



**An Roinn Caiteachais
Phoiblí agus Athchóirithe**
Department of Public
Expenditure and Reform

Project Ireland 2040 Investment Projects and Programmes Tracker

Overview and Analysis

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This paper has been prepared by IGEES staff in the Department of Public Expenditure & Reform. The views presented in this paper do not represent the official views of the Department or the Minister for Public Expenditure and Reform.

Summary

- This paper sets out a high level analysis of the latest edition of the Project Ireland 2040 Investment Projects and Programmes Tracker.
- The primary purpose of the tracker is to increase transparency relating to specific capital projects and programmes and thereby facilitate better coordination and more efficient planning of public infrastructure investment under Project Ireland 2040.
- The latest update of the tracker (September 2018) includes 271 projects and programmes, including 34 individual projects with costs in excess of €100 million. This compares with 116 projects included in the initial edition of the tracker (September 2017), reflecting the broader scale of investment planned under the National Development Plan 2018-2027.
- Three of the largest infrastructure projects are:
 - **Metro Link** (€3 billion) – proposed completion date is 2027
 - **Busconnects Dublin** (€2 billion) – proposed completion date is 2027
 - **Water Supply Project** (€1.18 billion) proposed completion date is 2025
- Three of the largest infrastructure programmes are:
 - **The Social Housing Programme** (€11.6 billion)
 - **The Schools Building Programme** (€7.8 billion¹)
 - **The DART Expansion Programme** (€2 billion)
- Three of the largest investment programmes are:
 - **Residential Energy Efficiency** (€3 billion)
 - **Rural Regeneration and Development Fund** (€1 billion)
 - **Targeted Agriculture Modernisation Scheme** (€680 million)
- The next update of the tracker will be published in Q1 2019 and will be further enhanced to include: yearly cost profiles for projects and programmes; information on project delays/cost inflation/design changes; as well as the capital investments of the semi-state sector e.g. Airports, Ports, Universities, Energy Infrastructure. More generally, the tracker will be developed as an instrument of greater public transparency and engagement with stakeholders on capital investment programmes of relevance in various sectors and in different areas.
- **For further details on any project or programme please consult the tracker document or contact the relevant Government Department.**

¹ This figure does not include the 10 year figure for PPPs which is captured in the PPP tab of the tracker.

1. Background

This paper sets out a high level analysis of the latest edition of the Project Ireland 2040 Capital Projects/Programmes Tracker. This is the first update of the tracker since the publication of the National Development Plan 2018-2027 (NDP) in February 2018. The previous edition of the capital tracker was published on the DPER website on 14 September 2017.

The tracker lists a range of projects and programmes committed to by Departments over the period of the NDP. The tracker currently focuses on projects and programmes with costs greater than €20 million. While the tracker does not provide an exhaustive list of all capital expenditure, the list of projects serves to highlight the diverse range of infrastructural demands competing for the resources of the State.

The tracker currently includes data from 13 Departments: D/Health, D/Defence, DTTS, DES, DJE, DHPLG, DPER, DAFM, DCHG, DRCD, DBEI, DCCAE and DCYA. It is expected that other Departments will contribute to the tracker in due course.

It is important to note that the management and delivery of the investment projects within capital expenditure allocations are the responsibility of the sponsoring Department in each case. The Department of Public Expenditure & Reform (DPER) is responsible for setting the capital expenditure allocations for spending Departments and for authorising the delegated sanction arrangements under which those Departments make their spending decisions.

Box 1: IMF Public Investment Management Assessment of Ireland (September, 2017)

A detailed appraisal of Ireland's system of public capital investment was carried out by the IMF through the application of the IMF's Public Investment Management Assessment (PIMA). In overall terms the PIMA concluded that there is an opportunity to achieve greater value for money from our public capital investment in Ireland. The main recommendations of the PIMA relate to how greater VFM could be achieved through a decisive shift to a model of project selection based on robust assessment through structured project appraisal of the returns generated by public capital investment projects.

In relation to the "Capital Tracker" database the IMF made the following recommendations:

- Develop the "Capital Tracker" database as a tool for forecasting investment requirements
- ensure that the annual profiles of approved projects fit within the available capital expenditure ceilings
- improve the allocation of unapproved projects, and
- track the progress of projects that are underway.

The implementation of the National Development Plan 2018-2027 now presents an opportunity to address the recommendations of the IMF PIMA report, including the recommendations relating to the tracker, with a view to improving the effectiveness and efficiency of public capital investment in Ireland. Section 4 of this paper discusses the directions of future development of the tracker in line with PIMA recommendations.

Changes to the latest version of the Tracker

In line with the new expenditure framework developed in the NDP, Exchequer costs are now recorded for the five year period covering 2018-2022, along with total costs of the projects/programmes. An explanation for any variance between the two figures is provided: e.g. in some cases, there may be a non-exchequer element of project funding, or part of the costs may be scheduled to occur before 2018 or after 2022.

The tracker also now captures information on the project lifecycle, as defined in the Public Spending Code, starting at stage (1) Pre-Appraisal, and finishing at stage (6) Post Project Review².

The NDP formally aligns resource allocations with the National Planning Framework's National Strategic Outcomes. To that end, the latest edition of the tracker has new columns for these National Strategic Outcome(s) which shows how each Department aligns its projects/programmes with the appropriate National Strategic Outcome as outlined in the NDP.

2. Purpose of Tracker

The primary purpose of the tracker is to increase transparency relating to specific capital projects and programmes and thereby facilitate better coordination and more efficient planning of public infrastructure investment in order to deliver on the National Strategic Outcomes set out in the National Planning Framework. This is in line with the recommendations made by the IMF PIMA report as detailed in Box 1.

The tracker provides the public, businesses and other stakeholders with reliable information about current and future infrastructure investments in Ireland.

The tracker will therefore be used by many different stakeholders for many differing purposes, including:

- The Government – to monitor implementation of the National Development Plan.
- The Project Ireland 2040 Delivery Board – to inform decisions on strategic direction.
- DPER – to help plan and manage capital expenditure requirements.
- Line Departments – to improve planning and coordination of public investments.
- Regional Assemblies – to inform Regional Spatial and Economic Strategies.

² See Annex 1 for Guidance Note on the project lifecycle.

- The Construction Sector – to identify opportunities and plan for the required capacity and support the work of the Construction Sector Group.
- Private Companies – to inform decisions on where to invest and locate.
- The Public – to find details relating to public investments in their area, and to better understand how the elements of the National Development Plan are relevant for their community and region.

Over time the tracker may become particularly useful in flagging projects which are facing difficulties in relation to their delivery. In such instances it may then be possible to reallocate the funding to other priorities which are in a position to be progressed.

3. Overview

In total there are 271 projects and programmes captured in the latest edition of the tracker³. This is an increase of over 150 projects and programmes compared to the September 2017 edition of the

Table 1: Investments under Project Ireland 2040 National Strategic Outcomes

	Infrastructure Projects	Infrastructure Programmes	Investment Programmes
1. Compact Smart Growth	8	8	-
2. Enhanced Regional Accessibility	16	6	-
3. Strengthened Rural Economies and Communities	12	9	12
4. Sustainable Mobility	6	4	1
5. A Strong Economy, supported by Enterprise, Innovation and Skills	12	9	15
6. High-Quality International Connectivity	n/a*	1	1*
7. Enhanced Amenity and Heritage	2	7	4
8. Transition to a Low-Carbon and Climate-Resilient Society	13	5	7
9. Sustainable Management of Water and other Environmental Resources	24	5	3
10. Access to Quality Childcare, Education and Health Services	41	15	3
11. Other Sectors	10	6	6

**Projects for this NSOs are largely carried out by semi-state companies e.g. Dublin Airport and Port Companies. It is intended to capture these projects in the next edition of the tracker which is due to be published in Q1 2019.*

³ While broad comparisons can be drawn between different editions of the tracker, a high degree of caution is necessary given the evolving: structure of the tracker, the data that it captures and the categorisation of that data.

tracker, which included a total of 116 projects and programmes. That is an increase of over 125% in the number of projects and programmes included on the tracker.

Table 1 gives a breakdown of projects and programmes by NSO. NSO 10 has the largest number of projects and programmes included in the tracker. NSO 4 has one of the fewest number of projects and programmes. However, these are generally particularly big projects such as Metro Link, Bus Connects and the Dart Expansion.

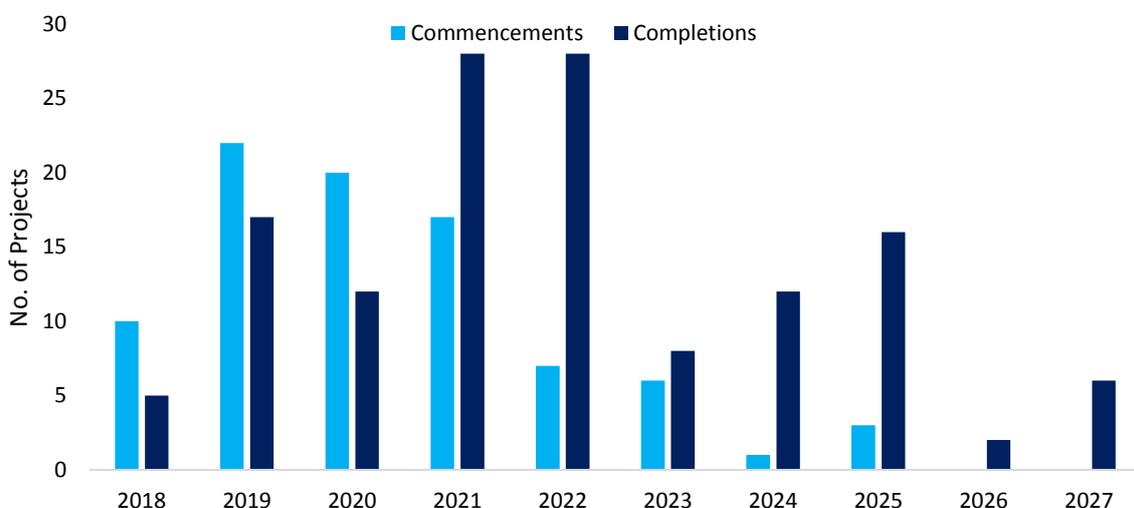
Projects

The latest edition of the tracker includes a total of 144 Projects. The mean cost of a project is €126 million, while the median cost is €35 million. There are 34 projects with costs greater than €100 million.

Six of the largest infrastructure projects included in the tracker are:

- **Metro Link** (€3 billion) – estimated completion date is 2027
- **Busconnects Dublin** (€2 billion) – estimated completion date is 2027
- **Water Supply Project – Eastern and Midlands Region** (€1.18 billion) proposed completion date is 2025
- **National Children’s Hospital** (€916 million) estimated completion date is 2021
- **N20 Cork to Limerick** (€900 million) – estimated completion date is 2025
- **Galway City Ring Road** (€593 million) – estimated completion date is 2025

Figure 1: Estimated Project Commencements/Completions by year



In the current edition of the tracker there are 5 major projects due to be completed and 14 projects due to be commenced in 2018. In total there will be 50 projects which are being progressed through the pipeline in 2018. The number of projects due to be completed increases to 28 by 2022. The projects which are currently due to be completed in the later years of the plan are generally the larger projects which take longer to plan, design and deliver such as the Metro Link or large motorways.

Given that capital expenditure ceilings set out in the NDP increase significantly over the coming years it is expected that the number of projects appraised, selected and planned for delivery over the coming years will increase in future editions of the tracker.

Projects completed in 2017 include:

- The Luas Cross City
- The Bray Flood Relief Scheme

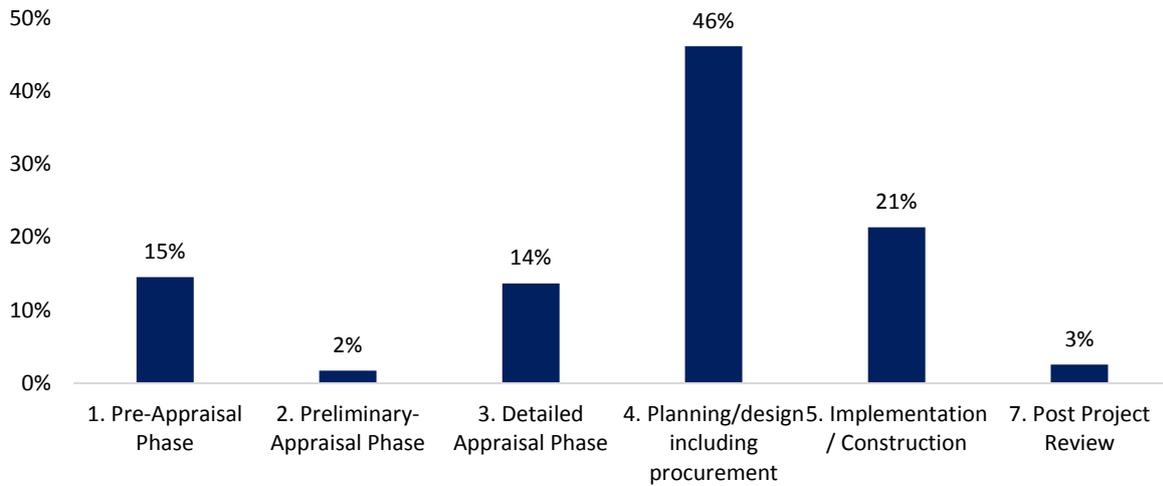
Projects due to be completed in 2018 include:

- Our Lady of Lourdes Hospital, Drogheda, construction of a ward block
- Equipment for the Prepared Consumer Food Innovation Centre
- UL Glucksman Library and UCD Confucius Institute
- Miesian Plaza fit-out of office accommodation
- Lough Key cycleway and West Clare Greenway

Projects due to be completed in 2019 include:

- National Forensic Mental Hospital on Portrane campus
- The upgrade of the existing N56 road in Donegal
- M11 Gorey-Enniscorthy Motorway
- N25 New Ross Bypass
- Dingle Relief Road
- Skibbereen Flood Relief Scheme
- National Indoor Arena Phase 2
- A new Food Innovation Hub for R&D in Cork

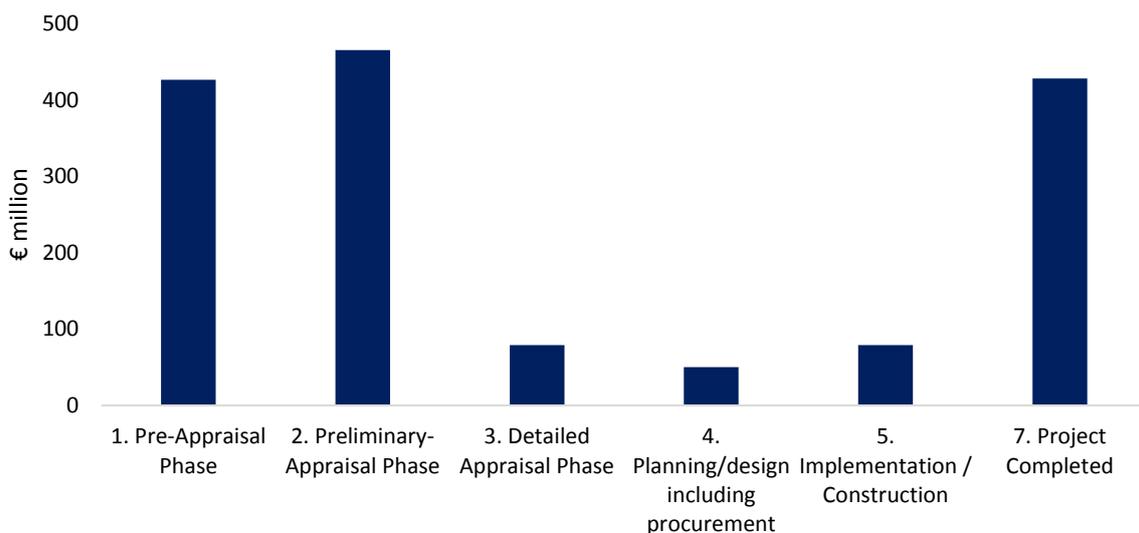
Figure 2: Share of Projects at each Stage of the Project Lifecycle



In terms of the project lifecycle, as shown in Figure 2, 31% of projects are at some stage of appraisal, 46% are at planning and design and 21% are at implementation/construction⁴. It should be noted that the appraisal and planning stage will often overlap. In reality, it is very difficult to carry out a detailed appraisal unless some planning and/or initial design work has been done.

Going forward it is intended that the tracker will capture information on projects which are completed over the course of the NDP⁵. There are a number of projects which have been completed since the last edition of the tracker was published in September 2017 e.g. the Luas Cross City.

Figure 3: Average Total Cost of the Projects at each stage of the Project Lifecycle



⁴ These figures are based on the projects which supplied information on the project lifecycle, i.e. 117 projects.

⁵ Separate processes are in place for post-project review of projects under the Public Spending Code and this iteration of the tracker does not include projects which may be at this phase of the project life-cycle.

Figure 3 indicates that the average cost of projects at the pre-appraisal phase is currently higher than at any other stage of the project lifecycle.

Infrastructure Programmes

The latest edition of the tracker now includes a sheet detailing the Infrastructure Programmes included in the NDP, totalling 73 such programmes. These are classified as infrastructure programmes which include multiple discrete infrastructure projects.

The two largest infrastructure programmes are:

- Social Housing Delivery (€11.6 billion)
- Schools Building Programme (€7.8 billion⁶)

Among the key programme outputs due in 2018 are:

- Housing – There is a target output of 7,869 houses delivered by build/lease/acquisition in 2018.⁷
- Schools - During the course of 2018 over 80 large scale projects will be under construction. In addition, 140 Additional Accommodation projects will be at the construction phase. Of the 408 large scale school projects in the existing programme, 230 will be in the Eastern and Midlands Region while the remaining 178 will be in the Southern, Northern and Western Regions.

Investment Programmes

The latest edition of the tracker now includes a sheet detailing the Investment programmes now included in the NDP, totalling 52 such programmes. These are classified as non-infrastructure related investment (e.g. R&D, equipment, ICT etc.) as well as non-public Gross Fixed Capital Formation (e.g. grants to non-public individuals, companies, organisations, bodies etc.).

Three of the largest investment programmes are:

- Residential Energy Efficiency (€3 billion)
- Rural Regeneration and Development Fund (€1 billion)
- Targeted Agriculture Modernisation Scheme (€680 million)

⁶ This figure does not include the 10 year figure for PPPs which is captured in the PPP tab of the tracker.

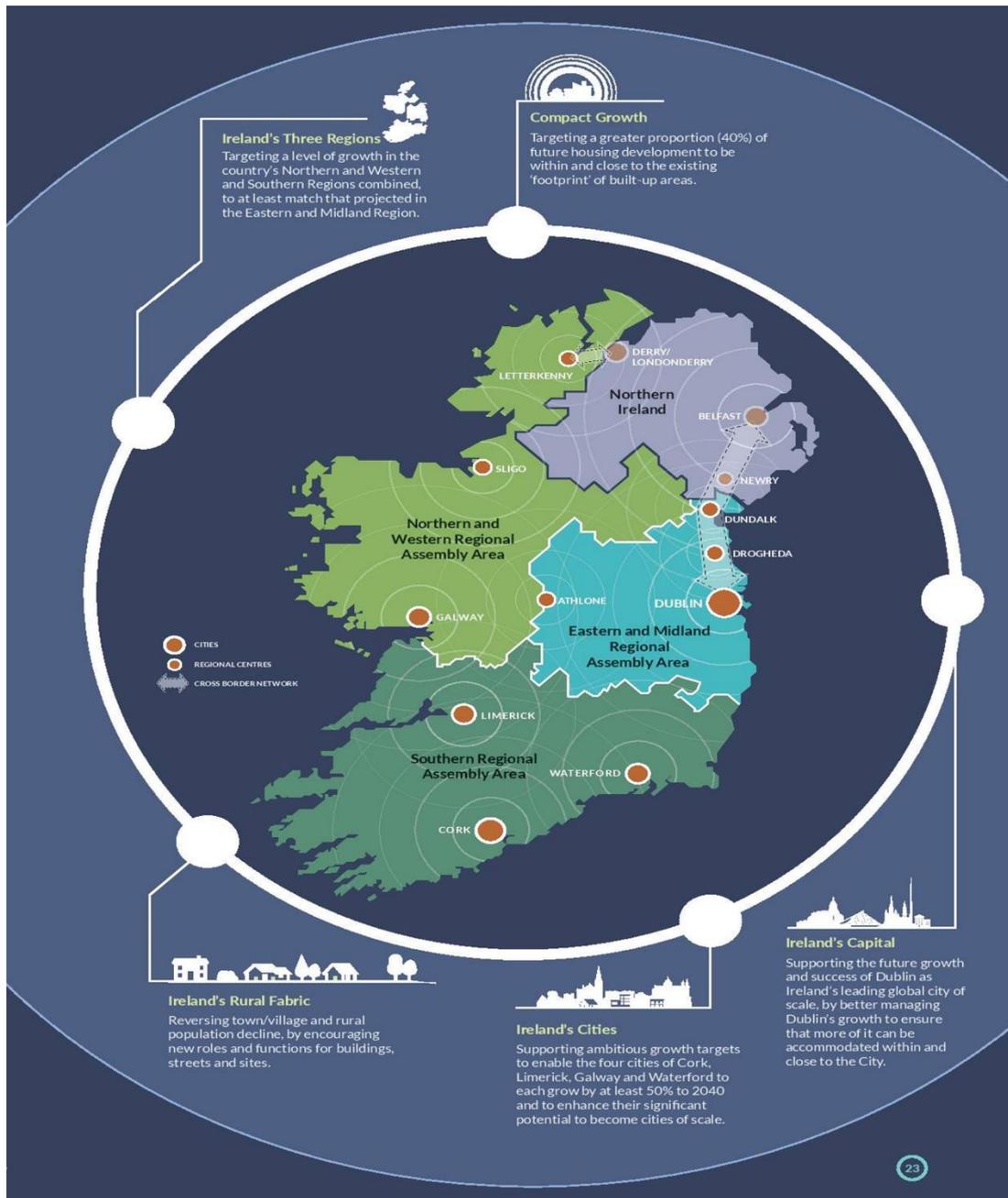
⁷ Source: DHPLG

4. Regional Breakdown

As shown in Figure 4, from an administrative and planning point of view, Ireland is divided into three regions: the Northern and Western, Southern, and Eastern and Midland Region.

Preparation is underway of draft Regional Spatial and Economic Strategies (also known as 'RSEs') by the three regional assemblies. These strategies will take the high-level framework and principles of the NPF and work out more detail at regional and local authority levels.

Figure 4: Ireland's three Regional Assembly areas and Northern Ireland



Preparation of the strategies involves the relevant local authorities, working together with relevant stakeholders, including the Minister and Department of Housing, Planning and Local Government, the Department of Public Expenditure and Reform and other interests, to put in place a regional co-ordination framework for the relevant statutory development plans at local authority level. The co-ordination required will include developing and agreeing a distribution of future population growth at a more detailed and regional level than the NPF, but working broadly within its parameters.

The RSEs will include the preparation of the Metropolitan Area Strategic Plans for the five cities as well as the regional centre plans for Athlone, Sligo, Drogheda-Dundalk-Newry, Letterkenny-Derry.

The RSEs will play an important role in informing the decisions made in relation to regional public infrastructure in the future as part of the National Development Plan and ultimately for inclusion in future iterations of the Capital Tracker.

Table 2: Approximate Regional Breakdown of Projects included in the Tracker

	NPF Population Target	Number of Projects
Eastern and Midland Region	c. 2,850,000	69
Southern Region	c. 2,000,000	43
Northern & Western Region	c. 1,000,000	23

The aim of the NPF is to see roughly 50:50 distribution of growth between the Eastern and Midland Region, and the Southern and Northern and Western Regions. When broken down by region the projects in the tracker largely mirror this proposed distribution.

- Eastern and Midland Region (NPF Population Target – c. 2.85 million by 2040)
 - 69 projects currently included in the tracker.
 - 24 major projects for every million of the target population.
 - It is important to note that many of the projects located in the Eastern and Midlands Region are national in nature e.g., the National Children’s Hospital.

- Southern, Northern and Western Regions (NPF Population Target – c. 3 million by 2040)
 - 66 projects currently included in the tracker.
 - 22 major projects for every million of the target population.

There are 9 projects which are either deemed to be national or divided across these regions e.g. the National Broadband Plan.

Box 2.1: The Eastern and Midlands Region

As set out in the NPF, the Eastern and Midland part of Ireland will, by 2040, be a Region of around 2.85 million people, at least half a million more than today. Beyond Dublin and the principal transport corridors, the Region is more rural in character, with variation both within the counties adjoining Dublin and between the Mid-Eastern counties and the Midlands.

Major projects included in the Tracker for this region include:

- Water Supply Project - Eastern and Midlands Region
- M7 Naas to Newbridge Bypass Widening
- The Metro Link
- Dublin Busconnects
- The National Children's Hospital

Box 2.2: The Northern and Western Region

The Northern and Western region was given particular focus in the NPF due to a historically lower level of urbanisation compared to other regions, proximity to the border and risks posed by Brexit. The Region contains both the fastest growing city in Ireland over the past 50 years (Galway), as well as significant towns such as Sligo and Letterkenny.

Major projects in the Tracker for this region include:

- Galway City Ring Road
- Busconnects Galway
- Sligo Hospital Redevelopment
- The N5 Westport to Turlough
- N4 Collooney to Castlebaldwin
- N56 Dungloe to Glenties

Box 2.3: The Southern Region

Key elements of this Region include the three cities and wider city-regions of Cork, Limerick and Waterford and their associated ports and the international airports at Cork and Shannon, a network of large towns, including county towns, many of which provide employment and functional roles much greater than their population scale, an extensive network of smaller towns and villages, many of which play regionally strategic roles, especially in remoter and peninsular parts of the region and a contrasting rural landscape that ranges from the Atlantic seaboard to rich productive agricultural lands and river valleys.

Major projects in the Tracker for this region include:

- The N20 Cork to Limerick
- Cork Busconnects
- The Dunkettle Interchange
- Lower Lee Flood Relief Scheme
- Limerick University Maternity Hospital
- Waterford University Hospital Ward Block

5. Next Steps in developing the Tracker

The next update of the capital projects tracker will be published in Q1 2019.

In line with the PIMA recommendations, it is intended to focus on three key improvements to the next update of the tracker, including:

1. Yearly breakdown of projected cost profiles of projects and programmes.
2. Information on project delays/cost inflations/design changes.
3. The inclusion of infrastructure projects being undertaken by semi-state companies e.g. Airports, Ports, Universities, Energy Infrastructure etc.

Work is ongoing to establish a web based portal to further facilitate the uploading of data by Departments and provide greater functionality and user-friendliness.

More generally, the Department of Public Expenditure and Reform will consider how the tracker can be further developed to promote greater transparency and public engagement with the process of monitoring the implementation of the National Development Plan 2018-2027. Additional information which could be collected in the future may include performance indicators, results of CBAs, mapping features, impact indicators etc.

It is intended that the use of the tracker will be incorporated into the planned update of the Public Spending Code in order to facilitate adherence to all requirements of the project life-cycle.

Annex 1

User Guide for the Project Ireland 2040 Capital Tracker

In line with the new expenditure framework developed in the National Development Plan 2018-2027 which includes five year capital ceilings, the first column in the tracker captures the Exchequer costs for the five year period covering 2018-2022.

The second column captures total costs of the projects/programmes.

In column three an explanation is provided for any variance between the exchequer and total cost figure: e.g. in some cases, there may be a non-exchequer element of project funding, or part of the costs may be scheduled to occur before 2018 or after 2022. The MetroLink is a good example which has a total cost of €3 billion over the period 2018-2027 but an exchequer cost of €810 million over the period 2018-2022.

Column four sets out the Department or Agency responsible for the delivery of the project or programme.

The name and location of each project/programme is captured in columns five and six. In some cases a project or programme may not have one specific location and could therefore be classified as a national project or programme.

Column seven provides a brief description of the current status of the project e.g. whether a design team has been appointed or whether site works have commenced.

Column eight captures information on the project lifecycle, as defined in the Public Spending Code, starting at stage (1) Pre-Appraisal, and finishing at stage (6) Post Project Review. This information is not relevant to capital programmes and therefore is not captured by the tracker.

Columns nine and ten set out the estimated commencement and completion dates for each project. However for Programmes, the Programme Timescale and Proposed Completion Date reflects the period for which funding for the Department has been allocated from 2018 out to 2022 and does not signify the lifecycle of the programme/grant.

Finally, in column eleven and twelve the tracker has new columns for the National Strategic Outcome(s) of the National Planning Framework which shows how each Department aligns its projects/programmes with the appropriate NPF.

Annex 2

Guidance Note: Stages of the Capital Projects Lifecycle

This note sets out the key stages of the project lifecycle that are to be captured in the latest draft of the Capital Projects Tracker.

These stages are discussed in greater detail in the Public Spending Code ([link](#)).

As detailed in section 1.12 of the National Development Plan, Departments must 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.

Stages of the capital projects lifecycle:

1. Pre-Appraisal Phase

Project has been proposed and has yet to be appraised.

2. Preliminary- Appraisal Phase

The preliminary appraisal aims to establish whether, at face value, a sufficient case exists for considering a proposal in more depth. On the basis of the preliminary appraisal, the Sponsoring Agency should decide whether formulating and assessing a detailed appraisal would be worthwhile or whether to drop the proposal.

3. Detailed Appraisal Phase

This stage aims to provide a basis for a decision on whether to drop a proposal or to approve it in principle. It involves the clarification of objectives, exploration of options, quantification of costs and a method of selecting the best solution from competing options. The appraisal and planning stage will often overlap. In reality, it is very difficult to carry out a detailed appraisal unless some planning and/or initial design work has been done.

4. Planning/Design including procurement

No commitment to finance a project should be made until this stage is completed and a decision taken on whether to proceed is taken. This stage involves detailed planning and costing of the project. The latter end of this stage may involve procurement and lead to

the evaluation of tenders and an assessment of whether the best proposal received meets the requirements and is within the approvals required.

5. Implementation/Construction

This stage may, if an external provider is involved, begin with contract placement and continues until the completion of construction. Management, Monitoring, Supervision and Control are key terms that apply to this stage.

6. Project Completed

Construction has been completed and the project has become operational, or in the case of a capital grants scheme the programme has come to an end.

7. Post Project Review

Post-Project Reviews aim to confirm whether project objectives have been met, the project has been delivered to the required standard, on time and within budget and to ensure that experience gained can be used on other projects.

For further details please follow the link below:

<https://publicspendingcode.per.gov.ie/a01-VFM-Code-Layout-Project-or-Programme-Life-Cycle/>

Quality assurance process

To ensure accuracy and methodological rigour, the author engaged in the following quality assurance process.

- ✓ Internal/Departmental
 - ✓ Line management
 - ✓ Other divisions/sections
 - Peer review (IGEES network, seminars, conferences etc.)
- External
 - Other Government Department
 - Steering group
 - Quality Assurance Group (QAG)
 - Peer review (IGEES network, seminars, conferences etc.)
 - External expert(s)
- Other (relevant details)