

2023 CAPITAL INVESTMENT PROGRAMME

October 2024





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INTRODUCTION



Background to the 2023 Capital Investment Programme

As part of its remit to support the delivery of an integrated, accessible public transport system, the National Transport Authority (NTA) operates a Capital Investment Programme across various activities such as Heavy Rail, Bus, Light Rail, Accessibility, Park & Ride, Ticketing & Technology, and Active Travel. This includes the provision of funding to public transport bodies, local authorities, and other agencies for the implementation of various projects and programmes within the Greater Dublin Area and the Regional Cities of Cork, Limerick, Galway, Waterford and other areas of the State. The strategic transport planning and development of effective traffic and transport demand management are also key functions undertaken in respect of the Capital Investment Programme. The Capital Investment Programme aims to improve the transport offering for those choosing alternatives to the private car as a mode of transport.

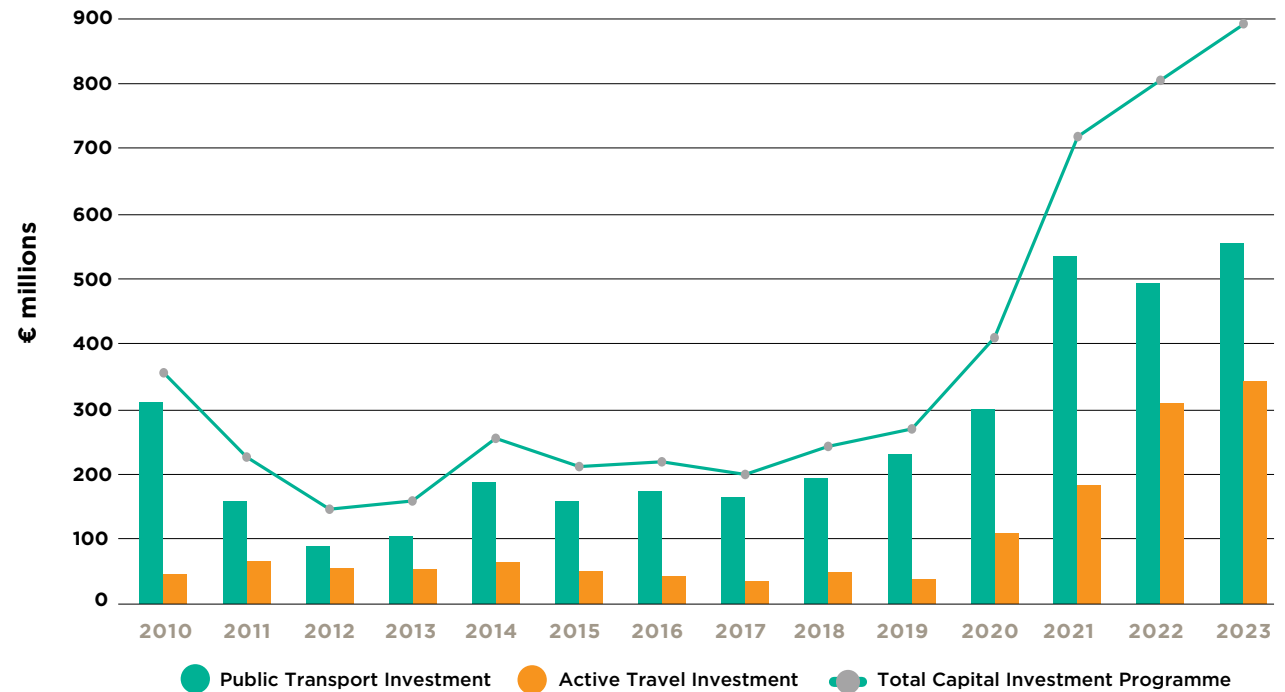


Figure 1: Capital Investment Programme Funding 2010 - 2023

Historical Funding and Context

The early years, following the establishment of the NTA in 2009, were marked by a decline in funding for public transport investment. In the last 6 years, since 2017, there has been a welcome return to growth in demand for public transport and a corresponding increase in Government funding for the delivery of major infrastructure projects and programmes.

In 2023, the NTA saw its funding for the Capital Investment Programme grow to €894.3 million, an 11% growth on 2022 funding.

Purpose and Outline of this Report

The purpose of this report is to provide an overview of the Exchequer funding from the Department of Transport (DoT) to the NTA's Capital Investment Programme in 2023, in terms of the projects and programmes which were under development during 2023, progress achieved within the year and other key details/milestones.

The report is developed as follows:

- › Executive Summary which provides an overview of the key achievements, summary of projects by programme, and challenges in 2023.
- › 2023 progress update on the key components and achievements of the Active Travel Investment Programme and Public Transport Investment Programme.
- › Appendices which provides further breakdowns and an update of capital projects and programmes within the Public Transport Investment Programme.

Overall Capital Investment Programme

The overall Exchequer funding for the 2023 NTA Capital Programme provided by Department of Transport was €894.3 million which was allocated amongst the various projects/programmes in the Capital Programme. As part of its remit to support the delivery of public transport, the NTA operates a number of different capital programmes as follows:

Section 1 - Active Travel Investment | €341.3m in 2023

The NTA operates an Active Travel Investment Programme whereby funding is provided to local authorities, public transport bodies and other agencies for the implementation of various projects and programmes centred around the provision of pedestrian and cyclist infrastructure and facilities, safety, and access to schools and public transport.



Section 2 – Public Transport Investment | €553m in 2023

Heavy Rail Programme | €247.2m in 2023

The NTA operates a Heavy Rail Investment Programme which primarily provides funding to Iarnród Éireann (IÉ) for various rail projects. Major investments within the Heavy Rail Programme include the DART+ Programme, National Train Control Centre, and the Cork Area Commuter Rail Programme

Bus Programme | €176.1m in 2023

Major investments within the Bus Programme include the BusConnects Programmes and Bus Fleet acquisitions.

Park and Ride | €3.5m in 2023

This programme includes the development of additional parking facilities at railway stations plus the development of new strategic park & ride sites.

Light Rail | €66.9m in 2023

The NTA operates a Light Rail Investment Programme which primarily provides funding to Transport Infrastructure Ireland (TII) for various Luas projects. MetroLink is a major investment scheme within the Light Rail Programme.

Accessibility | €19.8m in 2023

This programme provides for accessibility measures such as lifts and bridges at railway stations, grants for wheelchair accessible taxis and travel assistance programme for people needing support to use public transport.

Transport Technology | €19.5m in 2023

Projects such as Leap card enhancements, the real time passenger information system, travel apps, vehicle location systems and others are developed through the Transport Technology programme.

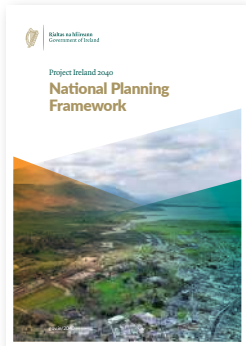
Integration and Support Projects and Services | €19.9m in 2023

Strategic transport planning, the development of complex transport models, project appraisal and assurance functions plus various other similar projects are developed under this programme.



Policy and strategic context

The following policies govern NTA priorities and funding:



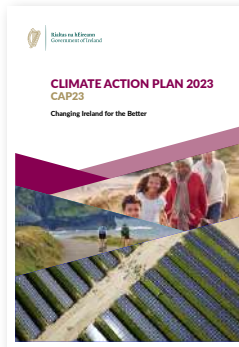
National Planning Framework (NPF)

Ireland's strategic planning framework that discusses strategic outcomes relevant to NTA programmes such as sustainable mobility, compact growth, enhanced regional accessibility, high-quality international connectivity, and lower carbon emissions. Part of **Project Ireland 2040**.



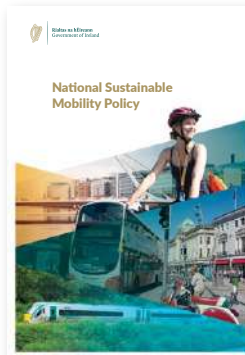
National Development Plan 2021-2030 (NDP)

Provides the enabling public investment of €165 billion to implement the NPF strategy as part of **Project Ireland 2040**.



Government's Climate Action Plan 2023 (CAP)

Calls for decisive action to halve Ireland's carbon emissions by 2030 and provides the roadmap for reaching the ultimate target of net zero by 2050. The plan targets a 50% reduction in emissions from the transport sector by 2030.



Department of Transport's National Sustainable Mobility Policy (SMP)

Sets out a strategic framework for walking, cycling and public transport to support Ireland's climate ambitions, much of which will be delivered through the various NTA programmes.



National Investment Framework for Transport in Ireland (NIFTI)

Sets out a framework for the prioritisation of future investment in the land transport network. All transport projects are required to align with the Investment Priorities, Modal Hierarchy and Intervention Hierarchy of NIFTI.



Our Rural Future 2021-2025

Government's national rural development policy, setting out a blueprint for policy making and investment in rural Ireland, which includes NTA's expansion of Local Link services through Connecting Ireland.

EXECUTIVE SUMMARY



Active Travel Investment 2023 Key Highlights



71km of new or upgraded cycle infrastructure



123km of new or improved pedestrian infrastructure



€341.3m
invested



>750km
of active travel km delivered since 2019



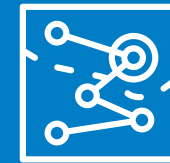
275
schools in Safe Routes to Schools Programme



>900
projects allocated funding in 31 local authorities



762%
increase in spend since 2019



391
junctions upgraded in 2023



4
new pedestrian/cycle bridges delivered in 2023



>20,000
cycle parking stands delivered since 2020, providing spaces for over 40,000 cycles

Public Transport Investment 2023 Key Highlights




Progression of 3 Major Programmes (BusConnects, DART+ and MetroLink)

Please see spotlights on each on pages 12 - 19 for more details.




€553m invested



120

buses purchased in 2023: 92 double-deck battery-electric buses, 4 single-deck battery-electric buses, 24 double-deck coaches.



139%

increase in spend
since 2019




269

sponsored projects/programmes
across 20 agencies



134

new standard bus
shelters installed



678

new TFI bus poles installed

BUS CONNECTS

TRANSFORMING CITY BUS SERVICES

BusConnects 2023 Spotlight | €139.2m in 2023



Figure 2: BusConnects Vision and Strategic Objectives

The BusConnects programme is a key part of the Government's policies to improve public transport and address climate change in Ireland's major urban centres: Dublin, Cork, Galway, Limerick and Waterford.

It delivers on commitments within the National Development Plan 2021-2030, the Transport Strategy for the Greater Dublin Area 2022-2042, the Climate Action Plan 2023 and the National Planning Framework 2040.

The transformative programme will connect people and places through an enhanced bus system. It will improve public transport, redesign bus routes, upgrade infrastructure, and promote cleaner travel.

BusConnects Dublin | €107.1m in 2023

During 2023, the BusConnects Dublin programme made significant strides. Key achievements included the introduction of new bus routes and fully electric buses, thorough planning for a new ticketing system, and confirmation of planning consent for the first of 12 new bus corridors. Highlights from relevant BusConnects Dublin projects are outlined below.

Network Redesign

The BusConnects Network Redesign project will introduce a redesigned, higher capacity bus network which delivers a better overall bus system for Dublin and the surrounding areas. In 2023, two phases were delivered with the introduction of new routes (together with relevant stops and shelters infrastructure). The new routes were:

- › the W Orbital routes serving the west and south-west regions of Dublin, including Newcastle, Saggart, Citywest, Tallaght, Liffey Valley, Lucan, Blanchardstown, Hazelhatch, Maynooth, and Celbridge. These 3 new routes will run on average every 15-30 minutes on weekdays and every 30-60 minutes on Saturday and Sunday; and
- › the new Southern Orbital, Radial and Local routes. S2, 74 and L25 are operated by Dublin Bus and routes S4, S6, S8, W2 and L55 are operated by Go-Ahead Ireland, on behalf of Transport for Ireland.

The launch of these phases has resulted in increased capacity and frequency, including increased evening and weekend services, to the communities through which they operate. For all new routes, infrastructure such as stops and shelters, were delivered in alignment with launch dates.

Core Bus Corridors

The aim of the Core Bus Corridors project is to enable and deliver efficient, safe, and integrated sustainable transport movement along the corridors. It involves the development of continuous bus priority infrastructure and improved pedestrian & cycling facilities on key radial corridors in the Greater Dublin Area, across five different jurisdictions.

Overall, the Dublin Core Bus Corridors project encompasses the delivery of approximately 230 km of dedicated bus lanes and 200 km of cycle tracks, which are being developed as 12 separate schemes as illustrated in figure 3.

Building on 2022 progress, in 2023, the remaining 6 (of 12) statutory applications were submitted to An Bord Pleanála for approval to construct under Section 51 of the Roads Act. In December 2023, An Bord Pleanála provided planning approval for the Liffey Valley to City Centre Scheme. As part of the infrastructure works, in February 2023, the Liffey Valley Bus Plaza was opened, providing high quality facilities to support services running from

the Liffey Valley Shopping Centre serving the surrounding areas and the city centre.

In order to engage the national and international contractor market, the procurement process

for the infrastructure framework was initiated with a Prior Information Notice released in the e-tender platform in October 2023 and a webinar briefing to all interested stakeholders later that month.

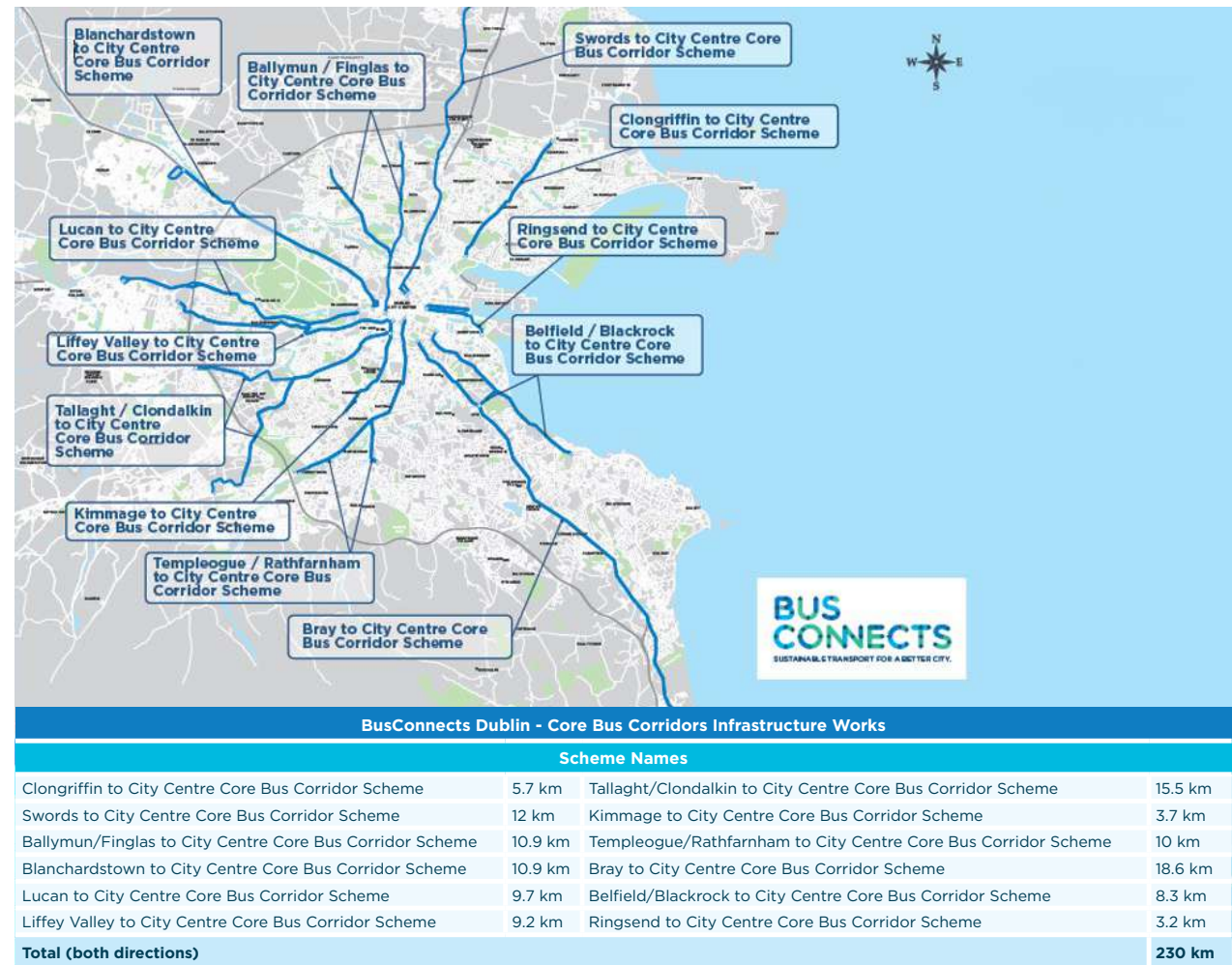


Figure 3: Dublin Core Bus Corridors Schemes



Transition to Low and Zero-Emission Bus Fleet

BusConnects will contribute significantly to the national priority to address climate change. Transitioning to a fleet of low and zero emission buses will support a cleaner and more liveable city by reducing noise and air pollution. In late 2023, the first zero emission battery electric buses became fully operational in Dublin, with charging capacity in place in the Summerhill and Phibsborough depots.



Next Generation Ticketing

As part of the BusConnects Programme, subject to the availability of a sufficiently accessible cash alternative product, Next Generation Ticketing (NGT) will support cashless operations which could be introduced on all buses, to remove the delays caused by cash payments and improve the passenger experience. BusConnects will incorporate the latest developments in account-based ticketing technology, including allowing use of credit / debit cards or mobile devices as a convenient means of payment.

During 2023, the project focused on progressing the ongoing procurement and prepared a final business case to support the expected contract award. The tender phase is expected to complete early in 2024.



Bus Stops

The BusConnects Dublin programme includes construction of enhanced bus stops and shelters across Dublin to align with the redesigned network and Core Bus Corridors. The upgrade of bus stop infrastructure and travel information continued throughout 2023 and included the following key highlights:

- › New TFI-branded poles were installed at 416 bus stops during the infrastructure work carried out in preparation for the introduction of new routes by the Network Redesign project.
- › Construction work was completed to support the introduction of the Western Orbital (W4 & W6) and the Southside Orbital routes for the Dublin Bus Network Redesign. Both routes are now operational.
- › Construction work progressed for the introduction of the F Spine under the BusConnects Dublin programme in early 2025. This initiative encompassed the enhancement of 15 bus stops, complete with upgraded passenger waiting areas and improved kerbing.
- › A further 779 bus stop upgrades, including new pole installations and hardstandings, were tendered in 2023 and will commence construction in early 2024. These will cover locations such as Dublin and the Greater Dublin Area (GDA) (E Spine, F Spine and O Route of BusConnects Dublin).

- › Multiple on-site stop location assessments undertaken with Dublin and Cork Local Authorities to progress future phases of BusConnects Network Redesign.

BusConnects Cork | €13m in 2023

In 2023, the BusConnects Cork programme went through extensive planning and design phases for its projects, including successful public consultations on proposed improvements to the Cork bus network.



Network Redesign

The Cork Network Redesign aims to transform the public transport network across the Cork Metropolitan Area to meet anticipated growth and future demand in the region. The new network will involve the creation of new bus routes and improved bus frequencies. In 2023, the project prioritised planning and design for the first 3 phases of implementation, including the relevant infrastructure.



Sustainable Transport Corridors

Cork Sustainable Transport Corridors will deliver approximately 91 km of new bus lanes and bus priority and 98 km of cycle facilities, making travelling by bus, as well as active travel, a more attractive option while simultaneously reducing carbon emissions and congestion. The second and third rounds of public consultation on the preferred route options for eleven sustainable transport corridors (shown in figure 4) were concluded in 2023.

The scheme designs will be further developed in 2024 and statutory consent applications to An Bord Pleanála will be prepared, including transport and environmental impact assessments.



Figure 4: Cork Sustainable Transport Corridors Schemes

Transition to Low and Zero Emission Bus Fleet

A new fleet of low and zero emission urban buses along with improved cycling facilities will result in more people using eco-friendly modes of transport across the cities of Ireland. Planning approval was received in 2023 for an additional temporary bus depot to enable the bus service increases planned for Cork city and to facilitate the electrification of the fleet and to facilitate the electrification of Bus Éireann’s Capwell bus depot.

BusConnects Galway | €1.9m in 2023

Network Redesign

In 2023, the final new bus network for Galway was published after an extensive review of the bus network, in collaboration with Galway City Council, Galway County Council, local bus operators, and specialised transport designers.

The key benefits of the final new network include:

- › Approximately 50% increase in the amount of bus services in Galway city, Bearna and Oranmore.
- › The extension of bus services to new areas with more routes, frequent services and an enhanced weekend timetable.
- › A new 24-hour bus service, to be known as Route 9, to operate from Knocknacarra through the city centre to Doughiska and Parkmore.
- › More residents of the city and its suburbs having access to the public transport network with Upper Ballymoneen Road, the Coast Road between Galway City and Oranmore and Oranhill among the areas to benefit.
- › More routes running cross-city, and the main point of interchange located at Eyre Square.
- › Simpler fares enabling seamless interchanges.

The new bus network will enable a larger group of individuals to avail of public transport resulting in increased access to a greater number of schools and workplaces across Galway City, Bearna and Oranmore. Overall, 67% of residents will live within 400 metres of a high frequency bus route (running every 15 minutes or better). The NTA plans to commence implementation of the new bus network from 2025.

Sustainable Transport Corridors

The Cross City Link is a public transport corridor linking the western and eastern suburbs through the city centre. The key purpose of this project is to provide a high-quality bus priority corridor through Galway City Centre, connecting the west and the east of the city. It is the foundation scheme for the delivery of the overall Galway Transport Strategy.

A planning consent application for the development of the Cross City Link was submitted to An Bord Pleanála during September 2022 and the decision from a Compulsory Purchase Order Oral Hearing is expected in 2024.

The Dublin Road scheme will be a multimodal link and allow for improvement of footpaths, segregated cycle lanes, junction type and bus lanes both directions with priority at junctions. The route also accommodates regional and national bus services and is one of the key routes into the city.

A multidisciplinary design team was appointed in mid-2022, allowing work to continue on completing the option selection stage & the preliminary design of the project. The project is due to be submitted for planning consent to An Bord Pleanála in 2024.

BusConnects Limerick | €5.1m in 2023

Network Redesign

The new bus network for Limerick was published at the end of 2023. This followed an extensive review of the bus network in Limerick, in collaboration with Limerick City and County Council, Clare County Council and Bus Éireann.

The key benefits of the new network include:

- › Approximately 70% increase in the amount of bus services in Limerick city and its suburbs.
- › The extension of bus services to new areas with more routes, frequent services and an enhanced weekend timetable.
- › A new 24-hour bus service operating between University Hospital Limerick, the city centre and the University of Limerick.
- › Provision of bus services to previously unserved areas such as Ennis Road, Dock Road, University of Limerick north campus and Ardnacrusha.

The new network will be delivered in a phased approach from 2025. It will be supported by a comprehensive public information campaign for bus users as the services are implemented.

Transition to Low and Zero-Emission Bus Fleet

In Limerick, during 2023, infrastructure work progressed to establish an on-site electricity substation, install charging points, and carry out civil and cabling work on all essential components of the charging infrastructure that will enable the transition to zero emission fleet.



Transition to Low and Zero-Emission Bus Fleet

BusConnects Waterford | €45k in 2023

Network Redesign

In 2023, efforts were concentrated on drafting a redesign of Waterford City's bus service network. The completion of this redesign is anticipated in early 2024. It is intended that the public consultation process will start in 2024.

To learn more about BusConnects, please see: <https://busconnects.ie/>



DART+ Programme 2023 Spotlight | €71m in 2023

The DART+ Programme is a transformative programme of projects which aim to modernise and improve existing rail services in the GDA. It will provide a sustainable, reliable and more frequent rail service improving capacity and electrifying the rail corridors serving Dublin. The planning and design of all elements of the DART+ Programme further progressed in 2023.

DART+ Fleet

Significant progress was made in 2023 on the first order of the DART+ Fleet; the design phase was complete, and manufacturing began in October 2023. The first new Battery Electric Multiple Units (BEMUs) are expected to be delivered in 2024, for deployment on the Northern Line in 2026. The BEMUs will operate on the Northern Commuter Line between Drogheda and Dublin. A contract was awarded in 2023 to install BEMU charging infrastructure on two platforms at Drogheda Station. This infrastructure will allow the BEMUs to operate on battery power between Malahide and Drogheda, ahead of the planned extension of overhead electric wires north of Malahide.



Inside the new DART+ Fleet



New DART+ fleet mock-up installed in Inchicore Depot for public consultation in May 2023



DART+ West

The DART+ West project, which includes the electrification of the existing railway between Maynooth and M3 Parkway and the city centre, enhancements to the railway network in the city centre along with a new depot facility to accommodate the new DART Fleet, was submitted at the end of September 2023 and is with An Bord Pleanála for determination.



DART+ South West

A Railway Order for the DART+ South West project was submitted to An Bord Pleanála on 22nd March 2023. This component of the DART+ programme will electrify the existing railway between Hazelhatch / Celbridge and the city centre via the Phoenix Park Tunnel. A period of statutory public consultation took place from 29th March to 16th May 2023 and all members of the public were invited to make a submission on the Railway Order application.



DART+ Coastal North

The DART+ Coastal North project progressed in 2023, which seeks to expand the electrification of the rail network and increase the capacity of the railway infrastructure to support enhanced levels of service between the city centre and Drogheda. The next step in delivering this aspect of the DART+ Programme is the approval of the Railway Order application which will be submitted to An Bord Pleanála by mid-2024. The updated DART+ Preliminary Business Case was submitted for approval in December 2023 to enable submission of the Railway Order.

To learn more about the DART+ Programme please see: <https://www.dartplus.ie/en-ie/home>

METROLINK

MetroLink 2023 Spotlight| €44.6m in 2023

The MetroLink Programme is the development of a high capacity high frequency segregated light metro corridor from Charlemont to Swords, via Dublin Airport and is the single largest investment in transport infrastructure in the history of the State.

The MetroLink Programme integrates with Iarnród Éireann, Dublin Bus and Luas to provide a fully integrated public transport system in the Greater Dublin Area. The corridor is predominantly in tunnel and includes 16 new stations, 11 of which are underground and a park and ride facility.

The Railway Order documentation for the programme was submitted to An Bord Pleanála in September 2022 and public consultation concluded in early 2023.

Planning and design for the MetroLink Programme developed throughout 2023. Proposed future designs can be seen in the adjacent pictures. A Client Partner was also engaged to assist in the further development of the programme requirements in preparation for tender stage.

To learn more about the MetroLink, please see: <https://www.metrolink.ie/#/home>



Proposed Tara Street entrance



Proposed Seatown Station platform

Number of projects by programme represented by stage in their lifecycle

The NTA's Capital Investment Programme at the end of 2023 was comprised of 1200 projects and programmes and the categorisation of these across various sub-portfolios is shown in the table below. Overall, 58% (700) of projects/ programmes are at planning and design, 24% (282) are at construction/implementation and the remainder of 18% (218) are at close out stage.

Programme	No. of projects/ programmes sponsored	% of projects in planning / design / procurement	% of projects at construction/ implementation	% of projects at close out	2023 Spend €'m
Active Travel Investment	931	64%	19%	17%	341.3
Public Transport Investment	269	39%	38%	23%	553.0
<i>Heavy Rail</i>	<i>76</i>	<i>45%</i>	<i>30%</i>	<i>25%</i>	<i>247.2</i>
<i>Bus Programme</i>	<i>103</i>	<i>40%</i>	<i>35%</i>	<i>25%</i>	<i>176.1</i>
<i>Light Rail</i>	<i>13</i>	<i>69%</i>	<i>15%</i>	<i>15%</i>	<i>66.9</i>
<i>Integration & Support Projects and Services</i>	<i>33</i>	<i>12%</i>	<i>76%</i>	<i>12%</i>	<i>19.9</i>
<i>Accessibility</i>	<i>17</i>	<i>29%</i>	<i>18%</i>	<i>53%</i>	<i>19.8</i>
<i>Transport Technology</i>	<i>20</i>	<i>40%</i>	<i>50%</i>	<i>10%</i>	<i>19.5</i>
<i>Park & ride</i>	<i>7</i>	<i>57%</i>	<i>29%</i>	<i>14%</i>	<i>3.5</i>
Total	1200	58%	24%	18%	894.3

Table 1: NTA 2023 Capital Investment Programme represented by programme and stage

Key Challenges of 2023

The challenges and uncertainty that faced the sustainable transport infrastructure programme in the previous year's report continued in 2023. Notwithstanding the impacts of the continued Russian invasion of Ukraine and other global political and economic issues, such as the Israel Gaza War, work continued to progress and expand the provision of sustainable transport infrastructure throughout the State.

In driving forward with the delivery of the NTA's extensive sustainable transport infrastructure programme, navigating such unprecedented levels of investment in a dynamic, complex environment brought with it various challenges. The array of challenges faced by those involved in the delivery of infrastructure projects and programmes in the State included, but are not limited to, the following:

- › Certain projects and programmes continued to face extensive delays in obtaining planning permissions from An Bord Pleanála, with significant associated cost and delivery implications;
- › NTA faced supply chain issues including a shortage of contractors and sub-contractors, construction inflation and material shortages as a result of significant global political and economic events and issues;

- › Due to macro-economic factors, inflationary impacts resulted in significantly increased costs for the delivery of the sustainable transport infrastructure programme. These inflationary impacts created increased funding requirements and the risk of affordability issues based on fiscal constraints; and
- › Substantial domestic and international construction market capacity constraints. The State of Ireland does not have the domestic construction market capacity to deliver the scale of infrastructure requirements inherent in the NDP, both across the transport sector and beyond.

The NTA and its partners such as Transport Infrastructure Ireland and Iarnród Éireann actively mitigate against these in the short term and long term by fostering a flexible and innovative environment.

To help address these risks, in 2023 the NTA continued to work with key stakeholders in the Department of Transport to determine multi annual profiles and communicate the implications of constrained funding scenarios; undertook comprehensive cost forecasts at suitable junctures to ensuring robust estimates and delivering against budget, schedule and benefits; engaged with central government on cost and timeline implications due to planning delays; and undertook extensive market engagement activities to Irish and International contractors to address substantial domestic and international construction market capacity issues. As in other years, across the sustainable transport infrastructure portfolio, organisational and governance arrangements remained a key focus to ensure they are fit for purpose for a growing and evolving portfolio.



SECTION 1: ACTIVE TRAVEL INVESTMENT



Background to 2023 Active Travel Grant Programme

The NTA is the Approving Authority for sustainable travel projects being implemented by Local Authorities throughout the State, with funding predominately focused on Active Travel projects which improve facilities for those walking, wheeling and cycling. Active travel, is seen as a critical component of Ireland’s Climate Action Plan, with a 50% increase in daily active travel journeys required by 2030. To facilitate this, NTA funding to Local Authorities has increased from an average of €34 million per year, between 2015 and 2019, to €341 million in 2023, with almost €1 billion invested in sustainable infrastructure between 2020 and 2023. This increase in funding is to continue into 2024 with over €290 million allocated for NTA funded Active Travel projects, with this level of funding committed until 2025.

Local Authorities, engineering consultants, contractors and the NTA increased their capacity to respond to this increased budget through upskilling of all those involved over a very short period. This has resulted in the delivery of approximately 750 km of active travel infrastructure since 2019.

A significant milestone achieved in 2023 was the completion of the Cycle Design Manual (CDM) update published in September. The CDM draws on the experience of delivering cycling infrastructure across Ireland over the last decade, as well as learning from international best practice, and has been guided by the need

to deliver safe cycle facilities for people of all ages and abilities. This new guide will help deliver world class active travel infrastructure in the years to come. To learn more about the design manual, please visit: <https://www.nationaltransport.ie/publications/cycle-design-manual/>

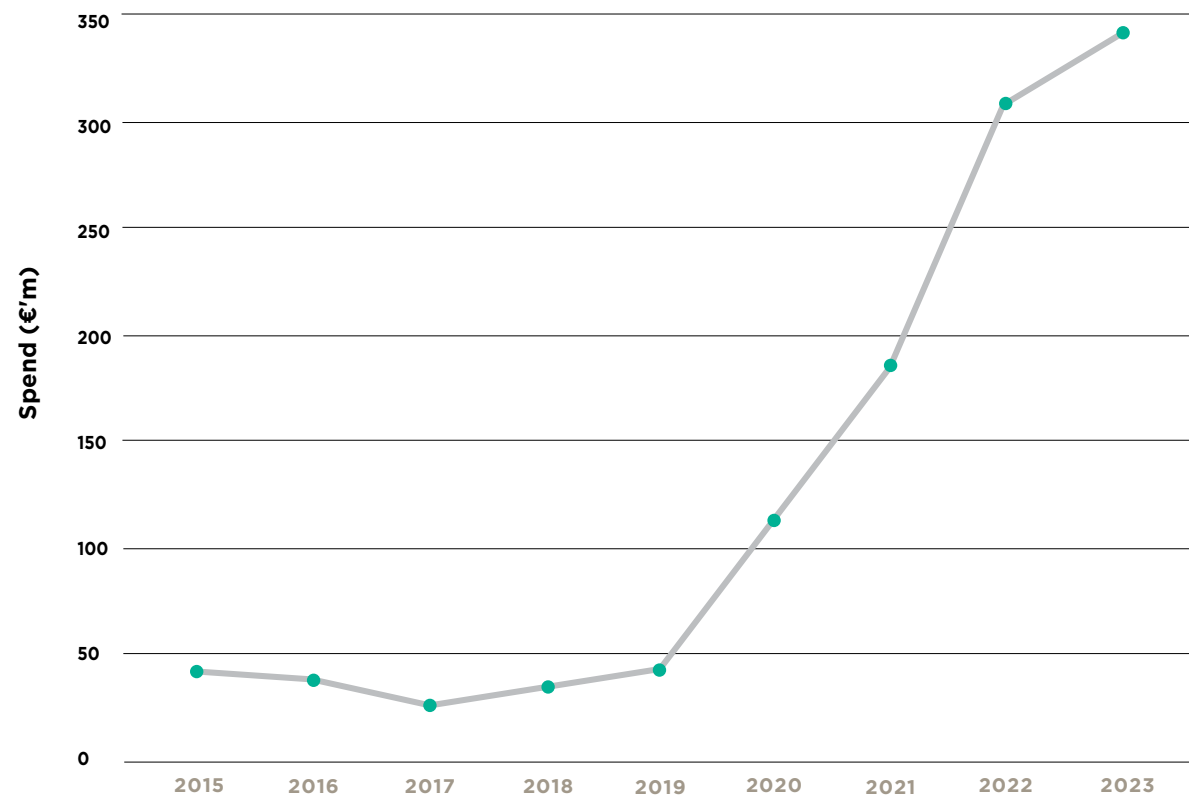


Figure 5: Active Travel Investment Spend Profile 2015 to 2023

Grants

The various grants being managed in 2023 (for the 31 Local Authorities) by the NTA in this area are outlined below:

1. Active Travel Grants Programme

The National Sustainable Mobility Policy, the Climate Action Plan, and other Government policies encourage modal shift, where possible, away from private car use and towards more sustainable transport modes such as walking or cycling.

The Active Travel Grants Programme funds projects supporting strategic pedestrian and cyclist routes, access to schools, permeability links, urban greenways and some minor public transport improvement projects. The aim of the programme is to provide active travel infrastructure that will help deliver at least 500,000 additional daily active travel and public transport journeys and a 10% reduction in kilometres driven by fossil fuelled cars by 2030 in line with metrics for transport set out in the Climate Action Plan.

The 2023 funding covered circa 900 Active Travel projects, which will contribute to the reaching the target of delivering 1,000 km of new, or improved, walking and cycling infrastructure across the country by the end of 2025.

2. Safe Routes to School (SRTS)

The Safe Routes School programme was launched by the Department of Transport and the NTA in March 2021. This programme aims to create safer walking and cycling routes within communities, alleviate congestion at the school gates, and increase the number of students who walk or cycle to school by providing walking and cycling facilities. The improvements to the school commute could range from an upgraded footpath or new cycle lane to a redesign of the front of school's environment. At the closing date for applications, over 930 Schools from every county in Ireland had requested to participate in the new programme. Following assessment 170 schools were selected for inclusion in the Round 1 programme in June 2021. By the end of 2023, 47 Front of School Treatments of Round 1 schools were completed, with a further 65 at detailed design or construction stage.

Round 2, which included 108 schools throughout the country, was launched in December 2022, with surveys and delivery plans produced throughout 2023.

By the end of 2023 cycle parking has been provided to 616 schools as part of the Safe Routes to School programme, representing over 10,000 spaces provided for bicycles and over 1,600 for scooters. In addition, over 4,300 cycle parking and almost 1,200 scooter parking spaces were funded by the NTA as part of the Green Schools Travel programme.



Example of cycle parking installed at Holy Child National School, Kildare



Launch of School Zone at Scoil Naomh Abbáin, Adamstown, County Wexford.

2023 Outturn

The NTA provided funding of €341.3m in 2023, comprising €174m across the 7 Greater Dublin Area (GDA) local authorities, €114.2m to the Regional Cities of Cork, Limerick, Galway and Waterford, and €53.1m to the remaining 19 Local Authorities, as shown in Table 2.

Geographic Area	2023 Spend
GDA Counties	€174m
Regional cities	€114.2
Rural Counties	€53.1
Total	€341,3m

Table 2: GDA/Regional/Rural Spend in 2023

Trend in Spending on Active Travel

The 2023 outturn represented a 10% increase in comparison with the 2022 outturn, and a 773% increase in comparison with the 2019 outturn. Figure 6 shows the increase in overall funding from 2015-2023 per the project category.

Project Category Spending Trend Graph

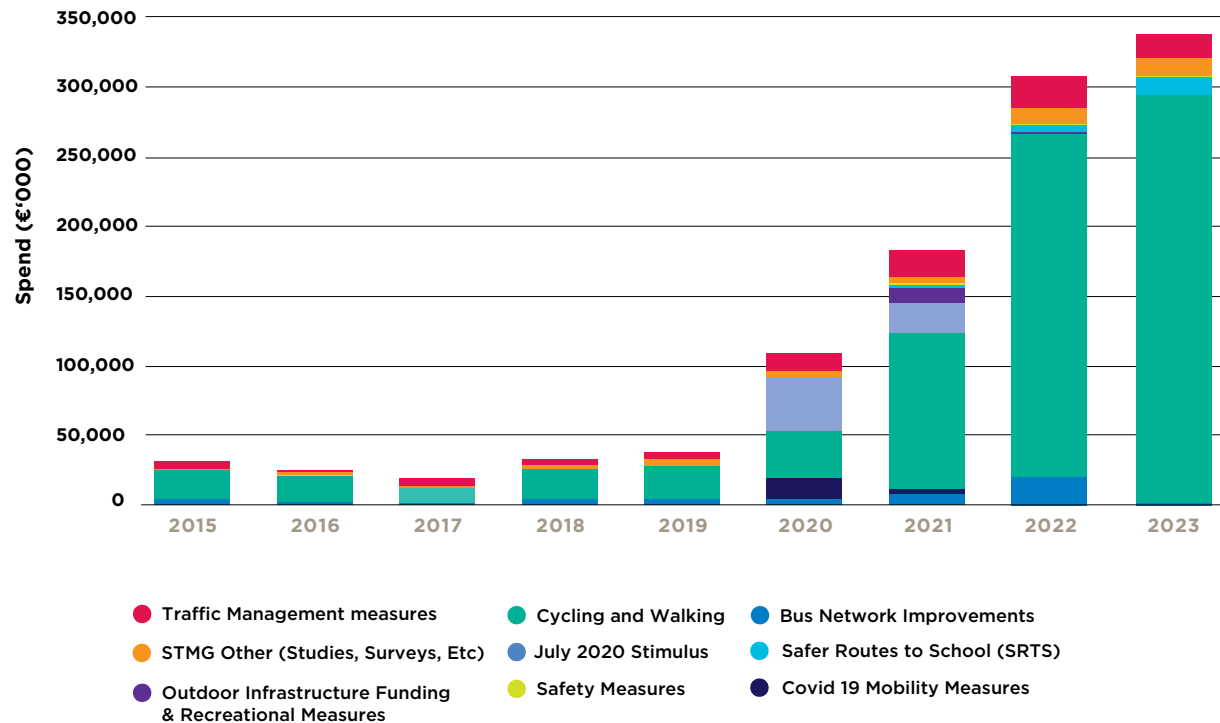


Figure 6: Active Travel Investment Spend Profile 2015 to 2023 by Category

Breakdown by Scheme Type

Tables 3 to 5 show the breakdown of spend by category in the GDA, the Regional Cities and the Rural Counties.

Total	Walking and Cycling	Traffic Management	Safe Routes to School	Bus Network	Safety	Other
174,022,654	151,436,148	6,173,329	6,600,052	1,236,334	293,914	8,282,877
100%	87%	4%	4%	1%	0%	5%

Table 3: GDA Financial Outturn By Scheme Type 2023

Total	Walking and Cycling	Traffic Management	Safe Routes to School	Bus Network	Safety	Other
114,237,953	98,076,074	9,511,907	2,491,523	1,469,115	227,810	2,461,524
100%	76%	13%	1%	9%	0%	1%

Table 4: Regional Cities Financial Outturn By Scheme Type 2023

Total	Walking and Cycling	Traffic Management	Safe Routes to School	Bus Network	Safety	Other
53,039,662	44,832,627	1,084,967	4,738,118	-	250,015	2,133,935
100%	85%	2%	9%	0%	0%	4%

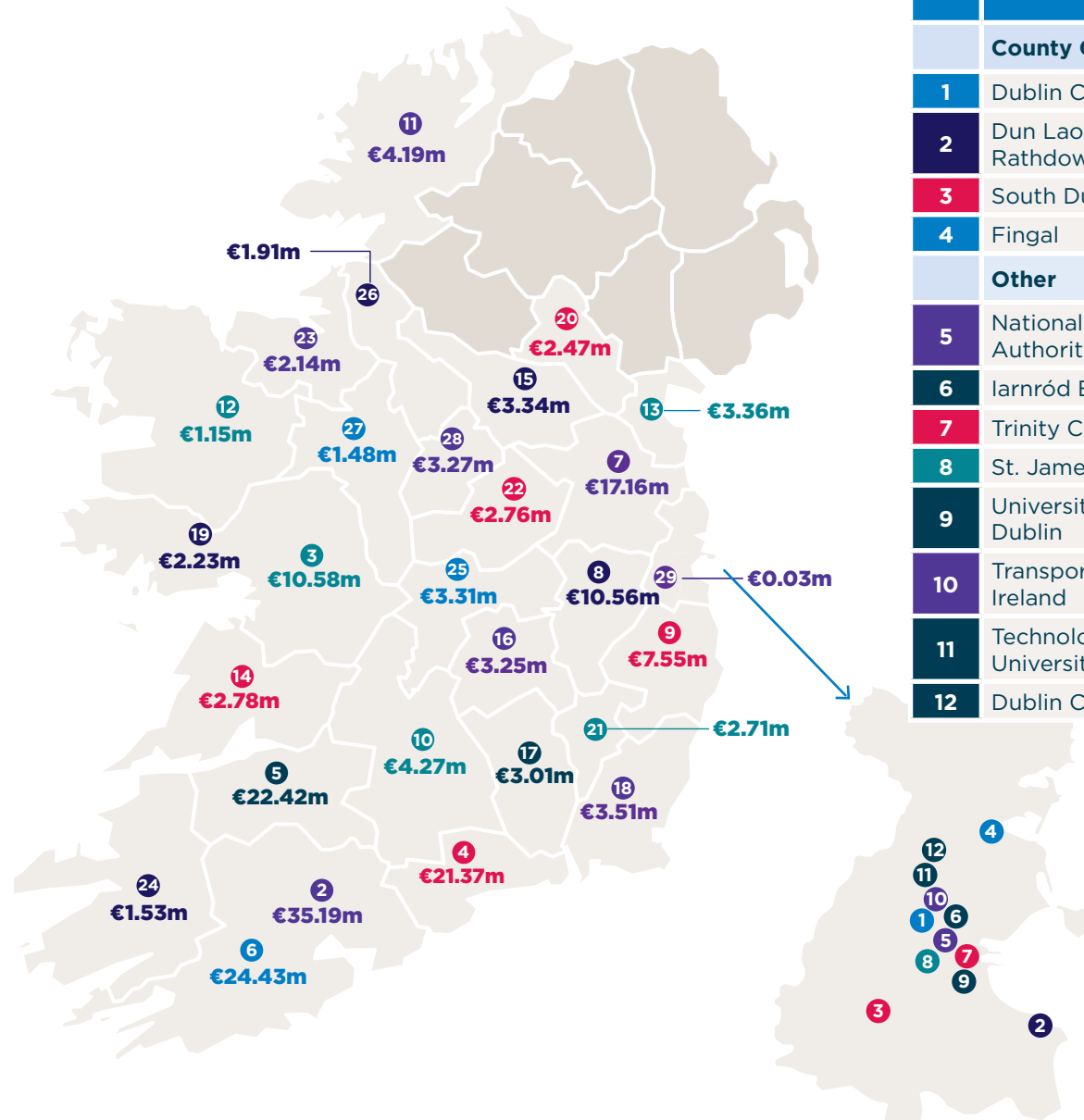
Table 5: Rural Counties Financial Outturn By Scheme Type 2023

Breakdown by Institution in 2023

Total Spend: €341.3m

County Map

Institution	Spending (€m)	Institution	Spending (€m)
City Councils		15 Cavan	
1 Dublin	€67.24	16 Laois	
2 Cork	€19.68	17 Kilkenny	
3 Galway	€22.33	18 Wexford	
City & County Councils		19 Galway	
4 Waterford	€15.75	20 Monaghan	
5 Limerick	€10.33	21 Carlow	
County Councils		22 Westmeath	
6 Cork	€0.09	23 Sligo	
7 Meath	€0.12	24 Kerry	
8 Kildare	€0.22	25 Offaly	
9 Wicklow	€1.14	26 Leitrim	
10 Tipperary	€2.40	27 Roscommon	
11 Donegal	€2.40	28 Longford	
12 Mayo	€0.02	University Hospitals	
13 Louth	€0.01	29 Tallaght	
14 Clare			



Dublin Map

Institution	Spending (€m)
County Councils	
1 Dublin City Council	€67.24
2 Dun Laoghaire Rathdown	€19.68
3 South Dublin	€22.33
4 Fingal	€15.75
Other	
5 National Transport Authority	€10.33
6 Iarnród Éireann	€0.09
7 Trinity College Dublin	€0.12
8 St. James Hospital	€0.22
9 University College Dublin	€1.14
10 Transport Infrastructure Ireland	€2.40
11 Technological University Dublin	€0.02
12 Dublin City University	€0.01

Breakdown by Scale of Project

The NTA's Project Approval Guidelines stipulate project management requirements commensurate with the scale of the overall project cost. The Project Approval Guidelines categorise projects as follows: › Band 1 Projects under €500,000 › Band 2 Projects between €500,000 and €10 million › Band 3 Projects over €10 million.

A total of 931 projects were funded by the NTA across the various funding programmes in 2023, broken down by project scale as shown in Table 6. Table 6 shows the number of projects by project scale. It is worth noting that some projects start off as Band 1 feasibility studies and progress into a larger band later.

	Band 1		Band 2		Band 3		
	<€500k		>€500k<€10m		>€10m		Total
	No.	%	No.	%	No.	%	
Total	423	45%	454	49%	54	6%	931

Table 6: Breakdown by scale of project overall programme. A further breakdown of project size per Local Authority is available in Appendix 1

Band 3 Projects

The number of Band 3 projects >€10m has substantially increased in recent years, from 9 in 2019 and 2020 to 54 in 2023. This reflects the increased size, complexity and ambition of Active Travel projects.

Band 3 Projects i.e. Projects > €10m	
Cork City Council	Airport Rd Cycle Lane Upgrades
	Blarney Village Cycle Route
	Cork North Docks Public Realm And Transport Infrastructure
	Douglas to Grange Bridge Cycle Route
	Grange Road to Tramore Valley Park
	Knockpogue Avenue and Knockfree Avenue Active Travel Improvement Works
	McCurtain St Quarter PTI (Phases 3,4&5)
	Passage Railway Greenway Project - Phase 2 - Mahon to Passage West
	Ringmahon Road Cycle Infrastructure
	The Glen and North Ring Road Environs Sustainable Transport Improvement Scheme
Cork County Council	Carrigaline - Active Travel Scheme (Main Street)
	Dunkettle to Carrigtwohill (Old N25) - Phase 3 - Dunkettle to Fitzpatricks
	Little Island - Sustainable Transport Interventions

Dublin City Council

Blood Stoney Bridge

Cabra to Blanchardstown

Chesterfield Avenue (Phoenix Park) Cycle Scheme

Clonskeagh to City Centre Cycle route

College Green Plaza Development

Dodder Cycle Route

Fairview to Amiens Street Cycle Route

Fitzwilliam Cycle route

Grand Canal Cycle Route

Kilmainham to Thomas St Cycle Scheme

Liffey Cycle Route

North Circular Road Cycle Scheme

Point Pedestrian and Cycling Bridge

Raheny to Kilbarrack Cycle Scheme

Royal Canal Cycle (Phibsborough to Ashtown)

Royal Canal Cycle Route (Phase 2)

Royal Canal Cycle Route Phase 3 (North Strand Road to Phibsborough Road)

East Coast Trail - East Wall Road (North)

East Coast Trail - Sean Moore Road (South)

Santry River Greenway

Dun Laoghaire Rathdown County Council	Beckett Link Road (Cherrywood)
	DLR Connector Active Travel Scheme
	Dun Laoghaire to N11 DLR Central
	Taney Road to Stillorgan Road Cycle Route
Fingal County Council	Broadmeadow Estuary Cycle & Pedestrian Bridge
	National Aquatic Centre (NAC) to Ongar Village
	Royal Canal Cycle Route
	Extension Sutton to Malahide
Limerick City and County Council	Mary Immaculate College to City Centre Cycle Route
Louth County Council	Active Travel - Ard Easmuinn Rd to Train Station/Friary School & Dundalk Bus Station to Rail Station
	Active Travel - Dundalk: R132 inner Relief Rd
Meath County Council	GDA Cycle Network Design within Meath towns, Scheme 1 - Proudstown Road to Trim Road - Navan
South Dublin County Council	Canal Loop Greenway Feasibility Scheme
	Dodder Greenway Section 4 - Springfield Ave & Dodder Road Lower
	Tallaght to Clondalkin Cycle Scheme
	Tallaght to Knocklyon Cycle Scheme
	Wellington Lane Cycle Improvements Scheme
Waterford City and County Council	Bilberry to City Centre Improvement Works
	Tramore Greenway
	Waterford and Environs Urban Regeneration - North Quays (Construction Stage)

Table 7: List of Projects over >€10m

Infrastructure delivered by Type and Region

The following tables show the type of infrastructure delivered by regional breakdown. This information is provided by Local Authorities. Note when measuring distances, where footpaths or cycle tracks or lanes were provided on both sides of a carriageway, the measurement includes both sides. However, for pedestrianised streets, greenways, traffic free links, 2-way cycle tracks, quiet ways (signed low speed low traffic roads), and traffic calming, the centreline measurement is used.

Walking Route Infrastructure	All	GDA	Regional Cities	Rural Counties	Campus
	km	km	km	km	km
Pedestrianised Street	0.32	0.32	0.00	0.00	-
Footpath Upgrade or Improvement	47.43	16.56	18.03	12.84	-
New Footpath	51.66	11.25	10.35	29.91	0.15
Shared Use Pedestrian Cycle Path	16.28	1.80	8.56	5.92	-
Urban Greenway/Traffic Free Link	7.26	0.45	2.63	3.84	0.33
Totals	122.95	30.38	39.57	52.51	0.48

Table 8: Walking Route Infrastructure km by type and region

Cycling Route Infrastructure	All	GDA	Regional Cities	Rural Counties	Campus
	km	km	km	km	km
Shared Use Pedestrian/ Cycle Path	16.28	1.80	8.56	5.92	-
Protected Cycle Lane	16.80	16.03	0.18	0.59	-
Segregated Standard or Stepped Cycle Track	26.16	16.82	6.18	3.16	-
Urban Greenway/Traffic Free Link	7.26	0.45	2.63	3.84	0.33
Quietway - Signed cycle routes on low-trafficked and low speed roads	3.36	2.01	1.19	0.16	-
Mandatory Cycle Lane	1.16	1.10	0.00	0.07	-
Totals	71.01	38.20	18.74	13.74	0.33

Table 9: Cycling Route Infrastructure km by type and region

Other Infrastructure	All	GDA	Regional Cities	Rural Counties	Campus
	no:	no:	no:	no:	no:
Cycle Parking Stands	3131	318	401	406	2006
Side Road Junctions upgrade	297	94	98	105	-
Bus Stop	105	54	44	5	2
Isolated pedestrian or zebra crossing	214	68	74	72	-
Junction upgrade	94	41	21	31	1
School Zone	41	15	13	13	-
Modal Filter	15	8	4	3	-
Island Bus Stop	21	15	6	-	-
New Pedestrian and Cycle Bridge	4	-	3	1	-
New Pedestrian Bridge	-	-	-	-	-
	km	km	km	km	km
Traffic Calming	3	2.2	0.0	0.7	-
Asset Renewal Bus Lane	2	1.6	0.0	0.3	-
Asset Renewal Cycle Lane	3.5	3.0	0.5	-	-

Table 10: Other Infrastructure by type and region. A further breakdown of infrastructure by type per Local Authority is available in Appendix 2

Trends in Infrastructure Delivery

There was a large increase in the kilometres of active travel infrastructure delivered between 2020 and 2023, compared with previous years. This reflects the increased investment and expanded geographical spread of the Active Travel Investment programme. The delivery of walking and cycling route kilometres in 2023 was lower than 2022 as the programme has shifted from the rapid build schemes implemented during, and immediately after, Covid to larger permanent schemes, such as Clontarf to City Centre in Dublin and McCurtain Street in Cork.

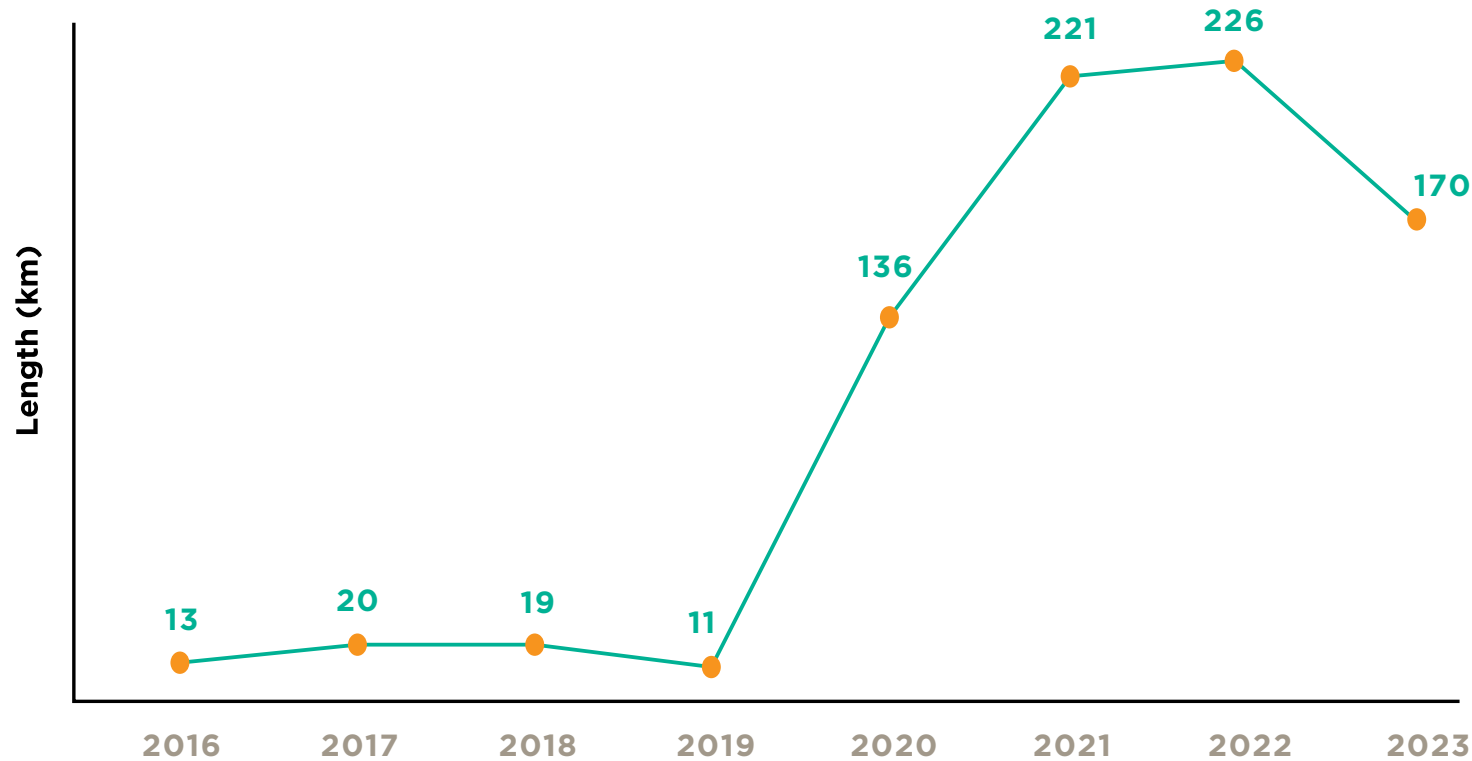


Figure 7: Trends in Walking and Cycling Route Infrastructure Delivery 2016-2023

Public Bike Schemes

The regional bike scheme has been operated by the NTA since 2014, with schemes in Cork, Limerick and Galway. Covid-19 had a significant impact on bike usage in all 3 locations, with 2023 showing a significant rebound with increased usage in all locations.

In July 2022, Waterford was added to the public bike share scheme. Fourteen docking stations and 220 bikes were strategically located throughout Waterford City, with almost 20,000 individuals renting bikes during 2023, significantly ahead of usage in both Galway and Limerick.

City	Total Trips in 2019	Total Trips in 2020	Total Trips in 2021	Total Trips in 2022	Total Trips in 2023
Cork	241,064	81,504	54,615	109,699	143,557
Waterford	-	-	-	9,637*	18,527
Limerick	22,129	10,447	4,862	9,414	13,945
Galway	27,190	6,604	7,898	6,264	8,916
Total	290,383	98,555	67,375	135,014	184,945

*No. of trips after 6 months

Table 11 – Public bike schemes (trips made)

City	2019	2020	2021	2022	2023
Cork	6,594	5,220	4,048	4,230	4,792
Waterford	-	-	-	1,284*	1,319
Limerick	1,824	1,344	829	843	928
Galway	4,127	4,349	937	832	785
Total	12,545	10,913	5,814	7,189	7,824

*No. of subscribers after 6 months

Table 12 – Public bike schemes (number of registered users¹)

¹ The number of registered users is averaged across the year

Spotlight Active Travel Projects:

The active travel programme includes over 900 projects in all parts of the State. The following are just a few spotlight projects that are being built at a rapid pace.

- › Spotlight 1: Loreto School to Cavan Town Phase 1
- › Spotlight 2: Ardmore Road, Mullingar Town Co. Westmeath
- › Spotlight 3: East Coast Trail – Blackrock Park to Trimbleston Avenue
- › Spotlight 4: Grange Road to Tramore Valley Park pedestrian and cycling link
- › Spotlight 5: St. Cronan's Ave & Brackenstown Rd, Swords

In addition to the above 5 projects that are spotlighted in the following slides, other completed projects can be seen on the Transport for Ireland YouTube Channel and these will be added throughout the year. The following are currently available for viewing:

1. Active Travel review of 2023

<https://www.youtube.com/watch?v=NOhPuOElixQ>



The Clontarf to Dublin City Centre scheme



Vernon Mount Bridge

2. Safe Routes to School Programme

https://www.youtube.com/watch?v=H_EgrP_30H4



Bunscoil Rinn an Chablaigh, Cobh, Cork



An Mhodhscoil School Street, Limerick

Spotlight 1: Loreto School to Cavan Town Phase 1 | €0.33m in 2023

Cavan County Council introduced 482m of segregated cycling and walking facilities including reconfigured bus stop infrastructure in the community in 2023. This scheme includes the R212 Cathedral Road and Old Butlersbridge Road in Cavan Town. Further enhancements includes 5 upgraded junctions, 1 new pedestrian crossing with public lighting and a novel extruded kerb detail along with utilisation of red asphalt for cycle tracks in line with NTA specification.

The completed scheme will connect 2 schools, numerous residential communities and one third level institute to Cavan Town centre.



Figure 8: Cavan County Council

Before and After Photos



Spotlight 2: Ardmore Road, Mullingar Town Co. Westmeath (Phase 2) | €0.35m in 2023

In 2023 Westmeath County Council constructed a pathway along the Ardmore road, a local primary road (L-1133), which links the Dublin Road southeast of Mullingar town. This scheme extends along both the northern and southern sides of the town.

Work was divided into phases, with the first phase consisting of 870 metre centre line highway with new active travel infrastructure (shared cycleway and pedestrian sidewalk) and new surfacing to the road carriageway. Phase two consisted of a 390 metre centre line carriageway with new active travel infrastructure (shared path) and resurfacing the road carriageway.

The scheme included connections for existing residential areas along the Ardmore road and the recently constructed Holy Family National School.

The adjoining lands on the Ardmore are zoned for over 2,000 homes and the completed scheme will have a positive impact on the community and promote a modal shift to active travel. The completed scheme ties into the existing active travel infrastructure.

Phase 3 will consist of a new pedestrian & cycle bridge over the Royal Canal and Greenway at Saunders Bridge. It is anticipated that work will commence on site in 2024.



Phase 1 (Road Centre Line 870m completed)



Phase 2 (Road Centre Line 390m completed)

Spotlight 3: East Coast Trail – Blackrock Park to Trimbleston Avenue Section | €3m in 2023

Significant work was completed in 2023 by Dún Laoghaire County Council, where 475m of two-way kerb protected cycle track and 260m of footpath upgrades were constructed. This scheme extends from Blackrock Park to Trimbleston Avenue, and includes 2 upgraded junctions, 6 side road crossings comprising of a continuous crossing using a new Dutch style kerb at the St Helens junction and bus priority for outbound bus services at the Booterstown Avenue junction. Works for this scheme also includes landscaping and lighting improvements.

The project is a critical part of the longer east coast trail scheme, which includes the former S2S Sutton to Sandycove route. The aim for this project is to link any future coastal active travel route along strand road to the Coastal Mobility Route which stretched from Blackrock Park to Sandycove.

Please note the scheme was designed prior to the red surface specification for cycle tracks carriageway or carriageway adjacent cycle facilities.

The proposed scheme aligns with the proposed BusConnects project with only minor junction changes required. The scheme has been designed to facilitate an extension of the active travel facilities into the Dublin City Council area.

Before and After Photos

<https://maps.app.goo.gl/psQDT8UHMxxRakBM7>



Spotlight 4: Grange Road to Tramore Valley Park pedestrian and cycling link | €6.5m in 2023

In 2023 Cork City Council implemented 1.1 km off-road pedestrian and cycle path between Grange Road and Tramore Valley Park, including a new bridge over the N40 in Vernon Mount. This scheme provides a Greenway-quality connection between northern suburbs and existing active travel infrastructure in Tramore Valley Park.

It provides pedestrians, cyclists, and those with a mobility impairment with a safe, direct link from Grange, Frankfield, Donnybrook and Douglas to a number of schools to the south of the N40, and onwards towards the city centre.

The need to address severance caused by the N40, and to improve active travel infrastructure in the area, was identified in the Cork Metropolitan Area Transport Strategy (CMATS). It now forms a key part of the walking and cycling network in this part of Cork, and in future will link to two emerging BusConnects corridors (Grange Road to the north and the N27 South Link Road to the south), which will include high quality active travel infrastructure.

In addition to addressing severance and cutting journey times for students and commuters, this link also offers a new recreation route for Cork. The city council acquired 13 acres of woodland on the northern side, creating a green area, rich in biodiversity, which had previously not been open to the public.

Instead of concrete retaining walls, strengthened embankments comprising of reinforced earth bags, sown with grass seed, were constructed. Furthermore, environmentally sensitive lighting has been used along the whole length of the scheme.



Grange to Tramore Valley Way

Spotlight 5: St. Cronan's Ave & Brackenstown Rd, Swords | €2.4m in 2023

The St. Cronan's Ave & Brackenstown Road project delivered nearly 4.5 km of protected cycle lanes in 2023 with red asphalt surfacing within a busy urban environment, approximately 1.5 km north-west of Swords's Main Street. The scheme included the upgrade of 2 junctions and the installation of 5 new zebra crossings. Additional improvements to 12 side road junctions were made to provide safer crossings for vulnerable road users and to slow traffic turning movements into housing estates.

The scheme incorporated the Safer Routes to Schools programme by providing traffic calming measures and front of school treatments at St. Cronan's Junior and Senior National Schools on Brackenstown Road. These improvements included the removal of a number of car parking spaces and the installation of new bike stands to encourage children and their parents to use active travel modes for their commute to school. These changes have made cycling and walking in the area more pleasant and overall, it has created a safer environment for all road users.

Brackenstown Road – St. Cronan's Junior & Senior School after construction



SECTION 2: PUBLIC TRANSPORT INVESTMENT



Public Transport Investment (PTI) Programme

The NTA is the approving authority and in some cases holds a dual role of sponsoring authority and approving authority for Public Transport Investment projects and programmes within the GDA, the Regional Cities of Cork, Limerick, Galway, Waterford and other areas of the State. While the NTA has statutory responsibility for the GDA, the NTA manages projects and programmes through the rest of the State on behalf of the Department of Transport.

Investment in PTI has increased significantly from an average of €188m per year between 2015 and 2019, to €553m in 2023. This increase in funding over the last number of years reflects major strategic capital programmes entering late stages of planning and design development and progressing towards construction stage.

A €58m increase was noted from 2022 to 2023 largely due to growth of the BusConnects programme and a higher percentage of PTI projects at construction and implementation phase in 2023.

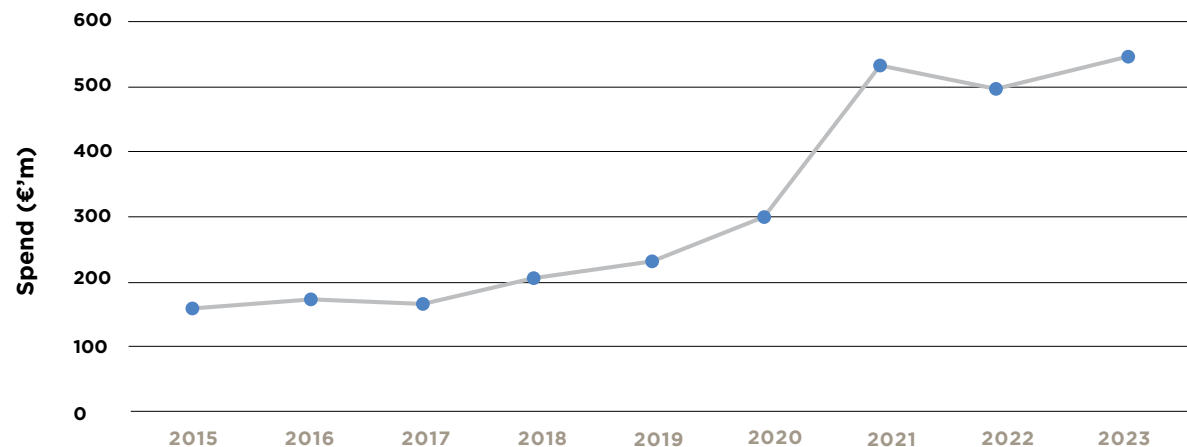


Figure 9: Public Transport Investment Spend Profile 2015 to 2023

2023 Outturn

The NTA provided funding of €553m in 2023 across 269 projects/programmes outlined in Table 13 below:

Programme	No. of Projects	Spend in 2023
Heavy Rail Programme	76	€247.2m
Bus Programme	103	€176.1m
Light Rail	13	€66.9m
Integration and Support Projects and Services	33	€19.9m
Accessibility	17	€19.8m
Ticketing and Technology	20	€19.5m
Park and Ride	7	€3.5m
Total	269	€553m

Table 13: PTI Spend in 2023

Trend in Spending on Public Transport

The 2023 outturn represented a 12% growth in comparison with the 2022 outturn, with a 3% increase in comparison with the 2021 outturn. Figure 9 shows the increase in overall funding from 2015-2023 by programme.

Spending Trend Graph by Programme

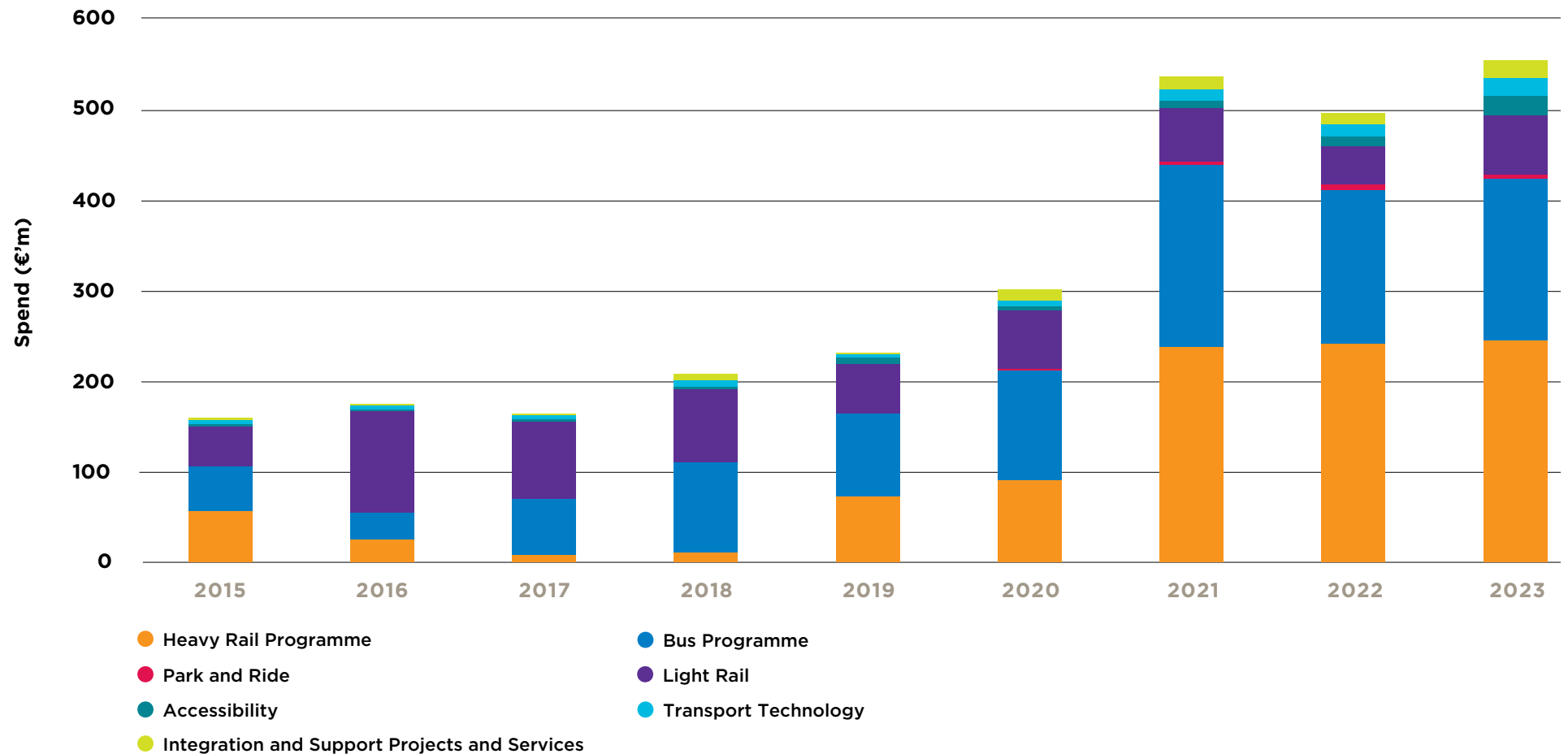


Figure 10: Public Transport Investment Spend Profile 2015 to 2023 by Programme

Heavy Rail Programme Spotlight 1:

Cork Area Commuter Rail (CACR) Programme | €21.4m in 2023

The Cork Area Commuter Rail programme is a transformative rail improvement programme for the Cork Rail Network. It will deliver increased train capacity and frequency, providing for more connected communities and a more sustainable transport network. The programme represents the largest investment in the Cork Rail Network.

The programme involves developments and enhancements to the rail network from Mallow through Cork to Cobh and Midleton and will include the delivery of new rail infrastructure, electrification, and re-signalling across the 3 main lines of Mallow, Cobh and Glounthaune to Midleton.

The Cork Area Commuter Rail Programme is being progressed through several separate but interrelated projects. 2023 saw construction contracts awarded for a new through platform at Kent Station and for the re-signalling of the network. In addition, An Bord Pleanála granted a Railway Order for the twin tracking of the Glounthaune to Midleton line and a tender for Multi-Disciplinary Consultancy Services Framework to support the delivery of the remaining elements of the programme was released to the market.



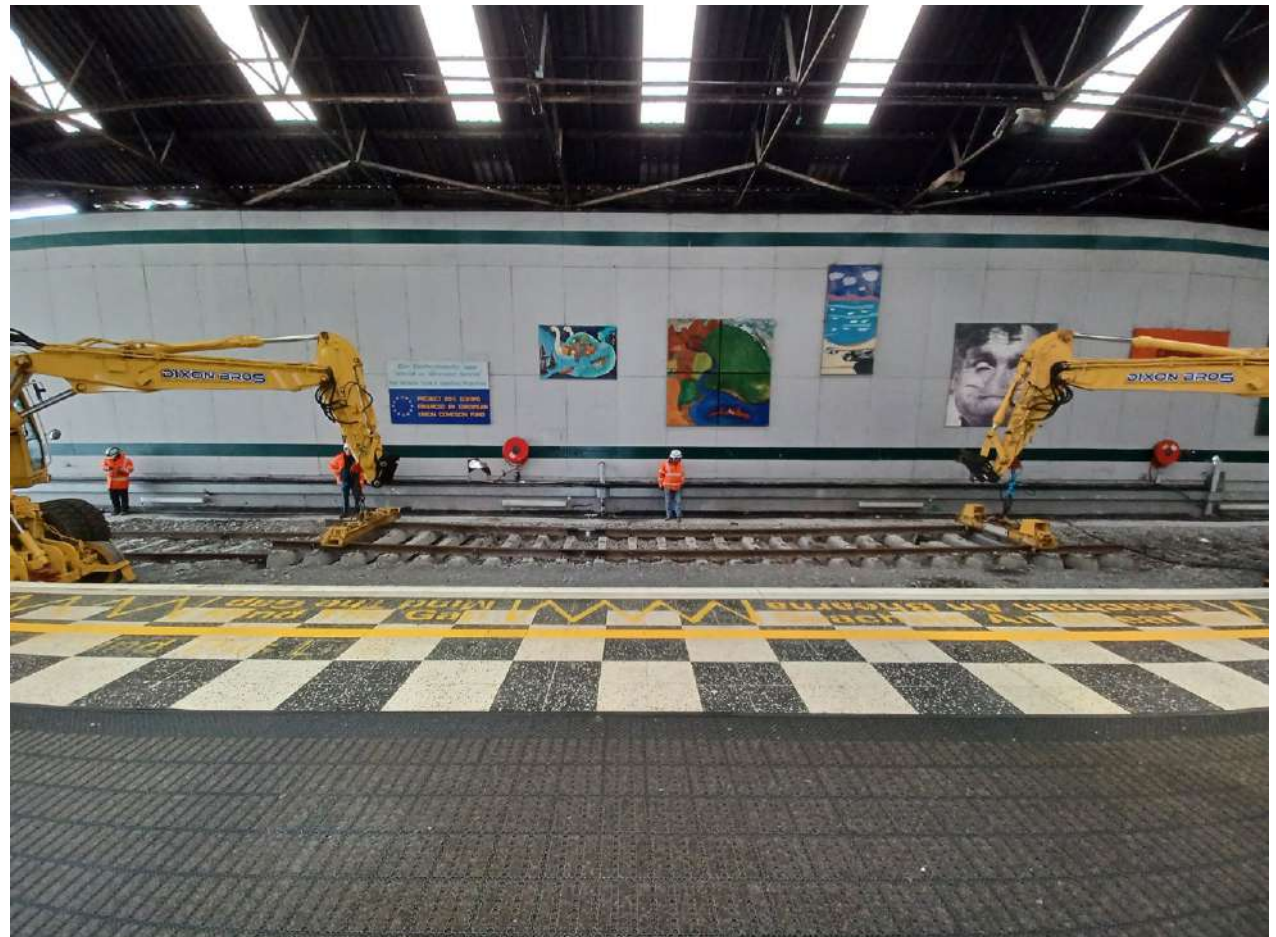
Kent station platform construction

Heavy Rail Programme Spotlight 2:

Ceannt Station Upgrade Project | €974.9k in 2023

Ceannt Station is a key transport gateway to Galway City and the wider region in the west of Ireland. This project will represent a major investment in the station. The roof of the existing train hall will be replaced to transform the platforms into bright and welcoming spaces in addition to the construction of new platforms, a new southern entrance, and modern customer facilities.

2023 saw the approval of the project's Final Business Case, the completion of enabling works and the signing of the main works contract.



Ceannt Station Enabling Works

Heavy Rail Programme Spotlight 3:

Woodbrook Station | €2.4m in 2023

Woodbrook Station is a key public transport project designed to enhance connectivity and support the sustainable development of the Woodbrook-Shanganagh area. The project involves constructing a heavy rail station on the East Coast Rail Line between Shankill and Bray which will be served by DART services. The station will improve accessibility, reduce travel barriers, and promote compact growth in the local area.

Following approval of the Final Business Case, the main works contract was signed, and construction commenced in 2023. The station is due to be completed in 2025.



Woodbrook Station Construction Works

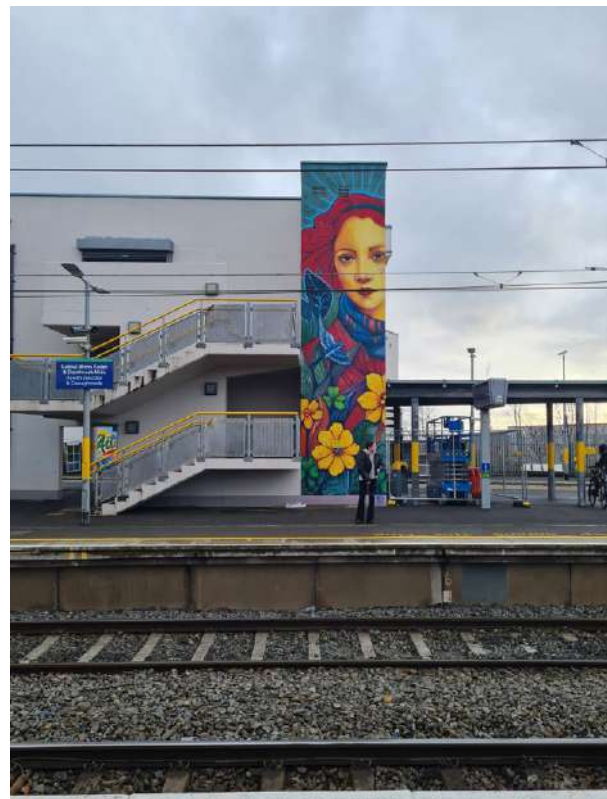
Heavy Rail Programme Spotlight 4:

Railway Station Renewals | €7.5m in 2023

The Station Renewal Programme has addressed the historic underfunding of the Buildings & Facilities assets across the rail network, which has contributed to deteriorating conditions. In 2023, 123 stations underwent repainting and/or repair works to masonry/timber, platform metalwork, boundary fencing, customer concourses and facilities. In 2024, additional trades crews will be recruited to work on reducing the IÉ Station Defect Log items and age-related defects reported at 50 other station sites.

Howth Junction and Donaghmede Station

A station art programme, incorporating community engagement and creativity, has been implemented to provide colourful artwork highlighting sustainability themes and local biodiversity as part of the Railway Station Renewal Project for 2023.



Howth Junction station

Carrick-on-Shannon & Edgeworthstown Stations

IÉ Pollinator Programme has been supported by the Railway Station Renewal Project and in 2023 has delivered pollinator areas and bug hotels to enhance our environment and its biodiversity and reduce operations negative impacts.



Carrick on Shannon Station pollinator area



Edgeworthstown Station pollinator and Bug Hotel

Bus Programme Spotlight

Transition of Urban Bus Fleet to Zero-Emission

In line with the relevant actions contained within the Climate Action Plan 2024 and the National Sustainable Mobility Policy Action Plan 2022-2025, the NTA has been progressing the transition of the urban public bus fleet in Ireland to operation by zero-emission buses through the electrification of bus depots and the purchase of battery-electric buses.

Early in 2023, the transformation of the Athlone town bus service into Ireland's first 100% zero-emission town bus service was completed, with an official launch taking place on 20th January 2023, and services commencing on 29th January 2023.

Eleven (11) single-deck long-length battery-electric buses have been allocated to Bus Éireann's Athlone bus depot to operate the town bus service, with 9 x 150kW charging stations outfitted with a total of 18 charging guns (and associated power supply infrastructure) being installed at the depot to support their operation.



Line-up of EA-type single-deck battery-electric buses in Bus Éireann's Athlone Depot

In the time since the buses entered service, they have driven more than half a million zero-emission kilometres, resulting in a substantial reduction in the emission of CO₂ and other pollutants along the routes they have traversed, and have contributed to a significant increase in the number of passengers availing of the Athlone town bus service.

The buses in use in Athlone were supplied under a framework agreement for single-deck long-length battery-electric buses signed in June 2021 with Alexander Dennis Limited (ADL), which was also the supplier of the earlier double-deck plug-in hybrid buses in service in Dublin, Galway and Limerick.

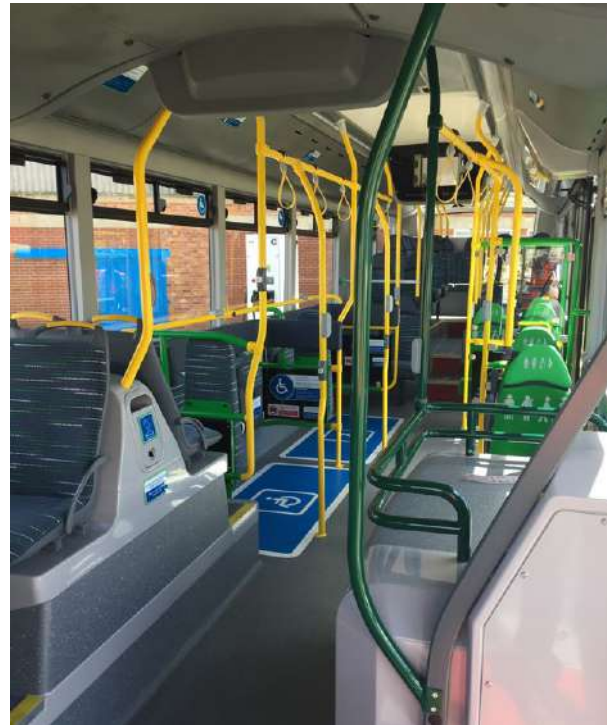
These Enviro200EV buses (as they are known) are based on proven technology (similar buses had been in service in London since 2016) but tailored to the specific needs of the NTA in providing excellent accessibility, separate wheelchair and buggy spaces and a high level of comfort for both the passengers and the driver. They were also the first buses in the State's urban bus fleet to be equipped with a Camera Monitoring System (CMS), which eliminates the need for an exterior mirror on each side at the front end of the bus.

Each bus is fitted with Lithium Iron Phosphate (LFP) traction battery packs, with a total energy of 348kWh and a usable energy of 266kWh after 6 years of service, powering two hub-mounted traction motors.

Two orders for a total of 55 buses have been placed to-date, inclusive of the 11 buses for Athlone, with the remainder intended for use on the new O Route in Dublin and zero-emission town bus services in Sligo.

Dublin

In Dublin, planning for the electrification of Dublin Bus depots began during 2019 and a procurement competition was launched by Dublin Bus during 2021 for the installation of charging infrastructure at a number of depots, which regrettably had to be cancelled due to the tenders received being non-compliant.



View of interior of EA-type single-deck battery-electric bus



EA-type single-deck battery-electric bus

Subsequently, a revised tender competition was undertaken in respect of two depots (Summerhill bus depot and Phibsborough bus depot).

This contract was awarded in December 2022 and the initial phases of charging infrastructure were commissioned at Summerhill depot in November 2023 and at Phibsborough depot in December 2023.

As of the end of 2023, there were 56 charging guns installed at Summerhill bus depot and 27 charging guns installed at Phibsborough bus depot, with another 53 charging guns at the latter programmed to become available during January 2024. A total of 136 high-power charging guns will therefore be available from early 2024 to support the operation of battery-electric buses within the Dublin region, together with a further 8 lower-power charging guns primarily designed to support the operation of hybrid buses.

Introduction into passenger service of the first double-deck battery-electric buses began in October 2023 and is progressing well, with 20 of these buses in service as of the end of 2023 and all 100 buses from the initial batch of buses destined for use in Dublin expected to be in operation by Q3 2024.

These buses were supplied under a framework agreement for the supply of double-deck battery-electric buses signed in March 2022 with Bamford Bus Company (trading as Wrightbus). As with the single-deck long-length battery-electric buses procured by the NTA, these Wrightbus StreetDeck Electroliner buses offer excellent accessibility, separate wheelchair and buggy spaces and a high level of comfort for both the passengers and the driver. Each bus is fitted with Forsee ZEN SLIM Nickel Manganese Cobalt (NMC) traction battery packs with a total energy of 454kWh and a usable energy of 350kWh throughout the first 6 years of service, powering a single traction motor coupled to the rear axle.



EW-type double-deck battery-electric bus pictured on Route 122 operated by Dublin Bus

Limerick

In Limerick, significant progress was made during 2023 with the first phase of depot electrification to support the transition of Limerick city bus services to operation by zero-emission buses, which will provide 30 high-power charging guns and associated infrastructure at Bus Éireann's Roxboro bus depot. This will be sufficient to support the operation of an initial fleet of 34 double-deck battery-electric buses from early 2024. A second phase of depot electrification will increase the number of charging guns available in Limerick to 70.

Galway

In Galway, an enhanced electricity grid connection to support the transition of Galway city services to operation by zero-emission buses, was secured at Bus Éireann's Galway bus depot and procurement of the requisite charging infrastructure will commence shortly. It is currently envisaged that 70 charging guns will be provided, adding to the 2 lower-power charging guns already on-site.

Sligo

In Sligo, an enhanced electricity grid connection to support the transition of Sligo town services to operation by zero-emission buses was secured and procurement of the requisite charging infrastructure and associated facilities is expected to commence shortly. It is currently envisaged that 18 charging guns will be provided.

Cork

In Cork, an enhanced electricity grid connection to support the transition of Cork city services to operation by zero-emission buses was secured at Bus Éireann's Cork Capwell bus depot. It is currently envisaged that 110 charging guns will be provided with installation currently programmed to commence once the temporary depot at Tivoli Docks has come on stream during Q3 2025. The temporary depot in Tivoli is required to reduce the number of buses and coaches based at Capwell bus depot, in order to enable yard space to be released to enable the installation of charging infrastructure to commence.

Work is also underway to assess how charging infrastructure and associated facilities can be provided to support the transition of the Dundalk, Navan and Drogheda town bus services to operation by zero-emission buses.

Park and Ride | €3.5m in 2023

Park and Ride Development Office

The Park and Ride Development Office (PRDO) established in 2020 enables the delivery of key Park & Ride facilities across all regions providing full time specialist resources on these projects.

The plans to expand the Park and Ride network are set out in the various metropolitan area transport strategies which have been prepared by NTA with input on Park and Ride from the PRDO. Three strategies have been published, namely the Transport Strategy for the Greater Dublin Area 2022-2042, the Limerick Shannon Metropolitan Area Transport Strategy (LSMATS) and the Waterford Metropolitan Area Transport Strategy. The PRDO is continuing the work as set in the Galway Transport Strategy and CMATS.

In 2023 the PRDO progressed several strategic sites through an options selection process and continued the preparation of planning documentation including Environmental Impact Assessment Reports, discussion with landowners on agreements, development of options for bus services and site designs.

Fassaroe Co. Wicklow

In 2023, the PRDO received planning consent through the Part 8 process for a new bus-based Park and Ride at Junction 6 Fassaroe on the M11 in County Wicklow. The proposed development comprises a state of the art Park and Ride facility with a capacity of 388 parking spaces, including 26 spaces for mobility impaired users and 42 spaces for charging of electric vehicles.

Annacotty Co. Limerick

As part of the development of strategic Park and Ride sites identified in the LSMATS the PRDO assisted Limerick City and County Council in the purchase of land at Annacotty to facilitate a future Park and Ride.

Iarnród Éireann Car Park Programme

The IÉ Car Park Programme consists of the upgrading and expansion of park and ride provision at various IÉ railway stations throughout the country. The strategy is being rolled out with an initial group of 12 priority stations: Portlaoise, Millstreet, Ballybrophy, Bray, Portmarnock, Leixlip Louisa Bridge, Kildare, Edgeworthstown, Farranfore, Carlow, Athy and Charleville.

In 2023, the tender to construct a significant upgrade of the car park and access to Kildare Rail station was awarded. The project will provide improved access to the station, an additional 30 car parking spaces and an additional 50 bicycle spaces.

Portmarnock

As part of the BusConnects Network Redesign, bus and improved pedestrian / cyclist access is required at Portmarnock Rail Station. The IÉ Car Park Programme developed a proposal to modify the existing car park to facilitate a new public bus interchange. This includes a new bus turning facility, with two bus stops and a new vehicular drop off location (set down) at the station entrance. The works also include improved pedestrian and cycling access to the station, additional bike parking and an upgrade to existing infrastructure including pavements, boundary treatments, drainage, lighting, CCTV and landscaping. The project commenced construction in 2023.

County Meath

The Tara Na Rí (Garlow Cross) Park and Ride Facility in County Meath is a new local Park and Ride facility to the south of Navan and near J7 on the M3. The scheme provides for 50 car parking spaces and serves existing bus stops on the R147. Bus Éireann 109, 109A and NX stop at this location. The project was completed and opened to the public in 2023.



Garlow Cross/Tara na Rí Park and Ride in County Meath

Light Rail Spotlight | €66.9m in 2023

Luas Lifecycle Asset Renewals (LCAR) | €13.3m in 2023

The LCAR Programme, running over 6 years (2021-2026) with an overall value of circa €54 million, is a series of projects that invest in the renewal of existing Luas assets to ensure a high quality, resilient and reliable Luas service. The current Luas light rail system is in operation since 2004 and the LCAR programme has been developed to renew assets that are outside of the current operation and maintenance contract. The aim of the programme is to protect the value of past investments, and to ensure that Luas' infrastructure continues to operate effectively, reliably and safely.

Renewals cover various aspects of the light rail system such as track and power control systems as well as station and bridge infrastructure.

The LCAR Programme for 2023 saw continuing contact wire replacement works, track renewals and overhauls of rolling stock. The LCAR Programme for 2023 also comprised of a number of other projects, such as upgrades to the Tetra communications system used by the Luas operator, updates to the servers used for automatic fare collection and improvements to emergency help points at platforms.



Rail Renewal



Overhead line replacement



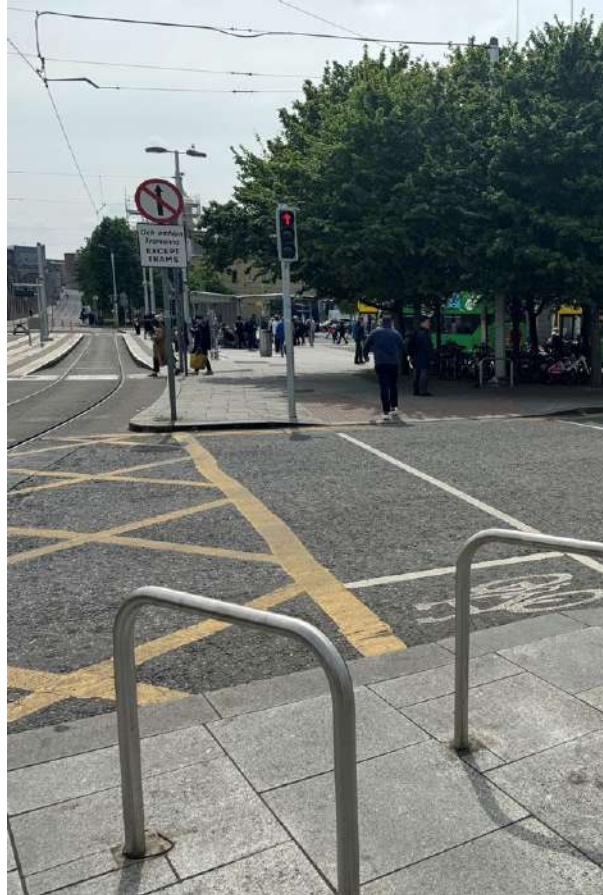
A Light Rail Vehicle during an overhaul

Public Transport Luas Upgrades (PTLU)| €2.45m in 2023

The PTLU Programme, running over 5 years (2021-2025) with an overall value of circa €29 million, is a programme of works which go beyond general operation and maintenance which is undertaken by the Operator on Luas Light Rail systems. The scope of the programme includes projects which are not covered by the Operator contract and focus on upgrading and carrying out minor works on Luas assets to ensure the standard of Luas operations is maintained.

Enhancements focus on improving accessibility, safety, the public realm, intermodal facilities as well as sustainability and capacity.

The PTLU programme for 2023 saw the addition of polymer sealant to various track sections across the network. In addition, repaving works were done to various platforms to improve safety and accessibility and enhance the public realm. Pedestrian crossings were also upgraded at various locations.



Heuston access road



Enhancement works underway on O'Connell Street

Accessibility Retrofit Programme | €19.8m in 2023

The NTA Public Transport Accessibility Programme is a targeted retrofit programme to improve existing public transport infrastructure by retrofitting and upgrading existing facilities. The programme aims to upgrade infrastructure to current accessibility standards and to remove barriers for those with mobility issues. The programme is cognisant of the fact that it is important to support end users of the system and not just provide infrastructure improvements in isolation. In addition to funding infrastructure improvements, this programme funds other projects and softer measures to help reduce barriers to access to sustainable modes of transport.

Rail Stations | €9.9m in 2023

Wheelchair accessible overbridges incorporating lifts were opened at Gormanston railway station in Co. Meath and Dalkey railway station in Co. Dublin in early 2023, while the construction of similar facilities was completed at Little Island railway station in Co. Cork and commenced at Banteer railway station.

Iarnród Éireann secured planning consents for accessibility works at Rathdrum, Athy, Boyle, Claremorris and Rathmore in 2023.

The wider upgrade of accessibility in rail stations is being progressed in accordance with the Technical Specifications for Interoperability for Persons with Reduced Mobility. Iarnród Éireann is preparing a business case to bring all stations in its current programme up to the latest standards/specifications.



New Lifts and accessible bridge at Little Island Co. Cork

Bus Stations | €1.86m in 2023

Accessibility Works to bring bus stations to the required standard under Technical Guidance Document (TGD) - Part M, is continuing. This project will enhance Bus Éireann stations for all users. The NTA board approved the Bus Station programme Strategic Assessment Report in 2023. The Programme's Business Case has also been approved, subject to modifications which are being addressed by Bus Éireann in a revised business case to be submitted to the NTA in 2024.

Wheelchair accessible bus bays and upgrade of the external bus stations environs were constructed in Kilkenny and Mullingar bus stations and construction commenced at Cork and Ennis stations.



Mullingar Bus Station Upgrade Before



Mullingar Bus Station Upgrade After

The Wayfinding Centre | €2.1m in 2023

Vision Ireland is developing a transport training centre on Botanic Road in Dublin. The Wayfinding Centre will provide a safe and controlled indoor environment which replicates the real-world experience of using public transport including lighting, acoustics, hazards and the built environment that surrounds public transport. The NTA is part-funding this project which was substantially completed in 2023 and due to open to the public in 2024.

The Wayfinding Centre will provide individual and group training opportunities in a one stop shop for all public transport. It will accommodate users and the design testing of potential project layouts, help increase public awareness, and help inform standardisation and consistency across transport accessibility projects.

The site encompasses 3,000 sq.ft. of a former print works building. This warehouse type building is large enough to accommodate the examples of the various public transport under one roof, giving people the opportunity to experience transport in a safe and secure environment.

Navigating the public transport system can be daunting and confusing for people with physical, mental, cognitive or sensory impairments. While Vision Ireland is a sight-loss charity, the Wayfinding Centre will be a pan-disability centre to serve a wider variety of people who may have difficulty accessing public transport.

The aim of the centre is by replicating real world conditions and facilitating an entire journey approach that people can learn to navigate transport and streetscapes in a controlled environment to help them transition to the real world experience.



Pedestrian crossing test environment



Wayfinding Launch Event



Wayfinding centre



Recreation of Luas stop at Wayfinding Centre



Guide dog area within the Wayfinding centre

Transport Technology Projects | €19.5m in 2023

The NTA undertakes a vast array of transport technology projects and programmes in light of the increasing emphasis on the role that technology has to play in the delivery of public transport infrastructure and services. These projects and programmes include, but are not limited to:

1. Leap OpCon Transition
2. Next Generation Automatic Vehicle Location (NG AVL)
3. Integrated Ticketing (TFI Leap Card)

1. Leap Operations Contract Transition

In compliance with procurement regulations, the NTA re-tendered a combined Leap operate and maintain contract. The Leap OpCon Transition project is required to transition the operation of the Leap scheme to new contracts prior to the expiry of the current contracts.

During 2023, the transition process was completed and the new supplier took full control of the day-to-day operations. Considerable work was done with the new supplier during the year on a number of work streams (finance, ICT, operations and service delivery, contact centre and retail point-of-sale network enablement) in the run up to the handover.

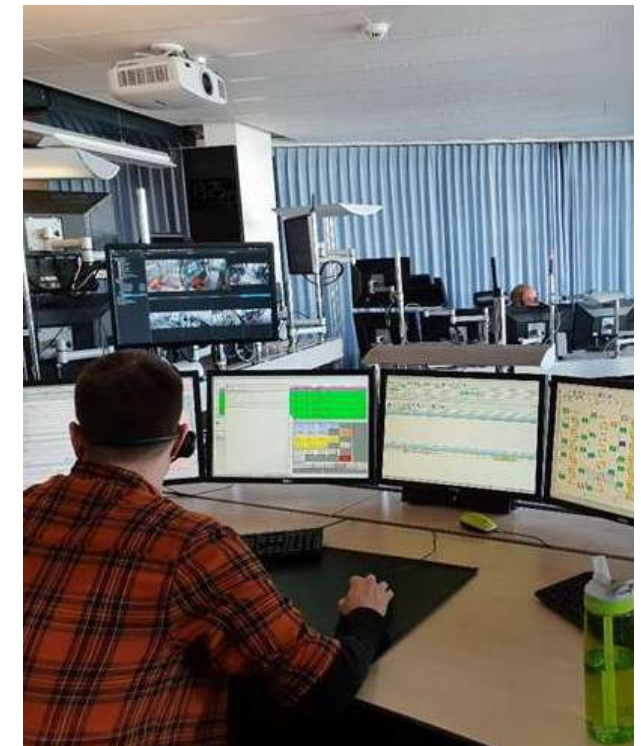


2. Next Generation Automatic Vehicle Location (NG AVL)

Automatic Vehicle Location (AVL) is required for service control of buses, communications with drivers, tracking of route performance, generation of real time passenger information for on-street displays and mobile apps and is at the core of the contract management function of the NTA in tracking kilometres operated and punctuality by operator by route.

The five separate AVL systems currently used for bus operations are approaching their end of life. In 2021 the NTA commenced a public procurement competition to find a single supplier of a modern system to replace the five systems with one central system common to all bus operators. In 2023 the NTA received tenders from a number of bidders, following a formal assessment process. The most economically advantageous bidder was identified and the NTA successfully awarded the NG AVL contract to Trapeze ITS Ltd before year end and project mobilisation commenced.

The project is expected to start early in 2024 and is intended to replace the AVL hardware installed on all PSO public transport buses across the country. It also includes an "AVL Light" option for smaller bus operators with the intension of including more services on the real-time bus stop displays and in the TFI Live app.



Example Trapeze AVL service control room

3. Integrated Ticketing (TFI Leap Card)

Integrated Ticketing, better known as TFI Leap Card, is the overall Leap Card system to which the NTA makes enhancements on an ongoing basis. Amongst the Leap systems is the TFI Leap Top-Up App, which is a free application available for suitably equipped Apple and Android phones. It allows customers to instantly top-up a TFI Leap Card, check balance information, monitor daily and weekly cap values, and collect tickets.



TFI Leap Card

In 2023, Leap Card Sales increased by 23% over 2022, up from 951,522 to 1,170,505, the highest figure ever, and over 28% higher than 2019 (i.e. pre-Covid). By the end of 2023, over 7.4 million Leap Cards had been issued since the launch of the Leap Card scheme.



Measure	2023	2022	% Change 2023 v 2022
TFI Leap Cards sold	1,170,505	951,522	+23%
Free Travel Passes issued ¹	16,023	-92,586	-
Travel Credit Value topped up	€249.5m	€215.9m	+16%
Travel Credit Value used	€210.1m	€182.6m	+15%
Ticket product sales	€33.7m	€29.2m	+15%
Journeys (excluding Free Travel Passes)	207.8m	158.5m	+31%
TFI Leap Top-Up App top-ups	€161.2m	€125.4m	+28%

Table 14 - Leap Card Statistics

¹ The 2022 total indicates a net decline in the total number of valid free travel passes relative to the total number of valid free travel passes in 2021.

Integration and Support Projects and Services

| €19.9m in 2023

The NTA undertakes a vast array of activities in support of its significant portfolio of capital projects and programmes. These services and projects include, but are not limited to:

1. Transport Modelling
2. Governance and Assurance
3. Consolidated Contact Centre
4. Strategy Development



Transport Modelling

In 2023, extensive work was undertaken to fully update the Regional Modelling System, post-Covid. Key inputs included the 2022 and 2023 National Household Travel Surveys, Airport Surveys, Ferry Port Passenger Surveys, and a programme of multi-modal cordon transport surveys for the regional cities. The NTA worked closely with the Road Safety Authority (RSA) on a major data sharing project to access accident data following the successful delivery of a joint project on vulnerable road users. In addition, considerable time was devoted to scoping out improvements to the Regional Modelling System to ensure that it meets new and future needs reflective of NTA responsibilities and wider use cases of the Regional Modelling System's

data. The NTA worked closely with the Central Statistics Office (CSO) on data availability and input into the Census 2027 consultation process.

The Regional Modelling System continued to be used intensively for a wide range of projects and initiatives including, but not limited to, MetroLink, BusConnects, the Waterford Metropolitan Area Transport Strategy, the Cork Area Commuter Rail Programme, the Cork Light Rail Transit Scheme, the DART+ programme, the Galway Cross City Link project, and the Luas Finglas scheme. The Regional Modelling System was also used to support Public Transport service planning (for example for Connecting Ireland and Town Services), Active Travel project assessment, Department of Transport initiatives (such as the Climate Action Plan) and the Department of Education School Transport scheme. A number of research papers were also prepared building on the model development and supporting NTA projects. These were prepared in collaboration with academia and are available on the NTA website.

The project to develop a Greater Dublin Area (GDA) demand management scheme commenced in 2023.

This project arose from a measure in the GDA Transport Strategy and is tasked with identifying the demand management measures required to meet the 2030 Climate Action Plan targets for the GDA. The project has progressed and due to be completed in 2024. The direction of this work has been shaped by the work of the Department of Transport on developing the National Demand Management Strategy which is due for publication in 2024.

Building on work carried out for the Department of Transport on the Climate Action Plan, for the Environmental Protection Agency (EPA) and as part of the GDA Demand management Scheme, the NTA also undertook to operationalise a number of newly developed tools: the National Fleet Models [Car, Light Goods Vehicles (LGV), Heavy Goods Vehicles (HGV)] and the Irish Freight model. These will be developed and rolled out as shared tools in 2024 in partnership with Transport Infrastructure Ireland, the Sustainable Energy Authority of Ireland, the EPA, the Irish Maritime Development Office, Iarnród Éireann and the Department of Transport.



Governance and Assurance

In addition to robust internal processes and structures, the governance of the NTA's Capital Programme is also supported by extensive external oversight including by the Department of Transport, Major Projects Governance Oversight Group and Major Projects Advisory Group. Additionally, external reviews are also leveraged to provide independent scrutiny and assurance over the programme. To build upon an existing robust system of internal control, in 2023, significant work was undertaken to further enhance various facets of governance and assurance. Examples include further work to progress the governance arrangements for major programmes, systems development to support effective financial management of the NTA's portfolio, various project and programme assurance reviews, and independent external expert reviews of key deliverables for various major projects and programmes.



Consolidated Contact Centre

To support the growing public transport network and ensure that customers receive a consistent and positive customer experience, the NTA progressed its plans to establish a Consolidated Contact Centre for public transport in Ireland. The aim of this project is to establish a centralised contact hub, which will enable customers to route their queries

in relation to a wide array of public transport services via a single source.

Key achievements in 2023 included the approval of the Final Business Case for the project by NTA Board and the award and mobilisation of the main contract.



Strategy Development

Throughout 2023, the NTA continued to engage with Local Authorities nationally on the preparation of development plans and local area plans as well as being consulted on the preparation of numerous local transport plans for key towns and other settlements. Much of this work was undertaken to assist with the prioritisation of transport investment in local areas.

Galway Metropolitan Area

The Authority continued to work with Galway City Council on the implementation of the objectives set out in the Galway Transport Strategy (GTS). Following a decision to review the GTS, the NTA appointed consultants in Q4 2023 to prepare a new Galway Metropolitan Area Transport Strategy (GMATS). This work is now underway with input from Galway City Council, Galway County Council, TII and the Northern and Western Regional Assembly. Optioneering and analysis is ongoing, and the GMATS will be presented for Public Consultation once this work has been completed.

Transport Planning Initiatives

Key transport planning initiatives undertaken by the NTA in 2023 included:

- › **Dublin City Centre Transport Plan** - The purpose of the Dublin City Centre Transport Plan is to identify and prioritise changes to the current transport arrangements which are necessary to fulfil the vision for the City as a sustainable, dynamic, and inclusive place, as set out in the Dublin City Development Plan.

The plan also facilitates the implementation of the NTA's Transport Strategy for the Greater Dublin Area 2022-2042 by providing a more detailed framework for accommodating significantly higher numbers of people travelling into the City Centre, in particular by rail, bus, cycling and walking.

A Draft Dublin City Centre Transport Plan was published in September 2023 for public consultation and is currently being finalised by the NTA and Dublin City Council.

- › **Local Transport Plans and Studies** - Local Transport Plans (LTPs) set out the detailed framework for investment in public transport, walking and cycling for settlements. They are undertaken based on the methodology developed by the NTA with Transport Infrastructure Ireland.

In 2023, the NTA continued to collaborate with Local Authorities on the LTP Programme. Work progressed on 27 LTPs in 2023, with 12 being published in draft form for public consultation.

It is expected that approximately 20 LTPs will be published in draft form in 2024 with a number to be finalised during the year.

› **Planning Submissions** - The NTA made **56 submissions** relating to various stages of County and City Development Plans, Local Area Plans and other plans. These submissions often represent final stages of detailed and comprehensive engagement with Local Authorities throughout the plan-making processes.

The NTA reviewed 195 applications for developments in 2023, on which **71 submissions** were made. These range in scale from small infill developments on an NTA Core Bus Corridor Schemes to Large-Scale Residential Developments of several hundred units and major infrastructure developments such as MetroLink, Powering Up Dublin by Eirgrid, and a major development proposal for Dublin Port.

During 2023, preparation took place for the launch of a national consultation programme to collate development details from each Local Authority.

This information will feed directly into the Regional Models ensuring a more accurate vision of population, employment and education growth into the future.



APPENDICES



Section 1 Appendices - Active Travel Investment

Appendix 1: Breakdown by Scale of Project per Local Authority

	Band 1		Band 2		Band 3		Total
	<€500k		>€500k<€10m		>€10m		
	No:	%	No:	%	No:	%	
Cork City Council	16	21%	49	65%	10	13%	75
Dublin City Council	22	36%	19	31%	20	33%	61
Limerick City and County Council	14	25%	40	73%	1	2%	55
Dun Laoghaire Rathdown County Council	11	23%	33	69%	4	8%	48
Cork County Council	13	30%	28	64%	3	7%	44
Fingal County Council	14	33%	24	57%	4	10%	42
Tipperary County Council	16	46%	19	54%	0	0%	35
Kildare County Council	9	26%	24	71%	1	3%	34
Meath County Council	12	36%	20	61%	1	3%	33
South Dublin County Council	12	36%	16	48%	5	15%	33
Wicklow County Council	17	52%	16	48%	0	0%	33
Donegal County Council	20	67%	10	33%	0	0%	30
Louth County Council	12	40%	16	53%	2	7%	30
Cavan County Council	23	82%	5	18%	0	0%	28

	Band 1		Band 2		Band 3		
	<€500k		>€500k<€10m		>€10m		Total
	No:	%	No:	%	No:	%	
Kilkenny County Council	16	57%	12	43%	0	0%	28
Sligo County Council	14	54%	12	46%	0	0%	26
Monaghan County Council	20	80%	5	20%	0	0%	25
Waterford City and County Council	10	40%	12	48%	3	12%	25
Galway City Council	6	26%	17	74%	0	0%	23
Wexford County Council	15	68%	7	32%	0	0%	22
Clare County Council	12	57%	9	43%	0	0%	21
Leitrim County Council	17	85%	3	15%	0	0%	20
Westmeath County Council	9	45%	11	55%	0	0%	20
Laois County Council	15	79%	4	21%	0	0%	19
Mayo County Council	14	78%	4	22%	0	0%	18
Galway County Council	12	71%	5	29%	0	0%	17
Offaly County Council	11	65%	6	35%	0	0%	17
Carlow County Council	8	57%	6	43%	0	0%	14
Kerry County Council	7	50%	7	50%	0	0%	14
Longford County Council	8	67%	4	33%	0	0%	12
Roscommon County Council	10	91%	1	9%	0	0%	11

	Band 1		Band 2		Band 3		Total
	<€500k		>€500k<€10m		>€10m		
	No:	%	No:	%	No:	%	
National Transport Authority	1	14%	6	86%	0	0%	7
University College Dublin	3	75%	1	25%	0	0%	4
Transport Infrastructure Ireland	0	0%	2	100%	0	0%	2
Dublin City University	1	100%	0	0%	0	0%	1
St James Hospital	1	100%	0	0%	0	0%	1
Tallaght University Hospital	1	100%	0	0%	0	0%	1
Technological University Dublin	0	0%	1	100%	0	0%	1
Trinity College Dublin	1	100%	0	0%	0	0%	1
	423	45%	454	49%	54	6%	931

Table 15: Project Size per Local Authority


	Pedestrianised Street/New Footpath/Footpath Upgrade or Improvement	Shared Use Ped Cycle Path	Urban Greenway / Traffic Free Link	Segregated Standard or Stepped Cycle Track	New Protected Cycle Lane	Quietway - Signed cycle routes on low-trafficked and low speed roads	Bus Lane	Traffic Calming
Galway County Council	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kerry County Council	0.8	1.1	0.0	0.0	0.0	0.0	0.0	0.0
Kilkenny County Council	1.3	0.5	0.9	0.0	0.0	0.0	0.0	0.0
Laois County Council	1.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Leitrim County Council	2.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Louth County Council	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Longford County Council	0.3	0.8	0.0	0.0	0.0	0.0	0.0	0.0
Mayo County Council	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Monaghan County Council	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Offaly County Council	5.0	0.0	0.0	0.5	0.4	0.0	0.0	0.0
Roscommon County Council	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sligo County Council	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tipperary County Council	4.3	0.0	0.7	2.1	0.0	0.0	0.0	0.0
Westmeath County Council	1.2	1.7	0.8	0.6	0.0	0.0	0.0	0.0
Wexford County Council	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Campuses and Schools	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Total	99.4	16.3	7.3	26.2	16.8	3.4	2.3	2.9

Table 16: Route infrastructure delivered by Local Authority

	New Pedestrian Bridge	New Pedestrian and Cycle bridge	Junction upgrade	Isolated ped or zebra crossing	School Zone	Modal Filter	Cycle Parking Stands	Bus Stop	Island Bus Stop
Kerry County Council	0	0	0	0	0	0	0	0	0
Kilkenny County Council	0	0	19	5	1	0	0	0	0
Laois County Council	0	0	8	12	2	0	0	2	0
Leitrim County Council	0	0	7	7	1	0	0	0	0
Louth County Council	0	0	45	0	0	0	0	0	0
Longford County Council	0	0	3	3	1	0	0	0	0
Mayo County Council	0	0	2	2	0	0	0	0	0
Monaghan County Council	0	0	0	0	0	0	0	0	0
Offaly County Council	0	0	17	12	0	0	0	0	0
Roscommon County Council	0	0	6	2	1	0	0	0	0
Sligo County Council	0	0	0	1	0	0	5	0	0
Tipperary County Council	0	0	1	0	0	0	0	0	0
Westmeath County Council	0	0	4	6	0	3	395	0	0
Wexford County Council	0	0	6	6	3	0	0	2	0
Campuses and Schools	0	0	1	0	0	0	2006	2	0
Total	0	4	424	224	46	16	3266	146	32

Table 17: Other Infrastructure by Local Authority


Section 2 Appendices - Public Transport Investment

 Heavy Rail Safety & Development			
Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Dart+ Programme	<p>The DART+ Programme will provide a sustainable, reliable and more frequent rail service improving capacity on the rail corridors serving Dublin, to Drogheda on the Northern Line, Hazelhatch on the Kildare Line, Maynooth and M3 Parkway on the Maynooth Line, and on the South Eastern Line as far south as Greystones.</p> <p>As part of the electrification of the commuter rail network serving Dublin, a single fleet manufacturer has been appointed for the provision of both fully electric multiple unit (EMU) and battery electric multiple unit (BEMU) rail fleet for the expanded DART network.</p> <p>An Oral Hearing in relation to the DART+ West project was convened by An Bord Pleanála. The Hearing concluded in October 2023 and it is now a matter for An Bord Pleanála to consider. Additional applications for a Railway Order for the Dart+ Programme were submitted during March 2023 for the DART+ South West project with an application planned to be submitted to An Bord Pleanála for DART+ Coastal North Project by mid-2024.</p>	<p>Phase 3 - Preliminary design</p> <p>Phase 6 - Construction & Implementation (DART+ Fleet)</p>	€70.9m
41 Intercity Railcars (ICR's) Purchase	<p>The objective of the project is to provide additional capacity on existing rail services. An order was placed in December 2019 for an additional 41 InterCity Rail (ICR) train carriages, to add extra capacity to the existing train fleet. These additional carriages are what is referred to as “intermediate carriages”, meaning they can only be used for lengthening trains sets.</p> <p>The first batch of carriages arrived in Ireland on the 4th of September 2022, and all 41 carriages have been delivered and are at various stages of testing and commissioning. The NTA, in conjunction with Irish Rail, are finalising the deployment of these additional carriages in order to address passenger capacity issues on the rail network across Ireland.</p>	<p>Phase 6 - Construction & Implementation</p>	€37.1m

 Heavy Rail Safety & Development			
Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Heavy Rail Maintenance	<p>Due to shortfalls in the Public Service Obligation (PSO) funding in 2023, NTA co-funded a portion of IE Heavy Maintenance costs in 2023. This funding contributed towards long periodicity maintenance and overhaul asks, typically with a periodicity of between 2 and 7 years required to ensure the safe and reliable operation of rolling stock.</p>	N/A	€24.0m
National Train Control Centre	<p>The aim of the new National Train Control Centre (NTCC) is to provide a modern, safe, efficient train control system that can effectively meet the current network needs and the significant growth in services which are planned over the next two decades. The NTCC building at Heuston has been occupied since November 2022 by An Garda Síochána and a limited number of Iarnród Éireann staff. There is also a facility allocated to Dublin City Council Traffic Control department within the building.</p> <p>Detailed design for the refurbishment of the existing Central Traffic Control (CTC) building at Connolly Station was significantly progressed in 2023 and fit out is due to commence in 2024. Significant progress was made on the development of the Traffic Management System (TMS product). The software developer completed the development of their Generic Product and 5 rounds of Factory Acceptance Testing (FAT) were complete. The first software release is expected before mid-2024.</p>	Phase 6 - Construction & Implementation	€23.6m
Cork Area Commuter Rail	<p>The Cork Area Commuter Rail (CACR) Programme involves the development and enhancements to the rail network over approximately 62 kilometres from Mallow through Cork to Cobh and Midleton. This will include electrification and re-signalling across the three main routes along with the provision of through running services at Cork Kent Station.</p> <p>Construction contracts were awarded in 2023 along with a Railway Order being granted by An Bord Pleanála.</p>	Phase 2 - Concept Development & Option Selection	€21.4m


Heavy Rail Safety & Development

Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Train Protection System - Drogheda to Greystones (D2G)	<p>The overall objective of the Train Protection System (TPS) project - Phase 1 is to deploy an European Train Control System (ETCS) Level 1 TPS on the Drogheda to Greystones (including the Howth branch) coastal route to support the commissioning of new trains as part of the new DART Fleet project. This will involve the design, installation, testing and commissioning of TPS equipment on this coastal route which will be used by the new rolling stock that will be delivered as part of the new DART Fleet project. These areas are referred to as the Drogheda to Greystones Railway, or 'D2G' Project. The project will conclude upon the submission of the Approval to Place In Service (APIS) 5 Application 'Interim Operation' to the Commission for Rail Regulation (CRR).</p> <p>IÉ progressed with the trackside installation works for work packages:</p> <ul style="list-style-type: none"> › DG1 - Howth Branch, › DG2 - Malahide to East Wall Junction, › DG4 - Malahide to Drogheda, › DG5 - Sandymount to Greystones, and › DG6 - North Ireland Border to Drogheda. <p>Civil works and testing phase for DG1 were complete and safety approval process is ongoing. Civil works for DG2 to DG6 were progressed during the period. On board Installation works for the head of a series were complete and safety approval process is ongoing.</p>	Phase 6 - Construction & Implementation	€12.9m
Colbert Station - Transport Interchange Limerick	<p>The Colbert Station Interchange is no longer fit for purpose to meet its current demand, with many operational and customer experience challenges facing the existing station interchange. These include limited operational capacity and resilience, poor operational efficiency, and poor customer facilities such as toilets, disabled access, and surveillance.</p> <p>IÉ commenced work in 2022 and the main construction progressed significantly in 2023 with the new interchange due to open to the public in early 2024.</p>	Phase 6 - Construction & Implementation	€10.3m

 Heavy Rail Safety & Development			
Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Railway Station Renewals 2023	<p>The Station Renewal Programme has addressed the historic underfunding of buildings & facilities assets across the rail network, which had contributed to deteriorating conditions.</p> <p>In 2023, work was undertaken at 123 stations, including repainting and repairs to masonry, timber, platform metalwork, boundary fencing, and customer concourses and facilities. In 2024, additional trades crews will be recruited to reduce the number of items on the IÉ Building Inspection Station Defect Log and address age-related station management faults reported at over 50 station sites.</p>	Phase 6 - Construction & Implementation	€7.5m
Rail Infrastructure coastal works at Rosslare, Bray head and Killiney	<p>The rail infrastructure coastal works at Rosslare Wexford, Bray Head Wicklow and Killiney Dublin involve the continuation of interim coastal repair works south of Rosslare Strand, Bray Head and Killiney and adjacent to the railway.</p> <p>In 2023, IÉ progressed and completed with emergency works in Rosslare. Killiney tender was awarded and the procurement of materials and site setup by the contractor commenced at year end.</p>	Phase 6 - Construction & Implementation	€3.7m
East Coast Railway Infrastructure Protection Projects (ECRIPP)	<p>The ECRIPP is a collection of five projects, the scope of which is the provision of coastal defence infrastructure to provide climate resilience to the railway line between Dublin and Wicklow.</p> <p>In 2023, ECRIPP progressed with the commencement of topographical surveys. The project has also progressed to Phase 2 (Concept Development & Option Selection), where IÉ will develop the project through an option selection process, carry out an assessment of options and alternatives and identify the preferred option(s).</p>	Phase 2 - Concept Development & Option Selection	€3.4m


Heavy Rail Safety & Development

Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
DART Operational Capacity Enhancement Project, Bray	<p>This project comprises of constructing a new operational facility within existing buildings and rationalising the existing facility to make more efficient use of space and facilitate removal of temporary buildings on site. The temporary buildings occupy lands adjacent to the existing car park entrance. Their removal will facilitate improved access and mobility at the station.</p> <p>Construction works commenced on site in January 2023 with substantial completion and registration of the Building Control on programme in December 2023. Occupation of the new premises is planned for early 2024.</p>	Phase 6 - Construction & Implementation	€3.0m
Lifts & Escalator Renewal Works	<p>The investment in lift and escalator renewal works is part of the IÉ “Big Lift” project. It comprises the upgrade or replacement of lifts, escalators and systems to improve reliability and performance of existing facilities for persons with reduced mobility.</p> <p>IÉ completed the upgrade and renewal of 3 new heavy duty stainless steel electric traction lifts, 1 escalator and 21 lift mechanical safety gear systems in 2023.</p>	Phase 6 - Construction & Implementation	€2.7m
Railway Station signage and wayfinding programme	<p>The signage and wayfinding programme will replace non-compliant, inadequate, and deteriorated station signage, enabling any railway customer to identify and navigate the stations.</p> <p>18 Sligo Line stations and 15 Galway District stations have been signed off by IÉ in 2023. To date, 80% of the IÉ network has been signed in accordance with IÉ wayfinding guidelines and standards. The remaining stations will be put out to tender in 2024.</p>	Phase 7 - Close-out & Review	€2.7m

 Heavy Rail Safety & Development			
Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Woodbrook DART Station	Woodbrook Station, located between Bray and Shankill, will serve both existing and new communities in Woodbrook-Shanganagh area. The station will feature two 174-meter-long platforms equipped with passenger shelters, seating, lighting, CCTV, customer information displays, bicycle parking, and ticketing facilities. On-site works commenced in November 2023 and will continue throughout 2024.	Phase 6 - Construction & Implementation	€2.4m
Railway Station Roof Renewals	This project consists of executing repairs and renewals at six station roofing locations. IÉ completed the following upgrades in 2023: Connolly station reconstruction of valley gutter, Heuston station flat roof membrane, Cobh flat roof renewals and Athlone roof renewals trackside building.	Phase 6 - Construction & Implementation	€2.0m
Railway Station furniture and bike parking	The Station Furniture and Bicycle Facilities Programme covers the provision of target quantities for each category of station furniture for all stations. IÉ completed the following upgrades in 2023: 100 external seats, 86 bins, 11 shelters in Donabate, Templemore, Athy, Portlaoise, Woodlawn, Cork Kent & Chareville.	Phase 7 - Close-out & Review	€1.5m
Clongriffin Railway Station vandalism retrofit	Clongriffin Railway Station has been the subject of repeated vandalism, with the station's glass façade smashed on numerous occasions. In 2023, IÉ reconstructed the station elevations to enable the station to function in this expanding residential DART location. In addition, the reconstructed elevations reduced maintenance requirements and extended the life of the facility.	Phase 7 - Close-out & Review	€1.3m


Heavy Rail Safety & Development

Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Station Customer Service Systems (SCSS) Enabling Works	<p>The overall objective of the project is to develop preliminary designs for the Station Customer Service Systems to align with IÉ's vision for Customer Information Systems (CIS). The SCSS Enabling Works project will develop systems requirements specifications and a procurement strategy for these systems. This includes a review of existing CIS equipment technical specifications, developing new technical specifications for station equipment, and the specification of a Station Management System.</p> <p>In 2023, IÉ progressed the system requirements specification, typical station layouts design and customer requirements specification (CRS). Work also commenced with development of procurement strategy for SCSS implementation phase.</p>	Phase 2 - Concept Development & Option Selection	€1.1m
Oranmore Station Enhancements	<p>This project is to deliver a passing loop and second platform at Oranmore Station along with associated infrastructure.</p> <p>In 2023, IÉ received Gateway 2 approval from the NTA to progress the scheme's preliminary design.</p>	Phase 3 - Preliminary Design	€1.0m
Station heating renewals programme	<p>This project involves the replacement and upgrade of life expired heating systems providing welfare services to booking offices, public waiting rooms and public toilets.</p> <p>In 2023, new hot water heating systems were installed at 7 stations on the network.</p>	Phase 7 - Close-out & Review	€1.0m
Ceannt Station Redevelopment Galway	<p>This project involves the construction of the station roof; southern façade and entrance; building works; tracks and platforms at Ceannt Station, Galway.</p> <p>Enabling works for the project were completed in 2023 and the main works contractor mobilised on site.</p>	Phase 6 - Construction & Implementation	€1.0m

 Heavy Rail Safety & Development			
Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Upgrade of Fire & Voice Alarm Systems	<p>This project involved the installation of a new Public Address and Voice Alarm (PAVA) systems at both Cork Kent and Dublin Hueston Stations to serve the public areas of the stations.</p> <p>This project was completed in 2023.</p>	Phase 7 - Close-out & Review	€0.9m
Railway Stations surfacing renewals	<p>The Railway Station surfacing renewals programme will address concourse, platform, car park and approach road surfaces degraded asset conditions at 12 station locations.</p> <p>IÉ completed the following upgrades in 2023: Mallow car park & accessibility improvement works, Gran Canal Dock Platform 1 renewal of wearing course and Tara street north entrance retiling works.</p>	Phase 6 - Construction & Implementation	€0.9m
Railway station passenger waiting room and toilet upgrades	<p>This project comprises of upgrades to 10 station toilets at Pearse, Bray, Drogheda, Dundalk, Kildare, Killarney, Limerick Junction, Longford, Mullingar, and Thurles; and 5 waiting rooms at Dundalk, Longford, Malahide, Mallow and Kildare.</p> <p>IÉ completed the following upgrades in 2023: Mullingar, Killarney, Limerick Junction, Pearse, Dundalk & Bray toilet works.</p>	Phase 6 - Construction & Implementation	€0.8m
Kishoge Station Opening	<p>The scope of this project is to cost effectively open Kishoge station to passenger service utilising the existing station building & platforms based on the current track and platform configuration and operational needs.</p> <p>Construction works commenced in October 2023 with planned completion in 2024.</p>	Phase 6 - Construction & Implementation	€0.8m


Heavy Rail Safety & Development

Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Passenger Information System (PIS) Upgrade for DART EMU Class 8500/8510/8520	<p>The DART fleet currently consists of 144 Electric Multiple Unit (EMU) carriages. A total of 68 carriages (47% of the fleet) are fitted with obsolete and inoperative Passenger Information Systems (PIS). These are the 8500, 8510 and 8520 EMU classes of carriages which were procured by IÉ from 2000-2004.</p> <p>Following the PIS installation across the 68 carriages in 2022, IÉ completed the implementation in 2023 which included supply of components, system installation, testing & commissioning of the entire fleet.</p>	Phase 6 - Construction & Implementation	€0.8m
Inchicore Track Renewals	<p>The Inchicore Track Renewals project comprises of renewal or removal of hand points; altering existing radius over Points and Crossings units to accommodate new fleet; relaying of plain line track; and realignment to match where DART+ ties-in from the mainline. The overall project is split up into 6 work packages: work package 1 was completed on site in December 2023.</p> <p>Detailed design for Stage 2, 3 and 6 (scheduled for 2024) has commenced in December 2023, awaiting approval from Chief Civil Engineering (CCE) technical team to place material order.</p>	Phase 6 - Construction & Implementation	€0.8m
Ticket Vending Machine Bank Note Acceptor Update	<p>This project relates to upgrading 133 Ticket Vending Machines (TVM's) on the IÉ rail network to update the Bill Note Acceptor or convert the TVM's to cashless operation.</p> <p>The project commenced in 2023, and IÉ progressed initiation, planning and procurement throughout the year.</p>	Phase 3 - Procure	€0.8m
Mark IV Rolling Stock - CCTV Upgrade	<p>The objective is to supply a quality replacement CCTV system including cameras, recorders and associated equipment in compliance with all relevant standards for use on and with IÉ passenger rolling stock.</p> <p>All the CCTV upgrades on MKIV fleet were complete by December 2023.</p>	Phase 7 - Close-out & Review	€0.7m

 Heavy Rail Safety & Development			
Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
LED Lighting Programme	<p>The LED Lighting Programme involves the renewal of LED lighting in all areas that provide step-free access in train stations across the IÉ network. This will see the renewal of existing luminaires located on lift shaft entrances, over track bridges and stairs.</p> <p>A total of 400 lights on 15 platforms and concourses were renewed and completed by December 2023.</p>	Phase 7 - Close-out & Review	€0.6m
Real Time Customer Information (RTCI)	<p>The Real-Time Customer Information (RTCI) project is a foundational project for improving the provision of real time service information to IÉ customers and staff and is included in the Customer Information System (CIS) Strategy recommendations. The project will support the creation of real time data services utilising onboard equipment, the latest data management tools and will include the delivery of occupancy information and real time train location information, improved arrival time calculations and a vastly more reliable IT infrastructure. The RTCI project supports the Traffic Management System project in becoming the 'single source of truth' for real time customer information.</p> <p>In 2023 IÉ progressed with the preparation of a pre-tender documentation. A Pre-Qualification Questionnaire was issued in 2023 and evaluation completed by the end of year.</p>	Phase 1 - Initiation	€0.5m
Auto door renewals programme	<p>The overall objective of this project is the renewal of automatic door systems at various locations across the IÉ network in order to improve the overall safety and passenger experience of the stations.</p> <p>Renewal works were completed for 39 Auto doors at 17 stations in 2023.</p>	Phase 7 - Close-out & Review	€0.5m


Heavy Rail Safety & Development

Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Lift Passenger Call Programme	<p>This project is for the continued roll out of lift passenger call and CCTV systems across the IÉ network in order to address anti-social behaviour events.</p> <p>These systems were installed in 18 lifts at 8 stations in 2023.</p>	Phase 7 - Close-out & Review	€0.5m
DART Platform Accessibility	<p>This project aims to prevent the increase of, or reduce, ramp usage on the DART network (existing and proposed). The project will initially define 'the problem' in line with the RM (Persons with Reduced Mobility), TSI (Technical Specification for Interoperability) and then subsequently define the project objectives via consultation with key stakeholders, including the NTA. This will be presented as a Strategy. The scope, cost and programme will be presented in the Implementation Plan, after the Feasibility Study has been completed to advise accordingly.</p> <p>In 2023, IÉ progressed the development of 3 reports - the Strategy, Feasibility Study and Implementation Plan.</p>	Phase 1 - Scope & Purpose	€0.4m
Railway station renewal and upgrade program	<p>The station renewal and upgrade programme includes painting works and station passenger furniture upgrade. The station painting programme initiated in 2020 includes up to 22 operational station locations with deteriorated painting elements and associated minor repairs/part renewal.</p> <p>Outstanding seat delivery and installation completed in 2023.</p>	Phase 7 - Close-out & Review	€0.4m
Kylemore and Cabra Station	<p>The Greater Dublin Area Transport Strategy 2022-2042 specifically identifies new rail stations at Cabra, Glasnevin, Heuston West, Kylemore, Woodbrook, west of Sallins, west of Louisa Bridge and west of Maynooth.</p> <p>The NTA have provided funding to Iarnród Éireann in 2023 to commence the preparation of designs and planning for the Kylemore Road and Cabra rail stations.</p>	Phase 1 - Scope & Purpose	€0.3m

 Heavy Rail Safety & Development			
Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Ballysimon and Moyross Station	<p>The Limerick Shannon Metropolitan Area Transport Strategy 2040 (LSMATS) sets out proposals for additional rail stations at Moyross and Ballysimon (in tandem with a park and ride facility), with the potential for other stations on the existing rail network to be kept under review, including at Corbally and Parkway, possibly linked to park and ride provision.</p> <p>In 2023, IÉ progressed with the the preparation of designs and planning for the Ballysimon rail station and the identification of a emerging preferred location and layout for the Moyross station.</p>	<p>Phase 1 - Scope & Purpose (Ballysimon)</p> <p>Phase 2 - Concept Development & Option Selection (Moyross)</p>	<p>€0.3m</p>
Ennis Line Capacity Improvements	<p>The upgrade and enhancement of the Western Rail Corridor between Limerick and Ennis, and onward line to Athenry, is a Policy Objective (No.7) set out in the LSMATS. This project will review the existing infrastructure and develop a solution to improve capacity on the line.</p> <p>The project commenced in September 2023 with the appointment of a multi-disciplinary consultant to undertake Phase 1 (Scope and Purpose) and Phase 2 (Concept Development and Options Selection) of the project.</p>	<p>Phase 1 - Scope & Purpose</p>	<p>€0.3m</p>
Passenger Information System Replacement - 29000 DMU	<p>This project is to replace the End-of-Life Passenger Information System (PIS) on the Class 29000 Diesel Multiple Unit (DMU) fleet. The PIS system is an audio and visual communication system which predominantly delivers automated safety and destination information to passengers. The new PIS will also have remote access capability to allow live updating of timetables or transmission of emergency messages, as well as remote diagnostics to aid failure identification and maintenance.</p> <p>In May 2023, IÉ awarded the contract to IKUSI for the upgraded PIS on the 29000 DMU fleet with implementation planned for 2024.</p>	<p>Phase 6 - Deploy/ Rollout</p>	<p>€0.3m</p>


Heavy Rail Safety & Development

Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Tax Saver Distribution Upgrade	<p>This projects includes required updates to the the TaxSaver website to ensure GDPR compliance and the cookies directive.</p> <p>In 2023, IÉ progress with planning and procurement with upgrades to commence in 2024.</p>	Phase 1 - Initiation	€0.3m
Limerick-to-Limerick Junction Capacity Enhancement	<p>This project aims to improve and expand the current connectivity capacity between Limerick and Limerick Junction.</p> <p>In 2023, the projects Strategic Assessment Report was finalised and work on Phase 2 (Concept Development & Option Selection) of the project commenced.</p>	Phase 2 - Concept Development & Option Selection	€0.2m
Multimodal Interchange	<p>With the focus of encouraging further modal shift to public transport, recognising the evolving way in which the public is accessing and interchanging between transport modes at stations, this project will undertake a study to develop a design standard for developing stations for multimodal interchange and a strategy for its application across the IÉ network of stations. “Mobility hubs” create space designed specifically to house public and shared mobility modes, improving interchange between all modes involved while enhancing the public realm for local residents and businesses as well as transport users.</p> <p>IÉ issued the Strategy & Implementation Plan to the NTA in December 2023 for review.</p>	Phase 1 - Initiation	€0.1m

 Heavy Rail Safety & Development			
Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Avoca Station Pre-Feasibility	<p>IÉ is undertaking a Pre-feasibility study of the reopening of Avoca Station located on the Dublin to Rosslare line, between Rathdrum and Arklow in County Wicklow. The Pre-feasibility study will consider, amongst other things, potential passenger demand, potential stopping patterns, engineering feasibility and high level cost estimation of reopening this station. The study will identify the merits of further progressing the project through subsequent planning stages, and allow a decision to be made as to whether there is likely to be a reasonable economic case to support the scheme.</p> <p>In 2023, IÉ progressed the Pre-Feasibility report and is nearing completion.</p>	Phase 1 - Scope & Purpose	€0.1m
Other Heavy Rail Projects	<p>Other new projects have also commenced/ are at early stages of planning and design such as Navan line, Laoise Train Care Depot Service Slab Cover, Drogheda and Connolly Depots Refurbishments, and implementation of customer information systems in the existing fleet.</p> <p>Additional projects, at the construction and implementation phases, had small payments in 2023 such as Limerick Fuel Slab and New bicycle ranks & tip-up seats for 29000 railcars.</p>	N/A	€0.4m
Other Technology Projects	<p>Other technology projects were progressed in 2023 including Ticket Vending Machines (TVMs) replacements, Tax Saver Distribution Upgrade, Passenger Information System Replacement, Revenue Protection Unit - Back Office, IÉ Website enhancement and others.</p>	N/A	€0.4m
NTA Heavy Rail Support Costs	<p>This is internal NTA support spend on the Heavy Rail investment programme to conduct independent reviews of the Public Spending Code deliverables and Feasibility Studies.</p>	N/A	€0.2m
			€247.2m


Bus Programme

Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Bus Fleet Programme	<p>The main areas of fleet acquisition include new buses to renew and expand the fleet operating services within the Dublin Metropolitan Area (BusConnects Dublin Fleet), services within the other main cities in Ireland (BusConnects Urban Non-DMA Fleet) and town services (Non-City Urban Buses Fleet), in addition to new buses and coaches to renew and expand the fleet operating regional and commuter services (Non-Urban Fleet).</p> <p>Urban Bus Fleet (inclusive of BusConnects Dublin Fleet, BusConnects Urban Non-DMA Fleet and Non-City Urban Buses Fleet) During 2023, the NTA accepted delivery of 92 double-deck battery-electric urban buses and 4 single-deck (long length) battery-electric urban buses. These deliveries represented the completion of two initial orders for a combined total of 165 single and double-deck battery-electric buses and the first deliveries from a second order for 91 double-deck battery-electric buses.</p> <p>Non-Urban Bus and Coach Fleet During 2023, the NTA took delivery of a total of 24 low-entry double-deck regional commuter vehicles, representing the last deliveries from an order for 50 vehicles placed in late 2021 and the first deliveries from an order for 30 vehicles placed in late 2022. The remaining 26 vehicles from the latter order will be delivered during the first half of 2024.</p>	Phase 6 - Construction & Implementation	€77.8m

 Bus Programme			
Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
BusConnects Dublin	<p>BusConnects Dublin is a major investment programme to overhaul the current bus system in Dublin through a programme of integrated actions to deliver a more efficient, reliable and improved bus system for a larger audience.</p> <p>Some of the key elements that progressed at different phases during 2023 included:</p> <ul style="list-style-type: none"> ➤ The introduction of new bus routes including W Orbital routes across west and southwest regions of Dublin and Kildare, Southern Orbital, Radial and Local routes across southern regions of Dublin. ➤ The introduction of zero emission battery electric buses in Dublin, with charging capacity in place in the Summerhill and Phibsborough depots. ➤ Thorough planning and procurement for a new ticketing system. ➤ New TFI-branded poles were installed at over 416 bus stops and tender process progressed for upgrades over 750 bus stops; and ➤ Confirmation of planning consent for the first of 12 new bus corridors. 	<p>Phase 4 - Statutory Process</p> <p>Phase 5 - Detailed Design & Procurement</p> <p>Phase 6 - Construction & Implementation</p>	<p>€38.4m</p>
Depots	<p>In order to support the transition to a zero-emission urban bus fleet, significant progress was made in 2023 with regards to the provision of charging infrastructure at a variety of depots nationwide.</p> <p>Planning permission was also obtained in 2023 for a temporary bus depot at Jamestown Road in Finglas that is intended to facilitate the rollout of future phases of BusConnects Dublin Network ReDesign as well as the installation of further charging infrastructure at depots across the city. Planning for a brand new bus depot at Ballycoolin in north-west Dublin was also progressed during the year.</p>	<p>Phase 5 - Detailed Design & Procurement</p> <p>Phase 6 - Construction & Implementation</p>	<p>€18.3m</p>


 **Bus Programme**

Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
BusConnects Cork	<p>BusConnects Cork is a programme to fundamentally transform Cork's bus system, so that bus commuting will become a viable and attractive choice for employees, students, shoppers and visitors.</p> <p>In 2023, the Cork programme went through extensive planning and design phases for its projects, including two public consultations on the preferred route options for eleven sustainable transport corridors. The Network Redesign project prioritised planning and design for the first 3 phases of implementation, including the relevant infrastructure.</p>	Phase 3 - Preliminary Design	€13.0m
BusConnects Limerick	<p>BusConnects Limerick aims to transform the region's bus system, making public transport more useful to more people.</p> <p>The new bus network for Limerick was published at the end of 2023. This followed an extensive review of the bus network in Limerick, in collaboration with Limerick City and County Council, Clare County Council and Bus Éireann.</p>	Phase 3 - Preliminary Design	€5.1m
BusConnects Galway	<p>The BusConnects Galway programme will enable more people to avail of public transport resulting in increased access to more places and opportunities.</p> <p>In 2023, the final new bus network for Galway was published after an extensive review with multiple stakeholders. The Dublin Road scheme option selection stage and preliminary design progressed in 2023, and is expected to result on the submission of planning consent to An Bord Pleanála in 2024. A planning consent application for the development of the Cross City Link was submitted to An Bord Pleanála during September 2022 and the decision from a Compulsory Purchase Order Oral Hearing is expected in Q3 of 2024.</p>	Phase 3 - Preliminary Design	€1.9m

 Bus Programme			
Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Bus Roadside Facilities (Bus Shelters & Bus Stops)	<p>Bus Roadside facilities includes the maintenance and repair of existing bus shelters and the provision of new bus shelters on bus routes throughout the State and the provision of improved customer information at bus stops.</p> <p>In 2023, the NTA installed 134 new standard bus shelters nationwide. In addition, the NTA extended an existing programme to deliver solar powered courtesy lighting solutions at bus shelters where lighting was not available due to power supply issues. By the end of 2023, approximately 845 out of 896 identified shelter locations had solar panels fitted to illuminate the shelters' courtesy lighting.</p>	Phase 6 - Construction & Implementation	€4.8m
Bus Éireann (BÉ) (Infrastructure and Technology)	<p>The NTA provide a capital grant allocation to BÉ on an annual basis for a number of infrastructure and technology projects/programmes.</p> <p>In 2023, €4.2m was grant funded to BÉ to support a number of infrastructure and technology projects, programmes and initiatives including, but not limited to, Garage and Vehicle Management, Network Performance Decisioning System (NPDS) - Phase 1, Bus Stations - new Wall Boards, Information Kiosks plus Back-End, CCTV On-Bus Project and others.</p>	Multiple	€4.2m
Dublin Bus Fleet Refurbishment	<p>In order to maintain the reliability and availability of mid-life buses within the urban bus fleet, refurbishment of various components is undertaken at approximately mid-life.</p> <p>During 2023, refurbishment of 33 buses first registered in 2016 was completed.</p>	Phase 6 - Construction & Implementation	€3.2m


Bus Programme

Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Dublin Bus (DB) (Infrastructure and Technology)	<p>The NTA provide a capital grant allocation to DB on an annual basis for a number of infrastructure and technology projects/programmes.</p> <p>In 2023, €2.5m was grant funded to DB to support a number of infrastructure and technology projects, programmes and initiatives including, but not limited to, SG Rear Engine Doors Safety Upgrade, Next Generation AVL - Dublin Bus Support, Website and App Replacement Project and others.</p>	Phase 6 - Construction & Implementation	€2.5m
Connecting Ireland	<p>Connecting Ireland is NTA's plan to transform rural and interurban mobility by improving bus services across the country over five years (2021 – 2025) inclusive. Phase 1 was completed in 2022 which developed an implementation plan and delivered 38 new and enhanced bus services throughout Ireland.</p> <p>In 2023 Phase 2 was completed delivering 64 new and enhanced services. These services under Connecting Ireland have led to a significant increase in the number of passengers using public transport in rural areas.</p>	Phase 6 - Construction & Implementation	€2.0m
New Town Services (NTS)	<p>The New Town Bus Services Programme aims to provide regular bus network services across the urban footprint area of Ireland's larger towns. The services will be provided by high-capacity single-deck buses that will operate from early morning until late evenings, offering direct, legible routes, at low-flat fares, offering discounts to children, students, young adults, and Leap card holders. The Programme aims to integrate bus services with other public transport services where possible.</p> <p>In July 2023, the Carlow Town Bus services was launched, recording 365,000 passenger journeys, averaging over 1,000 journeys daily. The Clonmel Town Bus Service also commenced in December 2023 recording 127,488 passenger journeys, with a 7-day rolling average exceeding 700 journeys daily.</p>	Phase 6 - Construction & Implementation	€0.5m

 Bus Programme			
Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Dublin City Council bus projects	<p>Construction for Dublin City Council bus projects continued on the Belmayne Main Street scheme. At the end of 2023 the next phases of work included commissioning the traffic signal infrastructure, installing public lighting, providing road markings on nearby roads and snagging for scheme completion.</p> <p>The bus connects liaison team has continued working on the core bus corridor and bus network redesign projects, including identification or pinch points on the bus network and implementing bus priority via the Dublin Public Transport Interface Model (DPTIMS). In 2023 the Finglas and Ballymun bus lanes were changed to be 24 hour operation, extended bus lane hours implemented on Amiens street /South Great Georges St/Aungier St/Camden St as well as Patrick St and Clanbrassil Street bus lane hours and clearways were all extended to include Sundays.</p>	Phase 6 - Construction & Implementation	€2.4m
Athlone Town Service Electrification Project	<p>The Athlone's town bus service will be Ireland's first all-electric bus service.</p> <p>In January 2023 the first 11 of the single-deck buses were introduced into service in Athlone following the commissioning of 18 new charging guns and associated power supply infrastructure at Bus Éireann's Athlone Depot; the town bus service in Athlone is the first such service in Ireland to convert to 100% zero-emission bus operation.</p>	Phase 6 - Construction & Implementation	€1.1m
Hydrogen Buses	<p>Three hydrogen-powered double deck buses owned by the NTA have been engaged in a technology pilot with Bus Éireann since mid-2021. Phase 1 of the pilot ran from July 2021 to the end of 2022 on Bus Éireann Routes 105X and 103X with the three buses completing more than 90,000 zero-emission kilometres and recording an average H2 gas consumption of 6.8kg/100km versus a pre-pilot projection of 6.0-8.0kg/100km. Phase 2 began at the start of 2023 and will conclude at the end of 2024.</p>	Phase 6 - Construction & Implementation	€0.5m
Other technology projects	<p>NTA provided capital funding to other technology bus projects in 2023 which included funding to staff salaries for these projects.</p>	N/A	€0.3m


 **Bus Programme**

Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Red Cow Bus Interchange	<p>The Red Cow Bus Interchange Programme consists of the redevelopment of the current bus interchange facilities at Red Cow Luas Park & Ride car park, which will improve accessibility, capacity and the levels of service on the overall public transport system as part of BusConnects Dublin Programme.</p> <p>During 2023, an application for the permanent works was lodged in February following a Request for Further Information. Planning permission was granted by South Dublin County Council in October. In addition, the procurement of a D&B contractor for the design and manufacture of the canopies and waiting facilities took place, following a tender competition, and an approval to award was issued in December.</p>	Phase 4 - Statutory Process	€0.1m
			€176.0m

 Park & Ride			
Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
NTA Park and Ride Development Office	<p>The NTA Park and Ride Development Office (PRDO) provides design services to assist in the delivery of Park and Ride projects, predominately in the Greater Dublin Area but also across the State. The plans to expand the Park and Ride network are set out in the various metropolitan area transport strategies which have been prepared by the NTA with input on Park and Ride from the PRDO.</p> <p>Following on from the work completed in the transport strategies, in 2023 the PRDO progressed several strategic sites including grant of Part 8 Planning consent for Park and Ride at Fassaroe in Wicklow.</p>	Phase 3 - Preliminary design	€1.1m
N51 Park and Ride, Navan	<p>The proposed N51 Park & Ride facility includes a new offline bus bay along the westbound lane of the N51 capable of accommodating up to 4 large coaches, incorporating two new bus shelters, a new bus stand area and cycle parking. This new Park and Ride car parking area will be capable of accommodating a total of 181 car parking spaces, including 6 mobility impaired parking spaces and 18 e-car charging spaces. The works also include associated accommodation and fencing works, public lighting, a CCTV system, landscaping works, surface water drainage works and ancillary works.</p> <p>The project was completed and opened to the public in 2023. The NX bus route now serves the site.</p>	Phase 6 - Construction & Implementation	€1.0m
Limerick Park & Ride Land Acquisition	<p>In 2023, NTA co funded along with Limerick County Council the acquisition of lands at Mackey Roundabout, Mountshannon which will be used to develop a new Strategic Park and Ride site.</p>	N/A	€0.9m


 **Park & Ride**

Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
IÉ Car Park Programme	<p>The IÉ Car Park Programme consists of the upgrading and improving park and ride at Irish Rail Stations throughout the country. The strategy is being rolled out with an initial group of 12 priority stations as identified in the IÉ National Car Park Strategy Report; Portlaoise, Millstreet, Ballybrophy, Bray, Portmarnock, Leixlip Louisa Bridge, Kildare, Edgeworthstown, Farranfore, Carlow, Athy and Charleville</p> <p>2023 progress included a section 5 declaration of exemption for upgrade and additional 50 spaces at Kildare and the remaining stations progressed through various stages of preliminary design and planning.</p>	Multiple	€0.3m
Clontarf Road Station Carpark Upgrade	<p>As part of the BusConnects programme, there will be an increase in bus and passenger movements at the Clontarf Road Station. The upgrade to facilitate this increase includes reconfiguration of the existing station carpark to accommodate additional bus bays and reinstatement of existing road pavement (due to current state/design and proposed future bus movements) in both the main carpark and the link road leading onto Alfie Byrne Road. The scope also includes facilities and upgrades appropriate with an interchange of this nature and bus frequencies such as bike parking, additional security measures and lighting.</p> <p>The project was opened to the public in 2023.</p>	Phase 6 - Construction & Implementation	€0.2m
			€3.5m

 Light Rail			
Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
MetroLink	<p>MetroLink is the development of a high-capacity, high-frequency, automated rail line running from Swords to Charlemont, linking Dublin Airport, Irish Rail, DART, Dublin Bus and Luas services, creating fully integrated public transport in the Greater Dublin Area.</p> <p>During 2023 TII appointed a Client Partner to work alongside them to deliver the next phase of the MetroLink Project. TII continued progress on the development of tender documents for the main contract works and preparations were ongoing for an Oral Hearing.</p>	Phase 4 - Statutory Process	€44.6m
Luas Lifecycle Asset Renewals Programme	<p>The Luas Life Cycle Asset Renewal (LCAR) Programme is a series of projects to upgrade and maintain Luas assets to protect the value of past investments, and to ensure that that the Luas Light Rail System continues to operate effectively, reliably and safely.</p> <p>In 2023 renewal of contact wires as well as track rail sections continued with the length targets for these projects met for the year. In addition, upgrades works were undertaken on passenger help points, information displays and network infrastructure. Enhancements were all completed to the tetra radio system with the installation of new base stations and the rollout of new handsets to operational staff.</p>	Phase 6 - Construction & Implementation	€13.3m

 Light Rail


Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Luas Finglas	<p>Luas Finglas is a 3.9 km extension of the Luas Green Line from Broombridge to Charlestown via Finglas, with a 350-space Park & Ride facility located just off the M50 at St Margaret's Road. The alignment is primarily off-road and segregated from traffic providing a high-quality public transport service. In the year of opening, Luas Finglas will provide for a tram in each direction every 7.5 minutes during peak times with an approximate journey time of 30 minutes from Charlestown to Trinity College.</p> <p>During 2023, the project progressed through preliminary design including the completion of a preliminary cost estimate. The draft Preliminary Business Case was finalised and issued to the Department of Transport in August 2023. In addition, and in preparation for the upcoming Railway Order submission, the preliminary design was progressed to a reference design and preparation of Environmental Impact Assessment Reporting (EIAR) chapters commenced.</p>	Phase 3 - Preliminary design	€3.8m
Public Transport Luas Upgrades	<p>The Public Transport Luas Upgrades (PTLU) Programme is a programme of works which go beyond general operation and maintenance which is undertaken by the Operator (currently Transdev) on Luas Light Rail systems. The scope of the programme includes projects which are not covered by the Operator contract and focus on upgrading and carrying out minor works on Luas assets to ensure the standard of Luas operations is maintained and enhanced.</p> <p>In 2023 Polymer Sealant works continued across the network to improve the rail infrastructure. In addition, work was undertaken to fit out the roof of the Redcow depot with a solar PV array.</p>	Phase 6 - Construction & Implementation	€2.4m
Luas Cork	<p>Luas Cork, previously known as the Cork Light Rail Transit (LRT), was identified in the CMATS as a key east-west corridor as part of the integrated transport network.</p> <p>Planning and route design development progressed in 2023 and a non-statutory public consultation on the Preferred Route alignment is due to commence in 2024 to seek community feedback on the Preferred Option.</p>	Phase 2 Concept Development & Option Selection	€0.9m

 Light Rail			
Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Luas Cross City	<p>The Luas Cross City project consisted of a 5.6 km extension of the Luas light rail system including 13 additional stations, a new depot and the purchase of 10 additional trams. The project allows the connection between the two existing Luas red and green lines in the inner city centre. The Luas Cross City has been operational since December 2017.</p> <p>In 2023, TII commenced development of the Ex-Post evaluation report for the project.</p>	Phase 7 - Close-out & Review	€0.7m
Green Line Capacity Enhancements	<p>The Green Line Capacity Enhancement (GLCE) project aims to cater for future demand along the Luas Green Line corridor ensuring optimal use of existing infrastructure in advance of other major public transport investments. The GLCE project includes a number of key elements to increase capacity of the Green Line including the extension of 26 existing Citadis 402 trams, manufacturing 8 new Citadis 502 trams and extending the Sandyford depot.</p> <p>In 2023, TII commenced development of Final Account reports for close out of the project.</p>	Phase 6 - Construction & Implementation	€0.4m
Luas Lucan	<p>Luas Lucan is a west-east mass transit running from Lucan (Adamstown) to Dublin City Luas network providing a high capacity service from this area to Dublin City Centre, sufficient to cater for the high transport demand along this corridor.</p> <p>In 2023, TII ran a tender competition to appoint a consultant to undertake the options analysis stage of the project and identify an Emerging Preferred Option for the scheme.</p>	Phase 1 - Scope & Purpose	€0.3m




Light Rail

Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
NTA Light Rail Support Costs	In 2023 engagement of technical advisors, such as Chandler KBS to assist in review of cost estimates, was undertaken. Gardiner & Theobald was appointed to carry out a review of the Luas Finglas Procurement Strategy. Aecom was appointed under the Technical Advisory Framework to investigate emerging trends on the light rail industry worldwide.	N/A	€0.3m
Fleet Supply Contract	<p>The fleet supply contract is a project to develop the specification for a new light rail vehicle for the luas network as well as tender for and award a supply contract for these new vehicles.</p> <p>In 2023, TII ran a market consultation to understand what the market is capable of supplying, lead times and what new technologies are available for light rail rolling stock. In addition, consultation has began with various stakeholders to develop the specification for the new vehicles.</p>	Phase 2 - Concept Development & Option Selection	€0.1m
			€66.9m

 Accessibility			
Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
IÉ Station Accessibility Programme	<p>The objective of the Accessibility Programme is to improve the accessibility across the 54 stations identified as requiring upgrade on the Irish Rail network.</p> <p>Wheelchair accessible lifts and bridges at Gormanston station, Co. Meath and Dalkey, Co. Dublin were opened to the public in early 2023. Construction of accessible lifts and bridges was also completed at Little Island station and commenced at Banteer in Co. Cork. IÉ also secured planning consents for accessibility works at Rathdrum, Athy, Boyle, Claremorris and Rathmore in 2023.</p>	Multiple	€9.9m
Wheelchair Accessible Vehicles Grant Schemes	<p>A key objective of the NTA under the Taxi Regulation Acts 2013 and 2016 is the promotion of a quality service by small public service vehicles (SPSV) and their drivers and the promotion of access to small public service vehicles by persons with disabilities. The 2023 WAV Grant Scheme opened at the start of January in furtherance of this objective.</p> <p>2023 saw the WAV grant increase from €7,500 to €17,500 for a new vehicle, with lesser amounts being available for the purchase of older cars. Any person deemed suitable under SPSV legislation to hold a vehicle licence could apply for this grant throughout the country. The NTA received a remarkable response to the Grant Scheme in 2023 that resulted in 411 grant-assisted vehicles being added to the fleet, including 312 new licences. A further 160 wheelchair accessible vehicles which did not receive grants were also licensed during the year. In 2014, 4% of the fleet was wheelchair accessible (850 vehicles); by year-end 2023 this had increased to over 18.5% (3,661 vehicles).</p>	N/A	€4.7m
The Wayfinding Centre	<p>Vision Ireland (formerly NCBI) is developing a transport training centre on Botanic Road in Dublin. The Wayfinding Centre will provide a safe and controlled indoor environment which replicates the real-world experience of using public transport including lighting, acoustics, hazards and the built environment that surrounds public transport.</p> <p>The NTA is part-funding this project which was substantially completed in 2023 and due to open to the public in 2024.</p>	Phase 6 - Construction & Implementation	€2.2m


Accessibility

Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Bus Éireann Accessibility Project	<p>This is Bus Éireann's Nationwide Bus Station Accessibility Programme. Site inspections were carried out in 2018 of 17 locations across the country. Outline proposals were prepared for each location. The objective is to provide wheelchair accessibility at all locations. Accessible car spaces are also to be provided at each location where possible.</p> <p>In 2023 wheelchair accessible bus bays and upgrade of the external bus stations environs were constructed in Kilkenny and Mullingar bus stations and construction commenced at Cork and Ennis.</p>	Multiple	€1.5m
Bus Shelter Seating Retrofit Programme	<p>In 2022 a review of shelter locations with no seats were identified, a total of 311 locations were identified with simple retrofit installations possible at 210 locations.</p> <p>By the end of 2023, 58 two-bay galvanised seating units and 115 one-bay galvanised seating units, all equipped with high-visibility yellow armrests, were retrofitted into existing bus shelters.</p>	Phase 6 - Construction & Implementation	€0.4m
Bus Station Accessibility Enhancements	<p>Accessibility works to bring bus stations to the required standard under Technical Guidance Document (TGD) - Part M, is continuing. This large-scale project will enhance Bus Éireann stations for all users.</p> <p>The Bus Station programme Strategic Assessment Report was approved in 2023. The Programme Business Case has also been approved, subject to modifications which are being addressed by Bus Éireann in a revised business case to be submitted to the NTA in 2024.</p>	Phase 3 - Preliminary Design	€0.4m

 Accessibility			
Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Local Authority Accessibility	<p>This programme of works involves the construction of wheelchair accessible bus stops in locations served by high floor coaches, initially focusing on towns with a population over 5,000.</p> <p>During 2023, construction was completed on 10 wheelchair accessible bus stops including locations in Offaly, Meath, and Cork. The NTA carried out audits of towns with a population of over 1000 people to identify a programme of works for the next phase of the programme.</p>	Multiple	€0.3m
Travel Assistance Schemes	<p>The TFI Travel Assistance Scheme helps people with disabilities to use public transport on their own.</p> <p>In 2023, the TFI Travel Assistance Scheme in Dublin, which is managed by Dublin Bus, carried out 2,142 assists. The NTA also launched the TFI Travel Assistance Scheme in Cork in September 2022 which is managed by Bus Éireann and has now three assistants with 536 assists carried out during 2023.</p>	N/A	€0.3m
			€19.8m


Transport Technology

Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Leap Operations Contract Transition	In 2023 NTA completed the transition of the contract for the day to day operations of the TFI Leap Card scheme to a new supplier. This included commissioning a new Leap retail agent network with An Post and PostPoint.	Phase 6 - Deploy/ Rollout	€10.0m
Finance System Project	<p>The Finance system project aims to replace the existing finance systems in a phased manner with a single integrated finance solution which will support growth, and enable process improvement resulting in greater effectiveness and efficiencies for the NTA.</p> <p>In 2023, the project team completed the Procurement phase, obtaining final business case approval and appointing a systems supplier. The project moved into the detailed planning phase in December 2023.</p>	Phase 3 - Procurement	€3.3m
NextGeneration Automotive Vehicle Location	<p>Automotive Vehicle Location (AVL) is required for service control of buses, communications with drivers, tracking of route performance, generation of real time passenger information for on-street displays and mobile apps and is at the core of the contract management function of the NTA in tracking kilometres operated and punctuality by operator by route.</p> <p>In 2023, the contract for the Next Generation AVL system was awarded.</p>	Phase 6 -Deploy/ Rollout	€1.8m
Leap Operational Investments	<p>Leap Operational Investments is a series of smaller scale enhancements and additions to the Leap Card scheme. These include additional features in the Leap Top-Up applications, implementation of new application process for students and investigations into the feasibility of a virtual Leap Card.</p> <p>In 2023, enhanced versions of the Leap Top-up apps were launched for both iOS and Android. In addition, a proof-of-concept implementation of a virtual Leap Card inside the Android mobile phone wallet was developed in house and tested on a number of live ticketing devices.</p>	Multiple	€0.8m

 Transport Technology			
Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Public Transport Operator Investments	<p>Public Transport Operator (PTO) investments is a series of smaller scale projects to enable efficient delivery of public transport. These projects include supply of ticketing equipment for privately owned bus operators who join the Leap scheme, the supply of portable inspection devices and components required to read Leap Cards.</p> <p>In June 2023 NTA collaborated with the Cavan-Monaghan TFI Local Link regional office to pilot the acceptance of contactless bank card payments using an external reader connected to the existing ticket machine on their regular services. This approach allowed NTA to leverage the existing ticketing equipment, rather than having to purchase entirely new ticket machines. The NTA has received beneficial feedback from this pilot and the outcomes will be factored into a wider rollout to all TFI Local Link regular rural services nationwide planned for mid-2024.</p>	Multiple	€0.7m
Bus Market Opening for the Eastern Coastal Commuter Corridor Support Systems	<p>This project is to provide system support for the commencement of services on the Eastern Coastal Commuter Corridor.</p> <p>The operation of certain bus routes on the East Coast Corridor commuter services to and from Dublin were publicly tendered and in 2023 preparatory works were performed to support the tendering process.</p>	Phase 6 - Deploy/ Rollout	€0.5m
Technology Services Group	<p>Technology Services Group include various small projects including enhancements to the TFI Live National Journey Planner and Real Time Information (RTPI) system and to the systems that produce the data required to support the journey planner and real-time systems.</p> <p>During 2023, a number of enhancements to the TFI Live National Journey Planner system and to the systems that produce the data required to support the journey planner were completed. In addition a number of enhancements were made to the ICT systems that support the operation of Bus Market Opening (BMO) services.</p>	Multiple	€0.5m

Transport Technology


Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Travel Information Systems and Services (TISS) Applications	<p>TISS Applications is a project to implement a new generation national journey planning and real-time passenger information system.</p> <p>At the end of February 2023 the NTA launched the first iteration of the TFI Live system which includes web and app journey planning as well as real time passenger information (RTPI). The launch of this new system was necessary due to the expiry of the previous contract and is based on a more modern cloud based platform. The system includes the provision of new data feeds (GTFS v2) that is shared with third party channels such as Google Maps, HERE Maps, Apple Maps and the open data community via Data.Gov.ie, Ireland's open data portal.</p> <p>During 2023 customers continued to experience a number of issues with the quality of real time data displayed in the TFI Live App. One of the primary causes was that the bus operators were experiencing issues delivering services due to a shortage of bus drivers, and additionally there were issues cancelling services on the separate AVL systems, leading to disappearing buses and frustrated customers. NTA commenced a number of remedial actions to address these issues. One of the most impactful actions will be to the sourcing of a new single Next Generation AVL system (NG AVL) for all bus operators in Ireland – under the aforementioned NG AVL project, which shall ensure a single consistent source of real time data in a single data feed and consistent format.</p>	Phase 6 - Deploy/ Rollout	€0.4m
Mobile Ticketing	<p>Mobile Ticketing is a mobile phone application that sells tickets for Public Service Offering (PSO) bus services nationwide, known as "TFI Go".</p> <p>Usage of NTA's mobile ticketing app, TFI Go, continued to expand in 2023, selling tickets for 31 bus operators both publicly and privately owned, including all Bus Éireann PSO services, Go Ahead Ireland Dublin Commuter services and all TFI Local Link Regular Rural Services across the country. Growth was experienced across the board including on private bus operators participating in the young adult fares discount scheme that has been recently expanded to include 24 year olds up from 23. As a result of this growth, usage of the app hit a new high in November 2023, with 85,000 tickets sold during the month, almost double the previous highest monthly figure.</p>	Phase 6 - Deploy/ Rollout	€0.4m

 Transport Technology			
Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
ICT BMO investments	<p>The NTA directly operates certain systems necessary for the delivery and operation of the Bus Market Opening (BMO) services.</p> <p>During 2023 a number of IT servers and software applications were replaced and/or patched and upgraded in order to keep them on supported versions and to reduce potential risks.</p>	Phase 6 - Deploy/ Rollout	€0.4m
Leap Infrastructure Investments	<p>Leap Infrastructure Investments is a series of smaller scale projects to keep the Leap IT hardware and software systems operational and working on up-to-date versions. This requires regular refreshes and replacements to ensure Leap is operating on supported software versions.</p> <p>During 2023 a number of IT servers and software applications were replaced and/or patched and upgraded in order to keep them on supported versions and to reduce potential risks.</p>	Multiple	€0.4m
Next Generation Ticketing in the Greater Dublin Area (GDA)	<p>The NTA sought to implement new and more flexible ticketing systems through its Next Generation Ticketing (NGT) project, which is intended to be the eventual successor to the successful TFI Leap Card integrated ticketing scheme.</p> <p>This project is primarily to support BusConnects Programme, but additionally during 2023 work was performed on the business case to expand NGT beyond bus and onto Luas and Irish Rail services in the Greater Dublin Area.</p>	Phase 3 - Procurement	€0.1m
ServiceNow (SNOW) ITIL Management System	<p>ServiceNow is a tool is used by the Transport Technology operations and service delivery teams to monitor and manage ongoing operations of systems necessary for the delivery of public transport services.</p> <p>Following a public procurement competition completed in 2022, the configuration and deployment of the ServiceNow tool was completed during 2023.</p>	Phase 6 - Deploy/ Rollout	€0.1m
			€19.5m



Integration & Support Projects and Services

Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Transport Modelling	<p>The National Transport Authority (NTA) undertakes transport modelling to support transport investment by enabling planners to make informed and data driven decisions. The NTA undertakes strategic modelling to analyse planned transport investments and make informed decision for Ireland's future.</p> <p>In 2023, the NTA extensively updated the Regional Modelling System following Covid-19. They utilised various surveys and collaborated with organisations like the Road Safety Authority (RSA) and the Central Statistics Office (CSO). The system was crucial for projects such as MetroLink, BusConnects, and the Cork Light Rail Transit Scheme. Additionally, they started developing a demand management scheme for the Greater Dublin Area (GDA) to meet climate targets by 2030, influenced by the Department of Transport's National Demand Management Strategy.</p>	N/A	€6.8m
Capital Programme Office	<p>The Capital Programme Office (CPO) is responsible for the oversight, management and administration of the NTA's Capital Grants Management Process and the dissemination of Capital Grant funding to grantees, the central review of the Public Spending Code and assisting in ensuring compliance, and acts as a central hub of reporting for the Capital Programme.</p> <p>In 2023, the CPO commenced with further improvements of NTA's Capital Grants Management System to digitise the Project Approval Guidelines to better manage and monitor capital funded projects. Additionally the CPO team completed a number of governance reviews across major projects in line with its requirements under the Public Spending Code.</p>	N/A	€3.9m

 Integration & Support Projects and Services			
Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Transport Technical Support	<p>The NTA engages services to support internal teams and enable progress across capital projects such as data analytics, technical advisory, finance advisory and other areas.</p> <p>In 2023, the salient recommendations from the 2022 Independent Review of the NTA Analytics Platform were implemented. A new design framework was introduced to enable the Platform to ingest data and incorporate new contracts in a more automated, accurate, efficient and flexible manner. In addition, the Irish Rail data pipelines are now fully automated and in production, providing daily data feeds from the Irish Rail system. Furthermore, the design phase commenced for the ingestion of Luas data into the Platform. Several dashboards were either developed or enhanced, most notably the Journey Speed Dashboard which can be used to measure improvements in journey times arising from the BusConnects programme.</p>	N/A	€2.9m
Strategy Development	<p>The NTA has responsibility for the development and delivery of strategic transport plans within the GDA. Throughout 2023, the NTA continued to engage with Local Authorities nationally on the preparation of development plans and local area plans. Much of this work was undertaken to assist with the prioritisation of transport investment in local areas.</p>	N/A	€2.3m
Project Big Move	<p>Currently, the NTA is located across 5 different buildings in Dublin City Centre with some leases due to expire at the end of 2024. Project Big Move (PBM) will provide a modern single site workplace capable of accommodating all NTA staff working in a hybrid \ blended pattern. A modern single site workplace will put a greater emphasis on providing staff with a variety of work settings capable of supporting individual focus work, collaboration and opportunities to connect with colleagues from across the organisation.</p> <p>NTA commenced with the preparations and fit out of the new premises in 2023 and plans to relocate all staff in 2024.</p>	N/A	€1.8m



Integration & Support Projects and Services

Project/Programme	Description and 2023 Progress	Project Phase at Dec 2023	2023 Spend
Consolidated Contact Centre	<p>As part of its customer contact strategy, the NTA progressed its plan to implement and establish a Consolidated Contact Centre under the TFI brand. The Consolidated Contact Centre aims to be the primary customer service contact point for services provided by the transport operators, as well as for certain ticketing service providers and ticketing offerings controlled by the NTA.</p> <p>Key achievements in 2023 included the approval of the Final Business Case for the project by NTA Board and the award and mobilisation of the main contract.</p>	N/A	€1.3m
Transport Regulation	<p>During 2023, IT development work was undertaken on the CABS system that supports the NTA's licensing function for small public service vehicles.</p>	N/A	€1.0m
			€19.9m

Phases of an NTA Project Life Cycle - Capital Investment

(Extract from the NTA Project Approval Guidelines - [Project Approval Guidelines 2024 - National Transport](#).)



Phases of an NTA Project Life Cycle - ICT

(Extract from the NTA Project Approval Guidelines - [Project Approval Guidelines 2024 - National Transport](#).)



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