal power generation assets within the ESB and Bord na Móna fleet will reach the end of their useful lives in their current configuration over the medium term. With further investment, there may be the potential for some of these assets to be reconfigured to generate electricity from lower-emission fuel options which would contribute positively to the decarbonisation of electricity.

For example, the most suitable replacement low-carbon technology will need to be identified for the ESB-owned coal plant at Moneypoint before the end of its useful life in its current configuration in 2025. Depending on the decision made in relation to the future of the plant, a significant investment will be required. For example, to replace the existing plant with an equal-size plant fired by gas would cost up to €1 billion.

Bord na Móna is currently co-firing its peat station at Edenderry with biomass in line with its stated ambition to replace largescale peat production with alternative energy sources by 2030. ESB also has two peat plants at west Offaly and Lough Ree. These plants will have to be converted to more sustainable low-carbon technologies following the expiry of the Public Service Obligation in respect of the plants at the end of 2019.

The proposed Celtic Interconnector

Current Status: Initial Design and Pre-Consultation

Estimated Cost: €1 billion

Estimated Completion Date: 2025/2026

The Celtic Interconnector is a proposed €1 billion sub-sea electricity cable linking Ireland and France.

The capacity of the Celtic Interconnector is estimated at approximately 700 megawatts, enough to power 450,000 households, and is being studied by EirGrid and its French counterpart Réseau de Transport d'Électricité (RTE).

It would improve security of electricity supply in Ireland and France by providing a reliable high-capacity link between the two countries; diversifying our sources of supply; increase competition in the all-island Single Electricity Market; and support the development of renewable energy, particularly in Ireland.

The proposed 700 megawatts capacity would add to available generation capacity levels and assist in meeting future demand growth.

It is also a substantial step forward in the completion of the Ireland-France Sustainable Energy Roadmap, which both RTE and EirGrid intend to further actively support with all relevant stakeholders and ensure that Ireland benefits from the development of regional markets at EU level.

Transport

NSO 4: Sustainable mobility deals with the decarbonisation of transport in order to secure Ireland's climate action goals. Transport accounts for 20% of Ireland's overall emissions (and 27% of our non-ETS emissions), with 52% of overall transport emissions coming from private cars, 24% from freight and 4% from public transport. The *National Mitigation Plan* highlights as a priority the necessity to progressively electrify transport systems making a shift away from polluting and carbon intensive propulsion systems to new technologies such as electric vehicles and introduction of electric and other alternatively fuelled systems for public transport fleets.

The main actions planned to achieve this are securing an early transition to zero/low emission vehicles in the private and public fleets and setting targets for substantial progress in phasing out the Internal Combustion Engine and replacing it with Electric

Vehicles/other alternative fuels through schemes to incentivise Low Emission Vehicles. Specific measures are set out below:

- Transitioning the car transport fleet to electricity and providing additional charging infrastructure.
- Delivering priority public transport programmes including BusConnects, LUAS Green Line Capacity Enhancement, DART Expansion Programme and Metro Link so that increased transport demand is met by greener public transport.
- Replacing existing diesel buses for the urban public bus fleet with lower emitting alternatives under the BusConnects programme, while promoting commercial bus services and small public service vehicle industry to use low-emission fleet.
- Encouraging a significant modal shift through greater levels of investment and further development of meaningful alternatives to private car uses under the following three major environmentally sustainable transport schemes:
 - » new urban cycling and walking routes which will provide additional sustainable travel options to complement increased capacity and faster, higher quality public transport in our main cities;
 - » traffic management, bus priority and other smarter travel projects in the five cities; and
 - » pilot initiatives for low emitting technologies in the transport sector.

There is also the need to make the road network more resilient to the effects of climate change. This would include the following measures which would be undertaken under national, regional and local road programmes:

- improved road drainage systems;
- strengthened road pavements and bridges which can resist the effects of increased rainfall and the effects of scour damage; and
- raising of roads in certain instances in order to prevent roads becoming impassable after heavy rainfall.

Agriculture, Forestry and Land Use

While agriculture emissions have fallen 3.5% from 1990 to 2016, the sector accounts for 46% of Ireland's non-ETS emissions, and these are projected to increase by 4% to 5% by 2020 from current levels. The projected increase in period to 2020 is associated with the substantially greater increase in milk production since the end of milk quotas in 2015.

In order to support the achievement of climate action goals, the policy objective is an approach to carbon neutrality for agriculture and land use that does not compromise sustainable food production. Agriculture including land use, will continue to focus on reducing emissions, enhancing carbon uptake in soils, and increasing fossil fuel and energy intensive materials displacement. There will be particular emphasis on innovation and early widespread adoption of improved techniques in both primary production and the processing sector and increased afforestation through a new national forestry programme and contribution from the sector to bioenergy production.

Ireland's Rural Development Programme 2014–2020, based on a European Commission's methodology⁷, will provide support of €3.4 billion for climate-change objectives. Examples of schemes within the RDP which have a specific climate focus include the Beef Data and Genomics Programme (BDGP) and the Green Low-carbon Agri-environment Scheme (GLAS). BDGP entails farmers undertaking a six-year commitment to carry out pre-defined actions to deliver a more climate friendly suckler herd. In the preparatory analysis undertaken in designing BDGP, it was estimated that the scheme would generate greenhouse gas savings of between 92 kilotonne and 300 kilotonne.

GLAS will deliver overarching benefits in terms of the rural environment whilst addressing the issues of climate change mitigation, water quality and the preservation of priority habitats and species. For example, GLAS includes actions targeted at reducing emissions levels (such as support for low emissions slurry spreading to be applied to 160,000 hectares and minimum tillage practices to be applied to 28,000 hectares) and sequestration actions (such as planting of 6,500 hectares of new hedgerows). The RDP and in particular both of these schemes will provide measurable climate related benefits for Ireland and Irish agriculture.

Ireland's forests play an essential role in helping with climate change mitigation, through carbon sequestration in forests and the provision of renewable fuels and raw materials. Irish forestry is a major carbon sink and afforestation is one of the most significant mitigation options that is available to Ireland to help meet its international climate targets. Climate change mitigation also occurs when forest-based biomass replaces fossil fuels for heating or power generation. This helps to reduce the dependence on imported fossil fuels.

⁷ The methodology for the calculation of support by the European Agricultural Fund for Rural Development (EAFRD) for climate change objectives is set down by Article 2 and Annex II of Commission Implementing Regulation (EU) No 215/2014.

Further innovation and new measures will include:

- town-scale pilots of food and agricultural waste to gas in agricultural catchments for local gas networks supply and biogas production; and
- piloting of 'climate-smart countryside' projects to establish the feasibility of the home and farm becoming net exporters of electricity through the adaptation of smart metering, smart grids and small-scale renewable technologies, for example, solar, heat pumps and wind.

Further work is planned, in the context of the policy approach to carbon neutrality for agriculture, to elaborate a full menu of mitigation (including sequential options in the agriculture, forestry and land use sector) to enable the implementation of an approach that makes Ireland a leader in sustainable and low-carbon farming and land management, while simultaneously ensuring we meet our legally binding climate targets, as well as, our 2050 National Transition Objective.

Flood Risk Management

The existing flood capital investment programme and Flood Risk Management Plans developed under the Catchment Flood Risk Assessment and Management (CFRAM) process will help reduce the vulnerability of the country to the negative effects of climate change through effective adaptation measures.

Investment of €350 million since 1995 has already delivered 42 major flood relief schemes around the country that are providing protection to 9,500

properties and an economic benefit to the State in damage and losses avoided estimated at €1.9 billion. €430 million has been allocated for flood mitigation initiatives over the period 2016 to 2021 to protect threatened communities from river and coastal flood risk. This funding is supporting the development and implementation of a significant existing flood relief investment programme which includes eight major flood relief schemes under construction and 26 schemes under design and at planning to protect 11,200 properties. Some of the major projects included in the existing programme are as follows:

- Lower Lee (Cork City) Flood Relief Scheme (in development);
- Skibbereen Flood Relief Scheme (under construction);
- Enniscorthy Flood Relief Scheme (in development);
- Bandon Flood Relief scheme (under construction);
- Clonakilty Flood Relief Scheme (preconstruction);
- Claregalway Flood Relief Scheme (under construction); and
- Athlone Flood Relief Scheme (under construction).

In addition, the programme supports the delivery of 660 minor works schemes, delivered directly by Local Authorities nationwide that provide local solutions to prioritised flooding issues.

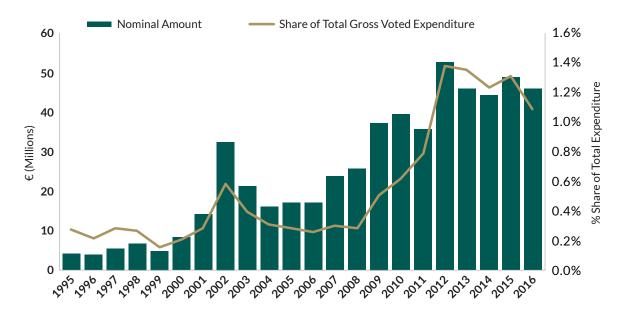


Figure 5.5: Gross Voted Capital Expenditure on Flood Risk Management

Source: Department of Public Expenditure and Reform Databank



In 2011, the Government identified 300 areas that are at potentially significant risk from flooding and together account for 80% of Ireland's potential flood risk from rivers and seas, the primary source of flooding in Ireland.

Since then extensive and detailed engineering modelling has been completed by the OPW through its CFRAM programme for each of these 300 areas.

This is the largest ever study of flood risk in Ireland and has delivered:

- 29 Flood Risk Management Plans that set out c. 118 other major and minor capital projects in addition to those already included in the existing programme; and
- flood maps for the flood risk in each of these areas that will support planning and emergency response management.

The Government is committed to the policy objective of delivering further capital works/flood relief schemes to minimise the impacts of river and coastal flooding on society through the roll-out of the 29 Flood Risk Management Plans. Delivery of this capital works programme will be underpinned by a total investment of up to €940 million over the lifetime of the National Development Plan.

The 29 plans include proposed flood relief schemes which will need to be prioritised. The prioritisation process, which relates primarily to the proposed physical flood-protection measures, will be based on an evaluation process including Multi-Criteria Analysis and benefit to cost-ratio (which represents the overall benefits, on balance across each of the objectives, per Euro cost of a proposed measure), and the risk arising from the nature of the local flood waters within a community. The prioritisation will be applied on a regional basis.

The schemes will range from very large schemes costing in excess of €15 million each to smaller schemes that can be progressed by the Local Authorities with funding available from the OPW. An example of five large schemes identified in the plans are as follows:

- Limerick city and environs
- Tralee
- Dundalk
- Carlingford and Greenore
- Drogheda

National Strategic Outcome 9

Sustainable Management of Water and other Environmental Resources

The NPF highlights the centrality of our sustainable water resources to the implementation of the NPF to underpin our environmental and economic well-being into the future against the backdrop of the significant deficits in the capacity and quality of our current provision reflecting historic underinvestment.

Strategic Investment Priorities 2018–2027: Sustainable Management of Water and Other Environmental Resources, €8.8 billion

Investment in our country's water services is critical in meeting the needs of our growing economy across the regions, of our people and their health and the protection and enhancement of the quality of our environment and ensures public health.

- Water Infrastructure Irish Water Investment Programme
- Eastern and Midlands Water Supply Project
- Greater Dublin Drainage Project
- Rural Water Investment Programme

Investment Actions

Water Infrastructure (Irish Water)

Ireland's water and wastewater network comprises a vast network of fragmented assets in varying states of repair with some dating from the 19th century. The upgrading of these networks will take sustained capital investment by Irish Water over many investment cycles in order to deliver efficient, fit-for purpose water infrastructure and services to meet Ireland's needs.

Future investment in water infrastructure will also involve increased delivery of new connections, co-ordinated with the planning process to support economic growth and meet the needs of priority housing developments and significant development and urban renewal areas, while at the same time supporting implementation of national strategies in relation to public health, safety and environmental compliance risks.

It is estimated that investment of close to €14 billion will be required by Irish Water over the period 2018 to the mid-2030s, on a structured and phased basis, to meet these investment needs. This investment will be delivered in parallel with the continued transformation of the delivery of water services to ensure:

- consistent application of maintenance standards;
- achievement of significant operational changes and operating cost savings; and
- embedding of water conservation and sustainable water resource management into water policy.

The Government agreed on a new funding arrangement for Irish Water in September 2017, based on the report of the Working Group on the Future Funding Model for Irish Water. Under the new funding model, Irish Water is being funded in respect of domestic water services by the Exchequer for both capital and current purposes (c. €1.1 billion in 2018, of which €500 million is capital) with investment in relation to the non-domestic sector being funded through charges and borrowings.

In line with the Water Services Act 2017, the Minister for Housing, Planning and Local Government will publish a Water Services Policy Statement during 2018 in respect of the policy objectives and priorities of the Government regarding the provision of water services in the State. Irish Water will also submit a strategic funding plan required by the new legislation later this year, setting out expected expenditure, income and funding requirements over a multiannual period, while also meeting environmental requirements such as obligations under the Urban Waste Water Treatment Directive, the Drinking Water Directive and the EU Water Framework Directive-mandated River Basin Management Plans. This strategic funding plan will be subject to regulatory review and provision of funding on an annual basis by the Oireachtas.

€8.5 billion will be invested by Irish Water over the period of the National Development Plan. Some of the water and waste water projects to be progressed across the country include:

- National Programme of Investment to tackle leakage through find and fix (active leakage control) and water mains rehabilitation.
- Vartry Water Supply Scheme: This €150 million investment is designed to ensure a safe and sustainable water supply for the north Wicklow and south Dublin area, and includes the upgrading of the existing treatment plant.
- Ringsend Wastewater Treatment Plant (WTP) project: This €190 million project will provide further capacity to support development in the Greater Dublin Region.

- Cork Lower Harbour Main Drainage Project: This
 €55 million investment is required to significantly
 enhance the water quality in Cork Harbour. The
 project is important in terms of protecting the
 environment, facilitating economic development
 and providing for a growing population.
- Athlone Main Drainage Project: This €36 million project is the provision of new infrastructure which will increase capacity in the wastewater network, alleviate property flooding from sewer overflows, protect the environment and support future development in the area.
- Belmullet Sewerage Scheme: This €10 million investment by Irish Water will provide new wastewater infrastructure to comply with EU Directives and eliminate the current untreated discharge. The new WTP commenced operations in December 2017.
- Killala, Foxford and Charlestown Sewerage Schemes: Irish Water is progressing a €19.4 million investment in new and upgraded wastewater infrastructure in these three agglomerations to comply with EU Directives and eliminate untreated discharge at Killala. Construction will commence in 2018.
- Enniscorthy WTP: This €16.3 million project will upgrade the wastewater treatment facilities in Enniscorthy, an investment which will bring significant environmental and economic benefits to the area.
- North Docklands Sewerage Scheme: This €18
 million investment will deliver an upgrade to
 the wastewater collection network serving the
 North Docklands area. The newly upgraded
 wastewater network in the North Docklands area
 will be capable of handling the areas fast growing
 population and will protect and improve water
 quality in the River Liffey.
- The Donegal Group B project includes the development of new sewerage schemes in Killybegs, Bundoran, Glencolumbkille and Convoy. This €26 million investment will ensure compliance with EU Directives and will provide wastewater treatment capacity in these areas supporting growth and economic development.
- Kerry Central Regional Water Supply Scheme Project: This €33 million investment is needed to construct a new WTP for Central Kerry that will see approximately 62,000 customers removed from the Environmental Protection Agency's Remedial Action List.

The NPF highlights, as set out in the box following, that a new long-term water supply source for the Eastern and Midland Region is needed by the mid-2020s, to provide for projected growth up to 2050 and contribute to resilience and security of supply for the region.

Eastern and Midlands Water Supply Project

Current Status: At Consultation Stage

Estimated Cost: €1.2 to 1.3 billion

Estimated Completion Date: TBC

The Water Supply Project (WSP)–Eastern and Midlands Region involves a 170 km pipeline with supporting infrastructure (water treatment plant, pumping stations and terminal point reservoir) to ensure that the long-term (2050+) water supply needs of the Dublin Region are met in a sustainable manner.

The project has been in development since the mid-1990s, originally under Dublin City Council as project sponsor, and under Irish Water management since January 2014. Since then Irish Water has concluded a four-phase public consultation process on the project. Phase 4 involved the publication of the Final Options Appraisal Report and the Environmental Impact Statement Scoping Report. The Final Options Appraisal Report confirms that the preferred scheme is:

- abstraction of water from the Lower Shannon at Parteen Basin;
- water treatment nearby at Birdhill; and
- treated water piped to a termination point reservoir at Peamount in South County Dublin, with supplies of treated water available to Midland communities along the route.

Greater Dublin Drainage Project

This is a c. €500 million major wastewater treatment plant for the Dublin region, to augment the existing plant in Ringsend and facilitate economic development, cater for a growing population and protect the environment.

The core deliverables of that project are the provision of a new wastewater treatment plant at a site in the northern part of the GDA and an associated marine outfall which will discharge fully treated effluent into the Irish Sea at a point approximately 1 km northeast of Ireland's Eye; and the provision of a new Orbital Drainage Sewer linking the new plant to the existing regional sewer network via pumping stations at Abbotstown (near Blanchardstown) and Grange (near Baldoyle), which will enable future connections for identified areas of development within the catchment area.



Water Infrastructure (Non-Irish Water)

Following Estimates 2018, over €164 million funding has been allocated over the period 2018 to 2021 for (non-Irish Water) investment in water infrastructure including:

- €95 million for the Rural Water Programme; and
- €41 million for legacy issues in relation to lead pipe remediation and developer provided infrastructure, mainly in housing schemes - this will support the move from a pilot phase to a multi-annual programme to be developed in collaboration with local authorities and Irish Water.

The increase in the Rural Water Programme reflects the need for additional investment in the sector to improve and sustain the quality of rural water. The priorities for the next rural water multi-annual programme will be determined following consultation with stakeholders through a working group to be established shortly in line with the recommendations of the Joint Oireachtas Committee.

Waste Management and Resource Efficiency

Investment in waste management infrastructure is critical to our environmental and economic well-being for a growing population and to achieving circular economy and climate objectives.

Capacity will continue to be built in waste facilities, including anaerobic digestion, hazardous waste treatment, plastics processing, recycling, waste to energy, and landfill and landfill remediation, to meet future waste objectives. The infrastructure to deliver waste management policy has been, to date, largely delivered through private investment with some public sector investment. Significant infrastructure capacity development will be required to separate and process various waste streams at municipal and national levels to achieve new EU legally-binding targets and the additional investment may include a potential role for public investment.

Natural Resources

Investment in geological understanding by the Geological Survey Ireland, through completion of both the Tellus and INFOMAR mapping programmes by 2028 can significantly de-risk and encourage private investment in Ireland's natural resources.

Investment will also be undertaken by the private sector in sustainable mineral, oil and gas exploration and development investment to develop Ireland's natural resources.

Ireland's future energy security will be partly dependent on new infrastructure investment to potentially supply natural gas from a future gas field to the national gas network. The Corrib gas field has an estimated producing life of just over 15 years. In 2016, after Corrib became operational, indigenous gas production met over 55% of the State's gas needs. Prior to that, over 95% of the State's natural gas needs were imported, via the two gas interconnectors from Great Britain.

Remediation of Haulbowline Island

Funding of approximately €30 million will be allocated over the period 2018 to 2021 for the remediation of Haulbowline Island.

National Strategic Outcome 10

Access to Quality Childcare, Education⁸ and Health Services

Access to quality primary education, health services and childcare, relative to the scale of a region, city, town, neighbourhood or community is a defining characteristic of attractive, successful and competitive places.

This NDP provides significant public investment in education and health infrastructure to meet current infrastructure needs, cater for an estimated population growth of one million and respond to Ireland's changing demographic profile.

The co-ordination of primary and post-primary schools places and health infrastructure with the spatial development of cities and regions is consistent with the objectives of the NPF. Support will also be provided to ensure quality of supply of childcare places.

Strategic Investment Priorities 2018–2027: Primary and Post-Primary Education, €8.8 billion

Primary and Post-Primary Sectors

Primary and Post-Primary School Buildings: €8.4 billion

Schools building programme and refurbishment and upgrade of the existing school stock to deliver an annual average of 20,000 permanent school places and to support the reform and modernisation of school curricula (for example, STEM, Physical Education (PE)):

- a school laboratory and PE hall build and modernisation programme;
- deep energy retrofit programme for pre-2008 schools; and
- prefab replacement programme from 2019.

Digital Strategy for Schools: €420 million

The ongoing embedding of the use of digital technologies in teaching, learning and assessment.

Education

Primary and Post-Primary Schools

Over the years ahead, the delivery of additional permanent school places to meet demographic demand will continue to be prioritised. The expectation is that an average of 20,000 permanent school places will be delivered annually over the medium term. This will be achieved via the Large Scale Projects Programme, which is expected to deliver an average of up to 50 large-scale projects annually as well as via the Additional Accommodation Programme, which will support smaller extension projects. Funding of nearly €1.7 billion for these programmes has already been confirmed. Site acquisition will also be an important priority to facilitate the delivery of new schools. Funding of €180 million has been allocated for a multi-annual programme to support the replacement of purchased prefabs.

The provision of school places in alignment with planned population growth will be supported by detailed demographic analysis at the level of the 314 school-planning areas. In this regard, the school building programme will align with NPF objectives in delivering, over time, more compact growth and a rebalancing of growth between the regions. In the interim period, the school building programme will continue to respond to existing and previously planned demographic growth, with the objective of ensuring a school place for every child.

The focus of the school-building programme will progressively shift from primary to post-primary level reflecting the fact that post-primary enrolments at the national level are not projected to peak until 2025. However, additional primary level provision will continue to be required to support housing provision, and will be essential to achieving the growth targets for the five cities.

In addition to providing for demographic growth, the resources available under the National Development Plan will deliver a number of new priorities in the schools sector, supporting and reinforcing Ireland's ambition to have the best education and training service in Europe. Catering for diversity in relation to religion and language is also important in this regard.

An indicative envelope of €2.5 billion is being identified to advance a strengthened focus on refurbishment of Ireland's existing school stock over the next ten years alongside the funding necessary to generate additional places and support grant schemes for minor works and maintenance.

⁸ Capital investment in the Higher Education and FET sectors is included under the NSO 5: A Strong Economy, supported by Enterprise, Innovation and Skills.

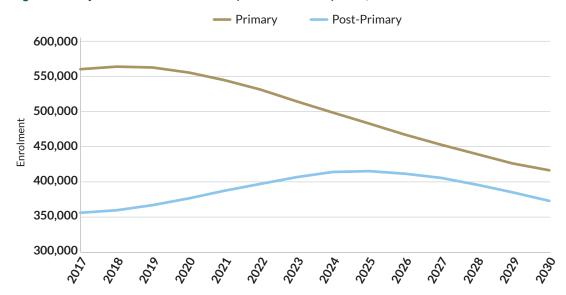


Figure 5.6: Projected Enrolments at Primary and Post-Primary Level, 2017-2030

This refurbishment programme will have different strands to include those listed below.

- A school laboratory build and modernisation programme that ensures that students in all post-primary schools have access to appropriate laboratories and other facilities and equipment to support delivery of the reformed science curricula and the roll-out of Computer Science as a leavingcertificate subject.
- A PE build and modernisation programme that ensures that students in all post-primary schools have access to appropriate facilities to support PE provision, particularly also in the context of the roll-out of PE as a leaving-certificate subject. Enhanced and modernised PE facilities will also provide important amenities for local communities.
- The commencement and progression of a deep energy retrofit of schools built prior to 2008, with a view to optimum energy use and conservation in school buildings. It is envisaged that this will draw from the experience gained from an energy pilot project that is being undertaken by the Department of Education and Skills, in conjunction with the SEAI, aimed at establishing innovate delivery models as well as a menu of best-practice retrofit options.

Resources available under the National Development Plan will also allow the Department of Education and Skills to fund pro-active and effective maintenance and minor works grant schemes to ensure that schools are appropriately maintained. It is planned that these schemes would reach €100 million annually by the early part of the 2020s and that greater certainty will be given to schools in relation to funding availability.



Digital Strategy for Schools

The Digital Strategy for Schools is a priority initiative which seeks to further embed technology and digital learning in primary and post-primary schools. Capital investments in connectivity and equipment, alongside teacher upskilling, are essential to the integration of ICT in all classrooms. Enhanced ICT infrastructure and ICT skills development in higher and further education settings will also be prioritised.

The ongoing embedding of the use of digital technologies in teaching, learning and assessment

underpinned by this strategy is being supported through the investment of €420 million over the period of the National Development Plan. Investment in appropriate ICT infrastructure will support curricular developments such as Computer Science at senior cycle, the planned review of the primary maths curriculum (to include computational thinking), and the implementation of the STEM strategy. Investment is also required to ensure that availability of high speed broadband in all areas, as envisaged under the National Broadband Plan, can be optimised through proper Wi-Fi in schools.

Strategic Investment Priorities 2018-2027: Health, €10.9 billion

A number of major investment projects and programmes along with significant reform initiatives are planned for the health sector including:

Major Investment Projects and Programmes

The main outcome of delivery of these projects and programmes are healthcare facilities that allow for implementation of new models of care and for delivery of services in high quality modern facilities. This will facilitate the transition of patients to the most appropriate care settings ranging from complex acute care to primary and community services.

New Children's Hospital at St James's campus, Dublin and two Outpatient Departments and Urgent Care Centres at Connolly Hospital, Blanchardstown and at Tallaght Hospital, Dublin.

National Maternity Strategy developments including the replacement of standalone maternity hospitals by relocating the National Maternity Hospital at St. Vincent's, the Coombe Hospital at St James's, the Rotunda Hospital at Connolly and Limerick University Maternity Hospital at UHL.

National Cancer Strategy Capital Developments including National Programme for Radiation Oncology at Cork, Galway and Dublin, and expansion of Breastcheck.

National Forensic Mental Health Service Hospital at Portrane, Dublin.

Primary Care Centre construction programme across the country.

Replacement and refurbishment of 90 Community Nursing Units across the country.

Replacement and refurbishment of long-term residential care units and housing in the community for people with disabilities at various locations across the country.

National Rehabilitation Hospital redevelopment, Dún Laoghaire, Dublin - Phase I and Phase II.

Roscommon Rehabilitation Unit.

Trauma Strategy Capital Developments.

Acute Hospital developments including:

- New hospital for Cork
- Waterford ward block
- Letterkenny rebuild including Radiology
- Naas endoscopy suite
- Tallaght Renal Dialysis and Intensive Care Units
- Limerick ward block
- Beaumont ED and Cystic Fibrosis unit
- Galway ED and ward block

- Portiuncula ward block
- Roscommon Central Sterile Services Department
- Clonmel ward accommodation and outpatients department
- CUH paediatric phase 2
- Sligo Central Sterile Services Department and hospital redevelopment phase 1
- Cavan day ward upgrade
- Mullingar radiology, MRI and theatres
- Kilkenny radiology and MRI
- Coombe theatre upgrades
- Mater Dublin clinical laboratory replacement
- Connolly Dublin clinical laboratories and Central Sterile Services Department

Mental Health projects including:

- Portlaoise 40 bed Residential Unit
- New Acute Units in Galway, Sligo, and Naas
- Provision of a Crisis Housing Unit in Clonmel

Infrastructural and Critical Clinical Risk programmes including building, equipment and ambulances

New Ambulance bases at Ardee, Mullingar, Limerick, Cork and Galway.

Other Major Health Reform Initiatives



Additional capacity

As recommended in the Health Service Capacity Review bed numbers and services will be expanded to build a better health service for the future for all our people consistent with the National Planning Framework

- 2,600 additional acute hospital beds to be delivered across all Hospital Groups
- This includes new dedicated elective-only hospitals in Dublin, Cork and Galway to tackle waiting lists and provide access to diagnostic services.
- 4,500 additional long term and short term residential beds in Community Nursing Homes in the public system
- Additional Primary Care Centres and Community Diagnostic Facilities so that people can receive better care close to home and avoid hospital unless it's necessary
- Additional facilities for mental health services and for people with disabilities

Sláintecare Reform - eHealth and ICT

As recommended in the Sláintecare Report, investment in ICT infrastructure will enable the integration of services and flow of information across and within various care settings. This includes the National Electronic Health Record Programme, vital to make patient information available through technology to support improved patient care, safety and efficiency.

Health Service Capacity and Reform

Significant additional capacity will be required across all aspects of the health service to respond to demographic changes. The Health Service Capacity Review 2018 identifies additional capacity requirements for the period to 2031. It also makes clear, that in the absence of major reforms, the demand on our hospital system in particular will become unsustainable. Capital investments will be targeted at supporting this reform process. Continued investment in primary care facilities will be needed, including the development of community diagnostic hubs. Our ageing population will require the delivery of significant additional step-down and long-stay facilities, and it is expected that approximately an additional 4.500 of these beds will need to be delivered by the public system.

Even with a major shift in our model of care, the Review concludes that acute hospital bed capacity will need to increase by 2,600 and the NDP will deliver on this requirement. A key principle will be the need to achieve greater separation between scheduled and unscheduled care, so that the system can respond better to emergency needs without adding to waiting lists for elective procedures. Planning across all hospital groups in line with demographic needs will inform project selection for the introduction of this additional capacity.

New Dedicated Ambulatory Elective-Only Hospital Facilities

New dedicated ambulatory elective-only hospital and Cork. These facilities will provide high volume, low complexity procedures on a day and outpatient basis, together with a range of ambulatory diagnostic services. The high volume dedicated ambulatory centres. It is envisaged that these facilities will be sited adjacent to general hospitals. The aim is to both increase capacity in the hospital system and provide a better separation They will provide increased, protected capacity major hospitals to address higher complexity and emergency care. Additional benefits from this include improved quality outcomes for patients and increased efficiency due to higher productivity and throughput, together with reduced waste dedicated day and ambulatory centres is in line with healthcare developments internationally and the recommendations of the 2018 Health Service Capacity Review.



Sláintecare Reform – eHealth and ICT

The National Development Plan will support the provision of digital health services, including the development of electronic health records in many health care settings such as the New Children's Hospital over the 10-year implementation timescale and reflects what was envisaged in the eHealth strategy for Ireland. This vision is also set out and supported in the Sláintecare report.

Digital health services will enable the right information about the right patients to be available securely in the right health care setting at the right time. This will allow doctors and nurses to enhance patient safety and will also support, in time, patients being able to securely access their own health data.

Digital health implementations envisage a range of systems to underpin patient safety, efficiency and the critical building blocks required to support integrated care across our health system. The National Development Plan will also fund the on-going investment in healthcare ICT to support a range of functions including electronic patient record systems, radiology, laboratory and diagnostic facilities. Building on the recent successful roll out of the Maternal and Newborn System, NDP investment will support the implementation of similar systems in many other health care settings across the acute, primary and community care areas.

ICT systems such as electronic prescribing and tele-health will directly improve patient services allowing chronic disease to be managed in a more patient centred environment at community level including in patient's homes.

As our population changes and ages, the challenges we face in the health sector over the coming decade will require a sustained period of investment and reform. The Government supports the vision for a high quality, safe, accessible and sustainable healthcare system. Capital investment has a key role to play both in enhancing service provision and as a driver of reform.

Health capital investments in the National Development Plan will support Government priority projects and commitments and will enable the roll-out of new additional health capacity in the community and acute hospitals. Targeted investment in support of a clear and sustained programme of reform and productivity improvement is required.

The plans for public health care investment over the next ten years include:

New Children's Hospital

The new Children's Hospital along with the Paediatric Outpatient and Urgent Care Centres at Connolly and Tallaght Hospitals, will enhance paediatric acute services regionally and nationally. It will deliver 380 individual inpatient rooms. Work has commenced on the sites. The Paediatric Outpatients & Urgent Care Centre at Connolly will open in 2019 followed by Tallaght in 2020. The new Children's Hospital will open in 2022.

National Forensic Mental Health Hospital Project

The National Development Plan provides for replacing the Central Mental Hospital with an appropriate modern facility at Portrane County Dublin which will open in 2020. The development of a new 120 bed national forensic mental health hospital is central to modernising mental health services nationally, in line with the Vision for Change policy.

National Cancer Strategy

The National Programme for Radiation Oncology consists of delivering replacement and additional facilities and equipment for the delivery of radiation oncology services at public hospitals in Dublin, Cork and Galway to meet existing and future demand. Phase 1 has already delivered additional and replacement linear accelerators at public hospital sites in Dublin. Construction is underway in Cork to provide replacement and additional radiation oncology facilities which will be commissioned in 2020. The development of replacement and additional facilities at Galway is in planning and phase 2 of the programme will also see the delivery of further additional cancer radiation capacity in Dublin. Resources provided under the NDP will allow the development of these facilities to address the increase in demand for radiation oncology forecast in the National Cancer Strategy. In addition, capital funding under this plan will allow for the development of cancer facilities in line with the National Cancer Strategy. The Strategy includes the expansion and improvement of medical oncology units and day wards, improvements in diagnostic facilities and investment in aseptic compounding infrastructure as well as the construction of a comprehensive cancer centre.

Trauma

The implementation of the Trauma System is expected to involve capital investment in, in particular, dedicated trauma receiving areas, dedicated trauma wards and dedicated trauma operating theatres.

Cardiac Services Infrastructure

Investment in cardiac catheterisation laboratories and other cardiac services infrastructure nationally will be informed by the outcome of the National Review of Specialist Cardiac Services in relation to optimal service configuration of a national adult cardiac service to achieve optimal patient outcomes at population level.

National Rehabilitation Hospital - Phase I & II

Phase I of the redevelopment of the National Rehabilitation Hospital, will deliver a 120 bed modern hospital, including support therapies for paediatrics and acquired brain injury wards, hydrotherapy unit and sports hall and will be operational in 2020. Phase II of the National Rehabilitation Hospital involves the expansion of services to include all existing therapies and support facilities to the new hospital.

The National Maternity Strategy

Funding will be made available to provide the infrastructure to support implementation of the Maternity Strategy and to provide an appropriate environment within all our maternity hospitals/units to facilitate the delivery of a modern, safe, quality service where the woman's need for privacy and dignity is respected. All the remaining standalone maternity hospitals - National Maternity Hospital, Limerick Maternity Hospital, the Rotunda and the Coombe - will be redeveloped on acute hospital sites. Almost 48% of all births occur in these hospitals annually. The first hospital to be redeveloped will be the National Maternity Hospital; planning permission has been awarded for the new maternity hospital on the St Vincent's University Hospital campus at Elm Park, Dublin. This new hospital will cater for up to 10,000 births per annum and will radically improve maternity, gynaecology and neonatal healthcare, both at local and national level.

Primary Care Construction Programme

In line with health strategy a decisive shift towards primary care is required to meet growing demands for health and social care services, in particular in the management of chronic disease. The construction programme for Primary Care Centres will continue throughout the National Development Plan through a combination of direct building by the Health Service Executive, by working with the private sector using an operational lease arrangement or through a Public Private Partnership mechanism. The Plan will support the completion of projects currently in construction and planning, and meet future population needs in accordance with the National Planning Framework. This programme will include provision of diagnostic facilities in the community.

Replacement and Refurbishment of Public Nursing Homes and Long-Term Residential Care Units

Funding has been allocated in the NDP for the replacement and refurbishment of community nursing homes and long term residential care facilities for older people and people with disabilities. Accommodation standards require significant investment through upgrade, refurbishment or replacement. Over the next five years, this will provide for the replacement and refurbishment of 90 public nursing homes across the country.

The NDP also provides for a public private partnership project to deliver community nursing homes.

Disability Services

The NDP will continue to support the capital programme for people with disabilities, which consists of the purchase and adaptation of houses in the community along with the replacement of long-term residential care units.

Critical Clinical and Infrastructural Risk

The NDP will allow the health sector to develop a structured replacement programme for equipment and ambulances, and minor capital works, over the course of the plan to meet regulatory and clinical infrastructure standards. As with any health system, there is an ongoing need to maintain and update both facilities and healthcare equipment. Accommodation standards, health technology and the regulatory environment have continued to evolve, such that elements of the accommodation, and clinical / medical / diagnostic equipment, must be upgraded or replaced to meet regulatory standards, or as equipment reaches the end of its life. A specific redevelopment programme will be put in place to modernise acute hospital services in Cork.

Strategic Investment Priorities 2018–2027: Childcare, €400 million

The NPF highlights the contribution of early childhood care and education to spatial development, in addition to the positive impact on individual and community development, quality of life and social cohesion. The NPF also draws attention to the important role of childcare provision in terms of underpinning future patterns of labour force participation which will be crucial to sustaining employment growth and to the realisation of the economy's growth potential over the period of the National Development Plan. International research confirms that good access to affordable and high quality childcare is critical, in particular, to supporting female labour market participation.

Access to affordable childcare is inherently linked to creating an equitable society, sustainable communities and a thriving economy. Childcare

provision is therefore considered under the National Development Plan along with housing, schools and health facilities as an integral part of national infrastructure.

Childcare Investment Projects

Childcare to ensure quality and supply of sufficient childcare places

Youth services that support and target disadvantaged young people and improve their employability

Tusla through the continued development of ICT and standards of accommodation

Oberstown Children Detention Campus through the provision of safe and secure places

Investment Actions

Demographic and labour force trends, analysis of current supply levels and initiatives such as the introduction of the Affordable Childcare Scheme all strongly point to the requirement for increased investment in childcare capacity. While the capital funding available annually in recent years has, and is, being used to expand capacity, for example, 7,000 places created in 2017, €6.8 million available in 2018, significant investment is likely to be required over the period of the National Development Plan for multiannual programmes for new buildings and expansion of current services in areas of disadvantage, sparsity and population growth; to expand services in some areas; and to support ongoing essential maintenance to enable delivery of high quality services that meet strict regulatory requirements.

The Department of Children and Youth Affairs is commissioning research in 2018 to obtain a detailed assessment of demand for and projected supply of, childcare over the next decade which will examine the extent to which the childcare sector is capable of meeting expected demand.

A 10-year, cross-Government Early Years Strategy will be published in 2018 (children in their first five years of life). One of the core objectives of this strategy will be to increase the proportion of children who have access to high-quality, early years care and education. To meet this objective, a range of actions will be set out in the strategy. The Government's commitment to supporting the implementation of this strategy and its objectives is demonstrated by the commitment of €250 million of resources under the National Development Plan for investment in additional childcare provision.

In addition to childcare, further capital investment will be required to support continued investment in Tusla, Obserstown Children Detention Campus and Youth Services.

Other Public Investment Sectors

There are a number of critical sectors of public investment which do not relate directly to the NSOs as specified in the NPF. There are also public investments that support multiple NSOs without falling clearly under a single NSO. A number of these investments are detailed below. All of these investments will be aligned as far as possible with the NPF while also recognising that there are important a-spatial investment projects and programmes such as investments in vehicles and ICT equipment.

Strategic Investment Priorities: Other Public Investment Sectors, €3 billion

Increased levels of public investment in defence and justice is a critical foundation to the National Development Plan, to facilitate the capability to deliver on the roles assigned by Government.

Justice



- Forensic Science Laboratory
- Garda Divisional Headquarters in Kevin Street and Galway
- Replacement of the Harcourt Square Complex
- Garda Station Building and Refurbishment Programme
- Garda ICT Programme
- New or refurbished courthouses in a number of provincial cities and county towns
- Redevelopment of Limerick Prison
- Development of Mountjoy Prison Campus
- Family Law and Children's Court Complex on Hammond Lane



Defence



- Land Forces Equipment Force Protection and Capability Development includes; Upgrade of the Defence Forces Mowag Armoured Personnel Carrier fleet (underway); Light Tactical Armoured Vehicle Replacement; investment in ICT, weapons and ammunition
- Ongoing Naval Service vessel renewal and replacement programme: mid-life refit of the LÉ Roisín and LÉ Niamh and acquisition of a new multi-role vessel
- Air Corps Aircraft renewal and replacement:
 - » Three new Fixed Wing Utility Aircraft replacing Cessnas (underway)
 - » CASA Maritime Patrol Aircraft Replacement Programme
- Defence Forces Built Infrastructure Renewal and Development

Justice and Equality

An efficient and effective criminal justice system is vital to the realisation of the strategic outcomes of the Ireland 2040 Plan. This includes important Government services and activities across policing, prisons and the courts. In particular, visible, effective and responsive policing will play a central

role in supporting the growth and development of communities under the new NPF.

Success in achieving compact growth in our urban areas and Strengthened Rural Economies and Communities are all depending on the performance of our criminal justice system. This is also underpinned by the critical work of the main agencies tasked with protecting the security of the State. A major programme of reform is underway in respect of An Garda Síochána. Important reform initiatives have been implemented in the Irish Prison Service to promote better outcomes for the prison population and their families. Other important change management initiatives are planned for the Courts Service to modernise processes in the courts and improve efficiency.

These reforms are, and will continue to be, supported through increased public capital investment.

This includes priorities such as ICT projects as well improvements in the capacity and quality of accommodation and service delivery locations across policing, prisons and the courts. Increased population growth in the next ten years as envisaged under the NPF will also create new demands in terms of the current stock and the requirement for additional public capital infrastructure for the criminal justice system.

The Exchequer funding in the period 2018 to 2027 will mainly fund the following projects/programmes in the Justice sector presented below.

Forensic Science Ireland

The new building for Forensic Science Ireland (FSI) will provide laboratory and administrative facilities which are modern, secure, and capable of meeting operational forensic analysis demands, as well as anticipating the medium to long term needs of the FSI service in the future. The scale and type of facility that is planned for development is proportional and appropriate to the operational and administrative needs of FSI. The new building in Backweston will comprise of biology, chemistry, drugs and DNA analysis laboratories and related technical areas which will have the capacity to process all cases submitted for forensic analysis.

An Garda Síochána

- Completion of the implementation of the Schengen Information System (SIS 11), a significant investment in counter-terrorism capacity.
- Continuing significant investment in Garda ICT which is a central component of An Garda Síochána Modernisation and Renewal Programme.
- Completion of Garda Divisional Headquarters in Kevin Street (Dublin) and Galway.
- Continuing investment in the Garda fleet to ensure that An Garda Síochána has a modern, effective and fit for purpose fleet.
- Provision of a replacement office for the Harcourt Square complex in Dublin.
- Investment in the Garda Station Refurbishment Programme, benefitting over 30 Garda Station locations in the State.
- A continuation of the Garda Síochána Building and Refurbishment Programme, as part of the Garda Síochána Modernisation and Renewal Programme which will, amongst other things, result in a new Divisional model of policing.
- Development of Garda training facilities.
- Development of a large-scale Property and Exhibit Management Stores.
- Development of new control room facilities arising from the integration of computer aided Dispatch and Contact Management systems (999 calls etc.).
- Requirements in relation to the Garda Aircraft and Helicopter including a potential replacement of Fixed Wing Aircraft and helicopter.

The final investment priorities will be determined in light of the outcome of the Garda Síochána Inspectorate review already underway, in relation to the dispersement of Garda resources, including stations in the State, and the Report of the Commission on the Future of Policing in Ireland.

Courts Service

- Provision of further new or refurbished courthouses in provincial cities and county towns where facilities remain substandard (including Galway City, Wicklow Town, Portlaoise, Tralee and Roscommon) and further provincial locations such as An Clochan Liath (Dungloe) to serve as the Gaeltacht court for the region and Tuam.
- Family Law and Children's Court Complex on Hammond Lane.
- Redevelopment and modernisation of the Four Courts, following the completion of the Hammond Lane project, as a campus for Civil Courts.
- Construction of standard county town type court facilities at a number of locations in county Dublin (outside of the city centre) and also in North Kildare, Bray and Navan.
- Regional Family Law Centres.
- A nationwide condition survey of all court buildings in the estate will be undertaken to determine their condition and identify works required in relation to any issues identified and meet ongoing maintenance requirements.
- The proposed use of Green Street Courthouse, in Dublin as the Headquarters for the Judicial Council is likely to give rise to a requirement to undertake an extensive refurbishment of this very old and historic building.

Prison Service

- Prison Building Programme, including redevelopment of Limerick Prison, construction commencing in 2018 of a new modern wing in the prison and a dedicated standalone new female prison for the Munster region. Investment will also provide for the improvement of facilities in Shelton Abbey, Loughan House Open Centre, the Dóchas Centre, Cloverhill Prison and Wheatfield Place of Detention.
- A masterplan for the future development of the entire Mountjoy Prison campus was prepared in the period 2014 to 2016. The project is expected to be delivered in phases over the period 2021 to 2031.

- As well as being the only high-security prison in the state, Portlaoise Prison is also one of the oldest, originally dating from approximately 1830.
 New and modern elements have been added down the years. However, the large historic E Block, which dates from 1900, remains in use as cell accommodation despite being in bad condition and lacking basic requirements and requires modernisation or replacement.
- In keeping with the strategic objectives of the service to enhance rehabilitation and reintegration, the intention is to develop and enhance lower security facilities across the state. The existing open centre facilities in Loughan House and Shelton Abbey are limited in their capacity to deliver the organisation's vision and future goals of the Open Centre ethos. The Irish Prison Service is currently in the process of developing a detailed masterplan for the two open prisons to maximise available accommodation, modernise the existing dormitory style accommodation and enhance prisoner services and facilities.

Irish Naturalisation and Immigration Service

Ongoing investment is required by the Irish Naturalisation and Immigration Service over the next 5-to-10-year period, to underpin an ICT strategy designed to transform and modernise service delivery through greater use of automated processes and to protect the security of the State, particularly in the context of supporting the Common Travel Area leading up to and post-Brexit.

Defence Investment

The White Paper on Defence 2015 sets out the policy framework for the development of defence in the period to 2025. It provides for a whole-of-government approach recognising the indivisibility of security with many other government policy areas. As with the justice area, it recognises the societal bedrock provided by security and defence provision, which allows society to function and thus contributes to national well-being across political, social, economic and environmental elements. In contributing to wider international security, particularly through Ireland's commitment to collective security through membership of the UN and the EU, Defence makes a very active contribution to broader well-being which in turn supports international relations and economic prosperity. Beyond this basic underpinning, Defence contributes to a range of important social and economic areas including security tasks in support of An Garda Síochána, fishery protection and air ambulance services among others.

The Defence element of the National Development Plan will concentrate on the investment required

to provide the capabilities necessary to undertake Government requirements into the future. These cover a range of contingent and specific capability requirements as set out in the White Paper. The White Paper also identifies areas for investment where additional resources become available. These will be considered in the context of the allocation of resources across all investment programmes for the period to 2027, taking account of the outcomes of the system of fixed-cycle reviews of defence, provided for under the White Paper, undertaken over the period.

With very significant property infrastructure across Ireland, and an associated investment and modernisation requirement, the Department of Defence will consider opportunities to best leverage this infrastructure for modernisation purposes and as part of the Government's approach under the NPF.

In the wider international domain, the development of the European Defence Fund may create opportunities for Irish industry over the longer term. The White Paper already makes a strong commitment to Defence Forces participation in projects which support Irish enterprise and which can contribute to required capabilities.

The further identified priority investment programmes/projects, which have yet to be subject to a full planning and appraisal process, include the following:

- Land Forces equipment renewal and replacement programme comprehending major Force
 Protection Equipment including acquisition and replacement of transport, communications and information technology, weapons and ammunition systems:
- procurement of replacement Light Tactical Armoured Vehicles;
- Naval Service fleet renewal and replacement including acquisition of a multi-role vessel;
- Air Corps aircraft renewal and replacement;
- Defence Forces Built Infrastructure Capital Programme, including accommodation, catering, workshops, storage and training facilities; and
- other enabling investment associated with priority capability requirements considered in the light of the ongoing assessment of security.



Major Defence Forces built-infrastructure projects currently in progress, include:

- ordnance storage facilities in the Defence Forces Training Centre, Curragh, Co. Kildare;
- training facilities in Sarsfield Barracks, Limerick and Stephens Barracks, Kilkenny;
- accommodation facilities in the Defence Forces Training Centre, Curragh and Cathal Brugha Barracks, Dublin;
- accommodation upgrade in Casement Aerodrome, Baldonnel, Co. Dublin;
- catering facilities in Custume Barracks, Athlone; and
- upgrade of fuel storage safety system in the Naval Base, Haulbowline, Co Cork.

Other significant Defence Forces built-infrastructure projects will be advanced, in military installations throughout the country, over the lifetime of the National Development Plan.

Public Service ICT

In Budget 2018, taking into account the outcome of the review of the previous capital plan, the Department of Public Expenditure and Reform Vote Group (less OPW) has been allocated €60 million in capital expenditure over 2018 to 2021. This funding will be used to ensure the continued implementation of the Public Service ICT Strategy.

The Office of Government Procurement will continue to invest in the eTenders platform to support national and EU requirements. Investments necessary to support Central Purchasing Body activities of the Office of Government Procurement and its sector sourcing partners will be made.

The purpose of the capital expenditure undertaken by the National Shared Services Office (NSSO) is to deliver greater effectiveness and efficiency. The NSSO is currently investing in the establishment of a Financial Management Shared Service which will be rolled out across 48 public bodies. This will enable the delivery of economies of scale and improved management information across the civil service in the medium term.

Estate Management

Under this programme, the OPW's priority is, through ongoing investment in the State's building stock, to deliver efficient and effective accommodation for civil servants and conservation of the State's built heritage. The OPW will advance a number of projects within the Estate Portfolio Management programme and in the areas detailed below.

- Investment in a number of State-owned properties: this includes construction of new energy efficient buildings and refurbishment, alteration, fit-out and improvement of existing owned buildings to facilitate optimum space utilisation. Major projects are planned at Hawkins House, Leeson Lane and Tom Johnson House during the investment period. Other projects including the Leinster House project will need to be considered in the context of available resources.
- Acquisition/Disposal Programme: will facilitate
 the OPW in further enhancing the value of the
 State's property portfolio through strategic
 planning and reinvestment and, in turn,
 minimising the State's rental liability.
- Retrofits: complete fabric upgrade of selected buildings and improvement to buildings in order to comply with regulations and assist in meeting Ireland's carbon usage requirements.
- Mechanical/Electrical: this program may be expanded to ensure compliance with the 2007 Safety Health Welfare at work regulations and will also have a beneficial effect on energy reduction.
- Garda Programme: This relates to ongoing works on Garda Stations and will serve to meet the Government's commitment in An Garda Síochána's Policing Plan with major projects planned for Athlone, Baileborough and in the Dublin area.
- Infrastructure investment at heritage sites to meet increased visitor numbers and further develop the partnership with Fáilte Ireland in order to maximise tourism, economic and social return.

Department of Foreign Affairs and Trade

The Strategic Investment Priorities identified in this sector include those listed below.

- Further announcements will be made as part of the Doubling Our Global Footprint initiative.
- The Passport Reform Programme which is divided into three phases and will be delivered over the period 2016 to 2019. The reform programme's vision is of a fully integrated service delivering a more efficient, predictable and citizen-focused service with an increased focus on fraud detection and prevention measures to maintain the integrity of the Irish passport and the provision of online services
- Invest in Government ICT Solutions in equipment and systems to deliver capacity and efficiencies.
- The construction, refurbishment, enhanced security works and acquisition of properties as part of the Department's Global Property Portfolio in order to ensure that Irish missions have the accommodation and promotional/representational capacity necessary to fulfil their responsibilities for hosting events that highlight Ireland as an opportunity for investment and promote trade, economic and cultural opportunities. The Department of Foreign Affairs and Trade will also look at opportunities for developing Ireland Houses, with the State Agencies and the embassy, in strategic locations.

Department of Finance Vote Group

The strategic investment priority in this sector is the delivery by the Office of the Revenue Commissioners of further ICT development (PAYE Modernisation). The project represents the most significant reform of the administration of the PAYE system in over fifty years. The objective of the project is that employers, employees and Revenue will all have access to the most accurate and up-to-date information available relating to pay, tax, PRSI and USC deductions. This will ensure that the right amount is collected at the right time from employees, and that employers pay their correct liabilities when required.

Department of Employment Affairs and Social Protection

The Strategic Investment Priority in this sector relate to additional ICT modernisation and allow for the significant refurbishment of the Department's Áras Mhic Dhiarmada building in the coming years.



Chapter 6:

Oversight and Implementation

6.1 Overview

The success of the National Development Plan is crucially dependent on improving both the quantity and quality of public capital investment. The clear commitment to improving the quantity of investment is set out earlier with detail in particular in chapter 3.

This chapter sets out the actions that will be undertaken to improve the quality of spend, drawing on the findings and recommendations of the IMF Public Investment Management Assessment (PIMA).

These actions build on the current strengths of Ireland's public capital investment system in delivering significant investment projects across the whole of the public service as evidenced by the Major Projects Capital Tracker published at (www.per.gov.ie/en/review-of-the-capital-plan-2016-2021).

A major innovation and reform arising for the new model of public capital investment envisaged

through the implementation of the National Planning Framework (NPF) is to incorporate a strong regional dimension into decision-making on public capital investment priorities. This arises from the role set out in the NPF of Regional Spatial and Economic Strategies (RSESs).

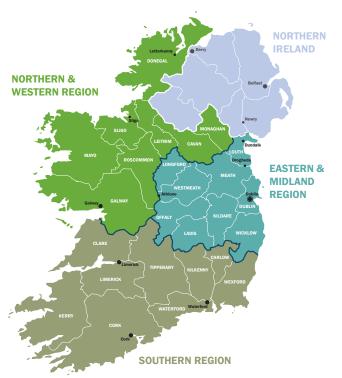
6.2 Evidence-base for the National Development Plan

The starting point for the implementation of the National Development Plan is the identification of infrastructure and investment priorities detailed in chapter 5. This is the case both for the period 2018 to 2021, for which funding has already been allocated in Budget 2018 informed by the review of the 2015 capital plan, and for the period 2022 to 2027 for which funding commitments have been established and are set out in chapter 3.

The evidence in chapter 2, in combination with the prioritisation by departments of projects outlined in chapter 5, provides a comprehensive national picture of critical infrastructural needs which can guide and inform the preparation of RSESs by the Regional Assemblies. The work of the Irish Government Economic and Evaluation Service network in building analytical capacity across the civil service through specialist recruitment and learning and development will also play an important role in enhancing the evidence base for decision making.

This analysis has contributed to the identification by departments, as set out in chapter 5, of longer-term strategic investment priorities including major priority infrastructural projects to be delivered over the term of the National Development Plan.

Ireland's three Regional Assembly areas and Northern Ireland.



6.3 Role of Regional Investment Plans

The NPF and the associated legislative framework will guide the Regional Assemblies' delivery of statutory RSESs. These strategies will include new Metropolitan Area Strategic Plans for the cities of Dublin, Cork, Limerick, Galway and Waterford. This concept represents a major innovation in enabling the adoption of an integrated, consolidated and coherent approach to regional planning. Spatial planning in relation to the Greater Dublin Area (GDA) already provides an example of co-ordination of sectoral plans.

The National Transport Authority (NTA) has a legal responsibility for preparing a transport strategy for the GDA, with a statutory requirement for consistency between the transport strategy and the RSES for the GDA. The NTA's Transport Strategy also provides a framework around which other agencies involved in spatial planning, environmental protection and delivery of other infrastructure such as housing, water and power, can also align their own investment priorities. As an example of good practice in this area, the NTA has assisted several other Local Authorities across Ireland's cities in preparing transport related strategies or in implementing transport related projects. The NPF includes a policy objective to extend the statutory arrangements between spatial and transport planning in the Greater Dublin Area to other cities.

In order to ensure the RSESs are practical and realistically aligned to the level of available investment resources, each Regional Assembly is establishing high-level steering groups comprising senior officials from local authorities, Government Departments/ Agencies and commercial-State companies to oversee the preparation of the RSESs. The steering groups will also ensure that their plans are properly aligned with NPF National Strategic Outcomes and are, in aggregate, deliverable within the available public capital investment resources set out in chapter 3. It is envisaged that by end-2018 each RSES should be finalised containing agreed priority investment projects capable of being delivered within the capital allocation available to Departments and Agencies.

6.4 Financial Oversight

All project and programme proposals will be subject to the detailed requirements of the Public Spending Code. This includes robust and rigorous project appraisal in order to obtain funding under the National Development Plan.

No change is proposed to long-established arrangements for oversight, monitoring and management of voted Exchequer resources. Exchequer funding will continue to be managed through the normal, robust systems for control of voted funds. However, the new planning approach put

in place under the NPF will require an intensified and structured co-ordination of public capital investment planning. It will also require the involvement of funding Departments and other public bodies including the commercial State Owned Enterprises (SOEs) in working with and supporting the Regional Assemblies in preparing their RSESs.

6.5 Strengthened Governance Arrangements

The recent IMF PIMA undertaken in July 2017 found a generally good standard of public investment management in Ireland. It did, however, identify scope to secure significant improvements in the efficiency of public capital investment. The PIMA contains a number of recommendations to achieve this important objective through:

- improved capital planning;
- more robust and rigorous resource allocation; and
- stronger project delivery and implementation.

In response to these recommendations the actions listed below are now being taken.

- In 2018, the Department of Public Expenditure and Reform will establish an Infrastructure Projects Steering Group (IPSG) with senior representatives of all of the infrastructure and investment Departments.
- The IPSG will lead in developing crosssectoral dialogue on infrastructure, including identification of national priorities and actions and standardisation of data presentation.
- IPSG discussions will be guided by the main sectoral strategies, as identified in the NPF.
- In 2017, the Department of Public Expenditure and Reform published a Capital Tracker. It will be further developed in 2018, to become the primary tool for public transparency on infrastructure project priorities, timelines and performance targets for the National Development Plan with the benefit of further IMF technical assistance. The IPSG will provide strategic guidance for this project.
- At present, projects valued higher than €20 million must have their appraisal methodology assessed by Department of Public Expenditure and Reform. The revision of this principle will be considered by the Public Spending Code review.
- Further actions will be taken following examination and the provision of advice of the IPSG to implement the main recommendations set out in the PIMA.

6.6 Protecting the Quality and Value of Past Investment

The public capital stock at any point in time reflects cumulative public capital investment flows over time, adjusted for the impact of depreciation. The procyclical nature of public capital investment in Ireland, which the National Development Plan responds to, has contributed to a situation where insufficient capital spending has been undertaken to maintain and renew the public capital stock and offset the impact of depreciation. This is a significant cause of the deterioration in quality of public infrastructure which impacts adversely on the public services depending on that infrastructure. Protecting the quality and value of the capital stock through appropriate levels of expenditure for maintenance and renewal purposes has therefore been identified as a significant priority in all of the sectors encompassed by the National Development Plan.

This aligns with the IMF PIMA which highlighted that adequate levels of maintenance and rehabilitation funding are critical for sustainable service delivery. Several years of low capital spending have resulted in a situation where maintenance funding appears to be well below generally accepted norms, and is likely to lead to early degradation of public infrastructure. The IMF, therefore, recommended prioritising spending on the maintenance of infrastructure assets while also drawing attention to a lack of information or a standard methodology for determining appropriate maintenance levels.

Responding to the PIMA recommendations in relation to this issue will require the development, on an iterative basis, of a policy on monitoring the value and status of publicly funded asset stocks to inform maintenance allocations, initially focussed on the main infrastructure Departments.

Initial actions to be initiated by the Department of Public Expenditure and Reform in 2018, through the IPSG, include for example:

- identifying existing sectoral non-financial asset registers and data gaps;
- identifying priority sectoral maintenance needs; and
- establishing an operational definition of maintenance spend, as a prelude to creating a maintenance subhead in each strategic infrastructure vote

In the medium-term it will be necessary to develop a central register of infrastructure assets valued at either book (initially) or (ultimately) market value. The initial objective is to obtain a detailed operational understanding of the current funding baseline, with the expectation that historical maintenance needs will need to be dealt with on a priority basis.

6.7 Outcome of the Public Private Partnership Review

The purpose of the Public Private Partnership (PPP) Review was to examine the future role of PPPs against the backdrop of the Government's plans for a substantial increase in Exchequer-funded public capital investment. A summary of the review's findings is presented below.

- PPPs have made a very significant contribution to the delivery of priority public capital infrastructure in Ireland.
- In light of the role that PPPs have played in recent decades in delivering public capital infrastructure with private funding and full transparency on the economic cost of projects, PPPs should remain a feature, broadly to the same extent as heretofore, in overall public capital investment.
- In the context of the Government's plans to increase public capital investment to amongst the highest levels in the EU in GNI* terms, the pursuit of further additional investment projects by PPP over and above this planned level of public capital investment would pose a risk that such projects may not achieve value-for-money and/or could give rise to a level of public capital investment overall that is not consistent with macroeconomic or fiscal sustainability.
- It is essential that projects are judged on their merits and if PPPs offer better value-for-money than traditional procurement, they should be selected on that basis. It is recommended that the current limit of 10% on the exposure of annual Exchequer allocations be replaced. The previous budgetary control mechanism used for PPPs which required that the capital value of PPPs should be charged to the capital allocation of the sponsoring Department will be re-instated.
- There is evidence that, where Exchequer resources are available to fund priority public capital projects, there can be a reluctance to examine the potential for PPP procurement. This may reflect the often high degree of complexity involved in PPP procurement. In these circumstances, it is important that PPPs should continue to be considered as a procurement option for appropriate public capital investment projects, within the suite of capital investment mechanisms available to Departments and should be assessed on a level-playing field basis as compared to traditional procurement.

- Projects which have the potential for user charges or which offer the potential to generate significant third party income should, in particular, be considered in terms of their suitability for procurement as PPPs, based on a concession model.
- As an incentive to the use of PPP, where a
 project offers the potential for user charges (i.e.
 concession projects), the self-financing element
 of any such concession PPPs may be discounted
 when charging the project to the sponsoring
 agency's Exchequer capital allocation. This should
 encourage the use of PPP for the delivery of such
 projects.
- In addition, in recognition of the challenges that PPPs can pose for Departments in terms of the complexity of the contract and the long term nature of the financial commitments involved, the scope for a new procurement option will be examined in 2018 comprising a less complex and shorter-term alternative PPP-type contractual arrangement, that could still offer some of the advantages of PPP but for smaller-scale projects, over a shorter time period.
- Finally, in order to improve transparency in reporting on PPPs, a number of changes in the reporting arrangements for PPPs are also recommended.

6.8 Investment by the Commercial State Sector

As evidenced by the projects set out in chapter 5, commercial SOEs are a significant tool in delivering public infrastructure objectives without the need for Exchequer funds, including in particular energy, public transport, ports and airports.

Under the Code of Practice for the Governance of State Bodies, Government, as shareholder, can appropriately influence the policies of SOEs in particular through the requirements for:

- ministerial consultation on (a) strategic plans and
 (b) business and financial plans;
- ministerial approval for acquisition or disposal of assets;
- ministerial consent before significant change in the nature, scope or scale of activities;
- ministerial notification of shareholdings exceeding 30% of a company; and
- ministerial consent for any joint ventures or acquisitions, or creation of subsidiaries.

It is very important that shareholding Departments should engage with commercial SOEs on an annual basis, to ensure that rolling business and financial plans remain aligned with Government priorities, including sectoral policy, NPF objectives and State shareholder interests.

The NewERA initiative has led to very significant reform in how Government manages its relationship with commercial SOEs. Government's objectives are now formally communicated to the Board of each company on an annual basis by way of a Shareholders' Expectations Letter. The letter sets out the policy context and the financial and commercial expectations of Government. In particular, these letters establish the dividend policy for each company.

These arrangements should be used more intensively and on a more structured basis by shareholding Departments to ensure that State-company investment policies are integrated into the wider infrastructure policy of Government, particularly in the energy and transport sectors.

In addition, the Government intends to develop, in conjunction with NewERA, a Framework of Principles through which to consider major investment decisions by commercial SOEs. This proposed framework will build on NewERA's experience to date and international best practice. It will help to further strengthen alignment of investment decisions by commercial SOEs with the Government's strategic objectives under the National Development Plan and the NPE.

The RSESs to be drafted under the NPF will provide an opportunity to further develop the arrangements for integrating the planning of investment by the commercial-State companies with the wider process of planning overall public capital investment.

6.9 Construction Sector Working Group

To ensure regular and open dialogue between Government and the construction sector, a Construction Sector Working Group will be established. A healthy, sustainable, competitive and well-functioning construction industry which offers good long-term quality employment and construction output is essential to the achievement of the goals of the NPF and the delivery of the projects outlined in the National Development Plan. The experience of the last fifteen years highlight the dangers for society and the economy when the construction sector expands too greatly and contracts too steeply.

The Construction Sector Working Group will consist of the main Government Departments and agencies with responsibilities for policy and for the delivery of infrastructure as well as representatives from the construction sector. Part of the group's remit will be to consider matters such as:

- data/trends relating to the construction sector in Ireland;
- the supply of necessary skills and enhancing capacity;
- the role of Building Information Modelling and adopting other technologies and innovative practices in driving improved productivity and efficiencies:
- the use of sub-contracting and the level of selfemployment; and
- the productivity of the construction sector.

6.10 Equality Budgeting

Equality Budgeting involves providing greater information on the likely equality impacts of public expenditure which, in turn, enhances the potential to better facilitate the integration of equality concerns into the expenditure process and enhance the Government's decision-making framework. In line with the commitment in the Programme for Government and building on research carried out by the Department of Public Expenditure and Reform an Equality Budgeting Initiative was announced by the Minister for Public Expenditure and Reform in Budget 2018. The framework now in place for the implementation of the initiative will provide the opportunity to include appropriate and relevant areas of capital spending for equality proofing.

6.11 New State Bodies and Agencies

The location of the headquarters of new state bodies and agencies is an important signal of the Government's commitment to supporting more balanced regional development. Consequently, in the case of the establishment of any State body in the future the policy will be that its headquarters should be located in an urban area outside of Dublin, other than when the sponsoring Minister lays a report before the Oireachtas setting out the reasons why this should not be the case.

Annex 1

Departmental Capital Allocations 2018-2022	2018	2019	2020	2021	2022
Ministerial Vote Group	(€ million)				
Agriculture, Food & the Marine	248	255	258	265	275
Business, Enterprise, & Innovation	555	620	630	640	715
Children & Youth Affairs	28	32	31	32	33
Communications, Climate Action & Environment	209	256	297	317	400
Culture, Heritage and the Gaeltacht	54	75	76	80	110
Defence	77	106	113	120	125
Education and Skills	745	941	942	1,006	1,100
Employment Affairs and Social Protection	10	14	15	16	17
Finance Group	26	25	22	18	19
Foreign Affairs and Trade Group	13	17	13	13	14
Health Group	493	667	724	780	825
Housing, Planning & Local Government *	1,631	2,033	2,079	2,209	2,280
Justice Group	145	241	230	208	216
PER Group	174	203	214	223	232
Rural and Community Development **	88	141	150	152	175
Transport, Tourism, & Sport	1,327	1,643	2,058	2,526	2,405
Sum Total	5,823	7,269	7,852	8,605	8,941

^{*} Note: €550m allocated to DHPLG for the Urban Regeneration and Development Fund included in these allocations will be available, on a competitive basis, to support projects from all Departments/agencies that contribute to urban (re)development and will not be confined only to DHPLG sponsored programmes or projects.

^{**} Note: €315m allocated to DRCD for the Rural Regeneration and Development Fund included in these allocations will be available, on a competitive basis, to support projects from all Departments/agencies that contribute to regional/rural development and will not be confined only to DRCD sponsored programmes or projects.

List of acronyms

BDGP - Beef Data and Genomics Programme

CERN - European Organization for Nuclear Research

CFRAM - Catchment Flood Risk Assessment and Management

CIT - Cork Institute of Technology

CLÁR - Ceantair Laga Árd-Riachtanais

CUA - Connacht Ulster Alliance

DAA - Dublin Airport Authority

DAFM - Department of Agriculture, Food and the

DBEI - Department of Business, Enterprise and Innovation

DCCAE - Department of Communications, Climate Action and Environment

DCHG - Department of Culture, Heritage and the Gaeltacht

DCU - Dublin City University

DCYA - Department of Children and Youth Affairs

DD - Department of Defence

DES - Department of Education and Skills

DFA - Department of Foreign Affairs and Trade

DH - Department of Health

DHPLG - Department of Housing, Planning and Local Government

DIT - Dublin Institute of Technology

DJE - Department of Justice and Equality

DPER - Department of Public Expenditure and Reform

DRCD - Department of Rural and Community Development

DTI - Disruptive Technologies Innovation Fund

DTTS - Department of Transport, Tourism and Sport

EAFRD - European Agricultural Fund for Rural Development

EAR - Environmental Assessment Report

EI - Enterprise Ireland

EIB - European Investment Bank

EIS - Environmental Impact Statement

ESB - Electricity Supply Board

EU - European Union

EU15 - the number of member countries in the European Union prior to the accession of ten candidate countries on 1 May 2004.

FET - Further Education and Training

FSI - Forensic Science Ireland

GDA - Greater Dublin Area

GDP - Gross Domestic Product

GFCF - Gross Fixed Capital Formation

GLAS - Green Low-carbon Agri-environment Scheme

GNI - Gross National Income

HPC- High Performance Computing

ICHEC - Irish Centre for High-End Computing

ICT - Information and Communications Technology

IDA - Industrial Development Authority

IMF - International Monetary Fund

IPSG - Infrastructure Projects Steering Group

LIHAF - Local Infrastructure Housing Activation Fund

LIT - Limerick Institute of Technology

MTU - Munster Technological University

NPF - National Planning Framework

NSMC - North South Ministerial Council

NSOs - National Strategic Outcomes

NTA - National Transport Authority

NUIG - National University of Ireland Galway

NUIM - National University of Ireland Maynooth

OPW - Office of Public Works

PE - Physical Education

PIMA - Public Investment Management Assessment

PLUTO - Planning Land Use and Transport Outlook

PPP - Public Private Partnership

PRTLI - Programme for Research in Third-Level Institutions

RAPID - Revitalising Areas by Planning, Investment and Development

RCSI - Royal College of Surgeons in Ireland

RDP - Rural Development Programme

RIA - Royal Irish Academy

RSESs - Regulatory and Safety Evaluation Specialty Section

SCP - Sport Capital Programme

SDZ - Strategic Development Zone

SEAI - Sustainable Energy Authority of Ireland

SFI - Science Foundation Ireland

gov.ie/2040

