Chapter 2
Policy Context and Need for the Project









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Policy Context & Need for the Project

2.1. Introduction

This chapter of the Environmental Impact Assessment Report (EIAR) outlines the relevant policy which underpins the proposed DART+ South West Project at European Union (EU), national, regional, and local level. It also outlines the need for the proposed Project.

The DART+ Programme, and more specifically the DART+ South West Project, is a continuation of railway improvements that commenced from the year 2000 onwards. The underlying rationale was that integration of land-use and transportation can help reduce the need to travel and thereby facilitate sustainable urban development. These objectives have consistently featured in strategic investment and land use plans published over the last 20 years; as have the specific improvements required to deliver these objectives, including the improvements needed on the Cork Mainline¹.

Among the matters which An Bord Pleanála ('the Board') is required to consider when an application is made for a Railway Order, in this case for DART+ South West, are the matters referred to in Section 143 of the Planning and Development Act 2000 (as amended) by virtue of Section 43(1)(h) of the Transport (Railway Infrastructure) Act 2001 (as amended and substituted).

Accordingly, the Board, in the performance of its functions is required to have regard *inter alia* to (a) the policies and objectives for the time being of the Government, a State authority, the Minister, planning authorities and any other body which is a public authority whose functions have, or may have, a bearing on the proper planning and sustainable development of cities, towns or other areas, whether urban or rural; (b) the national interest and any effect the performance of the Board's functions may have on issues of strategic economic or social importance to the State, and (c) the National Planning Framework and any regional spatial and economic strategy for the time being in force

In this regard Project Ireland 2040 (Building Ireland's Future) presents the overarching policy initiative to make Ireland a better country for all. Project Ireland 2040 is made up of the National Planning Framework and the National Development Plan.

By 2040 it is expected that an additional 1 million people will live in Ireland, with an additional 667,000 people working. This will place a huge increase in demand for travelling to work, education and services. Whilst the National Planning Framework sets out the sustainable spatial development strategy for Ireland, it is the National Development Plan that sets out the infrastructural investment programme to support implementation of this spatial strategy.

¹ The DART+ South West Project includes part of the existing Cork Mainline between Hazelhatch & Celbridge Station and Heuston Station. This part of the Cork Mainline is often referred to in policy documents and publications as the 'Kildare Line'.













The National Development Plan involves investment of approximately €116 billion in infrastructure to support the ten strategic outcomes of Project Ireland 2040. The DART+ Programme is a cornerstone infrastructural investment that enables a number of the Strategic Outcomes, namely:

- Enabling compact growth along public transport corridors (NSO1);
- Proving sustainable mobility (NSO4); and
- Facilitating a transition to a low carbon and climate resilient society (NSO8).

The National Development Plan commits exchequer funding to public investment projects that have sufficiently matured through the planning and technical evaluation process.

The National Development Plan states that the DART+ Programme is the cornerstone of rail investment with the lifetime of Project Ireland 2040 and represents the single biggest investment in the larnrod Éireann network.

The National Development Plan describes the DART+ Programme based on a number of discrete infrastructure delivery projects. These discrete projects are:

- DART+ Battery Electric Multiple Units (BEMU) Charging Infrastructure;
- DART+ West:
- DART+ South West:
- DART+ Coastal North; and
- DART+ Coastal South.

The Government, in December 2021, approved the Preliminary Business Case (PBC) for the DART+ Programme. The PBC was constructed on the principle of the discreet individual project descriptions. The PBC approval authorised the award of a fleet procurement contract for new electric and battery/electric trains.

The National Development Plan acknowledges the long-term planning necessary to give effect to Project Ireland objectives. Long term funding is allocated to deliver on these requirements and a disaggregated capital profile is determined in accordance with the Department of Transport requirements.

The Transport Strategy and the National Development Plan are fully aligned. The National Transport Authority has prepared the Transport Strategy for the Greater Dublin Area 2016-2035 (adopted as policy by Government) and a new draft Transport Strategy for the Greater Dublin Area 2022-2042.

These strategy documents also describe the DART+ Programme based on discrete infrastructural delivery projects, which can be delivered sequentially to deliver incremental capacity improvements and ultimately delivering the necessary longer-term capacity necessary across the network. The Strategy also acknowledges that the current DART+ Programme may be further expanded to meet further growth requirements.













As far back as the *Strategic Planning Guidelines for the Greater Dublin Area* (1999) and the *National Development Plan 2000 – 2006*, investment in the rail network was identified as a key requirement to provide a better service for the working and resident population of the Greater Dublin Area (GDA)²; both plans also promoted the concept of maximising existing transportation corridors along which future development of the GDA would occur.

2.2. Background and Project History

A summary of the background and project history is provided in this section. The reader is also directed to the Options Selection Report (OSR) - Volume 4.3: Strategic Need (available on www.dartplus.ie) which expands on the need for the DART+ Programme and DART+ South West Project, having regard for its strategic context and relevant plans, projects and studies undertaken in recent years.

In 2000, Iarnród Éireann and CIÉ published the *Dublin Suburban Rail Strategic (DSRS) Review*, which provided the genesis for the DART Expansion Programme (subsequently renamed the DART+ Programme). Of relevance to DART+ South West, there has been a long-standing rail industry recognition that operating a mixed railway (where commuter services, inter-city long distance services, and urban transit and freight services operate on the same tracks) severely compromises performance and capacity. Given the number of inter-city and commuter services using this section of the Cork Mainline, the proposal to build two extra sets of railway tracks in order to separate Intercity / regional and suburban railway services and eliminate the existing capacity constraint, has been identified as a pre-requisite to improve capacity along the line.

This DSRS Review noted that, in order to maximize the use of the existing network, capacity improvements on the Cork Mainline were required (again focusing on the need for additional tracks to separate Intercity and suburban railway services). The report recommended amongst other things:

- "four-tracking of the Kildare line should start with the Cherry Orchard Hazelhatch section to permit up to 6tph Heuston Hazelhatch or 4tph to Sallins and 2tph to Kildare, if suitable terminal facilities are provided".
- "electrification of the suburban lines from Maynooth and Sallins/Kildare".

The DSRS Review also recommended the electrification of lines. The review further identified that the development of an underground interconnector linking Spencer Dock and the City Centre would provide for cross-city rail services and would widen the city centre rail catchment. The development of such a tunnel would also provide capacity for more intensive development along the Cork Mainline. It was from this document that the DART Underground Programme was devised (i.e., underground rail interconnector and electrification of the radial lines).

In 2001, A Platform for Change - An Integrated Transportation Strategy for the Greater Dublin Area 2000 to 2016 (published by the Dublin Transportation Office) reiterated the key objectives of investing in rail and maximising the use of existing rail lines and reiterated the underlying requirements for the DART+ Programme. Those of relevance to DART+ South West, were:

² NTA define the GDA to cover the counties of Dublin, Meath, Kildare and Wicklow.















- Four-tracking from Cherry Orchard to Sallins;
- An east-west city centre tunnel; and
- Electrification of the Cork Mainline to the city centre.

In 2003, the Department of Transport commissioned a report to evaluate the long-term rail requirements from a national perspective in light of the emerging spatial planning and regional development trends and policies. This was presented in the *Strategic Rail Review* (2003). This report was cognisant of the recommendations of the DTO's *A Platform for Change* but considered more detailed analysis to take account of the localised development potential that would result in increased passenger demand (i.e. greater than assumed in *A Platform for Change*). The *Strategic Rail Review* (2003) acknowledged that the more detailed analysis could affect the timing of elements of the investment strategy.

The recommendation of the *Strategic Rail Review* (Section 4.5.4) was to develop the Dublin suburban routes in four phases, including as Phase 3: "Widening of the rail corridors between Dublin Connolly and Howth Junction and between Dublin Heuston and Hazelhatch on the Kildare route from two to four track, enabling separation of stopping DART services from fast intercity and commuter train services." The investment strategy recommended included:

- Progressing construction of the new turnback facility at Newbridge;
- The lengthening of platforms at Sallins and Hazelhatch; and
- Secure a Railway Order and proceed to construction of the four-tracking on the Kildare Line to separate Intercity and commuter traffic.

Since 2001, these objectives and requirements have remained constant including establishing Hazelhatch & Celbridge as the termination point for four-tracking and Sallins the termination point for electrification; however, having regard to interdependencies between some elements, they have had to be brought forward as different projects or phases at different times.

An early project (one of the investment strategy recommendations of the *Strategic Review 2003*) involved delivering platform lengthening at Hazelhatch & Celbridge Station and Sallins & Naas Station to accommodate longer trains in 2003.

However, addressing the existing constraints of the Cork Mainline was the priority; and the four-tracking of the line, between Park West & Cherry Orchard Station and Hazelhatch & Celbridge Station, was brought forward as the Kildare Route Project in 2006. At the time, it was not possible to include the four-tracking further into the city as part of the project because the design alignment of DART Underground and its interface with the Cork Mainline around Heuston and Inchicore had not been finalised.

The delivery of the Kildare Route Project in 2009 laid down significant groundwork for the DART+ South West Project, providing four-tracking for 11km and reconstructing several bridges to provide the necessary lateral clearance and vertical clearance for future electrification.

In 2009, with the DART Underground alignment finalised, the second phase of the Kildare Route Project was progressed. This looked at continuing four-tracking from the end of Kildare Route Project













at Park West & Cherry Orchard through to the end of proposed DART Underground within the larnród Éireann Inchicore Works. With the onset of the economic recession, the Government decided to defer the DART Expansion Programme in the *Capital Expenditure Programme 2012-2016*, with a view to progressing it again when funding permitted. The progression of the Railway Order application for Kildare Route Project Phase 2 Project was put on hold.

In 2015, the Government deferred authorisation for construction of DART Underground and instructed the National Transport Authority (NTA) and larnród Éireann to examine alternative designs that would deliver a lower cost technical solution, whilst retaining the required rail connectivity for the DART+ Programme.

In this regard, the onset of the financial crisis in 2010 and a series of capital spending reviews has affected the timing, but not the objectives or underlying requirements for the DART Expansion Programme (now the DART+ Programme).

Between September 2015 and the publication of the National Development Plan 2018-2027 (NDP) in February 2018, Iarnród Éireann and the NTA worked collaboratively in the assessment of lower cost technical solutions. A number of studies were undertaken including the DART Underground Western Tie-In Study (2017) and Tunnel Configuration Study for new Metro North and the DART Underground (NTA/ Iarnród Éireann /TII 2017).

In 2018, the *DART Expansion Programme Options Assessment* (Oct 2018) by Jacobs and Systra sought to identify a lower cost alternative to the proposed DART underground tunnel component of the DART Expansion Programme. It considered a range of 'scheme bundles' and recommended that the DART Expansion programme be delivered by enhancing the existing rail network in the short to medium term (Scheme Bundle 6). Of relevance to DART+ South West, Scheme Bundle 6 - DART Expansion with Existing Network Enhancement (No DART Underground) initially included:

- Upgrading of the Phoenix Park Tunnel Branch Line (as an alternative to the DART Underground tunnel).³
- New stations at Heuston West (Platform 10) and Cabra.
- Four-tracking on the Cork Line from Park West to Heuston station.

Following optimisation, an above-ground station at Kylemore on the Cork Mainline was recommended as an alteration to Scheme Bundle 6. This in turn meant that the Heuston West (Platform 10) station was no longer required and was removed from Scheme Bundle 6.

As part of future transport policy and strategy, further improvements of the Cork Mainline may be promoted, which may include full InterCity and/or Commuter electrification extensions. There is nothing being designed by DART+ South West that will preclude these future plans. These future projects will be subject to their own designs, technical assessment, and statutory approval.

³ It is noted that DART Underground, for which a Railway Order was approved in 2015, remains a proposal and the tunnel alignment is protected for potential future development.













In conclusion, the DART+ South West Project continues the railway modernisation works already significantly progressed by previous projects delivered since the early 2000s. DART+ South West is fully compliant with recent government transport and climate policy, most particularly the *National Development Plan 2021-2030* for completion of four-tracking from Park West to Heuston and electrification of the commuter lines from Hazelhatch to Heuston and along the Phoenix Park Tunnel Branch Line.

2.3. Policy Context

This section presents a summary of the policy context at a European, national, regional and local level for the DART+ South West Project. The planning and policy documents discussed in the following sections are listed in Table 2.1. The reader is also directed to the Options Selection Report (OSR) - Volume 4.2: Policy Context (available on www.dartplus.ie) which expands on the strategic fit for the DART+ Programme and DART+ South West Project, having regard for its strategic context and relevant plans, projects and studies undertaken in recent years.

Table 2.1: Planning and Policy Documents

EU Level Policy

EU White Paper on Transport: Roadmap to a Single European Transport Area - Towards a competitive and resource efficient transport system

European Green Deal

The Trans-European Transport Network (TEN-T)

National Policy

Project Ireland 2040

The National Planning Framework - Ireland, Our Plan 2040

The National Development Plan 2021-2030

Smarter Travel - A Sustainable Transport Future 2009-2020

Planning Land Use and Transport Outlook 2040

National Investment Framework for Transport in Ireland (NIFTI) (2021)

National Sustainable Mobility Policy

Climate Action and Low Carbon Development (Amendment) Act 2021

Climate Action Plan 2023

The White Paper: Ireland's Transition to a Low Carbon Energy Future 2015-2030

National Rail Policy

2030 Rail Network Strategy Review

Iarnród Éireann Strategy 2027

All-Island Strategic Rail Review (Consultation Paper)

Rail Freight 2040 Strategy













Regional Policy

Eastern and Midland Regional Spatial & Economic Strategy 2019-2031

Metropolitan Area Spatial Plan

Transport Strategy for the Greater Dublin Area 2016-2035

Draft Transport Strategy for the Greater Dublin Area 2022-2042

Greater Dublin Area Cycle Network Plan - the 2013 GDA Cycle Network Plan

2021 Draft GDA Cycle Network Plan

Integrated Implementation Plan 2019-2024

Local Policy

Dublin City Development Plan 2022-2028

Park West - Cherry Orchard Local Area Plan 2019

The City Edge Project

South Dublin County Development Plan 2022-2028

Adamstown Strategic Development Zone 2014

Clonburris Strategic Development Zone 2019

Kildare County Development Plan 2017-2023

Draft Kildare County Development Plan 2023 - 2029

Celbridge Local Area Plan 2017-2023

2.3.1. International and European Policy

Ireland is party to both the United Nations Framework Convention on Climate Change (UNFCCC) (UNFCC 1992) and the Kyoto Protocol (UNFCC 1997). The Paris Agreement (UNFCC 2015), which entered into force in 2016, is an important milestone in terms of international climate change agreements and includes an aim of limiting global temperature increases to no more than 2°C above pre-industrial levels with efforts to limit this rise to 1.5°C. The aim is to limit global GHG emissions to 40 gigatonnes per year as soon as possible whilst acknowledging that peaking of GHG emissions will take longer for developing countries. Contributions to GHG emissions will be based on Intended Nationally Determined Contributions (INDCs) which will form the foundation for climate action post 2020. Significant progress was also made in the Paris Agreement on elevating adaption onto the same level as action to cut and curb emissions however, Conference of Parties (COP) 27 has recognised the need for a focus on implementation of commitments made under these earlier agreements.

The European Union (EU) is striving to achieve a climate neutral European continent by the year 2050. In order to meet the commitments under the Paris Agreement, the EU enacted 'Regulation (EU) 2018/842 on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action and amending Regulation (EU) No. 525/2013' (hereafter













referred to as the Regulation) (European Parliament and Council of Europe 2018). The Regulation aims to deliver, collectively by the EU in the most cost-effective manner possible, reductions in GHG emissions from the Emission Trading Scheme (ETS) and non-ETS sectors of 43% and 30%, respectively, by 2030 compared to 2005. The ETS is an EU-wide scheme which regulates the GHG emissions of larger industrial emitters including electricity generation, cement manufacturing and heavy industry. The non-ETS sector includes all domestic GHG emitters which do not fall under the ETS scheme and thus includes GHG emissions from transport, residential and commercial buildings, and agriculture. Ireland's obligation under the Regulation is a 30% reduction in non-ETS GHG emissions by 2030 relative to its 2005 levels. To achieve climate neutrality, policies such as the European Green Deal and the EU White Paper were enacted to hasten the transition to a low carbon economy. The decoupling of economic progression and heavy resource use is crucial to this green transition.

2.3.1.1. EU White Paper on Transport: Roadmap to a single European Transport Area - Towards a competitive and resource efficient transport system

In 2011, the European Commission adopted the *White Paper Roadmap to a Single European Transport Area - Towards a competitive and resource efficient transport system* in the context of the Union's 2020 growth strategy. The vision of the White Paper spans four decades, up to 2050, but also sets earlier goals for 2020 and 2030. The Commission's vision for a competitive and sustainable transport system involves transport that uses cleaner energy, better exploitation of modern infrastructure and a reduction in its negative impact on the environment.

The White Paper defines ten goals designed to guide actions and measure progress to achieve a 60% reduction in CO_2 emissions and comparable reduction in oil dependency. Goals to which the DART+ Programme is aligned:

- Goal 1. Halve the use of 'conventionally fuelled' cars in urban transport by 2030; phase them out in cities by 2050; achieve essentially CO₂ free city logistics in major urban centres by 2030.
- Goal 4. By 2050, complete a European high-speed rail network. Triple the length of the
 existing high-speed rail network by 2030 and maintain a dense railway network in all Member
 States. By 2050 the majority of medium-distance passenger transport should go by rail.

2.3.1.2. European Green Deal

The EC recognises climate change and environmental degradation as an existential threat to Europe and have put in place the European Green Deal to transform the EU into "a modern, resource-efficient, and competitive economy, ensuring:

- No net emissions of greenhouse gases by 2050;
- Economic growth decoupled from resource use; and
- No person and no place left behind."













The EC further notes that the "European Green is also the EU's lifeline out of the COVID-19 pandemic. One third of the 1.8 trillion euro investments from the Next Generation EU Recovery Plan, and the EU's seven-year budget will finance the European Green Deal."

Providing efficient, safe and environmentally friendly transport is also a feature of the Green Deal. It is noted that "With transport contributing around 5% to EU GDP and employing more than 10 million people in Europe, the transport system is critical to European businesses and global supply chains. At the same time, transport is not without costs to our society: greenhouse gas and pollutant emissions, noise, road crashes and congestion.

Today, transport emissions represent around 25% of the EU's total greenhouse gas emissions, and these emissions have increased over recent years. The EU has a goal of being the first climateneutral continent by 2050, this goal requires ambitious changes in transport. A clear path is needed to achieve a 90% reduction in transport-related greenhouse gas emissions by 2050.

The European Commission adopted a set of proposals to make the EU's climate, energy, transport and taxation policies fit for reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels."

Rail is one of the most environmentally positive choices with regards to public transport. This is true particularly, considering the EU's Sustainable and Smart Mobility Strategy which targets transport and mobility under 3 key objectives.

- Sustainable mobility;
- Smart mobility; and
- · Resilient mobility.

The mobility strategy will, while designing policies, consider the environmental impact of development. To achieve sustainable mobility, 3 key perspectives will be evident in EU policies enacted to achieve sustainable mobility. The first is the reduction of fossil fuel dependence, the second is making alternative choices available such as high-speed rail in this instance. The EU aims to double the traffic on high-speed rail by 2030 and to double the freight traffic on rail by 2050. The final consideration is that policy will be enacted so that the pricing of transport will reflect the environmental impact associated with the respective mode chosen.

It is considered that the proposed DART+ South West Project is supported by the European Green Deal and will contribute to achieving its targets.

2.3.1.3. Trans-European Transport Network

The Trans-European Transport Network (TEN-T) policy supports the development of a Europe-wide network of railway lines, roads, inland waterways, maritime shipping routes, ports, airports and railroad terminals. The overall objective of TEN-T is to "close gaps, remove bottlenecks and technical barriers, as well as to strengthen social, economic and territorial cohesion in the EU."

The TEN-T policy seeks to achieve the following:

Improved use of infrastructure;













- Reduced environmental impact of transport;
- Enhanced energy efficiency; and
- Increased safety.

The 'Core Network' of the TEN-T policy includes the most important connections and links between key transport nodes, with nine corridors identified to streamline and facilitate the coordinated development of the Core Network by 2030.

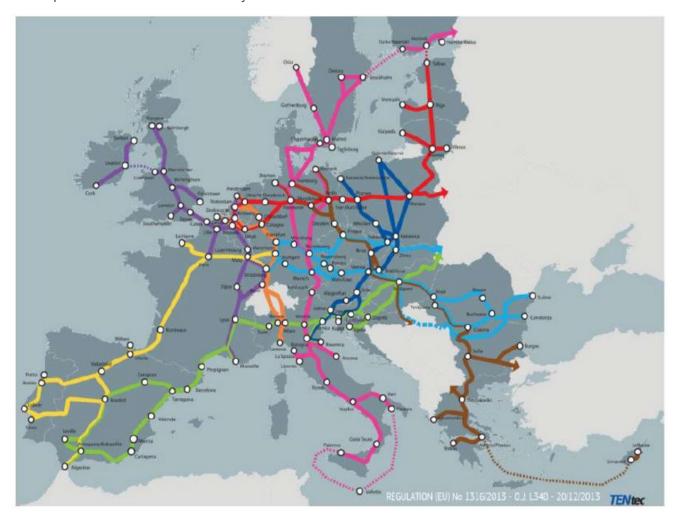


Figure 2-1 TEN-T Core Network

Source: ec.europa.eu

The North Sea-Mediterranean Corridor (indicated in purple in Figure 2-1) stretches from Edinburgh and Glasgow in Scotland to the ports of Marseille and Fos-sur-Mer in the south of France. The route includes a spur to Ireland, with the Cork-Belfast transport corridor identified. When complete, the North Sea-Mediterranean Corridor will offer enhanced multimodal links between North Sea ports, major European rivers basins and the southern French ports. It will also improve links between the British Isles and Continental Europe.

DART+ South West is identified as an action under the TEN-T Connecting Europe Facility Programme (CEF) which acknowledges that "upgrading this railway line to four electrified tracks will













bridge the missing link by connecting the Cork Line and the Belfast Line through two stations in Dublin (the Hazelhatch and Connolly stations)".

The Action concerns "developing the designs for the DART+ South West from the preliminary design to the detail design phases, completing the approval process and subsequently launching the procurement for works on electrifying, re-signalling, the railway infrastructure components of stations, bridge replacements and tracking to construct the necessary infrastructure along the Kildare line in Dublin" (see Figure 2-2).



Figure 2-2 TEN-T Action: 2019-IE-TM-0127-S

Source: ec.europa.eu

2.3.2. National Policy

2.3.2.1. Project Ireland 2040

Project Ireland 2040 was launched in February 2018 and comprises the *National Planning Framework* and the *National Development Plan 2018 – 2027*. The *National Development Plan* has since been revisited and updated to cover the period 2021-2030.

Project Ireland 2040 is a long-term overarching strategy which aligns investment decisions with a clearly defined development strategy and National Strategic Outcomes.

2.3.2.1.1. National Planning Framework 2040

The *National Planning Framework* (the NPF) is the primary articulation of spatial, planning and land use policy in Ireland. The framework is based on directing development to existing settlements rather













than allowing the continual expansion and sprawl of cities and towns. The framework provides each region with a set of objectives and key principles from which detailed plans are to be developed.

The NPF defines ten (10 no.) National Strategic Outcomes (NSO) as shown in Figure 2-3. The NSO represents a shared set of goals for every community across the country.



Figure 2-3 National Strategic Outcomes

Source: Project Ireland 2040

Of relevance to DART+ Programme are National Strategic Outcomes 1, 4 and 8.

- NSO 1 Compact Growth seeks to manage the sustainable growth of cities, towns, and villages to create compact and attractive places in which people can live and work. NSO 1 seeks to achieve effective densities and consolidation of built form rather than further sprawl of urban development. In this regard, the NPF states that: "Combined with a focus on infill development, integrated transport and promoting regeneration and revitalisation of urban areas, pursuing a compact growth policy at national, regional and local level will secure a more sustainable future for our settlements and for our communities".
- NSO 4 Sustainable Mobility is identified as being central to enhancing competitiveness, sustaining economic progress, and enabling mobility choices for citizens. Under NSO 4, the NPF aims to expand the range of public transport services available and to reduce congestion and













emissions. The policy also commits to invest in key transport projects such as the DART+ Programme, BusConnects and Metro Link. NSO 4 states:

"In line with Ireland's Climate Change mitigation plan, we need to progressively electrify our mobility systems moving away from polluting and carbon intensive propulsion systems to new technologies such as electric vehicles and introduction of electric and hybrid traction systems for public transport fleets, such that by 2040 our cities and towns will enjoy a cleaner, quieter environment free of combustion engine driven transport systems."

The NPF highlights that Dublin and other major urban areas are too heavily dependent on road and private, mainly car-based, transport, resulting in our roads becoming heavily congested. In order to overcome this issue, the NPF aims to deliver the key public transport objectives of the Transport Strategy for the Greater Dublin Area 2016-2035 by investing in projects such as MetroLink, DART Expansion Programme, and BusConnects in Dublin.

NSO 8 - Transition to a Low Carbon and Climate Resilient Society, notes that the progressive
and strategic development of new, sustainable energy systems, will support "the conversion of
the built environment into both generator/consumer of energy and the electrification of transport
fleets". Electrification of commuter services by means of the DART+ Programme will enable a
transition away from diesel-based commuter trains to a highly decarbonised electricity supply.

2.3.2.1.2. National Development Plan 2021-2030

The *National Development Plan 2021-2030* (the NDP) is the most recent infrastructure investment plan adopted by the government. The NDP is aligned with the delivery of the NPF objectives and sets out the State's investment priorities from 2021-2030 within the context of a changing demographic, the need for Ireland to move to a low carbon society and the sustainable growth opportunities brought about by a growing population.

The Plan supports the delivery of *Project Ireland 2040* through public capital investment over the next ten years and guides national, regional, and local planning and investment decisions in Ireland. The NDP provides government departments with greater visibility of their investment capacity over the term of the Plan. It sets out departmental allocations to 2025 and a total public investment of €165 billion over the period 2021 to 2030.

The focus of the NDP is to ensure more sustainable, compact urban growth. In this regard, the NDP states that "urban, compact growth will be supported under this NDP through investment in high quality integrated active travel and public transport systems and supporting amenities".

The NDP identifies the public transport as a strategic investment priority and notes that "the DART+ Programme will be a cornerstone of rail investment within the lifetime of Project Ireland 2040 and represents the single biggest investment in the Irish rail network". The programme comprising a number of infrastructural projects, namely: DART+ West, DART+ South West, DART+ Coastal North to Drogheda via Balbriggan, and DART+ Coastal South. It also includes the expansion and modernisation of the rail fleet, including both battery-electric and electric multiple units (EMU). The NDP notes that public consultation has already taken place in relation to the DART+ West and DART+ South West Projects, while the procurement process has been completed in respect of the new DART+ Fleet.













The NDP notes that the DART+ Programme will alleviate some of the constraints on the Dublin City Centre rail network and provide for additional intercity rail services. The Plan also expands on the objectives of NSO 4 - Sustainable Mobility and outlines how increases in passenger demand are to be catered for by a sustainable public transport system significantly less reliant on vehicles. The DART+ Programme, along with BusConnects and Metrolink, is specifically included in the Plan (under NSO 4) as a major national infrastructure project for appraisal and delivery and has been allocated €2 billion Exchequer funding for the development and delivery of the programme. It is recognised that the investment in high-quality sustainable mobility will improve citizens' quality of life, support Ireland's transition to a low carbon society and enhance the county's economic competitiveness.

The NDP also highlights that the improved and expanded sustainable mobility services and infrastructure can also act as an enabler of the NPF's commitment toward compact growth of the cities, towns, and villages within their existing urban footprint. Smarter Travel: A Sustainable Transport Future.

The National Development Plan 2018-2027 (which is the earlier iteration of the current NDP) outlines the scope of the DART+ Programme to include investment in new rolling stock, new infrastructure and the electrification of the Sligo line to Maynooth and M3 parkway, the Northern line to Drogheda and the Kildare line to Celbridge/Hazelhatch to create a full metropolitan area DART network with all lines linked and connected.

The Plan does not make provisions for any new tunnelling but does include the utilization of the existing Phoenix Park Tunnel and requires that the route for any future DART Underground is protected to allow for its future delivery.

2.3.2.2. Smarter Travel – A Sustainable Transport Future

The Department of Transport (DoT)⁴ Smarter Travel - A Sustainable Transport Future A New Transport Policy for Ireland 2009-2020 is a national policy document that sets out five (5 no.) key goals including:

- Reduce overall travel demand and commuting distances travelled by car;
- Improve economic competitiveness through maximising the efficiency of the transport network and alleviating congestion and infrastructure bottlenecks;
- Reduce reliance on fossil fuels and thus improve the security of energy supply;
- Minimise the negative impacts of transport on the local and global environment by reducing air pollutants and Greenhouse Gas emissions attributed to travel; and
- Improve accessibility to transport and improve quality of life with an emphasis on people with reduced mobility and those experiencing isolation as a result of reduced accessibility.

The national policy outlines targets to:

⁴ It is noted that the DoT was previously known as Department of Transport, Tourism and Sport's (DTTAS)













- Address unsustainable transport and travel patterns and to reduce the health and environment impacts of current trends;
- Deliver a sustainable transport system in line with climate change targets;
- Reduce work related commuting by car from a current modal share of 65% down to 45% by 2020;
- Increase commuting by alternative sustainable modes to 55% by 2020.

The goals and targets of *Smarter Travel - A Sustainable Transport Future* align with and support the DART+ South West Project.

2.3.2.3. Strategic Investment Framework for Land Transport

The Department of Transport (DoT) *Strategic Investment Framework for Land Transport, 2015* (SIFLT) lays out the role of transport in the future development of the Irish economy. The framework establishes two key principles:

- "(1) High level priorities for future investment in land transport; and
- (2) Key principles, reflective of those priorities, to which transport investment proposals will be required to adhere".

The SIFLT considers the objective of transport investment considering current and projected transport demand and identifies key issues for policy makers when investing in land transport. The framework sets out the rationale for investment in transport networks, citing their role in driving economic growth, and supporting the delivery of economic development objectives by enabling efficiency and competitiveness across the economy.

The framework highlights Irelands obligations regarding the reduction of carbon emissions and identifies the need for radical transformation within the transport sector if the targeted reduction in carbon emissions of 80% by 2050 is to be achieved. The need for investment is also established by illustrating that the existing land transport systems cannot cater for the projected increases in population and a 35% increase in commuting trips by 2040.

The SIFLT's priorities outlined below echo Project Ireland 2040's NSOs and guide investment decisions for transport schemes:

Address Urban Congestion: The need to address urban congestion is prioritised within the Framework to improve the efficiency and sustainability of the urban transport system. This is to be achieved by improving and expanding public transport capacity, the expansion of walking and cycling infrastructure and the wider use of technology within transport systems; and

Maximise the contribution of Land Transport to National Development: Transport systems should aim to enhance the efficiency of the existing network, improve connections to key ports and airports and support national and regional spatial planning priorities.

The objectives of the SIFLT align with and support the DART+ South West Project.

In December 2021, the Department of Transport (DoT) published the National Investment Framework for Transport in Ireland (NIFTI). This new framework replaces the SIFLT and is outlined below.













2.3.2.4. National Investment Framework for Transport in Ireland (2021)

Following the publication of Project Ireland 2040, DoT commenced the Planning Land Use and Transport Outlook (PLUTO) 2040 to update the SIFLT to ensure the alignment of planning with regard to land use and transport projects across government departments and agencies.

In December 2021, the Department of Transport published the *National Investment Framework for Transport in Ireland* (NIFTI). This new framework replaces the previous SIFLT (as outlined above). The Framework will be used by the Department for prioritising future investment in land transport network to support of the delivery of the ten National Strategic Outcomes (NSOs) of the National Planning Framework. Through the transport investment priorities identified it will contribute to Ireland's decarbonisation efforts, support vibrant and successful communities, deliver high performing transport systems, and promote a strong and balanced economy.

As part of the future network analysis completed to support investment priorities, NIFTI identifies consistent congestion as an issue in the five major cities in the country: Dublin, Cork, Galway, Limerick, and Waterford. It supports the development of new urban infrastructure supply across the five cities including the development of BusConnects and comprehensive cycle networks, while Dublin will also see heavy rail improvements in the form of DART+ Programme and MetroLink among other things. DART+ programme will result in a substantial investment in sustainable mobility being delivered under the National Development Plan and supports the objectives of the NPF.

The future network analysis undertaken to inform NIFTI has demonstrated that the DART+ programme for the GDA will address existing congestion issues, cater for rising travel demand, and support sustainable public transport options across the GDA. The DART+ programme will also encourage compact growth, transport-orientated development and supports the decarbonisation of the transport sector to include the purchasing of electric powered trains. The project also supports improvements and maximisation of existing transport infrastructure assets.

To address the transport challenges, NIFTI establishes four investment priorities namely:

- Decarbonisation:
- 2. Protection and Renewal;
- 3. Mobility of People and Goods in Urban Areas; and
- 4. Enhanced Regional and Rural Connectivity.

The four NIFTI Investment Priorities are supplemented by Modal and Intervention Hierarchies. Projects must align with these priorities to be considered for funding. Moreover, as the NSO are embedded in NIFTI future investment made in accordance with the priorities will support the delivery of the National Planning Framework over the coming decades. The DART+ Programme is fully aligned with these priorities.















Figure 2-4 National Investment Framework for Transport in Ireland – Investment Priorities

2.3.2.5. National Sustainable Mobility Policy

The Department of Transport's National Sustainable Mobility Policy (NSMP) sets out a strategic framework to 2030 for active travel and public transport to support Ireland's overall requirement to achieve a 51% reduction in carbon emissions by the end of this decade, targeting at least 500,000 additional daily active travel and public transport journeys by 2030.

The NSMP has been developed to align with and complement other international, European and national policies and frameworks, such as the UN Sustainable Development Goals, Paris Agreement, European Green Deal, EU Sustainable and Smart Mobility Strategy and National Planning Framework.

The policy is guided by three (3 no.) key principles, which are underpinned by ten (10 no.) high level goals as detailed in Table 2.2 below. The DART+ South West project supports the principles and goals outlined in the NSMP.

Table 2.2 Principles and Goals of the National Sustainable Mobility Policy

Principle	Goals
Safe and Green	1. Improve mobility safety
Mobility	2. Decarbonise public transport
	3. Expand availability of sustainable mobility in metropolitan areas.
	4. Expand availability of sustainable mobility in regional and rural areas.
	5. Encourage people to choose sustainable mobility over the private car
People	6. Take a whole of journey approach to mobility, promoting inclusive access for all.
Focused Mobility	7. Design infrastructure according to Universal Design Principles and the Hierarchy of Road Users model.
	8. Promote sustainable mobility through research and citizen engagement













Principle	Goals
Better Integrated Mobility	9. Better integrate land use and transport planning at all levels.10. Promote smart and integrated mobility through innovative technologies and development of appropriate regulation.

The DART+ programme is identified as a key focus for the Greater Dublin Area (GDA), by expanding the electric and battery electric fleet and rail network, with electrified services from 50 km to 150 km by 2030. The DART+ programme also expands and improves public transport services through improved railway infrastructure which is fundamental to achieving the target of an additional 500,000 daily active travel and public transport journeys by 2030.

The principles and goals of the National Sustainable Mobility Policy align with and support the DART+ South West project.

2.3.2.6. Climate Action and Low Carbon Development (Amendment) Act 2021

In July 2021, the *Climate Action, and Low Carbon Development (Amendment) Act 2021* was signed into law. It provides a governance framework setting out how Ireland will transition to 'Net Zero' and achieve a climate neutral economy by no later than 2050.

The key features of the Act are:

- Placing on a statutory basis a 'national climate objective', which commits to pursue and achieve, the transition to a climate resilient, biodiversity-rich, environmentally sustainable, and climate-neutral economy, by no later than 2050.
- Carbon budgets including a provision for setting sectoral targets.
- Actions for each sector to be included in an annually revised Climate Action Plan.
- Strengthened role for the Climate Change Advisory Council.
- New oversight and accountability by the Oireachtas.
- Public Bodies will be obliged to perform their functions in a manner consistent with national climate plans and strategies and furthering the achievement of the national climate objective.

Transport is one of the key sectors in which substantial improvements are required in order for Ireland to achieve a climate neutral economy by no later than 2050. The DART+ Programme will contribute to achieving this objective.

2.3.2.7. Climate Action Plan 2023

The Climate Action Plan 2023 (CAP23) provides a detailed plan for taking action to achieve the Government commitment to reduce the overall greenhouse gas emissions by 51% by 2030 and sets out specific actions to achieve net-zero emissions by 2050.

The Action Plan focuses on providing our communities with cleaner air and water; establishing a greener economy and society; and working towards adaptation and recovery from climate change.













The Action Plan also seeks to reduce transportation emissions by 50% by 2030 and cutting our dependency on fossil fuels.

The Action Plan focuses on the net-zero decarbonisation pathway for transportation based on the 'Avoid - Shift - Improve' framework (see Figure 2-5).



Figure 2-5 Avoid - Shift - Improve Framework

Source: Climate Action Plan 2023

The Action Plan notes that "key milestones have already been achieved on major infrastructural projects, including BusConnects in each of our 5 cities and the Greater Dublin Area's DART+ Programme and Metrolink, which will continue to be progressed through public consultations and the planning systems".

Action TR/23/37 seeks to promote and support the advancement of the DART + Programme to help decrease emissions. In this regard, the proposed DART+ South West Project is fully supported by the Climate Action Plan and will contribute to achieving its goals and targets.

2.3.2.8. The White Paper: Ireland's Transition to a Low Carbon Energy Future 2015-2030

This White Paper on Ireland's Transition to a Low Carbon Energy Future 2015-2030 provides a framework for transforming Ireland's fossil fuel-based energy sector into a clean, low carbon system by 2050. The White Paper comprises of an energy policy update and provides the framework to guide the national policy. The Paper considers European and International climate change objectives and agreements. The actions that support the proposed Project are:

- "Support initiatives to improve the energy efficiency of the rail network" (pg. 66).
- "Support further rail electrification" (pg.67).













2.3.3. National Rail Policy

2.3.3.1. 2030 Rail Network Strategy Review

In 2011, larnród Éireann carried out a review of future development requirements of the larnród Éireann InterCity Network (ICN) and regional services. It sets out a broad strategic goal for the rail network to "provide safe, accessible and integrated rail services that contribute to sustainable economic and regional development in an efficient manner."

The review stated that the Dublin – Cork corridor "remains the dominant corridor on the rail network, carrying a high level of passenger demand, and a significant level of intercity movements, particularly by business travellers who account for over 35 per cent of total rail passengers". The proposed development aims to electrify a portion of this corridor from Dublin to Hazelhatch & Celbridge Station.

In terms of the distribution of passenger demand across the various routes, the Strategy review indicates that in 2011, the Drogheda commuter route accounted for the highest proportion (26.9%) of passenger, followed by the Maynooth commuter route (19.3%), the Cork inter-city route (10.9%) and the Kildare commuter route (8.2%).

The implementation of the DART+ South West Project is supported by and aligns with the 2030 Rail Network Strategy Review as it proposed electrification of a section of the rail network and increased rail capacity.

2.3.3.2. Iarnród Éireann Strategy 2027

larnród Éireann prepared the 2017 Strategy for its national railway network. The Strategy will aid larnród Éireann to deliver high-capacity sustainable public transport solutions to cater for the increase in travel resulting from the anticipated population and employment growth, and to facilitate Ireland in improving sustainable mobility options and reduce carbon emissions from the transport sector.

The Strategy identifies the DART+ Programme as a priority investment project and highlights that the services along the DART line "have all experienced significant passenger growth over recent years with overcrowding increasingly experienced by customers on some peak services". The Strategy notes that the DART+ Programme will benefit the Intercity outer GDA services by increasing the capacity along the core rail corridors in the GDA. In the case of the DART+ South West Project, the Strategy states that the four tracking work "will increase reliability and journey times for all Intercity services using this corridor. This will be achieved by separating Intercity services from commuter services (i.e. Intercity will continue nonstop from Hazelhatch to Heuston at line speed without being impacted by the stopping commuter traffic)".

The implementation of the DART+ South West project is supported by and aligns with the larnród Éireann Strategy 2027.

2.3.3.3. All-Island Strategic Rail Review Consultation Paper

In November 2021, the Department of Transport launched and published an All-Island Strategic Rail Review Consultation Paper and will focus on delivering 6 goals namely:

Goal 1: Contribute to Decarbonisation













- Goal 2: Improve All Island Connectivity Between Major Cities
- Goal 3: Enhance Regional and Rural Accessibility
- Goal 4: Encourage Sustainable Mobility
- Goal 5: Foster Economic Activity
- Goal 6: Achieve Economic and Financial Feasibility.

The Review expands on the commitment under the New Decade, New Approach agreement to examine the feasibility of a high/higher speed rail link between Belfast, Dublin and Cork and will look at ways to improve our current rail infrastructure, including the feasibility of high/higher speeds and electrification, better connections to the North-West, and role of rail in the efficient movement of goods.

Whilst the outcomes of this review are not known it is noted that the DART+ South West Project will directly promote decarbonisation through electrification of the network, enhance connectivity, foster economic activity and sustainable mobility.

2.3.3.4. Rail Freight 2040 Strategy

The Rail Freight 2040 Strategy has been prepared by larnrod Éireann to guide the development of an expanded rail freight sector which will reduce carbon emissions from transport while enabling sustainable growth. The strategy sets out 25 strategic initiatives with an estimated investment of €500 million over the next twenty years. Identified infrastructure investments which may increase rail freight on the subject rail corridor include:

- Limerick Junction Western Gateway which will capitalise on the high volumes of traffic between Dublin and the South West. A Strategic Freight Terminal will be developed at Limerick Junction to facilitate intermodal traffic, a hub for distribution activity and support of businesses across the wider region.
- Dublin Eastern Gateway A Strategic Freight Terminal will be developed to the West of Dublin to facilitate intermodal traffic to and from the South West. The facility could be co-located with a dedicated construction materials terminal to support supplies to Dublin for this industry as it responds to housing and wider development demands over the coming decades.
- Dublin Port Operations at Dublin Port will be developed to optimise the integration of rail freight within the port and support it in responding to longer term capacity challenges
- Tactical Rail Freight Terminals (TRFT) will be developed in Cork, Galway and Sligo to establish a cross county network of rail freight facilities. In collaboration with road operators these terminals will expand the reach of rail freight and provide sustainable intermodal freight options to businesses across the regions.

The four tracking of the Dart+ South West project adds additional capacity and resilience to the rail network offering the potential for increase rail freight traffic.













2.3.4. Regional Policy

2.3.4.1. Eastern and Midland Regional Spatial & Economic Strategy 2019-2031

The Regional Spatial & Economic Strategy 2019-2031 (RSES) for the Eastern and Midland Region including the Metropolitan Area Spatial Plan for Dublin was published in June 2019. The RSES is a strategic plan and investment framework to shape the future of the region to 2031 and beyond. The RSES addresses the implementation of Project Ireland 2040 at the regional level. It considers spatial and economic factors which relate to the future of the region and ensures that employment opportunities, services, ease of travel and the overall wellbeing of citizens is being addressed.

The RSES highlights the DART expansion programme and its role in the consolidation of Dublin City Centre and surrounding areas. It notes:

"The RSES supports a feasibility study for the provision of high-speed rail links between Dublin and Limerick/ Junction Cork and enhanced rail services including the extension of the DART to Celbridge/ Hazelhatch in north Kildare"

The RSES identifies a Strategic Development Corridor to the south west of the city and notes the role that the DART expansion project plays in this regard:

"The consolidation of the western suburbs of Clonburris, Kilcarberry and Adamstown, linked to increased capacity and electrified services on the Kildare line, to be delivered by 2027".

Policy Objective RPO 8.8 supports the DART+ South West with the following rail projects noted in the associated Table 8.2 of the RSES:

"DART Expansion Programme- new infrastructure and electrification of existing lines, including provision of electrified services to Drogheda or further north on the Northern Line, Celbridge-Hazelhatch or further south on the Kildare, Maynooth and M3 Parkway..."

"New stations to provide interchange with bus, LUAS and Metro network including Kishoge, Heuston West, Cabra, Glasnevin, Pelletstown and Woodbrook."

A Strategic Environmental Assessment and an Appropriate Assessment were undertaken and published with this Strategy.

2.3.4.1.1. Metropolitan Area Spatial Plan (MASP)

The requirement for the development of MASP for Dublin City as part of the RSES is outlined in Project Ireland 2040. The objectives of the MASP include the management of sustainable and compact growth of Dublin City and better use of underused lands. Strategic development areas and corridors are identified in the MASP, including the DART expansion in the south-west corridor.

The Vision for MASP is to "build on our strengths to become a smart, climate resilient and global city region, expanding access to social and economic opportunities and improved housing choice, travel options and quality of life for people who live, work, study in or visit the metropolitan area." This vision is underpinned by a spatial framework which supports the overall settlement strategy of the EMRA and sequential development of the metropolitan area which include focusing on the consolidation of













Dublin City and suburbs and key towns which will be served by the DART+ South West expansion project.

One of the Guiding Principles to achieve this vision is;

"Integrated Transport and Land use: To focus growth along existing and proposed high quality public transport corridors and nodes on the expanding public transport network and to support the delivery and integration of 'BusConnects', DART expansion and LUAS extension programmes, and Metro Link, while maintaining the capacity and safety of strategic transport networks".

The MASP contains several objectives for the Dublin Metropolitan Area, including Sustainable Transport Objective to include:

RPO 5.2 "Support the delivery of key sustainable transport projects including Metrolink, DART and LUAS expansion programmes, BusConnects and the Greater Dublin Metropolitan Cycle Network and ensure that future development maximises the efficiency and protects the strategic capacity of the metropolitan area transport network, existing and planned".

"To focus growth along existing and proposed high quality public transport corridors and nodes on the expanding public transport network and to support the delivery and integration of 'BusConnects', DART expansion and LUAS extension programmes, and Metro Link, while maintaining the capacity and safety of strategic transport networks".

The objectives of the Eastern and Midland RSES and MASP align with and support the DART+ South West Project.

2.3.4.2. Transport Strategy for the Greater Dublin Area 2016-2035

The *Transport Strategy for the Greater Dublin Area 2016-2035* (the Transport Strategy) provides a framework for the planning and delivery of transport infrastructure and services in the Greater Dublin Area (GDA) until 2035. It also provides a transport planning policy around which other agencies involved in land use planning, environmental protection, and delivery of other infrastructure such as housing, water and power can align their investment priorities. It integrates short, medium, and long-term plans for rail, bus, cycling, walking and roads and sets out the transport provisions necessary to "contribute to the economic, social and cultural progress of the GDA by providing for the efficient, effective and sustainable movement of people and goods".

While the Strategy acknowledges the development of the rail network in recent decades, it advises that significant work remains to create a fully integrated rail network. Of particular relevance to DART+ South West it highlights: "In particular, the Kildare / Cork line terminates on the outskirts of the City Centre at Heuston and does not link into the heart of the city, and to the other three lines, for passenger services".

In developing the Transport Strategy, alternative options for the provision of transport services along six radial corridors into Dublin were considered. Heavy rail (DART and Commuter Rail) was found to be the most appropriate solution to meet the transport needs of the high-density population centres across several of the corridors identified. For example, in Corridor C (Maynooth-Leixlip-Lucan-to













Dublin City Centre) rail service on the Kildare Line are regarded as serving "the planned for population growth in the areas of Adamstown, Kishoge and Clonburris".

The Transport Strategy identifies the heavy rail infrastructure required to be delivered within the lifetime, as follows:

- Reopen the Phoenix Park Tunnel Link for passenger services, which will link the Kildare/Cork line to the city centre (The tunnel reopened in 2016 for regular passenger traffic).
- Complete the City Centre Re-signalling programme, which will provide additional train paths through the city centre section of the rail network (The Programme was completed late 2020).
- Implement the DART Expansion Programme, which will provide DART services as far north as Drogheda; to Hazelhatch on the Kildare Line (including a tunnel connection from the Kildare Line to link with the Northern / South-Eastern Line); to Maynooth in the west and to the M3 Parkway (All three major DART+ Projects are currently progressing towards Railway Order applications (i.e., DART+ West, DART+ South West and DART+ Coastal)).
- Develop a new train control centre to manage the operation of the rail network (The centre is currently under construction at Heuston West and is expected to be completed in 2023).
- Construct additional train stations in developing areas with sufficient demand (This is ongoing as part of an independent project).
- Implement a programme of station upgrades and enhancement (This is ongoing as part of an independent project).
- Ensure an appropriate level of train fleet, of an appropriate standard, to operate on the rail network (This is ongoing as part of an independent project).













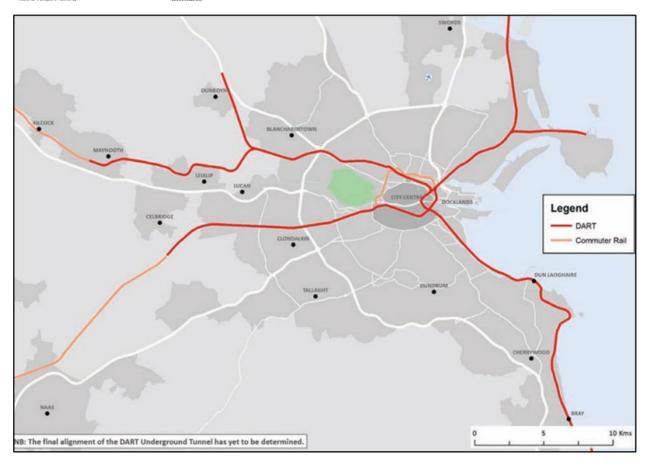


Figure 2-6 2035 Metropolitan Heavy Rail Network

Source: Transport Strategy for the Greater Dublin Area 2016-2035

The Strategy also includes objectives for other modes of transport which are relevant for the DART+ South West Project – reiterating the importance of a modal shift away from cars and providing enhanced facilities for public transport, pedestrians and cyclists.

- Section 5.7 Walking
 - "Revise road junction layouts, where appropriate, to provide dedicated pedestrian crossings, reduce pedestrian crossing distances, provide more direct pedestrian routes, and reduce the speed of turning traffic.
 - Ensure that the permeability and accessibility of public transport stops and stations for local communities is maintained and enhanced."
- 5.8.2 Regional and Local Roads:
 - "Develop appropriate road links to service development areas;
 - Enhance pedestrian and cycle safety through the provision of safer road junctions, improved pedestrian crossing facilities and the incorporation of appropriate cycle measures including signalised crossings where necessary."













- 5.8.3 Principals of Road Development:
 - "There will be no significant increase in road capacity for private vehicles on radial roads inside the M50 motorway;
 - That the road scheme, other than a motorway or an express road proposal, will be designed to provide safe and appropriate arrangements to facilitate walking, cycling and public transport provision."
- 5.10 Park and Ride
 - "Develop a network of strategic rail-based park and ride facilities at appropriate points where rail services intersect with the national road network, adjacent to, or outside of, the M50. These facilities are, or would be, located at Swords, Finglas, Dunboyne, Liffey Valley, Naas Road, Carrickmines, Woodbrook and Greystones."

The Transport Strategy also outlines objectives for Transport Services and Integration nothing that: "The DART services will operate to a high frequency with adequate capacity to cater for the passenger demand. It is anticipated that DART services in the city centre section of the network will operate to a regular ten-minute service frequency in the peak hours from 2016 and will transition to a five-minute service frequency following the completion of the DART Expansion Programme".

It is clear that the objectives of the Transport Strategy are in the process of successfully being delivered by the DART+ Programme and this includes progressing the DART+ South West Project.

2.3.4.3. Draft Transport Strategy for the Greater Dublin Area 2022-2042

The draft Transport Strategy for the Greater Dublin Area 2022-2042⁵, developed by the National Transport Authority (NTA) was published in November 2021 and was open for public submissions up until January 2022. The Strategy reviews and builds on the previous Strategy and once finalised will replace the previous framework, Transport Strategy for the Greater Dublin Area 2016-2035. The Strategy addresses the transportation requirements to support the continued co-ordinated development within the counties of Dublin, Meath, Kildare and Wicklow. Major projects provided for in the Strategy include:

- Luas Cross City;
- The reopening of the Phoenix Park Tunnel Rail Line;
- The on-going roll out of cycle tracks and greenways;
- MetroLink;
- DART+ Programme;
- Investment in bus priority and bus service improvements BusConnects Dublin; and
- M7 Naas to Newbridge widening, Oberstown Interchange and Sallins Bypass.

⁵ At the time of going to print the Transport Strategy for the Greater Dublin Area 2022 – 2042 was in draft format. It is anticipated that the Final Strategy will be published in Quarter 1 of 2023.













With regards to the DART+ Programme, the Strategy includes the following measures:

Measure RAIL1 – DART+ "The DART+ Programme will be implemented, providing electrified services to Drogheda in the north and Maynooth plus Celbridge in the west, in addition to an enhanced level of service to Greystones. The programme will include additional fleet, aligned with higher passenger demand, and a higher frequency of service on all lines"

Measure RAIL7 – Station Upgrades "The NTA, in conjunction with Irish Rail, will upgrade, refurbish and maintain train stations across the GDA to ensure that they are of an appropriate standard and provide a good quality experience for passengers".

Measure RAIL6 – New Rail Stations "The NTA, in conjunction with Irish Rail, will develop new rail stations at Cabra, Glasnevin, Heuston West, Kylemore, Woodbrook, west of Sallins, west of Louisa Bridge and west of Maynooth. Kishoge station will also open in the short term as development of the Clonburris SDZ is realised. Other stations will be considered where development patterns support such provision"

Measure CYC8 – Bikes on Public Transport "The NTA will facilitate the carriage of standard bicycles on all newly acquired (during this strategy period) DART, Commuter and Intercity rail carriages operating in the Greater Dublin Area at all times".

It is clear that the objectives of the Transport Strategy are in the process of successfully being delivered by the DART+ Programme and this includes progressing the DART+ South West Project. It will also support integrated transport and land use planning, and with the planned improvement in the fleet and increase in services it will support behaviour changes due to the provision of viable over the private car.

2.3.4.4. Greater Dublin Area Cycle Network Plan

The Greater Dublin Area Cycle Network Plan sets out a 10-year strategy to expand the urban cycle network from 500km to 2,480km. The overarching ambition of the scheme is, by 2021, to increase the numbers who commute by bike to be the same amount as those who commute by bus.

The network will consist of a series of primary, secondary and feeder routes as well as greenways routes. These routes will comprise of a mix of cycle tracks and lanes, cycleways and infrastructure-free cycle routes in low traffic environments. To compliment the investment in the cycle network, the cycle network plans also provide for:

"Sufficient on and off-street public cycle parking at key urban destinations such as bus/rail stations, schools, and large workplaces.

The expansion of the bike share scheme in Dublin City and the introduction of similar schemes across the Greater Dublin Area.

The implementation of a comprehensive cycle route signage programme in conjunction with the development of the cycle network".

The proposed network of primary, secondary and greenway cycle routes include several crossings of the DART+ South West Project corridor.













2.3.4.5. Draft Greater Dublin Area Cycle Network Plan 2021

It is noted that the NTA has updated the GDA Cycle Network Plan which accompanies the recently published Draft GDA Transport Strategy (November 2021). The 2021 draft GDA Cycle Network Plan provides a substantial update of the 2013 GDA Cycle Network Plan. The update plan continues to support the enhancement and expansion of cycling provision.

2.3.4.6. Integrated Implementation Plan 2019-2024

The NTA's *Integrated Implementation Plan 2019-2024* (the Implementation Plan) supports the delivery of the Transport Strategy and is aligned with the objectives of the NDP. The Implementation Plan sets out the central infrastructure investment programme and overall funding provision over the six-year period. It identifies the key investment areas with respect to bus, light rail, heavy rail and integration and sustainable transport investment.

The Implementation Plan provides further detail on the sequencing and allocation of the €4.6b available to the NTA across Bus, Light Rail, Metro and Heavy Rail projects up to 2024. It also notes that the "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 investment programme and overall funding provision of the Implementation Plan align with and support the DART+ South West Project.

2.3.5. Local Policy

2.3.5.1. Dublin City Development Plan

This Environmental Impact Assessment has been informed by the Dublin City Development Plan 2022-2028 ("the 2022 Plan"). The 2022 Plan as adopted came into effect on the 14th December 2022 and provides an integrated, coherent spatial framework to ensure Dublin city is developed in an inclusive way which improves the quality of life for its citizens, while also being a more attractive place to visit and work.

The DCCP aims to provide a strategy to achieve proper planning, and show how we will achieve sustainable development, that is development that meets current needs while not comprising future generations meeting their needs.

Furthermore, it aims to create a platform to facilitate and promote a sustainable and long-term vision for the city, which includes the delivery of large-scale infrastructure developments and public transport systems. Figure 2-7 illustrates the planned integrated transport network for the city centre.













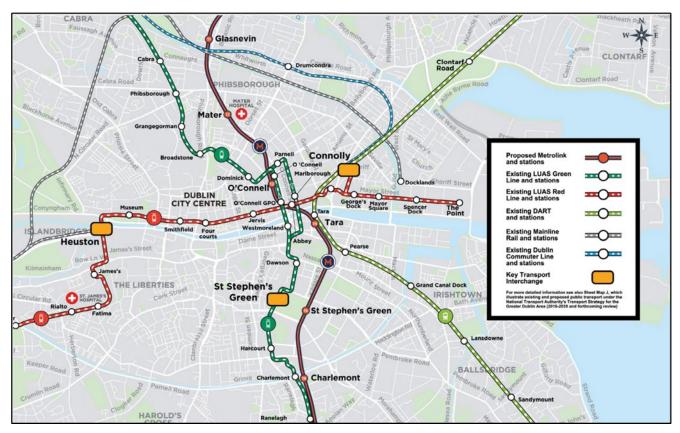


Figure 2-7 City Centre Integrated Transport Source: Dublin City Development Plan 2022-2028

The main DCDP policies and objectives (based on the 2022 Plan) that are of relevance to the DART + Programme include:

- SMTO1: "To achieve and monitor a transition to more sustainable travel modes including walking, cycling and public transport over the lifetime of the development plan, in line with the city mode share targets of 26% walking/cycling/micro mobility; 57% public transport (bus/rail/LUAS); and 17% private (car/ van/HGV/motorcycle)".
- Policy SMT14 "To manage city centre road-space to best address the needs of pedestrians and cyclists, public transport, shared modes and the private car, in particular, where there are intersections between DART, LUAS and Metrolink and with the existing and proposed bus network."
- Objective SMTO17:(i) "To promote and seek the development of a new interchange station at Cross Guns Glasnevin, subject to environmental requirements being satisfied and appropriate planning consents being obtained, as part of the DART+ and Metro link projects."
 - (ii) "To promote and seek provision of additional stations as part of the DART+ projects in consultation with larnrod Éireann/Irish Rail".
- SMT22: "To support the expeditious delivery of key sustainable transport projects so as to provide an integrated public transport network with efficient interchange between transport modes, serving the existing and future needs of the city and region and to support the integration of existing public transport infrastructure with other transport modes. In particular the following













projects subject to environmental requirements and appropriate planning consents being obtained: • DART + ."

• **SMT23:** (i) "To work with larnród Éireann/Irish Rail, the NTA, TII and other operators to progress a coordinated approach to improving the rail network, integrated with other public transport modes to ensure maximum public benefit and promoting sustainable transport and improved connectivity."

The DART+ South West Project aligns with, and is supported by, the policies and objectives of the DCDP.

2.3.5.1.1. Park West - Cherry Orchard Local Area Plan 2019

The Park West - Cherry Orchard Local Area Plan (LAP) was adopted in 2019 and provides for the future development of the area.

The LAP notes the following about the Park West – Cherry Orchard station and Kildare Line which runs centrally through the area:

- "The station is served by commuter and intercity services serving Heuston and Connolly stations; however, infrequent services do not make travel by train an attractive option.
- Vacant ground floor units in the vicinity of the train station reflect the limited use of the train station as a means of travel".

The LAP identifies 46 hectares of land available for development with the potential to deliver approximately 2,000 new residential units alongside new mixed use and commercial development. It identifies several vacant Key Development Sites, including sites which immediately adjoin the Kildare Line to the north and south. The overarching development strategy for the LAP is for the development of these vacant sites and their successful integration into the existing fabric of both the immediate area and the wider city.

The proposed land use strategy for the land includes mixed-use development with employment generating uses around the Park West – Cherry Orchard station. Refer to Figure 2-8. The DART+ South West Project will improve commuter rail services at this location and therefore enhance the social and economic conditions of the area.



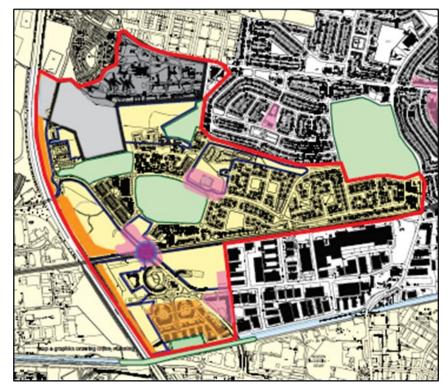












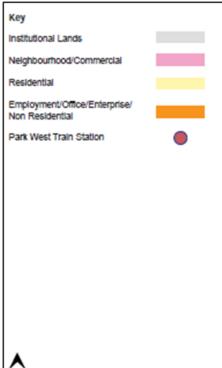


Figure 2-8 Proposed Land Use Strategy
Source: Park West – Cherry Orchard LAP 2019

2.3.5.1.2. The City Edge Project

The City Edge Project is emerging policy rebranding the Naas Road – Ballymount – Cherry Orchard – Park West URDF Masterplan, which was published in September 2020. The City Edge Project is a transformative regeneration project for the Naas Road, Ballymount and Park West areas in Dublin with a total study area of 700 ha. It is envisaged the scheme will create a new urban space with the potential for 40,000 new homes and 75,000 new jobs.

The project study area runs parallel to the railway track between Park West & Cherry Orchard and Inchicore and includes lands at Inchicore Works, Kylemore Road Bridge and Le Fanu Bridge within the project area, refer to Figure 2-9.

Following detailed analysis of the area and public consultation on an Emerging Preferred Concept, the City Edge Strategic Framework was published in August 2022. The purpose of the Strategic Framework is to set out a high-level approach and transformational trajectory for the regeneration of a new liveable, sustainable and climate resilient urban quarter. Amongst the objectives proposed is a new rail station and transport interchange on the rail line at Kylemore, and there is also an emphasis on Transport Oriented Development. It is envisaged in the Framework document that a Local Area Plan for the project will be advanced jointly by Dublin City Council and South Dublin County Council.













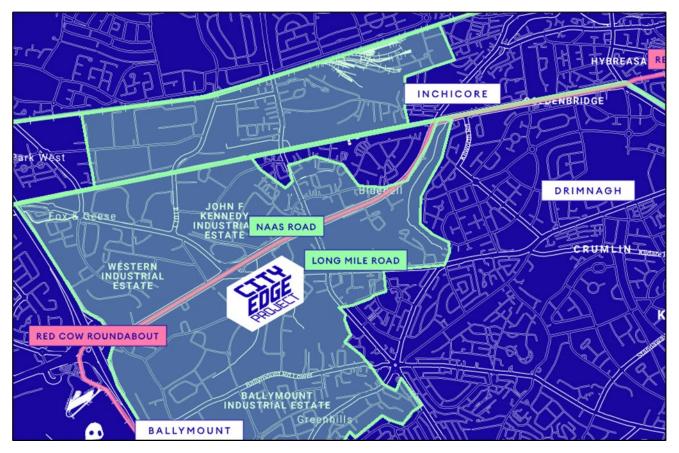


Figure 2-9 City Edge Project Area Map

Source: cityedge.ie

2.3.5.2. Heuston Masterplan

The non-statutory Heuston Masterplan has been prepared to guide the future development of the Strategic Development Regeneration Area (SDRA 7) under the Dublin City Development Plan.

The concept in the Masterplan envisages a substantial quantum of mixed-use development (c. 210,000 sq.m) including over 1,000 residential units. The development of the area is intended to be an exemplar of Transport Orientated and Sustainable Development focused around Heuston Station and Heuston West (the new DART station proposed under the subject RO application), with new pedestrian and cycling infrastructure offering sustainable links to the wider city. The development of this and will open c. 1km of river frontage and link the green assets of Phoenix Park and the Irish Museum of Modern Art.

The location of the proposed Heuston West station is identified in the western portion of the Masterplan area (see Figure 2-10). Links to the existing development at Clancy Quay are also identified, along with a new Liffey Boardwalk that links through (over or under) the existing railway line.















Figure 2-10 Indicative Masterplan Layout

Source: Heuston Masterplan

The proposed DART+ South West Project is running ahead of the masterplan, which is still in an early stage of development. By providing a new station and new commuter rail connectivity, DART + South West will facilitate the proposed masterplan. Iarnród Eireann, as both landowner and transport operator, will ensure integration of the proposed Heuston West Station with the ambitious new masterplan, as the masterplan is developed in more detail. This will include provision for efficient and attractive interchange between transport modes in the wider Heuston area, and development of the public realm to a high standard.

2.3.5.3. South Dublin County Development Plan 2022-2028

The route travels through the administrative area of South Dublin County Council (SDCC), the future development of which is governed by the *South Dublin County Development Plan 2022-2028* (the SDCDP). The South Dublin County Development Plan 2022-2028 (SDCC Plan) came into effect on 22nd June 2022. The previous Plan, which was in place between 2016 and 2022, has now been superseded. The SDCDP provides the spatial framework for the county in the context of national and regional policy frameworks and outlines qualitative and quantitative development management standards against which the DART+ South West will be assessed.

The SDCC Plan sets out a vision to "increase the number of people walking, cycling and using public transport and reduce the need for car journeys, resulting in a more active and healthy community, a more attractive public realm, safer streets, less congestion, reduced carbon emissions, better air quality, and a positive climate impact."













The Development Plan also contains policies and objectives which promote measures that have the potential to reduce the climate impact of transport by encouraging a shift from private motorised transport to walking, cycling and public transport. The objectives of the SDCC Plan under Chapter 7 'Sustainable Movement' are consistent with national and regional planning policy and include a number of objectives in relation to the DART+ Programme:

SM1 Objective 1: "To achieve and monitor a transition to more sustainable travel modes including walking, cycling and public transport over the lifetime of the County Development Plan, in line with the County mode share targets of 15% Walk; 10% Cycle; 20% Bus; 5% Rail; and 50% Private (Car/Van/HGV/Motorcycle)."

SM1 Objective 3: "To support the delivery of key sustainable transport projects including DART and Luas expansion programmes, BusConnects and the Greater Dublin Metropolitan Cycle Network in accordance with RPO 5.2 of the RSES/MASP."

SM3 Objective 2: "To facilitate and secure the implementation of major public transport projects as identified within the NTA's Transport Strategy for the Greater Dublin Area (2016-2035) as updated to 2042, or any superseding document, including BusConnects, the DART expansion programme along the Kildare route, the opening of the new rail station at Kishogue and the Luas to Lucan."

Chapter 7 of the plan notes that heavy rail services within the County are scheduled for significant upgrade and improvement including proposals for DART+ that will see increased train frequency on the Heuston to Hazelhatch line with capacity for up to 23 trains per hour in each direction with stops at Adamstown, Clondalkin/Fonthill and Park West in the Naas Road area, along with the opening of the rail station at Kishogue in Clonburris. Section 7.6.2 of the Plan notes the value that the DART expansion programme will bring, including in relation to employment areas and new housing development. The proposed DART+ South West Project aligns with the objectives set out in the SDCC Plan.

2.3.5.3.1. Adamstown Strategic Development Zone 2014

The Adamstown Strategic Development Zone Planning Scheme (the Planning Scheme) was originally approved by An Bord Pleanála in 2003, and further amended in 2014. When complete, the 223.5 ha area will provide approximately 7,000 no. residential units focused around Adamstown Railway Station. The SDZ scheme is illustrated in Figure 2-11.

The Planning Scheme was prepared regarding best practice in the planning and design of new urban communities. Its holistic design approach seeks to "create urban place with a strong sense of identity that is attractive and desirable as well as safe and secure, in a traditional town and village format".

The Planning Scheme was conceived to: "Provide alternatives to the private car in the form of a new railway station and transport interchange, additional rail capacity, dedicated bus routes and a continuous network of walking and cycling links".

The delivery of DART+ South West Project will significantly improve the frequency and reliability of commuter services at Adamstown Station which will bring social and economic benefits to this growing community.















Figure 2-11 Adamstown SDZ Scheme

2.3.5.3.2. Clonburris Strategic Development Zone 2019

In 2006, Government Order (SI 442 of 2006) designated 180 hectares of land at Clonburris as a Strategic Development Zone (SDZ). A Planning Scheme was subsequently made in 2008.

In 2015, Government Order (SI No. 604 of 2104) designated 280 hectares of land at Clonburris-Balgaddy as a SDZ; revoking the 2006 Order and 2008 Planning Scheme. Under the Designation of Strategic Development Zone: Balgaddy – Clonburris, the lands which are deemed to be of economic and social importance to the state, are "for residential development and the provision of schools and other educational facilities, commercial activities, including employment office, hotel, leisure and retail facilities, rail infrastructure, emergency services and the provision of community facilities, including health and childcare services." The current Planning Scheme for the Clonburris SDZ was approved by An Bord Pleanála in May 2019.

The Kildare / Cork railway line runs centrally / along the northern boundary of the lands and there are train stations within the SDZ, the Clondalkin-Fonthill station (which is operational) and the Kishoge station (which was constructed as part of the Kildare Route Project but which is not operational). Overarching principles of the Planning Scheme include:

To develop the SDZ in a manner that maximises existing and proposed public transport opportunities, including high quality rail and bus services;













- To direct land-uses and densities across the SDZ lands in a manner that creates a sustainable urban district that is based on the integration of land-use and transport planning; and
- To develop vibrant mixed-use centres around Clonburris and Kishoge railway stations as part of a hierarchy of urban centres to serve Clonburris.

The Planning Scheme therefore provides for the following:

- A land use strategy that will result in 98% of residences being located within 400 metres of a bus stop or within 800 metres of a train station.
- Both the Kishoge and Clondalkin-Fonthill Railway stations as forming focal points for the two planned urban centres within the SDZ lands. The main commercial areas are focused primarily around Fonthill Train Station and to a lesser extent Kishoge Train Station.
- Both the Kishoge and Clondalkin-Fonthill Railway stations serving as interchanges between rail, bus, car, walking and cycling.

The land use strategy focused on the two train stations within the SDZ is evident in Figure 2-12. The Masterplan is illustrated in Figure 2-13.

Like Adamstown, Clonburris was conceived as a transport-oriented development; with the Planning Scheme(s) designed to provide alternatives to private car use, via both existing and new rail stations, additional rail capacity, the future planned electrification of the rail line and dedicated bus routes. The DART+ South West Project is therefore a key enabler for Clonburris to reach its full and intended sustainable transport-oriented development potential. The DART project will increase the frequency and efficiency of the rail service, but the physical scope of the project does not extend beyond the existing rail stations.

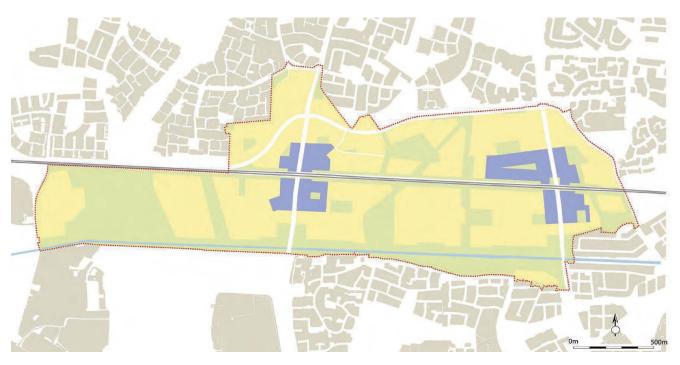


Figure 2-12 Land Use Map

Source: Clonburris SDZ Planning Scheme 2019













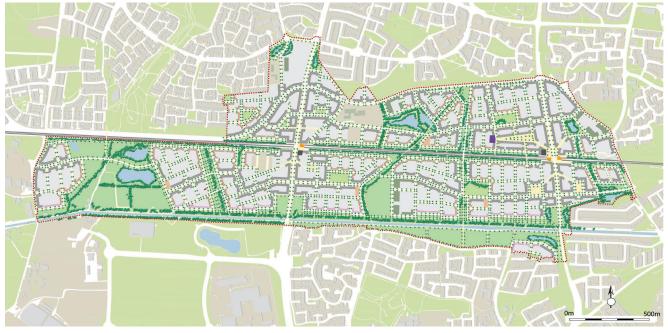


Figure 2-13 Clonburris Planning Scheme Masterplan Source: Clonburris SDZ Planning Scheme 2019

2.3.5.4. Kildare County Development Plan 2017-2023

The western portion of the route runs through the administrative area of Kildare County Council (KCC) and terminates at Hazelhatch. The future development of this area is governed by *Kildare County Development Plan 2017-2023* (the KDCP). The KCDP sets out an overall strategy for the proper planning and sustainable development of the functional area of County Kildare and aims to strengthen the county by facilitating sustainable development through the provision of physical and social infrastructure

At its adjourned meeting on 9th June 2020, KCC adopted a Variation (Variation No. 1) of the KCDP in response to changes in national and regional policy, namely the publication of the NPF and the RSES. The KCDP now designates Celbridge a 'Self-Sustaining Town' and as such will require "contained growth, focusing on driving investment in services, employment growth and infrastructure while balancing housing delivery."

The aim of the KCDP in terms of Transportation and Movement is to "promote ease of movement within and access to County Kildare, by integrating sustainable land use planning with a high-quality integrated transport system; to support improvements to the road, rail and public transport network, together with cycleway and pedestrian facilities".

The main policies and objectives stated in the County Development Plan which are of specific relevance to the DART+ Programme include:

MT 1: "Promote the sustainable development of the county through the creation of an appropriately phased integrated transport network that services the needs of communities and businesses."

MT 2: "Support sustainable modes of transport by spatially arranging activities around existing and planned high quality public transport systems."













- MT 3: "Influence people's travel behaviour and choices towards more sustainable options by working closely with relevant organisations in improving and accessing public transport facilities."
- **MT 8:** "Seek to address urban congestion with particular emphasis on facilitating improved bus transport movement and reliability and improved links to bus and railway stations."
- **PT 1**: "Promote the sustainable development of the county by supporting and guiding national agencies including the National Transport Authority in delivering major improvements to the public transport network and to encourage public transport providers to provide an attractive and convenient alternative to the car".
- **PT 2**: "Generate additional demand for public transport services by strengthening development around existing and planned high-capacity transport routes and interchanges throughout the county".
- **PT 3**: "Support the delivery of the NTA's Greater Dublin Area Transport Strategy (2016-2035) in Kildare".
- **PT 5**: "Investigate, in co-operation with larnród Éireann and the National Transport Authority, the provision of new railway stations in the county and the upgrading/relocation of existing stations, to rectify existing constraints in the network".
- **PT 7**: "Promote and support the upgrading of the Maynooth rail line and the Kildare rail line, in accordance with the Transport Strategy for the Greater Dublin Area 2016-2035 and in cooperation with the NTA".
- PTO 3: "Support the delivery of the NTA's Greater Dublin Area Transport Strategy (2016-2035) in Kildare."

The proposed DART+ South West Project aligns with these objectives and will support existing and future communities in County Kildare, specifically for the population of Celbridge.

2.3.5.4.1. Celbridge Local Area Plan 2017-2023

The DART+ South West corridor terminates at Hazelhatch Station, c. 2km to the southeast of Celbridge's town centre. One of the aims of the *Celbridge Local Area Plan 2017-2023* (LAP) is to set out a framework for enhancement of the town's existing transport network by increasing permeability, particularly for sustainable modes of transport and improving access to public transport.

The LAP identifies several Key Development Areas (KDAs) including KDA 2 Ballyoulster and KDA 5 Simmonstown located to the south of the River Liffey between Celbridge town centre and Hazelhatch Train Station.

LAP Objectives of relevance to DART+ South West include:

MTO 1.2: "To facilitate and encourage cycle as a more convenient and safe method of transport through the development of new or improved cycle facilities in Celbridge with a particular focus on the routes identified in the National Transport Authority (NTA) Greater Dublin Area Cycle Network Plan to link population, commercial, community facilities, schools and transport nodes."













- MTO 2.1: "To create an interlinked public transport network that maximises the efficiency of existing services, reduces overall journey times and facilitates easy exchanges between modes and/or routes."
- **MTO 2.4**: "To provide greater opportunities for modal shift to public transport through the appropriate management of development particularly in lands to the south of Celbridge Town Centre."
- MTO 2.5: "To work with all agencies to improve and develop public transport facilities in the area and to link such facilities with Celbridge Town Centre and other nearby towns and to ensure that developments are carried out in accordance with the requirements of this plan and relevant legislation."
- MTO 2.6: "To promote alternative routes of the bus service to Hazelhatch Train Station so that it serves Main Street, Maynooth Road, Shackleton Road and Clane Road."

The LAP also includes an objective to improve the road and footpath linking Celbridge to Hazelhatch Station.

The expansion of DART rail services to Hazelhatch and future housing (delivered through the KDAs) are identified as additional pressures for an already congested network and Kildare has appointed consultants to progress a scheme comprising a second river crossing of the River Liffey and a mainline carriageway linking Celbridge to Hazelhatch train station.

2.3.5.5. The Draft Kildare County Development Plan 2023-2029

The *Draft Kildare County Development Plan 2023-2029* is being progressed. The public consultation process for Stage 2 of the Draft Kildare County Development Plan took place between March – May 2022 and the proposed material alterations to the draft Plan were on display in September and October 2022. The process of developing the plan is expected to conclude in early 2023. The main policies and objectives stated in the Draft County Development Plan which are of specific relevance to the DART+ Programme include:

- **TM P1**: "Promote sustainable development through facilitating movement to, from, and within the County that is accessible to all and prioritises walking, cycling and public transport".
- **TM P3**: "Promote the sustainable development of the county by supporting and guiding national agencies in delivering major improvements to the public transport network and to encourage a shift from car-based travel to public transport that is accessible for all, regardless of age, physical mobility, or social disadvantage".
- **TM 09**: "Facilitate and secure the delivery/implementation of the public transport projects that relate to County Kildare as identified within the Integrated Implementation Plan (2019-2024), (or any superseding document), including the DART+ programme (Including DART+ West and DART+ South West), BusConnects and the light rail investments. The DART+ projects present an opportunity to improve journey time, reliability, and train frequency."
- **TM043**: "Facilitate and support the extension of the DART+ line to Kilcock, the extension of the DART+ Southwest line to Naas/Sallins (and promote a future extension to Newbridge and













Kildare Town in the next DART+ Programme / GDA Transport Strategy Review) and the extension of the LUAS network, in co-operation with Irish Rail, the Department of Transport and the National Transport Authority."

TM044: "Support the electrification of intercity routes".

It is envisaged that the *Draft Kildare County Development Plan 2023-2029* will be adopted in January 2023. The proposed DART+ South West Project will support existing and future communities in County Kildare, specifically for the population of Celbridge.

2.4. Need for the Project

Delivering a sustainable transport system is a key adaptation measure to respond to the challenge of climate change and Ireland's international obligation to meet its EU 2030 and 2050 climate agreements as a signatory of the international treaty on climate change (Paris Agreement, 2016). The government is currently implementing a range of major projects that will assist in meeting increased transport demand through greener public transport to tackle climate change but also provide a better and more sustainable quality of life, cleaner air, and health benefits for current and future generations. The DART+ Programme is one of these major projects.

The DART+ Programme will provide a high-capacity, sustainable and efficient rail transit system for the Greater Dublin Area that delivers a substantial increase to peak-hour capacity, frequency, and reliability. The Programme will benefit all transport users in the region, with improved connectivity for regional towns and cities and reduced congestion and will enable high density and sustainable development along the railway corridor.

Having regard for the background and policy context set out in earlier sections, the need for the project and the key objectives relating to the DART+ Programme and, specifically the DART+ South West Project are summarised in Figure 2-14.

Provides Sustainable Transport Options Over-reliance on private car use and increasing congestion in Greater Dublin Area. DART trains are more sustainable and cleaner than current diesel trains. Achieve Climate Change Targets Will help reduce the transport sector greenhouse gas emissions which continue to rise. Supporting the Government's Climate Action Plan.

Supporting Economic and Population Growth

- Congestion in Greater Dublin Area is increasing.
- Cost of Time Lost in the Dublin Region is -€350million/annum and forecast to rise to €2,000million/annum by 2033.
- Sustainable public transport infrastructure (pedestrian, cycling, bus and rail) will sustain economic and population growth while reducing emissions.

Integration of Land-use & Transport Planning

- Co-ordination and integration of spatial planning with rail transport.
- Supporting compact growth and increased densities in the Greater Dublin Area.
- Supports the implementation of the Project Ireland 2040 and the National Planning Framework.

Facilitates Integration with other modes of transport

- Improves integration of rail services with active modes of travel (walking and cycling).
- Enables greater cross-modal journeys through improved integration with other modes – Bus, Luas, proposed MetroLink and Dublin Bikes.

Figure 2-14 Why Investment in DART+ Programme is Needed













The Programme has been prioritised as part of the National Development Plan 2021-2030 and Project Ireland 2040 and will be integral to the provision of an integrated, high quality public transport system in line with national, regional, and local planning policy.

The delivery of DART+ South West Project and the enhancement of the heavy rail network between Hazelhatch & Celbridge Station and Dublin City Centre will assist in meeting the DART+ Programme objectives to create a full metropolitan DART network with all lines linked and connected, and with frequency and capacity of services significantly enhanced.

2.4.1. DART+ Programme Objectives

The primary objective of the DART+ Programme is to support urban compact growth and contribute to reducing transport congestion and emissions in Dublin by enabling modernised high-quality commuter rail services between Dublin City Centre and the areas of Drogheda, Maynooth, Dunboyne, Celbridge and Greystones. This is aimed to provide a safe, sustainable, efficient, integrated, and accessible public transport service along these corridors.

Sub-objectives of the DART+ Programme include:

- Cater for existing heavy rail travel demand and improve customer services along established rail corridors in the Greater Dublin Area through the provision of a higher frequency, higher capacity, electrified heavy rail service which supports sustainable economic development and population growth.
- Improve accessibility to jobs, education, and other social and economic opportunities through the provision of improved inter-rail and inter-modal connectivity and integration with other public transport services.
- Enable further urban compact growth along existing rail corridors, unlock regeneration opportunities and more effective use of land in the Greater Dublin Area, for present and future generations.
- Deliver an efficient, sustainable, low carbon and climate resilient heavy rail network, which contributes to a reduction in congestion on the road network in the Greater Dublin Area and which supports the advancement of Ireland's transition to a low emissions transport system and delivery of Ireland's emission reduction targets.
- Provide a higher standard of customer experience including provision of clean, safe, quiet, modern vehicles and a reliable and punctual service with regulated and integrated fares.

2.4.2. DART+ South West Project Objectives

The DART+ South West Project supports the overall DART+ Programme objectives. It represents the second of the infrastructural projects of the DART+ Programme to be delivered (the first will be the DART+ West Project).

The primary objective for the DART+ South West Project focuses on the target to increase the carrying capacity on the Project route corridor between Hazelhatch to Heuston and Glasnevin from the current peak capacity of approximately 5,000 passengers per hour per direction to approximately













20,000 passengers per hour per direction. This will be achieved by implementing an electrified railway network with higher capacity DART trains, increasing the frequency of services, and providing a new station at Heuston West.

Sub-objectives of the DART+ South West Project include:

- To deliver higher frequency, higher capacity, electrified rail service along the Project route corridor to enable the extension of the DART service to Hazelhatch & Celbridge Station.
- To deliver solutions to meet the Train Service Specification.
- To separate Intercity and fast regional services from the future DART service by providing additional tracks between Park West & Cherry Orchard Station and Heuston Station.
- To tie-in the Cork Mainline with the wider DART+ Programme using the recently opened rail link and existing connector tunnel through the Phoenix Park.
- To identify sustainable cost-effective solutions from a capital, operations, and maintenance perspective.
- To minimise adverse impacts on the natural and built environment during construction, operation and maintenance.
- To minimise impacts on existing rail services, road users and landowners during construction.
- To deliver a sustainable, low carbon and climate resilient design solution including making use of existing infrastructure where possible with targeted improvement works.
- To deliver an improved customer experience and service for customers along the Project route corridors.

The delivery of DART+ South West Project and the enhancement of the heavy rail network between Hazelhatch & Celbridge Station and Dublin City Centre will clearly assist in meeting the DART+ Programme objectives to create a full metropolitan DART network with all lines linked and connected, and with frequency and capacity of services significantly enhanced and provide opportunity for further expansion of the electrified network, introduction of new stations and transport mode interchange points across the GDA rail network as outlined in the NDP 2021-2030.













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