

Transport Infrastructure Ireland



Annual Report and
Financial Statements

2021



N59 Maam Cross to Bunnakill, Galway

Glossary

AADT	Annual Average Daily Traffic
BRUCE	Better Road User Charging Evaluation
CEDR	Conference of the European Directors of Roads
DPER	Department of Public Expenditure and Reform
DoT	Department of Transport
ETC	Electronic Toll Collection
EVs	Electric vehicles
HGVs	Heavy Goods Vehicles
NDP	National Development Plan (2018-2027)
NRA	National Roads Authority
NTA	National Transport Authority
MMaRC	Motorway Maintenance and Renewals Contract (Contractors)
OMTTCC	Operations and Maintenance of Tunnels and Traffic Control Centre
PPP	Public Private Partnership
RPA	Railway Procurement Agency
SAR	Strategic Assessment Report
TII	Transport Infrastructure Ireland

About this Report

The Annual Report and Financial Statements for 2021 provide a brief overview of Transport Infrastructure Ireland (TII) and our purpose to provide sustainable transport infrastructure and services, delivering a better quality of life, supporting economic growth and respecting the environment. The report is intended to provide information to our stakeholders regarding TII's financial statements, strategy and governance framework. Our reporting approach on our activities focuses on providing a clear view of TII's accomplishments during 2021 and the goals set for 2022. The information in this report has been prepared in accordance with the Code of Practice for the Governance of State Bodies (2016).

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Chairman and Chief Executive Statement 2021

We continued to make significant progress in what was a challenging year for everyone.

Light Rail and Metro

TII submitted the Preliminary Business Case (PBC) for the MetroLink project to the NTA in January 2021. Analysis of the PBC was undertaken by the NTA (National Transport Authority) and Department of Transport (DoT) throughout the year. While that analysis was underway, work on the development of the design and the preparation of the Railway Order documentation continued. The Environmental Impact Assessment Report and the Property Acquisition documentation will be complete by mid-2022. Government approval is required prior to submission of the MetroLink scheme to An Bord Pleanála.

In partnership with the NTA and utilising innovative virtual methods for public consultation, significant progress was made in relation to route selection for the Luas Greenline extension to Finglas and work commenced on the light rail project in Cork.

The Luas network, which commenced operation in 2004, required significant levels of asset renewal in the areas of rail track and the overhead conductor system. Work of this nature must be done at night and over weekends and requires the cooperation and acceptance of local residents, emergency services and the local authority. We wish to thank all those impacted for their patience, cooperation and support for this essential work.

National Roads

The achievement of planning approval for National Development Plan (2021-2030) mandated projects continued to be a very lengthy process during 2021. In March of 2021 planning approval for the M28, Cork to Ringaskiddy was finally achieved following a judicial review process which commenced following An Bord Pleanála's decision to approve the scheme in July 2018.

In December 2021, three years after submission, An Bord Pleanála issued its decision to approve the N6 Galway City Ring Road. That decision is currently the subject of three applications for judicial review.

An Bord Pleanála's decision in relation to the N21/N69 Limerick Adare Foynes is still awaited. The scheme was submitted to An Bord Pleanála in November 2019.

The N4 Collooney to Castlebaldwin, which achieved planning approval in 2015, opened to the public in July 2021. It replaced a 14 km section of the legacy network that was the scene of many fatal accidents over the years. Congratulations to Sligo County Council and all involved in delivering this project.

The majority of the inter-urban motorway network was completed through the years 2007 to 2010. Consequently, extensive asset renewal, in the coming years, will be essential in ensuring society has access to a safe and efficient road network. During 2021 TII's Network Management division developed new asset management structures to

address these asset renewal needs. Legislative and resourcing requirements to support these structures are under consideration by Department of Transport.

Greenways

At the request of the Minister for Transport, TII became the Approving Authority for a programme of Greenways in September 2021. This is a new exciting development for Ireland and one that TII is looking forward to delivering in partnership with local authorities. We would like to thank the Department of Transport for the sanction, received in April 2022, for the additional resources required to deliver this programme which has 77 projects in receipt of grant allocations in 2022.

Policy Development

2021 was a productive year in terms of Government Policies, Strategies and Plans. TII contributed to this work throughout the year. By the end of the year the Government had published the National Development Plan 2021-2030, the Climate Action Plan 2021, the Town Centre First Policy and the Road Safety Strategy 2021-2030. The DoT followed with the sectoral strategy, the National Investment Framework for Transport in Ireland (NIFTI). At the beginning of 2022 the Government published the National Sustainable Mobility Policy. This framework of Policies, Strategies and Plans provides the clarity of direction from Government that allows TII to complete the national road investment strategy, NR2040, during 2022. The NR2040 investment strategy will provide guidance to local authorities in the development of national road programmes and projects.

COVID-19

The global COVID-19 pandemic continued to impact the lives of everybody throughout 2021. The successful roll-out and comprehensive uptake of vaccines gave good reason for optimism that we could return to the workplace by the end of October. However, more transmissible variants resulted in an extension of Government restrictions and a postponement of plans to return to our Parkgate Street office buildings. TII staff, who could work from home, continued to work from home throughout the year. TII staff, whose essential work could not be done from home, did report to the depots, sites, operations and control centres. National road and

Luas operations continued uninterrupted and the transport infrastructure, for which TII is responsible, was available for use throughout the year. We would like to thank all concerned for their diligence and commitment.

Our First Chair

We would like to thank our first Chair of the TII Board, Cormac O'Rourke, and acknowledge his immense contribution to the creation of TII. Cormac's skilful stewardship of the NRA and RPA in advance of the creation of TII and through TII's formation in 2015 has given the agency the best possible start. We are truly grateful and committed to continuing Cormac's work of making TII as successful as it can be in undertaking its duties and functions.

Minister Ryan and Department of Transport

We would also like to thank Minister Ryan and his Department for the high levels of engagement, encouragement and support while dealing with the competing demands created by the climate crisis, a global pandemic, Brexit and war in Ukraine.

TII Board and Staff

As an agency of the state, TII is the Board and the talented people who work for it. Nothing is achievable without their commitment and dedication. We would like to take this opportunity to thank the Board members and the staff of TII for their work throughout 2021 which resulted in the achievements presented in this annual report.

Gareth and Peter

Chairman



Chief Executive



COVID-19 Pandemic

The COVID-19 pandemic has continued to have an impact on traffic volumes across TII's infrastructure network in 2021. Even though traffic levels across our national road network and passenger numbers across our light rail infrastructure have improved from 2020, these numbers are still significantly below pre-pandemic figures. Our road and rail network continues to see a gradual return to normal traffic levels following an extended period of travel restrictions and work-from-home measures implemented by the government to manage and reduce the rates of infection within our communities.

As discussed in further detail throughout the Annual Report and Financial Statements, the COVID-19 pandemic has had the following impact in 2021:

Road

Following the re-implementation of lockdown restrictions after Christmas 2020, car traffic volumes through January and February 2021 reduced to approximately 50% of pre-COVID-19 levels with a progressive return to approximately 100% of normal traffic by September, continuing at this level through to December. However, commercial traffic continued to operate at close to pre-COVID-19 levels throughout 2021 – pointing to the strength of economic activity throughout the year.

Light Rail

Luas patronage during 2021 remained significantly depressed at about 40% of pre-COVID-19 levels. While total Luas passenger journeys amounted to 19.5 million in 2021, representing a 1.6% increase from 2020 levels (19.2 million passengers), this remained a 59.7% decrease from 2019 levels (48.4 million passengers).

Impact and Response

These reductions in patronage and associated income have had a direct impact on TII, and our service providers. We continue to work extensively with the NTA, the DoT, and the Government to discuss our ongoing funding requirements to ensure that the national transport infrastructure remains operational and maintained, and that our vital capital infrastructure programmes and projects continue to support our communities.

Despite the impact of the pandemic and associated restrictions across Ireland, our priorities in TII remained resolute during 2021:

1. To ensure that critical infrastructure for Ireland's frontline workers and broader society remained open and operational;
2. To support capacity limitations on TII's infrastructure networks to protect our staff and all users of our infrastructure services; and
3. To continue to improve national road and light rail safety.

Anti-Social Behaviour

The negative trend in anti-social behaviour observed during 2020 across the public transport network in Dublin continued to impact the Luas network in 2021, particularly during periods where significant public health restrictions were in place. We recorded a significant increase in anti-social behaviour incidents during the first half of 2021, which peaked in April. This gradually improved during the second and third quarters of 2021, coinciding with the reintroduction of ticket checking on the network, increased passenger numbers and various security initiatives organised with the support of Transdev, An Garda Síochána and the NTA to target anti-social behaviour on and adjacent to the Luas network.

Our Staff and Service Providers

We are immensely proud of our staff and our service providers, who have showed exceptional resolve, determination, and professionalism to ensure that our Luas network and our national road network remained operational every single day last year. The contingency arrangements put in place during the year to protect the public have been exceptional and burdensome, and we are hugely grateful to our staff and service providers for their unwavering support and commitment to maintaining our network, to implementing innovative solutions to reduce manual and physical interactions within our tolling and rail operations, and for their commitment to continued development of our infrastructure network.



N16 Drummahon Under Construction, Leitrim



TII's Organisational Structure and Overview

In order to provide an integrated approach to the future development and operation of the national roads network and light rail infrastructure throughout Ireland, under the direction of the DoT and in partnership with local authorities and the NTA, TII is organised into mutually supportive divisions, departments and project teams, some dedicated to particular business or project outcomes and others providing administrative or technical specialist support across the spectrum of TII activities. TII is made up of six divisions:

- Network Management
- Commercial Operations
- Capital Programme Management
- Corporate Services
- Professional Services
- Business Services

Our performance in 2021 is discussed in the context of each of our divisions, with separate sections in our Annual Report and Financial Statements dedicated to Network Management, Commercial Operations, Capital Programmes, Professional Services, and TII's supporting Corporate Services and Business Services consolidated into one section below.

The Chief Executive's Office works across TII to connect and co-ordinate divisions and integrate strategic cross divisional initiatives; most notable being TII's integrated strategy for sustainability and climate action. The Chief Executive's Office is part of TII's Executive Team and provides direct support and assistance to the Chief Executive in all areas including communications, stakeholder and relationship management, collaboration, influence and engagement.

TII's Strategic Goals and Strategy in Action

TII exists to fulfil an important purpose of national strategic significance, touching the lives of citizens and visitors alike on a daily basis.

Our purpose is to provide sustainable transport infrastructure and services, delivering a better quality of life, supporting economic growth and respecting the environment.

In fulfilling our purpose, we strive towards three over-arching aims which, taken together, represent our vision:

- To be leaders in the delivery and operation of sustainable transport infrastructure;
- To ensure that Ireland's national road and light rail infrastructure is safe and resilient, delivering better accessibility and sustainable mobility for people and goods; and
- To be recognised as an organisation that values its people, customers and partners.

In 2021 we transitioned to our 2021-2025 Statement of Strategy, which sets out the goals that all of us in TII are aiming for and the strategic objectives that we hope to achieve over the next five years. This revised Statement of Strategy is framed in a context of climate change, political change, a global pandemic, and in alignment with the goals and objectives of the DoT. Our revised Statement of Strategy was approved by the Board of TII in October 2020.

We deliver our Statement of Strategy with careful consideration to the following:

- National policies, strategies, plans and frameworks of relevance to transport and to the development of which TII has contributed;
- Relevant developments and trends in economic, social, technical and legal environments; and
- TII's capability to continue to contribute, delivering results in accordance with its statutory remit.

Implementation of our strategy will, in particular, support the implementation of the national transport strategy as determined by the DoT.

TII executes its strategy through seven goals, each with accompanying strategic objectives. These goals fall within the following categories:

- Existing Infrastructure
- New Infrastructure
- Services
- Safety
- People
- Engagement and Collaboration
- Organisational Excellence

Our performance during the year was delivered against the goals above, as outlined in the tables on the pages below.

TII's Strategic Goals and Strategy in Action (cont'd)

Goals	TII strategic objectives which achieve our goals
<p>Existing Infrastructure Operate, maintain and extend the life of national roads and light railway infrastructure to ensure the safety and efficiency of our transport networks, ensure appropriate management of environmental resources and contribute to the transition to a low-carbon and climate resilient society.</p>	<ol style="list-style-type: none"> 1. Maintain and change existing infrastructure to reduce transport-related deaths, injuries and risks. 2. Extend the life and optimise the use of our transport infrastructure, to minimise the need to build new infrastructure. 3. Maintain our transport systems to ensure they are safe, resilient and available for use. 4. Introduce measures to support the reduction of carbon and other emissions in our operations. 5. Support use of emerging technologies such as connected co-operative and automated mobility. 6. Provide the information that our customers need.
<p>New infrastructure Deliver national road, light railway, metro and Active Travel infrastructure, contributing to compact growth, sustainable mobility, enhanced regional accessibility and the transition to a low carbon future.</p>	<ol style="list-style-type: none"> 1. Reduce transport-related deaths and injuries by modernising our infrastructure. 2. Support Ireland's economic recovery with the efficient movement of people and products. 3. Improve regional accessibility, including meeting the needs of bus operators and their passengers, and improving critically important lifeline routes to rural communities. 4. Deliver infrastructure that supports low-carbon transport systems and emission reductions. 5. Plan and design major transport schemes to encourage active travel and public transport. 6. Promote further use of low-carbon products in our construction projects.
<p>Services Operate TII's light rail, tolling and traffic control systems. This includes contributing to the electrification and digitalisation of transport, benefiting our customers and contributing to sustainable mobility and de-carbonisation of transport.</p>	<ol style="list-style-type: none"> 1. Make best use of TII's light rail system and national roads services, supported by innovation and ongoing performance improvements. 2. Implement national policy for demand management, to incentivise modal shift. 3. Operate eFlow, Dublin Tunnel, interoperability services and the Low Emission Vehicle Toll Incentive, contributing to the delivery of national policies for mobility, infrastructure funding and the European Green Deal. 4. Support and develop carbon-reduction measures in the transport sector. 5. Invest in cooperative intelligent transport systems to improve our services. 6. Maintain design standards for roads and bridges.

Summary of our performance in 2021

- We provided €26 million to fund 110 road safety improvement schemes on the existing national road network.
- TII's Carbon Tool was upgraded from a spreadsheet tool to a web-based application.
- We published our 2020 National Road Transport Indicators report.
- We have continued to implement several energy-saving measures associated with route lighting.
- We have significantly improved traffic information on [traffic.tii.ie](https://www.tii.ie/traffic) by providing an expanded range of traffic information for users of our network.
- We delivered a significant volume of Luas asset management works during 2021, including rail replacement and renewal of overhead line equipment. We also received approval for the 2021-2026 Luas Asset Renewals Business Case, with a value of circa. €46 million.

- We carried out carbon benchmarking case studies to support the use of low-carbon products in TII construction projects.
- We launched the Motorway Operation Services (eMOS) programme to help keep the M50 safe.
- We continued the enabling works and equipment installation required for the variable speed limit and lane control signalling regimes on the M50.
- We published the Code of Best Practice for Greenways and agreed associated compensation measures.
- We became the Approving Authority for Greenways as of the 20th September 2021.
- We completed the national roads project between the N4 Collooney to Castlebaldwin in County Sligo. This new €140 million, 15km roads project will significantly improve road safety, reduce journey times and improve journey time reliability, between Dublin and Sligo.

- We supported the Luas operator in the preparation of its Dublin Light Rail Sustainability Plan.
- We published 19 standards and 25 technical documents on [tiipublications.ie](https://www.tii.ie/publications).
- We submitted the draft Strategic Assessment Report (SAR) to the DoT for Project BRUCE (Better Road User Charging Evaluation) during 2021 and are progressing with this project in accordance with the requirements of the 2021 Climate Action Plan.
- We introduced new on-board audible destination announcements across the Luas Green Line fleet to assist visually impaired customers. This initiative will be rolled out on the Red Line fleet in 2022.
- We coordinated the changeover of the M50 eFlow tolling operation to the new contractor, Turas Mobility Services, during August 2021.
- We awarded the 3rd generation Interoperability Management Services contract to Indra Systems in December 2021, to support national electronic tolling arrangements in line with EU regulations.
- We concluded the 3rd generation Tolling Enforcement Services contract in December 2021, to support compliance and revenue protection on the M50 Toll Road.
- We continued to administer the Low Emission Vehicle Toll Incentive (LEVTI) scheme on behalf of the DoT during 2021, with over 18,500 low emission vehicles registered (up from circa. 8,900 in 2019).
- We managed the launch of the Alternative Fuel Heavy Duty Vehicle (AFHDV) purchase grant scheme in March 2021, on behalf of the DoT. There was a significant volume of applications for this scheme, with approximately €3 million of grant aid approved.

TII's Strategic Goals and Strategy in Action (cont'd)

Goals	TII strategic objectives which achieve our goals
<p>Safety Reduce the risk and number of collisions, injuries and deaths on our light rail and road infrastructure.</p>	<ol style="list-style-type: none"> 1. Deliver on TII actions in the Government's Road Safety Strategy. 2. Target investment based on analysis of collision data and a proactive risk-based approach. 3. Continuously improve the safety of workers engaged in TII construction and operations. 4. Promote new technologies, design standards and procedures to improve safety on TII networks. 5. Strengthen TII's safety culture through leadership, engagement and communication.
<p>People Maintain, enhance and harness the capability of our people, while promoting TII's values, to ensure the delivery of our goals.</p>	<ol style="list-style-type: none"> 1. Provide a positive employee experience, embracing diversity and inclusion. 2. Support personal development, motivating and building the capacity of the TII team. 3. Embed best-practice workforce planning as we respond to changing circumstances. 4. Maintain, develop and share TII knowledge and expertise.
<p>Engagement and Collaboration Engage and collaborate, partnering effectively with external parties, both nationally and internationally, to support the achievement of our strategy.</p>	<ol style="list-style-type: none"> 1. Foster and maintain relationships with external stakeholders and suppliers. 2. Procure and manage our contracts responsibly. 3. Participate in research and collaboration to support innovation and best practice. 4. Communicate with the communities affected by TII projects. 5. Engage with suppliers to ensure the application of our sustainability principles.
<p>Organisational Excellence Implement best practice in governance and how we conduct our business in TII, achieving a high standard of professionalism, compliance, assurance and securing value for money in all we do.</p>	<ol style="list-style-type: none"> 1. Promote a culture of good governance in TII, in line with the principles of governance applicable to public bodies. 2. Deploy robust control systems and structures that ensure compliance and accountability. 3. Promote innovation and the adoption of new methods and technologies. 4. Report on the implementation of our Sustainability Principles. 5. Report on the implementation of the Public Sector Equality and Human Rights Duty.

Summary of our performance in 2021

- €26 million was spent on 110 road safety improvement schemes by local authorities.
 - We recorded an 8% reduction in road traffic fatalities for the 2021 year.
 - We recorded a 50% reduction in road traffic collisions on the Luas network in 2021.
 - We managed distribution of 18,500 tonnes of salt used on winter treatments over 75 days across the motorway network MMaRC & PPP (2020: 19,400 tonnes of salt over 75 days).
 - We carried out 654 principal bridge inspections (2020: 780).
 - We performed 300km of pavement renewals works (2020: 295km).
 - We relined 565km of the national road network (2020: 450km).
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- In 2021 we provided training courses on technical standards for our road engineers through a series of in-depth webinars. These events target local authority staff engaged on national road projects and other users of our standards.
 - Staff continue to enhance their knowledge and expertise by participating in transnational and national research projects.
 - Diversity, Equity and Inclusion initiatives were rolled out in 2021. This included a webinar series, a speaker for International Women's day and the rollout of the Right to Disconnect training.
 - In 2021, we achieved CPD re-accreditation with Engineers Ireland demonstrating our commitment to the CPD.
 - We continued rollout of "Spotlight sessions", where staff showcase projects of interest, ensuring that information and knowledge is disseminated widely in the organisation.
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- We have engaged in several Conference of the European Directors of Roads working groups, covering a range of activities relating to the management of national road networks.
 - We commissioned eight research projects relating to road and light rail infrastructure.
 - We have continued to support MMaRC and PPP contractors with the implementation of the new maintenance regimes for existing landscapes in their respective areas.
 - We contributed to the preparation of the Transport Chapter of the 2021 Climate Action Plan, participating on working groups chaired by the Department of the Environment, Climate and Communications.
 - We participated in a new liaison group organised by the NTA, including Transdev and An Gardaí Síochána, to address the increase in anti-social behaviour on the Luas network.
 - TII, in conjunction with the Swedish Transport Agency, are currently chairing the Stockholm Group which is a working group for Member States with an interest in road user charging, pricing and tolling in the EU.
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- Please see our *Sustainability at TII* and *Our People* section below for further details on our 2021 achievements.



Sustainability at TII

Our vision is to lead in the delivery and operation of sustainable transport, enabling our networks to drive inclusive growth, create job opportunities, enhance the well-being of all persons, strengthen our resilience to address climate change, maintain our commitment to the environment and continue to prioritise safety.

Delivering on the vision and priorities framed by Project 2040 (the government's long-term strategy to make Ireland a better country for all and to build a more resilient and sustainable future), requires us to work collaboratively with the Irish transport sector, the Government, communities across Ireland, and with our valued partners and stakeholders. Achieving this vision for our transport networks involves our response to the promise of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals, and the European Green Deal.

We are committed to good governance and ethical practice, and as part of this we recognise the importance of sustainability as a one of our core corporate values. Transport must provide benefit to all equally and through the provision of safe, reliable, and equitable transport systems we can support integrated sustainable transport planning through appropriately balanced development of transport modes, while also introducing new transformations to meet our longer-term sustainability goals.

Ireland's Carbon Emission Profile and Energy Demand

Up to the year 2008, the rate of total Irish carbon emissions reduction was low, with decarbonisation activities limited by strong economic growth.

Since 2011, carbon emissions have trended to increase, peaking in 2018. In 2020, Ireland's carbon emissions were estimated to be 57.7 million tonnes CO₂e (carbon dioxide equivalent), which was 3.6% lower than the previous year (59.8 million tonnes of CO₂e). The transport section carbon emissions in 2020 were estimated to be 10.3 million tonnes CO₂e, which was 15.7% lower than the previous year (12.21 million tonnes of CO₂e). These carbon metrics form part of the latest information from the Irish Environmental Protection Agency (EPA).

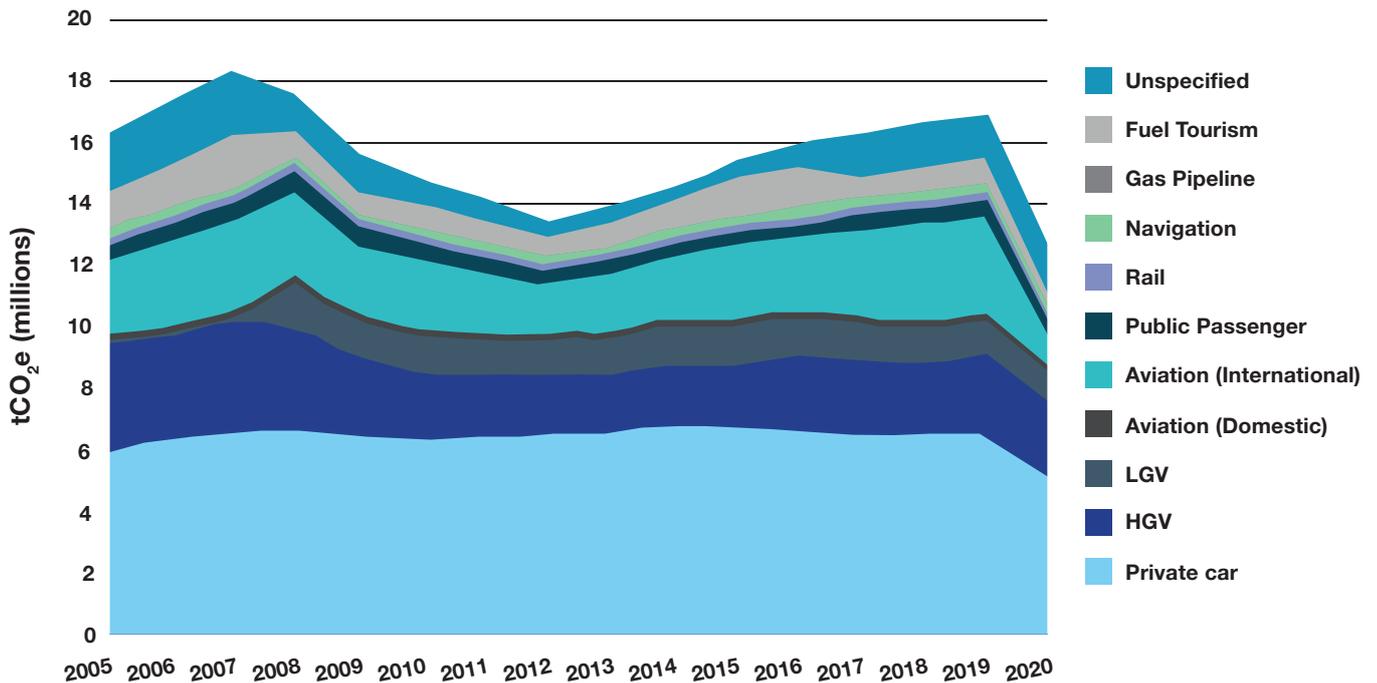
Transport's Carbon Emissions and Projected Changes

In the years 1990-2020, the transport sector's emissions increased by 100% with road transport increasing by around 103%. Public health measures due to the COVID-19 pandemic resulted in a circa. 16% decrease in carbon emissions from car and public transport journeys in 2020. In 2020, Passenger cars accounted for 59% of road transport emissions. Considering a 'With Existing Measures' scenario from the EPA, transport emissions are projected to grow by 5.7% between 2021 and 2030 to 11.6 million tonnes CO₂e. From 2021 to 2030 under the 'With Additional Measures' scenario, a decrease in carbon emissions of 17% to 9.1 million tonnes CO₂e is expected, with these measures assuming 935,000 electric vehicles on the roads by 2030.

Transport's Energy Demand

Since 2014, the transport sector has been the sector with the largest energy demand nationally. Energy demand from transport increased annually

Final energy by mode of transport (Source:SEAI)



from 2012 to 2019. In 2020, the most significant contraction in energy consumption was observed in the transport sector, due to the reduced mobility during the COVID-19 pandemic. The trends in energy demand by mode of transport 2005-2020 can be seen in the figure above.

TII's Carbon Emissions Profile

TII has undertaken a carbon inventory and baselining process. Our carbon equivalent emissions can be considered in terms of the following three broad categories:

- Operational Emissions
- Embodied Emissions
- Emissions in use / Roads in use

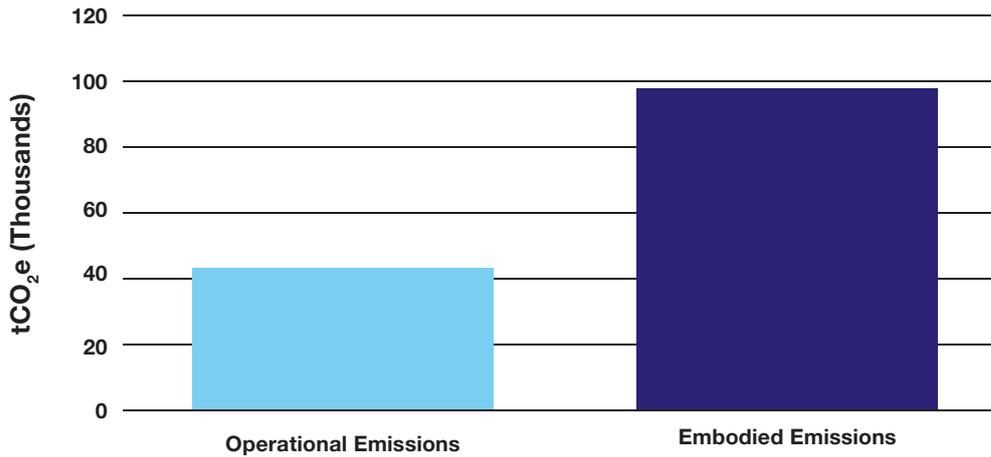
Operational carbon emissions cover all direct and indirect emissions arising from our operational activities, including all non-material-based emissions required to uphold or provide services on the national road and Luas networks. In 2018, the emissions generated in the employment of operational assets to facilitate our business accounted for 44,465

tonnes CO₂e, representing a 1% proportional impact of the total assessed emissions.

TII governs the delivery, maintenance, renewal, and improvement of the national primary and secondary road networks and the Luas network. Embodied carbon emissions from the TII asset base encompasses the impact of improving the existing road network and Luas network through both construction and maintenance works. In 2018, the carbon and other emissions utilised and generated in the delivery of TII's capital asset base accounted for 97,549 tonnes CO₂e, representing a 2% proportional impact of the total assessed emissions.

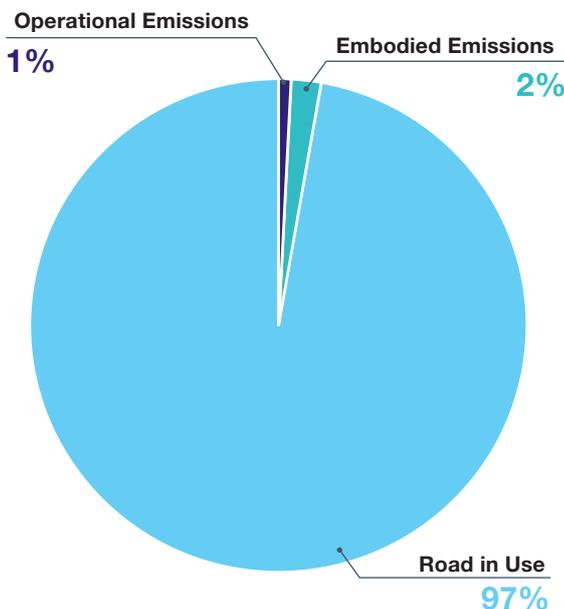
The embodied emissions include construction and maintenance works. Carbon emissions from construction activities accounted for 54,050 tonnes CO₂e, representing a 1% proportional impact of the total assessed emissions, while maintenance activities accounted for 43,498 tonnes CO₂e, representing a 1% proportional impact of the total assessed emissions. Please see the graph on the next page for a summary of our operational and embodied emissions.

TII Carbon Emissions in 2018 excluding road in use
 (Source: TII Carbon Inventory)



TII facilitates mobility for millions of members of the public every year by both public and private transport modes. The in-use carbon emissions assessment estimates the CO₂e emissions of vehicles using the existing national road networks (excluding TII vehicles). These emissions from use of the networks were estimated using vehicle kilometre travelled (VKT) by vehicles on a proportional basis for the national road network. In 2018, the emissions generated in the use of TII’s road asset base by others, namely the national road network, accounted for 5,254,600 tonnes CO₂e and represented a 97% proportional impact of the total assessed emissions. Please see the diagram below for the proportional split of TII’s emissions for 2018:

TII Carbon Emissions in 2018
 (Source: TII Carbon Inventory)



Ireland’s Climate Action Plan and TII Actions

Ireland’s 2021 Climate Action Plan (CAP) was released in November 2021, coinciding with the 2021 United Nations Climate Change Conference in Glasgow (COP26). It has clear implications for TII in contributing to Ireland’s national and sectoral budgets regarding reductions in carbon and other greenhouse gas emissions. Ireland has committed to becoming carbon neutral by 2050. This commitment has been solidified within the Climate Action and Low Carbon Development (Amendment) Act 2021, to which the CAP relates. The Government’s CAP 2021 outlines how it will achieve its ambitious goal of reducing greenhouse gas emissions by 51% by 2030 and achieving net-zero by 2050.

In response to the government’s ambition to reduce greenhouse gas emissions the following TII actions are outlined in the Government’s CAP 2021:

- We will improve and expand upon our active travel and greenways networks;
- We will develop a coherent and connected National Cycle Network Strategy;
- We will continue rollout of variable speed limits/dynamic traffic management infrastructure on the M50 to increase safety and reduce congestion;



- We will deliver public transport corridors providing prioritised bus lanes on relevant national radial routes to the M50 and deliver sustainable bus priority measures on the National Road Network;
- We will commence the delivery of the MetroLink, Luas Finglas and Luas Cork in partnership with the National Transport Authority; and
- We will continue to develop Project BRUCE.

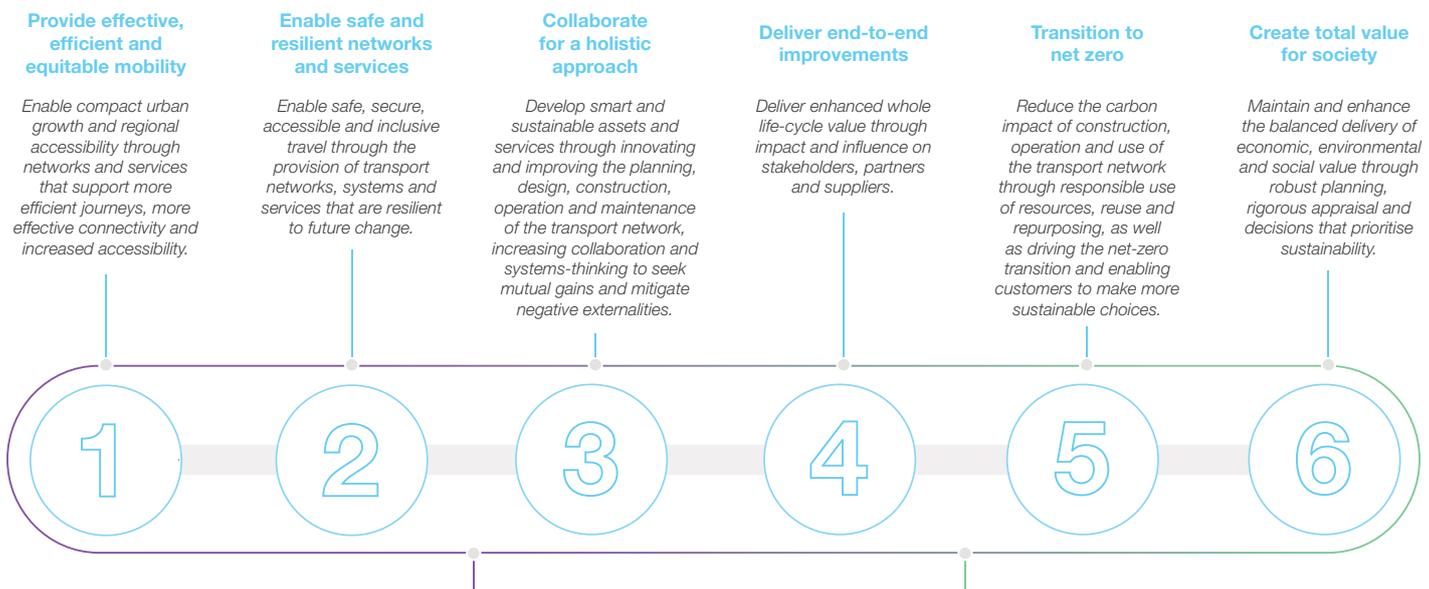
TII's Sustainability Implementation Plan

In 2021 we published our **Sustainability Implementation Plan – Our Future** in the context of our vision to lead in the delivery and operation of sustainable transport systems.

Consolidating years of ongoing commitment and effort, and building on our existing strengths, this

plan sets out a clear vision, and establishes a roadmap for embedding sustainability throughout our organisation and activities. Six guiding principles of sustainability describe how we will deliver a sustainable future through our work, and we will undertake a programme of activities over the next decade and beyond to support this ambition. These guiding principles focus on our key priority areas for the sustainable development agenda within our organisation:

The sustainability principles act as our guiding framework for the implementation of key activities across our organisation. We understand that we must contribute to achieving sustainable development across Ireland by delivering on our remit and by supporting and influencing our stakeholders. The tables in the pages further below provide key highlights and future goals for each of these principles.



Our 2021 Sustainability Initiatives – Key Call Outs

Greenways and Active Travel

TII supports the delivery of active travel infrastructure through the on-going development and construction of dedicated footways and cycleways as part of and alongside the national roads network. Please refer to our **Capital Programmes** section below for further details on these.

Electric Vehicle (EV) Charging Points

All of TII's nine service areas provide Electric Vehicle (EV) charging points for motorists. The range of charging facilities available provide both standard and rapid-charging units. TII has mapped the charging facilities at each of the nine facilities and also at the twelve private service area facilities located at or close to motorway junctions.

We are working to support the target of the 660,000 Battery Electric Vehicles on the road by 2030, as expressed in the Government's CAP 2021. The scale of the electrical infrastructure required to support the CAP targets and the potential Heavy Duty Vehicle requirements is challenging and is very substantial for such relatively remote sites as the service areas. In 2021 we began a modelling study to convert the target EV fleet figures into associated charging capacity and infrastructure requirements. From this we are developing an understanding of the capital investment required to deliver the infrastructure out to 2030. The study and the matter of EV charging infrastructure is part of an ongoing engagement with the DoT, in support of the work to develop the national charging infrastructure strategy.

We will continue to engage with and support the DoT throughout 2022 in establishing the new Office of Zero Emission Vehicles Ireland (ZEVI) and the publication of the national strategy for EV Charging Infrastructure.

Energy Saving Initiatives

2020 marked the last year of the National Energy Efficiency Action Plan 4 (NEEAP), which set an energy efficiency improvement target for Public Sector bodies of 33% (compared to 2009). TII's reported energy efficiency based on available 2020 data has improved by 30.7%.

In 2021 we continued our programme of energy reduction measures across our National Roads Network Management & Operations, in line with our June 2016 policy document "Energy Reduction in Public Lighting on National Roads". The early development and adoption of this policy has resulted in a strong and sustained contribution to reducing emissions.

TII switched off lighting which is surplus to that required under latest standards at 26 motorway junctions over the course of 2017 and 2018. These areas have been subject to ongoing monitoring since that time and there has been no decrease in road safety in these areas as a result. Building on the success of these schemes the layout of lighting at 38 Motorway Junctions, inclusive of PPP locations, has now been revised to current design standards with the removal of surplus lighting. The annual energy savings are 3.7 million kWh, with an estimated carbon reduction of more than 1,000 tonnes per annum. The treatment also provides substantial energy costs savings.

We also undertook further replacement of existing lighting with LEDs on the non-motorway sections of the national road network. Almost 700 older style lanterns have been replaced throughout the country across various local authorities with an average energy saving of over 400,000 kWh and equivalent estimated carbon saving of greater than 100 tonnes. This cooperation with local authorities has resulted in the upgrade of 16,446 lighting installations to date across 347 projects. These projects are in addition to the more substantial Climate Action Plan actions on public lighting. On those actions, TII has continued to work with the Road Management Office

(RMO) and local authorities to develop, procure and award a contract to support the replacement of 78,000 lights with LEDs in the southwest region as part of the national public lighting energy efficiency project. We have similarly continued to support the replacement of the remaining circa. 200,000 lights in other regions.

The project which TII commenced in 2017 to dim road lighting on the M50 motorway during night-time periods when traffic flow is lowest continues to deliver benefits. In 2021, the scheme achieved around a 40% energy savings which results in a 1.35 million kWh reduction in energy consumed and almost 400 tonnes of carbon emissions avoided each year.

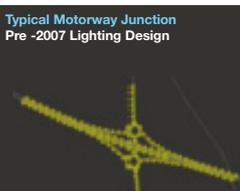
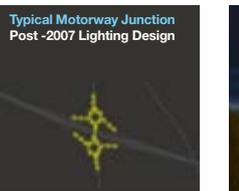
The overall total avoided emissions for 2021 is approximately 4000 tonnes of carbon. Collectively, the schemes advanced under the 2016 policy will continue to result in avoided emissions for many years. A lighting project dashboard is in development to highlight the significant contributions these projects have made, and we continue to look for further opportunities to reduce lighting emissions.

As an example of that drive for improvement, early engagement with suppliers for a lighting retrofit of

Dublin Tunnel took place in 2021. An innovative and circular economic approach to this project was adopted. Re-using existing luminaire housings will be pursued and this retrofit is anticipated to be well progressed in 2022, where annual savings of over one million kWh may be achievable. Also, at the Dublin Tunnel, a feasibility study was undertaken in 2021 to explore the potential for photovoltaic solar power generation at the Tunnel Control Building. The project envisaged as part of this study will be progressed.

Motorway and tunnel maintenance contracts now require that the contractors be certified to the ISO 50001 Energy Management standard, to ensure energy is being managed effectively across all new TII contracts. Leveraging on the energy management learnings from the ISO certification efforts, we also began a new initiative to examine diesel fuel usage across the network to identify areas for emissions reductions. We continue to monitor and audit our contractors to ensure that standardised energy and emissions reporting requirements are developed and applied consistently. Please see below for a summary of our road lighting energy reductions measures:

TII Energy Policy for Route Lighting
 **3,855 tonnes of CO₂**
Reduction per year
  **12.850 GWh**
Annual Energy Savings
  **€1.93m**
Annual Savings

Remove	Reduce	Replace
<p>Revised Lighting Design Standards for Motorway Junctions allows removal of surplus.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Typical Motorway Junction Pre -2007 Lighting Design</p> </div> <div style="text-align: center;">  <p>Typical Motorway Junction Post -2007 Lighting Design</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;">  <p>2500 De-energized Motorway Lights</p> </div> <div style="text-align: center;">  <p>3.7 GWh Annual Savings</p> </div> </div>	<p>M50 Off-peak Dimming Scheme. Innovative solution, first use in Ireland.</p> <div style="text-align: center;">  </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;">  <p>43% Annual Energy Savings</p> </div> <div style="text-align: center;">  <p>1.3 GWh Annual Savings</p> </div> </div>	<div style="text-align: center;">  </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;">  <p>3,431 tonnes of CO₂</p> </div> <div style="text-align: center;">  <p>7.85 GWh Annual Savings</p> </div> </div>
<p>Reduced lighting footprint at 38 Junctions Redesigned 2017/18</p> <div style="text-align: center;"> <p>Typical Light Units At Standard Motorway Junction</p> <div style="display: flex; justify-content: center; gap: 20px;"> <div style="text-align: center;"> <p>155 Pre-2007</p> </div> <div style="text-align: center;"> <p>45 Post- 2007</p> </div> <div style="text-align: center; background-color: #0070C0; color: white; border-radius: 50%; padding: 5px;"> <p>60 -70% Energy Saving</p> </div> </div> </div>	<p>Dimming of Existing Lights on M50 during off-peak periods.</p> <p>Dimming Schemes in preparation</p> <ul style="list-style-type: none"> M1 from M50 to Lissenhall (M1 J4) N7 from Red Cow to Naas By Pass (M7 J9) <div style="text-align: right; margin-top: 10px;">  </div>	<p>347 Funded Project</p> <p>16,446 Lights replaced incl. Design reviews & Enhancements</p> <p>€13.3m TII provided funding</p> <div style="margin-top: 10px;">  <p>Supported Key Projects such as Northwest Bypasses Energy Saving Project. TII was instrumental in developing 11 new agreed dimming profiles with ESBN and Local Authorities.</p> </div>
No Implications for Road Safety	No Implications for Road Safety	No Implications for Road Safety



Concept of LUAS Bridge, Finglas, Dublin



Concept of LUAS Bridge, Finglas, Dublin

Energy consumption of the Luas light rail network represents a significant portion of TII's overall energy consumption. In 2021 we continued to focus on improving the energy efficiency of the Luas fleet, depots and infrastructure. TII continued to work closely with the Luas operator and was accredited with ISO 50001: Energy Management System in 2021, with the aim of planning and implementing a programme of energy efficiency and carbon reduction projects to meet the new public sector targets set by government.

In 2021 we renewed our programme of gathering energy data, the key to achieving our aim of continuous improvement. 2021 marked the completion of the testing and commissioning of a specialist energy monitoring system for trams, namely TEMS (Tram Energy Monitoring System). TEMS is an innovative solution to support the development of light rail vehicle-based energy efficiency and carbon reduction projects by providing dynamic energy consumption data on individual tram subsystems, which can be recorded and viewed remotely in real time. TEMS was fitted to select trams on both Luas lines.

Energy data generated by TEMS shows a considerable proportion of energy being consumed by the heating, ventilation, and air conditioning system (HVAC). In 2021, trials of innovative HVAC solutions aimed at greater energy use optimisation were initiated. Upon completion of these trials, appropriate solutions will be considered for implementation across our entire Luas fleet. Another trial commissioned in 2021 tests the provision of alternative light source technology for tram passenger saloons and driver cab lighting systems.

2021 also saw the completion of a wireless, remote monitored energy monitoring system at each of the tram depots (Red Cow, Sandyford and Broombridge) and their electrical substations. The aim is to establish and record the consumption profile of electrical, thermal and water consumption which will subsequently be targeted with energy efficiency programmes. The Luas tram depots are among our highest energy consuming assets. Together with our partners, we have progressed the improvement of electrical and thermal energy efficiency at all depot sites.

TII's broader focus extends to the generation of onsite renewable energy. With that in mind, we have identified an initial tranche of suitable sites for the generation of renewable electricity via rooftop solar PhotoVoltaic (PV) arrays. The chosen sites are the Luas tram depots in Red Cow, Sandyford and Broombridge. The PV arrays will be sized to suit the roof areas of the depot buildings and are expected to contribute approximately 20% of the electrical energy demand of the tram depot facilities. This on-site renewable energy generation will support us in achieving our public sector emission reduction targets set for 2030. Having received approval to proceed with the project in 2021, we have awarded the initial stage 1 of the contract to a specialist consultant who will generate a structural and electrical report, EIA screening report, glint and glare assessment report, cost-benefit analysis report and an outline programme. We will continue to progress this project in earnest throughout 2022.

2021 Sustainability Highlights and Future Goals

Principle	2021 achievements
<p>Providing efficient and equitable mobility</p> <p>Enable compact urban growth and regional accessibility through networks and services that support more efficient journeys, more effective connectivity, and increased accessibility.</p>	<ul style="list-style-type: none"> - We published our Intelligent Transport Systems Implementation Plan for 2021 – 2025. This plan will allow us to manage our network more efficiently and sustainably. - We were appointed by the DoT to be the Approving Authority for greenway projects. - We commenced the implementation of variable speed limits and lane control along the M50 between junctions between J4 Ballymun and J6 Castleknock. - We developed and submitted the draft Strategic Assessment Report (SAR) for Project BRUCE regarding the assessment of future funding options for the operation of the road network.
<p>Enable safe and resilient networks and services</p> <p>Enable safe, secure, accessible and inclusive travel through the provision of transport networks, systems and services that are resilient to future change.</p>	<ul style="list-style-type: none"> - We delivered the first Park & Share facility on the national road network, close to Junction 16 of the M1, in partnership with Louth County Council in Q4 2021. - We continued to support and administer the Disability Tolling Exemption scheme through active engagement and collaboration with the Disabled Drivers Association of Ireland, DDAI and the Irish Wheelchair association. 10,362 discs have been administered since the launch of the scheme. - We have contributed to the development of the Road Safety Strategy 2021-2030.
<p>Collaborate for a holistic approach</p> <p>Develop smart and sustainable assets and services through innovating and improving the planning, design, construction, operation and maintenance of the transport network, increasing collaboration and systems-thinking to seek mutual gains and mitigate negative externalities.</p>	<ul style="list-style-type: none"> - We published the Gender Lens checklist tool for TII's Public Transport Projects on our website. - We progressed development of inputs for our Circular Economy Plan and for new circular economy standards with particular emphasis on incorporating the sustainability principles. - We continued to progress the requirements of the All-Ireland Pollinator Plan for the transport sector.

Future goals – 2022 and beyond

- We will continue the installation of Variable Message Signs, CCTV and other ITS equipment at strategic locations on the major inter-urban motorway Dual carriageway network by Q4 2025.
- We have provided 77 grant allocations to local authorities totalling €57 million to progress the delivery of the Greenway programme in 2022.
- We will publish technical standards for Greenway developments and active travel projects by Q2 2022.
- We will develop a National Cycle Network plan for inter-urban rural cycling and walking, providing connections to active travel networks and greenways.

- We will continue to collaborate and partner with the Road Safety Authority and An Garda Síochána to roll out driver education on fast lane mobile closures, and progress innovations regarding automated traffic management deployment vehicles.
- We will identify diversity and inclusion activities appropriate to TII and prepare for reporting on TII's gender pay gap. As part of this, we will report on gender ratios of the workplace as part of Diversity & Inclusion monitoring.
- We will commence the implementation of the Irish Government's Road Safety Strategy 2021 – 2030 in collaboration with the Road Safety Authority.

- We will continue the treatment programme of Invasive Alien Plant species on all national roads. The objective of this programme is to control the spread of Japanese knotweed and other knotweed species on the national road network.
- We will continue the development of new standards with particular emphasis on incorporating the principles of sustainability into all documents in line with developing TII's sustainability principles. Focus will be placed on the development of standards to better address active travel, the circular economy, sustainable pavements, earthworks, and bridges.
- We are due to complete the EU CEF co-funded C-ITS Pilot Project by 2023. This project involves the deployment of roadside communications infrastructure, in-vehicle receivers and driver displays. The project will ultimately enhance road safety and improve TII's environmental footprint. It will also harmonise C-ITS deployment across Europe.

2021 Sustainability Highlights and Future Goals (cont'd)

Principle	2021 achievements
<p>Deliver end-to-end improvements</p> <p>Deliver enhanced whole life-cycle value through impact and influence on stakeholders, partners, and suppliers.</p>	<ul style="list-style-type: none"> - We published an internal Sustainable Procurement Guidelines document. - Since 2017 we, through eFlow, have been sponsoring the Saffron Science competition for secondary schools in Ireland. This has resulted in over 700 submissions on topics addressing mobility, road user charging, active travel, technology and modes of transport. In 2021 the competition attracted over 230 entries. The winning entry discussed the promotion of active travel in the local area and was prepared by Presentation Secondary School in Thurles. - We progressed the development of a new standard for sustainable pavements.
<p>Transition to net zero</p> <p>Reduce the carbon impact of construction, operation and use of the transport network through responsible use of resources, reuse and repurposing, as well as driving the netzero transition and enabling customers to make more sustainable choice.</p>	<ul style="list-style-type: none"> - We continued the programme of energy efficient measures on national route lighting on the non-motorway network, aligning with the national energy savings programme of 2030 and the programme for government. - We monitored and recorded the energy consumption of tram primary components and completed a trial of the Light Rail Vehicle (LRV) tram saloon LED lighting retrofit. - We developed expertise and capability for modelling localised and national emissions associated with the national road network. - We developed a web application for TII's Carbon Assessment Tool. - We provide EV charging points for motorists at all our TII-operated motorway service areas.
<p>Create total value for society</p> <p>Maintain and enhance the balanced delivery of economic, environmental, and social value through robust planning, rigorous appraisal and decisions that prioritise sustainability.</p>	<ul style="list-style-type: none"> - We carried out a gap analysis as a first step towards TII's accreditation to ISO 14001: Environmental Management System, in line with TII's Sustainability Principles. - We continued to engage with the Office of the Planning Regulator (OPR), the NTA, regional assemblies and other local authorities to support compact planning. - We continued to disseminate, engage, and collaborate on our Travelling in a Woman's Shoes' research report and follow-up work in 2021. This included next steps and the approach to operationalising the main findings and recommendations of the study.

Future goals – 2022 and beyond

- We will promote the application of sustainability considerations via the use of the technical and commercial award criteria, in particular the identification of tendering on whole life cycle costs.
- We will continue to advance the development of TII's Carbon Assessment Tool to take on board the latest amendments in the 2021 Climate Action Amendment Bill, particularly any actions required to meet carbon sectoral budgets.
- We will carry out baseline and future emissions forecasts by using the National Transport Model and future vehicle fleet composition forecasts and scenarios.
- We will develop climate action reporting key performance indicators.
- We will develop our Climate Action Roadmap in accordance with Chapter 9 of the Climate Action Plan 2021. This roadmap will set out the path of reducing carbon emissions across the organisation and its business activities.
- We will publish an updated strategy for adapting to climate change on Ireland's light rail and national road network to reflect the Government's COP 2021 and the DoT's Statutory Climate Change Adaptation Plan for the Transport Sector 2019.
- We will commence planning for the enhancement of electric charging facilities at our service areas to cater for the targeted growth in the numbers of electric vehicles in line with Government target to reach one million electric vehicles by 2030.
- We will perform strategic noise mapping for 3,000 km of the national road network.
- We will commence the implementation of an upgrade programme to ensure that facilities for disabled users incorporate all statutory and best-practice requirements, as far as reasonably practicable.

Our People

The challenges of the COVID-19 pandemic continued into 2021, with a large proportion of our staff continuing to work from home. As an organisation, we focused on supporting our staff in terms of wellbeing, communication and technology. TII's Wellbeing programme "Flourish" was enhanced with events arranged to support staff's mental, physical, and social wellbeing including events such as webinars on resilience and guidance on switching off.

In 2021, COVID-19 communications dominated the Internal Communications (IC) narrative, ensuring staff were feeling connected and receiving consistent and accurate information. We increased levels of employee engagement, introduced further employee recognition schemes, and created opportunities to highlight the work of the organisation.

For 2022, the IC strategy has been developed to incorporate the following three areas of focus:

- Supporting business priorities;
- Collaboration & co-ordination; and
- Employee experience.

The return of staff to the workplace in the year was minimal and was managed in line with Government's "Work Safely Protocol". With the continuation of remote working throughout 2021, all staff were transitioned to TII devices to ensure security of remote access, as well as availing of ergonomic home assessments.

Diversity, Equity & Inclusion Initiatives

We want to create a positive working culture at TII where people feel valued and equipped with the skills and support to succeed, regardless of grade or role within the organisation. TII is committed to equality of opportunity and to the elimination of all forms of discrimination, as defined under the terms of the Employment Equality Act. Through our Diversity and Equality Policy, we aim to:

- Promote equal opportunities throughout TII;
- Ensure no person is treated less favourably than another on the grounds of gender, marital or civil status, family status, race, religion, sexual orientation, disability, age or membership of the traveller community;

- Prevent any form of discrimination, whether direct or indirect;
- Provide a working environment free from discrimination, harassment, sexual harassment and bullying; and
- Take action where inequality or discrimination is believed to exist or have taken place within the organisation.

During 2021, TII continued with initiatives from the prior year and implemented new initiatives to support equality in the workplace as well as in broader society and transport, including:

- The establishment of a Return-to-Work Programme, to support those staff returning from long-term leave;
- Continued research on women's mobility choices to support the gender data gap in the design of future transport solutions;
- The roll out of a Right to Disconnect policy and online training for all staff; and
- Providing guidance and training which will continue into 2022, with a focus on gender equality and unconscious bias.

Through these initiatives, we aim to build a culture of inclusiveness and equality within TII itself, where diversity is celebrated and where destructive or potentially discriminatory behaviours are recognised, addressed and remedied. TII recognises that this is the start of the journey, and that focused efforts will be needed to educate our organisation and to ensure that continuous improvements are made to support and enable staff – particularly those more vulnerable to potentially discriminatory behaviour - to thrive, promoting equality of opportunity for all.

For 2022, the Diversity, Equity & Inclusion programme includes the following areas of focus:

- The launch of an eLearning module for all staff on unconscious bias;
- The roll out of a webinar series on the multigenerational workforce to create a better awareness and appreciation of how each generation approaches their work in TII; and
- Development of an Inclusive Leadership Programme for our executive team.



N13 Kilross Junction to Drumkeen Pavement Strengthening Contract, Donegal



National Roads Network Management & Operations

Network Traffic and Operations

National Roads

TII has overall responsibility for the management and operation of the national road network, which it operates in partnership with local authorities. Approximately 50% of the national primary network, amounting to 1,298 km of motorway and dual carriageway, is managed directly by TII. We also oversee the operations and maintenance of approximately 500km of the motorway network through thirteen Public Private Partnership (PPP) contracts, with the remaining balance of the network maintained by three regional Motorway Maintenance and Renewals Contractors (MMaRC).

TII manages the Dublin Tunnel and Jack Lynch Tunnel through the Operation and Maintenance of Tunnels and Traffic Control Centre (OMTTCC) contract. The Limerick Tunnel is managed under a PPP contract. TII operates nine on-line Motorway Service Areas under a PPP concession arrangement. These are distinct from off-line Service Areas, which are located near interchanges and privately owned.

Network Traffic

Throughout 2021, the COVID-19 pandemic continued to have a significant impact on traffic volumes across the network, as it had done in 2020. This was most pronounced in the earlier part of the year, but volumes increased as the year progressed, returning to close to pre-pandemic levels. Throughout 2021, enabling works and equipment installation required for the variable speed limit and lane control signalling (Red X) regimes continued on the M50. In September 2021, Minister Eamon Ryan launched the variable speed limit deployment at the Motorway Operations Control Centre (MOCC) in the Dublin Tunnel Control Building. Following this, on the 4th of October the initial deployment phase between Junctions 4 and 6 of the M50 went live. The phased rollout will continue throughout 2022 and into 2023.

This new equipment allows the control room operators located in the MOCC to illuminate over lane digital signs on gantries on the M50, to display reduced cautionary speeds in response to incidents and prevailing traffic flows i.e., congestion. In addition, variable message signs can provide additional information to drivers in relation to type and location of the incident ahead. In parallel with the installation of the digital signs, additional CCTV cameras have been installed to give control room operators full view of that section of the M50.



Throughout 2021 we assisted the DoT, the Oireachtas Transport Committee and the Attorney General's Office in identifying and developing the necessary legislative changes required to give effect to the operation of the variable speed limit system and lane control signalling regimes.

COVID-19 Impacts on Network Traffic

The impact of the COVID-19 pandemic continued to result in a significant reduction of traffic across the national road network in 2021. Following the re-implementation of lockdown restrictions after Christmas 2020, car traffic volumes through January and February 2021 reduced to approximately 50% of pre-COVID-19 levels with a progressive return to approximately 100% of normal traffic by September, continuing at this level through to December. A notable factor in the traffic figures was the extent to which commercial traffic continued to operate at close to pre-COVID-19 levels throughout 2021 – pointing to the strength of economic activity throughout the year.

In addition to COVID-19 factors, commercial traffic volumes were also affected by Brexit impacts during the latter part of 2020 and the early months of 2021. Stockpiling of goods in the run-up to Brexit was evident in the increased volumes of heavy goods vehicles through Dublin Tunnel in December of 2020.

Throughout 2021, our network of more than 360 traffic counters across the national road network provided real-time data to TII, the DoT, Department of An Taoiseach, An Garda Síochána and other state bodies on traffic patterns across the country, providing insight into the evolution of travel trends throughout the year as COVID-19 restrictions were relaxed and highlighting the operational and strategic value of our investment in this infrastructure.

Incident Management

The economic growth experienced over the last decade has been mirrored by increased traffic volumes across the national road network leading in turn to more congestion. This has led to an increase in the number of traffic incidents and collisions, particularly on congested sections of motorway. In 2021 road operators working for TII responded to 8,323 traffic incidents (2020: 6,635) across the national road network, of which 1,320 were road traffic collisions (2020: 1,020).

While incidents can occur on any part of the network, the highest concentrations occur on urban motorways where congestion is greatest. There were 1,335 traffic incidents on the M50 motorway in 2021 (2020: 948), of which 475 were road traffic collisions (2020: 363). In addition to this, recovery operators removed 3,794 vehicles which had broken down from the M50 during the same period (2020: 4,326).

Dublin Tunnel

The impact of the COVID-19 pandemic continued to result in a significant reduction of traffic volumes through the Dublin Tunnel. However, traffic grew consistently through the later part of 2021 as the general outlook improved with respect to COVID-19. By year-end, HGVs and bus numbers were at pre-COVID-19 levels and cars were approximately at 70% of pre-COVID-19 levels.

In 2021, the remaining eight variable message signs (VMS) at Dublin Tunnel's toll plaza were replaced with new modern technology and intuitive pictograms. This concluded the works initiated in 2020 where two new VMS's were introduced in the toll-plaza lanes enabling larger full colour graphics that are less confusing to new users and particularly those just arriving from Dublin Port.

A feasibility study was undertaken in 2021 to explore the potential for PV solar power generation at the Dublin Tunnel control buildings. The study suggested there is potential for the installation of 75kW of solar panels which would produce approximately 69,000 kWh annually with a corresponding carbon saving of over 20 tonnes of carbon equivalents per annum. A project to implement the solar installation envisaged in the feasibility study is anticipated in 2022.

Winter Operations

TII manages a network of more than 114 weather stations, located predominantly on the national road network. These stations service both our road network and LUAS system. The stations provide detailed weather data used to generate the winter weather forecasts required to determine whether roads require treatment or not. TII operates a Road Weather Information System which, with forecast support from Met Éireann, enables local authorities and motorway operators to monitor weather conditions and make decisions on the deployment of salt gritters during the winter season to assist the safe passage of road users on the network.

We are responsible for the purchase of salt for the winter treatment of all Irish roads, which is undertaken through a multi-annual framework arrangement. To ensure the certainty of salt supply for our national roads (and minimise storage costs) we constructed four strategic salt storage depots at

several motorway maintenance compounds. During 2021, TII's MMarC and PPP contractors used 18,500 tonnes of salt in treatments carried out over 75 days of the winter season (2020: 19,400 tonnes of salt used in treatments over 75 days). Local authorities used approximately 32,800 tonnes of salt during the year on non-motorway national roads (2020: 45,300 tonnes). The occurrence of hail showers again led to localised issues on motorways on several occasions throughout the year. Hail showers lead to a rapid reduction in pavement temperature and the formation of a layer of ice on the road surface. At motorway speeds, encountering a sudden carpet of hail on the road can lead to loss of control and serious collisions.

Pre-treatment with salt does not work for hail. We continue to collaborate closely with the Road Safety Authority and An Garda Síochána in a campaign to highlight the risks of hail and to encourage drivers to moderate their speeds when there is a risk of hail. We have initiated a protocol with Met Éireann, who provide regional hail alerts which are displayed on our network variable message signs. In 2021, we installed four additional VMS signs on the M17 to allow us to better highlight the risk of hail occurring for road users, in addition to supplying other traffic information.

Motorway Service Areas

TII operates nine service areas, under PPP agreements, at six locations along the motorway network. These facilities are either double sided serving each direction of the motorway, or single sided serving both directions through a purpose-built road junction. They are located at:

- M1 Lusk (double-sided)
- M1 Castlebellingham (double-sided)
- M4 Enfield (double-sided)
- M6 Athlone (single-sided)
- M9 Kilcullen (single-sided)
- M11 Gorey (single-sided)

In 2021, we commissioned the design of an upgrade scheme for the M4 (W) Enfield Service Area to ensure compliance with current building regulations for the design of an accessible and inclusive built environment. Upgrade works have commenced in 2021 at Enfield and continue at the other service areas.

Brexit

In advance of Brexit on 31 December 2020, TII worked closely with the DoT to address the major Brexit-related risk arising from the likelihood of traffic congestion in Dublin Port, caused by the requirement for a new regime of customs and other checks following the UK's departure from the EU. The concern was that such congestion could lead quickly to port related heavy goods traffic backing up towards the Dublin Tunnel, at which point the tunnel would be required to close to traffic or to meter traffic in order to avoid standing traffic in the tunnel itself. Experience has indicated that this would quickly result in congestion on the M50 and M1 approaches to the tunnel. Prolonged closure of the tunnel due to port congestion typically leads to widespread traffic congestion across the city.

In response to this Brexit-related risk, we put in place a suite of measures to manage heavy goods vehicle traffic in the event of prolonged traffic congestion at the port. In addition, the new MOCC, which opened in Q4 2020, provided a significant resource to TII with respect to traffic management through the tunnel and on the motorway approaches. The MOCC also helped coordinate a response to traffic congestion in conjunction with other stakeholders including the DoT, Dublin Port Company, Dublin City Council and An Garda Síochána.

Ultimately, the contingency measures put in place to address Brexit traffic risks were not required to be implemented, due to a combination of effective planning and congestion mitigation in Dublin Port. This was aided by a reduction of HGV movements through Dublin Port and an improvement in offloading and onloading procedures. Contingency provisions including the stacking of commercial vehicles on the motorway approaches to the Dublin Tunnel remain in place.

ITS and Technology Deployments

We continued our programme of technology deployments across the motorway network in 2021. Associated with the M50 Dynamic Traffic Management Project, new deployments of variable message signs, lane control signals and CCTV cameras were installed from Junction 3 to Junction 6.

In Cork, the deployment of variable message signs and CCTV continued in 2021, covering the N40 and the approaches to the Dunkettle Interchange. This deployment is an essential pre-requisite for the management of traffic once the main line works for the Dunkettle scheme start in 2022. It will also assist greatly with the management of incidents and the operation of the network.

Elsewhere on the motorway network, new variable message signs were installed on the M17/M18 between Gort and Tuam, providing the capability to alert drivers to the occurrence of hail events and other incidents. Other deployments were carried out on the M7 and M11 routes.

In 2021 we continued to progress the EU CEF co-funded C-ITS Pilot Project. This project involves the deployment of roadside communications infrastructure, in-vehicle receivers and driver displays. This is done to develop our understanding of the requirements of the infrastructure that will be needed for future connected and autonomous vehicles. Progress on this project has been impacted by COVID-19 and is due to finish in 2023.

Asset Renewals

The asset value of the national road network is approximately €31bn and requires ongoing reinvestment to protect the value of the original investment and to ensure that it continues to perform as designed over its intended design life. In line with current practice TII's specialist technical advisors undertook the annual condition survey to monitor the condition of our network pavements. We also continued the annual programme of bridge inspections, undertaking more than 654 principal inspections in 2021 (2020: 780 inspections) and carrying out maintenance to approximately 1,650 structures under our regional routine maintenance contracts, similar to 2020.

Network Pavements

An updated three-year rolling programme for pavement renewals was developed following the completion of the 2021 annual network pavement condition survey. This ensures that there is a strong production line of pavement asset protection and renewal for delivery by local authorities. In 2021, approximately 300km of pavement renewals works were completed (2020: 295km). Our Annual Condition Report published in 2021, which is based on the 2020 network pavement condition survey, indicated a moderate continuing improvement in pavement structural and surface condition, most particularly in the case of our national secondary road pavements. This indicates that the prioritisation of interventions and the works undertaken are delivering an effective protection and renewal regime.

Bridge Rehabilitation and Strengthening

We continued with our programme of bridge rehabilitation and strengthening works in 2021. Under the umbrella of TII's EIRSPAN bridge management system, we undertook a programme of routine inspections across approximately half of all bridges on the network. Major refurbishment works were completed on a total of 23 bridges (2020: 8 bridges). In addition, during a six-week closure of the N71 between Kenmare and Glengarriff between October and December, major remedial works were undertaken to the Cahahone rock tunnel at the Cork/Kerry county boundary, in addition to increasing the headroom provision to cater for all tourist coaches.

Signs and Lines

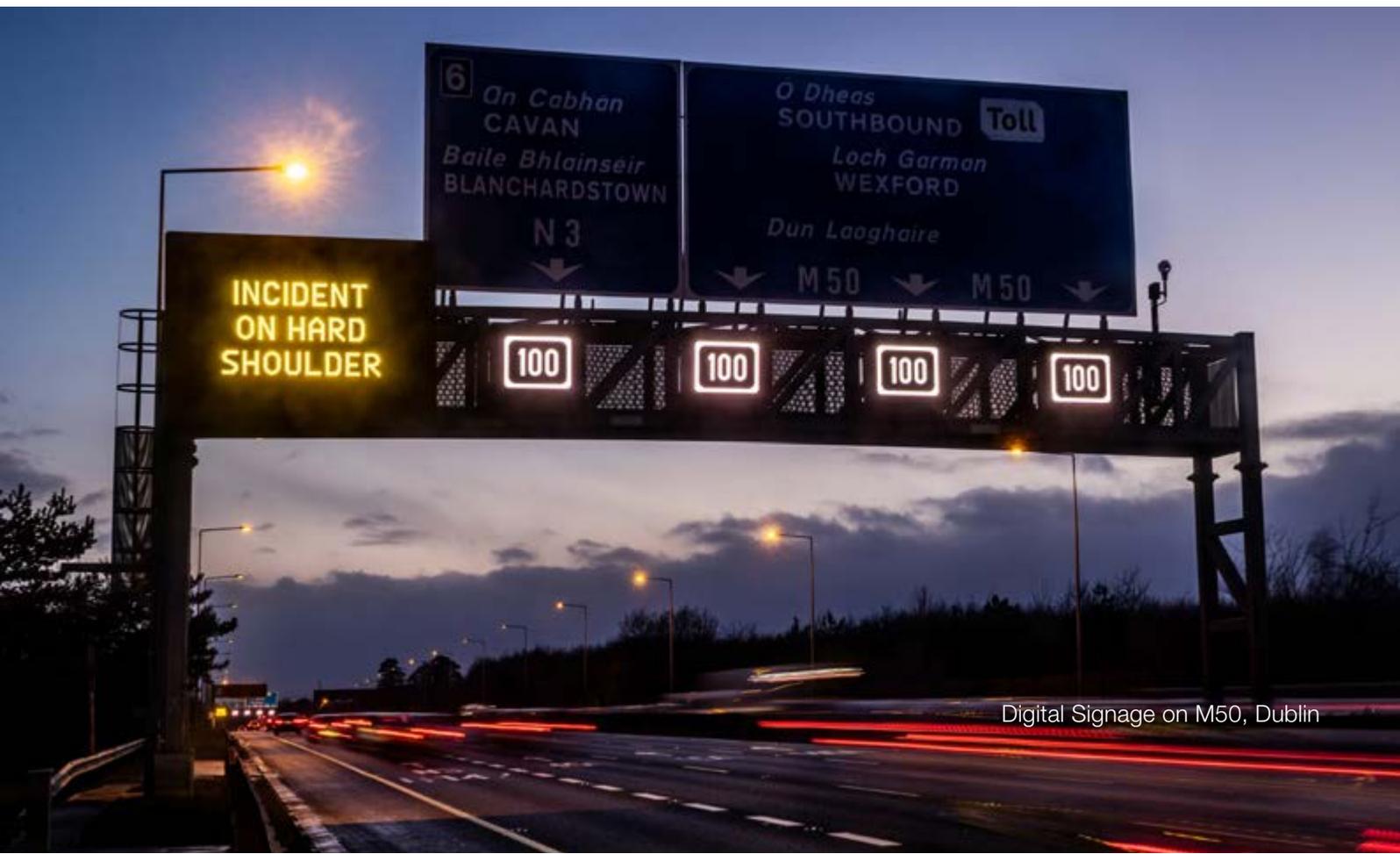
Maintaining the quality of lining and delineation is important in ensuring the continued safe operation of the national road network. In 2021, we completed 565km of network relining (2020: 450km) with the condition of our network delineation remaining largely similar to the previous year. Maintenance of road traffic signs, including washing, repair and cutting back of obscuring vegetation, was carried out under four Regional Sign Maintenance Contracts.

2021 Performance and Outcomes

- Dealt with 8,323 individual motorway incidents and 3,794 vehicle recoveries (across MMaRC & PPP);
- Undertook comprehensive landscape maintenance regime across the MMaRC & PPP network as well as in our service areas. In 2021 we continued the pilot pollinator assistance programme, that was commenced in 2020, under which grass cutting on the network was deferred through the early growth season. The programme will be implemented again in 2022;
- Continued performance of our network wide litter pick, including mainline road sweeping. Under this initiative, we collected 399 tonnes of litter on the MMaRC network in 2021 (2020: 300 tonnes);
- Carried out winter treatments using 18,500 tonnes of salt over 75 days over the winter season, across the motorway network MMaRC & PPP (2020: 19,400 tonnes of salt over 75 days);
- Drainage installation across MMaRC and PPP network was maintained, including the cleaning of 40,000 gullies twice per year;
- Improved skid resistance at 19 sites across the MMaRC managed network; and
- Replaced 5.8km of pavement on the N4 Mullingar By-pass and 4.8km of pavement on the N20 at Killeens.

Our Goals for 2022

- Following on from the audit findings of TII Motorway Service Areas, detailed designs are being developed with a view to the implementation of enhancement works to provide for compliance with current building regulations and BS: 8300 Design of an accessible and inclusive built environment;
- Pavement Asset Renewals: 113 schemes totalling 315km will be implemented by TII;
- TII will continue with the upgrade or replacement of a number of our key tunnel systems, including:
 - Completing the commissioning of the Public Address System at both the Dublin and Jack Lynch tunnels;
 - Replacing the SCADA (Supervisory Control and Data Acquisition) system by the first quarter of 2024;
 - Continuing the systematic replacement of CCTV camera systems in both tunnels in 2022;
 - Replacing the traffic control electronic signage in Dublin Tunnel commencing in 2022;
- Replacing the existing lighting system in Dublin Tunnel with an energy efficient alternative commencing in 2022;
- Installation of a PV solar array at Dublin Tunnel in 2022;
- Replacement of cross passage doors in the Jack Lynch Tunnel in 2022;
- Procurement of new tolling systems software for the Dublin tunnel, with upgrade completion in late-2023; and
- Integrating new services and operational requirements as they come on stream from the M50 Variable Speed Limit Project.
- We plan to undertake maintenance works on more than 1,600 bridge structures as part of our three regional bridge maintenance contracts, and indirectly through our PPP programme on the circa 500 structures that are currently being managed by PPP companies; and
- We will continue our engagement with motorway maintenance contractors to achieve pollinator friendly motorway landscaping maintenance systems. TII will implement the second year of the pollinator friendly landscape maintenance regime on our Tranche 1 Motorway Service Area PPP contract.



Digital Signage on M50, Dublin



Commerical Operations

Luas and Tolling Business

Luas Light Rail Operations

TII oversees the operation and maintenance of the Luas network in Dublin in partnership with the NTA.

TII's responsibilities include the management of the operations and maintenance contract with Transdev, the Luas Operator, as well as:

- Oversight of operational safety matters;
- Revenue, budget management and ticketing and fares policy in conjunction with the NTA;
- Life cycle asset management and renewals of Luas infrastructure and rolling stock;
- Service planning and timetabling;
- Oversight of advertising and delivery of marketing and public information; and
- Management of stakeholders interfacing with Luas network (e.g. planning and development).

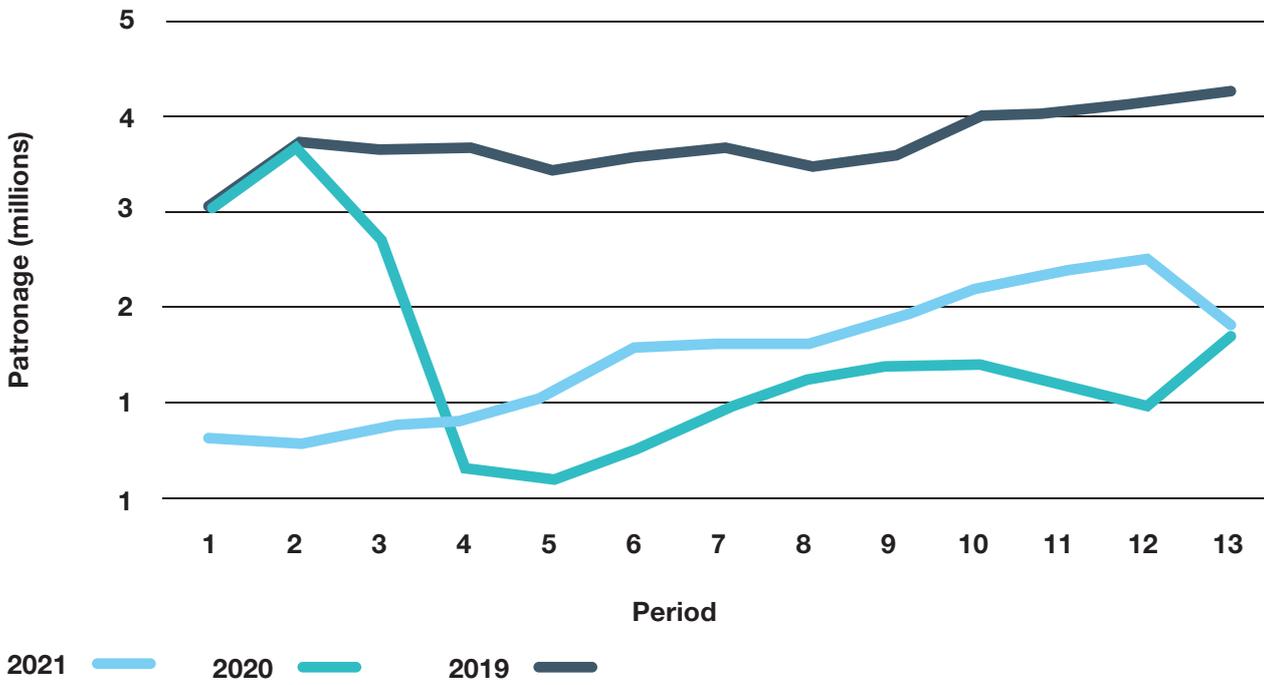
2021 Performance and Outcomes

2021 remained a challenging year due to the COVID-19 pandemic. TII and Transdev, in collaboration with the NTA, implemented business contingency arrangements to protect staff while also continuing to provide critical Luas services across Dublin. Luas operated light rail passenger services amounted to 4.2 million tram kilometres in 2021, which represents 95% of scheduled service kilometres in 2021. For comparison, Luas operated 96.7% of scheduled service kilometres in 2020.

The ongoing pandemic and related travel restrictions during 2021 resulted in 19.5 million passenger journeys across the Luas network (2020: 19.2 million). As shown in the graph below, this represents a significant decrease on 2019 levels (59%), and a slight increase of 2% on 2020 levels. In 2021, passenger journeys on the Green Line were in line with the previous year at 9.44 million, while passenger journeys on the Red Line increased to 10.04 million.



Luas Patronage



Our Light Rail Goals for 2022

- Continue to secure the delivery of safe and effective Luas light rail passenger services in accordance with the specified timetables subject to continuing provision of operating subventions from NTA;
- Manage and monitor day-to-day light rail operations and outsourced external service providers, including the current operations and maintenance (O&M) contract with Transdev, which includes LRV and infrastructure maintenance;
- Continue to monitor trends and undertake initiatives to improve services and safety following on from COVID-19 pandemic;
- Prepare a multi-annual asset management plan and implement the infrastructure asset renewal plan for 2022 (budget of €22.7m);
- Enhance operational resilience, including measures to increase resilience of key Luas facilities to severe weather and other events, which will include projects in 2022 to renew certain control systems, and ensure the provision of a back-up Systems Server room and the refurbishment of sub-station buildings; and
- Run a public information marketing campaign in collaboration with the NTA to encourage people to return to public transport. This campaign can focus on safety and security, as part of Transdev's contractual obligations.

Tolling Operations

TII's tolling operations collect significant user charges every year from a broad customer base of over two million domestic and foreign motorists using the M50 and Dublin Tunnel toll roads. Net revenues collected (i.e., gross revenues minus operating costs, taxes, and rates) are invested in the operation and maintenance of the national road network, thereby reducing Exchequer funding requirements.

TII's responsibilities include:

- Management of the M50 eFlow toll operation and Dublin Tunnel toll collections including the management of the respective operators providing services under contract to TII;
- Management of compliance levels on the M50 eFlow toll using an outsourced enforcement

service provider and provision of public information to promote compliance and awareness of how to pay the M50 toll;

- Managing the national interoperability arrangements including the interoperability management service provider contract and the legal arrangements underpinning interoperability;
- Strategic planning relating to the evolution of the tolling sector in Ireland in line with Governmental and EU policies on user charging and infrastructure funding. This includes planning for the hand back of PPP toll roads to TII between 2030 to 2040; and
- Managing the relationship with a range of stakeholders with a connection to tolling and road user charging. This would entail engaging with the following bodies:
 - The DoT and DG Move (the European Commission);
 - European tolling and road user charging forums; and
 - Academic and industry bodies.

2021 Performance and Outcomes - M50 eFlow Tolling

Traffic volumes and revenue in 2021 were above 2020 levels but were still impacted by the COVID-19 pandemic and travel restrictions, particularly during the first half of the year. The Annual Average Daily Traffic (AADT) for the M50 eFlow Toll in 2021 was 123,667 trips, an increase of 13% on the prior year (2020: 109,150) but remaining below 2019 levels. There were 45.1 million passages recorded on the toll road which is an increase of 13% from the prior year (2020: 39.9 million).

The overall estimated tolling compliance rate was 96.8% in 2021, slightly lower than 2020 levels (97.3%). However, these levels remain strong considering the M50 Toll Operator changed during 2021, and further considering the disruptive impact of COVID-19 restrictions on operational and enforcement activities.

Annual rates of traffic growth on the M50 Toll are set out overleaf. In addition to likely changes to post pandemic travel patterns (e.g., relating to hybrid working), TII consider that the rate of growth

of traffic volumes is expected to decline over the short to medium term due to network capacity constraints and increasing levels of congestion on the M50 corridor and radials.

Growth in M50 eFlow AADT Volumes Year on Year

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
8%	2%	3%	5%	7%	7%	5%	2%	4%	-28%	13%

2021 Performance and Outcomes - Dublin Tunnel Toll

The AADT for 2021 was 17,121, an increase of 7% over the prior year (2020: 15,995). The split between 'tollable' and 'non-tollable' traffic is set out in the graph below:

AADT: Dublin Tunnel (Rolling 12 Months)



Tolling Interoperability

TII has been providing Interoperability Management Services for over a decade to facilitate the operation of all electronic tags on all toll plazas in Ireland. Traffic volumes and associated journeys throughout the national road network increased in 2021 but remained impacted by COVID-19 restrictions, particularly during the first half of the year. Interoperable Electronic Toll Collection (ETC) transactions and revenues increased nationally in 2021 as follows:

- The transactions through the IMSP 'Hub' for 2021 was €50.72m, a 11% increase over prior year (2020: €45.5m).
- Settlements through the IMSP 'Hub' in 2021 was €153.8m, a 11% increase over prior year (2020: €138m).

TII awarded the next generation interoperability management services contract during Q4 2021. We

expect the transition of services from the outgoing service provider to occur during 2022.

The table below sets out the key tolling statistics for 2017 to 2021:

(figures in millions)	2017	2018	2019	2020	2021	% 2020 - 2021
National Interoperable ETC Transactions	53.0M	56.4M	60.5M	45.5M	50.7M	11%

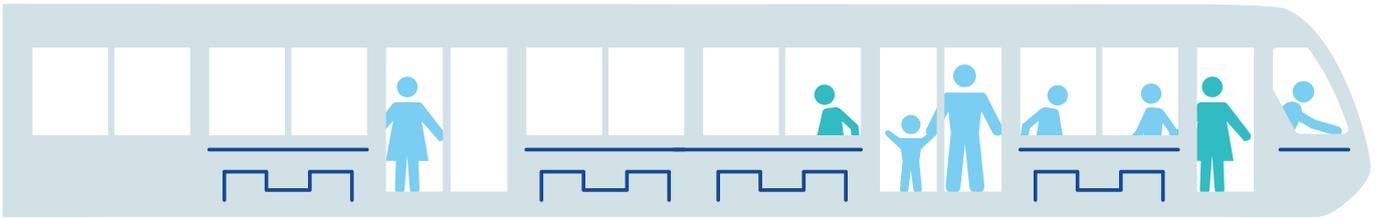
Our Tolling Goals for 2022

- Safeguard the stability and resilience of the M50 eFlow tolling operation and revenue stream following the transition to a new service provider in 2021. The operation will ensure accessible high quality customer services and promotion of continuous improvement. Compliance will be promoted through the delivery of an effective public information campaign highlighting awareness, methods of payment and consequences of non-payment;
- Continue to safeguard the stability and resilience of the national interoperability operation for the national network road users. This includes facilitating the operation of all electronic tolling tags at all toll plazas in Ireland and managing the transition to a new service provider, ensuring an effective and efficient handover;
- Manage the mobilisation and transition of the current Enforcement Services contract to the next generation contract by ensuring an effective and efficient transition of services during 2022, while maintaining enforcement services;
- Continue to explore the strategic opportunities with funding and road user charging options relating to the period following the expiry of the PPP toll concessions (circa. 2030-2040), in addition to developing the preliminary business case for project BRUCE together with all necessary internal and external stakeholder engagements; and
- Continue to work with the DoT in supporting our climate action agenda through management and administration of the Low Emission Vehicle Toll Incentive (LEVTI) and the Alternative Fuel Heavy Duty Vehicle (AFHDV) grant schemes.

2021 Facts

LUAS FACTS

19.5m passenger journeys



NETWORK MANAGEMENT FACTS

Our winter service fleet consists of



327

demountable
snow ploughs



388

salt
spreaders

56,637

tonnes of salt were
used on National Roads
Network in 2021.



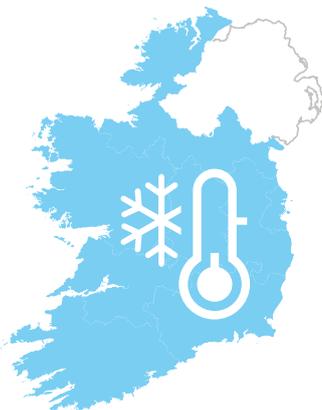
10,835

all emergency calls received
by Motorway Traffic Control
Centre including SOS
phones.



1,450

SOS phones in the country



72

nights in 2021 where
the temperature
reached below

ZERO



114

weather stations in
operation on the National
Roads Network.



Luas, M50, Dublin



Capital Programmes - National Roads, Active Travel/Greenways, Light Rail (Luas) & Metrolink

Capital Investment Plan

The Roads Act 1993 mandates TII to secure the provision of a safe and efficient network of national roads. In addition to performing construction or improvement works on its own behalf, TII provides allocations to local authorities on an annual basis, so they can deliver on the functions of TII in relation to national roads.

The National Development Plan (NDP) capital investment plan allocates Exchequer capital funding to TII of approximately €2,400 million over the period 2021-2025, as follows:

- Protection and renewal: approximately €1,240 million; and
- New roads: approximately €1,100 million.

Furthermore, the NDP capital investment plan allocates Exchequer capital funding to TII of approximately €5,600 million over the period 2026-2030 as follows:

- Protection and renewal: approximately €1,600 million; and
- New roads: approximately €4,000 million.

This represents a very substantial commitment of resources and is expected to move Ireland close to the top of the international league table for public investment.

This level of capital spending will maintain ongoing employment and job creation with appropriate regional development. It will also provide clarity

to the construction sector, allowing the industry to provide the capacity and capability required to deliver the Government's long-term investment plans.

The NDP also illustrates the commitment to reforming how public investment is planned and delivered. This is being achieved through a decisive shift to integrated regional investment plans, stronger co-ordination of sectoral strategies and more rigorous selection and appraisal of projects to secure value-for-money.

Major Projects

Completions:

- N4 Collooney to Castlebaldwin in County Sligo: This is one of the first key National Roads Projects to be delivered under Project Ireland 2040's Regional Connectivity objective. It was officially opened by An Taoiseach Micheál Martin, T.D. on October 18th, 2021. The new €140 million, 15km roads project will significantly improve safety by replacing the old N4 route, where 30 people died over three decades. Additionally, it will reduce journey times and improve journey time reliability between Dublin and Sligo, and make Sligo and the Northwest more accessible for investment and tourism. The project also includes 3.4km of cycleway with the potential to develop 11km of segregated cycle route along the old N4 corridor.



At Construction:

- N40 Dunkettle Interchange, Cork County Council – TII: We are in the process of upgrading the Dunkettle Interchange to a predominately free flow junction. Additionally, a new junction will be provided to the east of the main interchange for Little Island. Improvements will also be made to the Silversprings junction on the N8 into the City. These projects commenced in October 2020 and are expected to be substantially completed in Q2 2024.
- N22 Ballyvourney to Macroom – Cork County Council: We are constructing a 22 km new dual carriageway from Ballyvourney to Macroom. This will comprise bypasses of Macroom Town and the villages of Ballyvourney and Ballymakeera. Construction commenced in October 2019 and are expected to be substantially completed in Q3 2024.
- N5 Westport to Mulranny Road – Mayo County Council: We are constructing 20.3km of dual carriageway from Westport to east of Castlebar and a 2.3km single carriageway link to the N59 Westport to Mulranny. The scheme also includes a 2.5km upgrade of the existing N59 Westport to Mulranny road at Barleyhill. Construction commenced in October 2019 and is expected to be substantially completed in Q2 2023.
- N56 Dungloe to Glenties - Donegal County Council: This project consists of the realignment and construction of 27km of national secondary road. The project is being progressed in phases. Three sections are complete and two are under construction. Substantial completion of all sections is expected in Q4 2023.
- N5 Ballaghaderreen to Longford – Roscommon County Council: We are in the process of constructing a 33.4km single carriageway road that runs southeast from the tie-in point of the existing Ballaghaderreen Bypass to east of Strokestown at Scramoge. The proposed route will bypass the towns/villages of Frenchpark, Bellanagare, Tulsk and Strokestown. The contractor mobilised in January 2022 and works commenced on the site compound, however the contractor entered receivership in March 2022. The next steps in the delivery of the project are under consideration.
- N69 Listowel Bypass – Kerry County Council: We are constructing a 6km western and northern bypass of Listowel town centre which consists of approximately 3.65km of new road, 2.3km on-line improvement of the existing network along the mainline and 1.5km of side road improvements. Construction commenced in December 2021 and substantial completion is expected in Q4 2023.
- N59 Moycullen Bypass – Galway County Council: We are undertaking construction of a 4.3km of single carriageway bypassing the village of Moycullen to the northeast. Construction commenced in October 2021 and substantial completion is expected in Q3 2023.

Luas Green Line Capacity Enhancement

In 2021 the last remaining Alstom Citadis 402 LRVs were extended from 44 to 55 metres in length and the remaining new Alstom Citadis 502 LRVs entered service. The whole fleet on the Green Line now comprises of longer vehicles with an increase in capacity and comfort level.

MetroLink

The MetroLink is a key project in the National Development Plan and its progress to implementation is included as an action in the 2021 Climate Action Plan. During 2021, work continued on the preliminary design and preparation of the railway order submission and the environmental impact assessment report. The railway order submission to An Bord Pleanála is scheduled for Q2 2022, subject to the approval of the preliminary business case by the governmental cabinet in line with the Public Spending Code. A tender for the procurement of a client partner is in progress.

Luas Finglas, Cork Light Rail Transit (LRT) and Luas Lucan

- Luas Finglas: During 2021, work continued on the route selection process and a second non-statutory public consultation followed the publication of the preferred route. In 2022 we will target completion of the preliminary design, preliminary business case and other relevant documentation to enable the Railway Order application in early 2023.
- Cork LRT: The main activities to be undertaken in 2022 are the completion of the emerging preferred route and associated public consultation.
- Luas Lucan: A feasibility study for the Luas Lucan line was submitted to the NTA for review in late 2021. We will develop these discussions with the NTA with a view to mobilising the project team in 2022 and moving to option selection thereafter.

Additional Major Projects

Additional Major Projects Active in Planning & Design phase include:

- N6 Galway City ring road: This project is an integral part of the Galway Transport strategy. The proposed national road comprises 11.8km of motorway between the existing N6 at Coolagh (northeast of the city) to the existing Ballymoneen road (northwest of the city) and then continues as a single carriageway road for a further 5.6km as far as the R336 Coast road, west of Bearna, and includes a new bridge crossing of the river Corrib. The scheme was submitted for planning approval in October 2018 and approved by An Bord Pleanála in December 2021. The approval is subject to judicial review proceedings, so the delivery of the project is delayed.
- N21 Foynes to Limerick: This scheme is to provide a motorway upgrade to the N21 Limerick to Kerry route, in addition to a new link to the Tier One Port of Foynes. It comprises 16km new road from Foynes to Rathkeale with a single carriageway link road to the existing N69 at Askeaton and 16km of motorway from Rathkeale to Attyflin, east of Adare (incorporating the Adare Bypass). The project was submitted to An Bord Pleanála for planning approval in December 2019. The planning decision is expected in 2022.
- N52 Ardee Bypass: This scheme consists of 4.5km of reduced single carriageway, six road junctions, including a proposed roundabout on the N2, and two river bridge structures. The appropriate assessment screening is subject to judicial review proceedings, so the delivery of the project is delayed.
- The N20 corridor options: Transport corridors of around 80km are currently been considered between Cork and Limerick (this would include both road and rail transportation). Further public consultation is anticipated in 2022. Application for planning approval is targeted for 2023.
- We currently have a pipeline of 23 other major projects in planning with a focus on bypasses supporting the Town Centre First policy.

Preparing Schemes for Tender/ Construction

M28 Cork to Ringaskiddy: This project aims to upgrade approximately 12.5km of the N28 route from the N40 South Ring road to the port in Ringaskiddy. Advance works are currently underway, and construction is expected to start in 2024.

Minor Road Projects

Minor works projects are localised improvements which primarily address safety issues such as poor alignment, poor visibility, and narrow cross sections. The construction of four such projects were completed in 2021. A further six projects are in the process of being constructed.

Active Travel

2021 saw TII's continued involvement in the planning and delivery of active travel infrastructure. Moreover, TII garnered additional responsibilities and remit arising from communications from the Minister for Transport and the Annex of actions to the Climate Action Plan 2021. The latter highlighted TII's central role in the development of standards and technical guidance relating to active travel and TII's role in project delivery. Assigned responsibilities include the development of greenway and active travel standards; advancing a programme of major rural active travel schemes; and developing a coherent and connected national cycle network strategy in coordination with key stakeholders, such as the DoT and the NTA.

In 2021, significant works were undertaken in advancing the development of the national cycle network strategy owing to the ambitious and constrained project delivery timeline, a period of one-year. Works included the following:

- Significant engagement and collaboration with key stakeholders and organisations engaged in the development of cycling infrastructure - both nationally and internationally;
- Determination of clear project goals and objectives; and
- Establishing a coordination group to provide ongoing recommendations and oversight.

As part of the national roads programme TII continued to support the development and delivery of active travel infrastructure, such as footways and cycleways alongside or disparate from national roads. This included the delivery of dedicated cycling facilities on our pilot low-volume national road projects – with the N56 Cycleway from Illistrim to Letterkenny completed in 2021 under the national roads programme. Additionally, in collaboration with local authorities and the national road design offices, TII identified a portfolio of major rural active travel projects for development in the coming years; where funding under the national roads programme has been allocated to 28 active travel projects in 2022.

National and Regional Greenways

Code of Best Practice for National and Regional greenways

Developing a Code of Best Practice for National and Regional greenways in a consultative and proactive manner was a commitment in the DoT's Strategy for the Future Development of National and Regional Greenways. TII led this initiative and, following two-and-a-half years of consultation and deliberation, agreement was reached by all parties on the Code, and associated compensation, in 2021. The detail contained within the Code reflects the in-depth discussions that took place over two-and-a-half years between members of the working group and reflects the needs of all stakeholders. The Code will assist in the delivery of National and Regional greenways in a smooth and timely manner, ensuring that users can enjoy and experience the greenway in a safe and secure way.

National and Regional greenway programme

Following communication from the Minister for Transport in May 2021, TII was identified as Approving Authority with responsibility for the national and regional greenway programme, commencing 20th September 2021. Following this identification, significant engagement between TII and the DoT was necessary to ensure seamless transfer of responsibilities and programme continuity. Moreover, during the handover period, amendments to TII processes, procedures, and standards were enacted or extended to apply to the advancement of the national and regional greenway programme.

During 2021 a range of national and regional greenway projects continued to advance through implementation. In this regard construction works continued on a range of regional and national greenways in 2021 including, but not limited to, the Middleton to Youghal greenway, the Clifden to Recess greenway, and the Tralee to Fenit greenway.

The advancement of the Galway to Dublin greenway continued swiftly in 2021. A contract was awarded in 2021 to develop a bridge crossing of the River Shannon at Athlone. Additionally, a preferred route corridor to provide a greenway between Athlone and Galway City was identified. Planning and design of the preferred route between Athlone and Galway City will continue in 2022, with intent to seek development approval in 2023.

Feasibility, planning, and development works continued on a range of national and regional greenway projects in 2021 under the Strategy for the Future Development of Regional and National Greenways. Regional and national greenway projects cumulatively totalling circa 900km were funded through planning and design in 2021. In 2022, regional and national greenway projects will be advancing toward construction, along with those continuing planning and design.

2021 Performance and Outcomes

The Following Minor Schemes Opened to Traffic:

- **N6 Bothar na dTreabh Kirwin roundabout**
- **N59 Maam Cross to Bunnakill LVNS**

- **N67 Ballinderreen to Kinvara Phase 2**
- **N72 Stagmount**
- **N56 cycleway from Illistrim to Letterkenny**

The Following Minor Schemes Were Under Construction:

- N4 Sligo urban improvement
- N16 Drummahon
- N26 Cloongullane bridge
- N51 Dunmoe Phase 2
- N70 Brackaharagh
- N74 Ballyhusty

The Following Greenway Schemes Progressed in 2021:

- **N6 Bothar na dTreabh Kirwin roundabout**
- **N59 Maam Cross to Bunnakill LVNS**
- **N67 Ballinderreen to Kinvara Phase 2**
- **N72 Stagmount**

Our Goals for 2022

- Prepare contract documents for the M28 Cork to Ringaskiddy project;
- Planning and design for Athlone to Galway Greenway;
- Re-procure the N5 Ballaghaderreen to Scramoge project;
- Support the ongoing construction of 7 major projects noted above;
- Continue the planning, design and appraisal process on 23 major roads projects that are in the pre-planning approval phase;
- Progress the construction of 14 minor improvement projects;
- Prepare tender documentation on 9 minor improvement projects that have planning approval;
- Continue the planning and design and appraisal process on 40 minor projects; and
- Progress the funding of regional and national greenway projects cumulatively totalling circa 900km.

Facts

M50 PERFORMANCE SUMMARY

The M50 is the most heavily trafficked road in the country with over 100,000 vehicles using several sections on an average day in 2021.



13,171

Highest hourly flow recorded on the N7 - N4 section between 4pm and 5pm on 21st September.



1,335

Total No. of Incidents of which **475** were Traffic Collisions



174,404

Highest Daily Flow Recorded on the M50 between the N3-N4.

1.26 billion

Vehicle km travelled which represents a 10% decrease on 2020.



N40 PERFORMANCE SUMMARY

Some sections of the N40 Cork Southern Ring Road carried in excess of 70,000 vehicles in 2021 on an average day. There was an increase traffic volumes along the Southern Ring on 2020 levels to the order of 4% in some locations and 8% in others (gradual lifting of COVID-19 restrictions). The volumes of Heavy Goods Vehicles observed on the N40 in 2021 was largely consistent with 2020 levels.



7,309

Highest hourly flow recorded on the Kinsale Rd - Douglas section between 8am and 9am on 21st October.

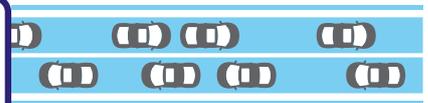
0.28 billion

Vehicle km travelled which represents a 6% increase on 2020.



94,441

Highest Daily Flow Recorded on the Kinsale Rd - Douglas section.



Busiest Typical Day



91

Total No. of Incidents of which **12** were Traffic Collisions



08:00 - 09:00

Peak Incident Time



11 minutes

Average Response Time



35 minutes

Median Duration of Incidents



Professional Services

The Professional Services division publishes guidance documents and provides technical support to other TII divisions as follows:

1. Strategic and Transport Planning;
2. Archaeology and Heritage;
3. Environmental Policy and Compliance (discussed as part of our Sustainability at TII section above);
4. Standards and Research; and
5. Safety at TII:
 - Road safety;
 - Construction health and safety; and
 - Light Rail safety.

Strategic and Transport Planning

Strategic and Transport Planning monitors the performance of the national road and light rail network, assesses future network demands, and carries out strategic studies.

In 2021, the base year for the National Transport Model was updated to 2020 using traffic observations from TII's extensive network of

automatic traffic counters. We published The National Road Network Indicators report for 2020 in May 2021, with enhancements to include carbon emission and air quality indicators.

The COVID-19 travel restrictions continued to have a significant impact on travel patterns and traffic volumes on the national roads network in 2021. New alternative future traffic scenarios, incorporating potential long-term working from home impacts, were issued to our Strategic and Transport Planning project teams. We continued to support light rail and road project teams in the audit and review of business case material, supporting development of a National Road Emissions Model and new TII guidance for the appraisal of active travel schemes.

Archaeology and Heritage

Archaeology and Heritage's primary objective is to minimise the archaeological and heritage impacts associated with TII projects and programmes. We ensure this through legislative and policy compliance, and proactive risk management, which, in turn, helps build public trust.

During 2021, we managed archaeology, built and cultural heritage on 184 schemes (2020: 186), including national road, public transport and active travel schemes. These works ranged in scale from monitoring of ground investigations for Luas Finglas, to archaeo-geophysical surveys for MetroLink, to the completion of advanced



archaeological works for the N5 Ballaghaderreen to Scramoge. Site works were also undertaken in counties; Cavan, Cork, Donegal, Dublin, Kerry, Kilkenny, Mayo, Meath, Monaghan, Roscommon, Sligo, Tipperary, Westmeath and Wexford. The use of sustainability criteria in the procurement of archaeological services was successfully piloted.

We continue to grow our TII Digital Heritage Collections in 2021, publishing two more books as part of the TII Heritage Series: *The Road to Kells: prehistoric archaeology of the M3 Navan to Kells and the N52 Kells Bypass road projects*, and *Between the Meadows: the archaeology of Edercloon on the N4 Dromod – Roosky Bypass*. Several new storymaps were also published, including one on the War of Independence ambush at Cúil na Cathrach (Coolnacaheragh), West Cork, Ireland.

Two TII heritage projects were shortlisted for Archaeological Achievement Awards administered by the Council for British Archaeology. This included: Abarta Heritage for the “Unslient Stones” audiobook, which was published to coincide with the opening of the Athlone active travel scheme, and AMS for their work on the “Gortnacranagh Idol”, discovered on the N5 Ballaghaderreen to Scramoge scheme.

Standards and Research

We maintain and regularly update a wide range of standards, guidelines and technical documents relating to the planning, design, construction, maintenance, and operation of national roads. In 2021, 19 standards (2020: 18) and 25 technical documents (2020: 16) were published on the TII publications website: tii-publications.ie.

These included a number of documents relating to active travel and greenways. We also published Project Management Guidelines for Public Transport projects and guidelines for the consideration of gender issues in the design of projects.

We continued to provide training courses on technical standards for road engineers in 2021. TII’s Annual National Roads conference was held on-line as a series of six webinars. These events target local authority staff engaged on national road projects and other users of our standards.

We organise research programmes covering technical areas associated with road and light rail infrastructure. In 2021, an open tender competition was organised seeking research proposals to support TII in its remit to provide safe and sustainable road and light rail transport networks. Eight research projects were commissioned following this tender competition.

We continued our collaboration with the Conference of the European Directors of Roads (CEDR). TII participates in several CEDR working groups covering a range of activities relating to the management of national road networks. This allows TII to share experience and carry out collaborative research with other European road administrations.

Safety at TII

One of our key strategic goals is to improve national road and light rail safety, prioritising safety across the full range of TII activities. We review safety across both our road and rail infrastructure, in addition to reporting on worker and contractor health and safety at our construction sites.

Road Safety

Our statutory remit includes the provision of a safe and efficient network of national roads. TII implements the EU Directive on road infrastructure safety management which applies to all motorways and national primary routes. TII has applied the Directive to all national roads since June 2012. We aim to half the number of fatalities and serious injuries on national roads by 2030, in line with the EU Road Safety Policy Framework 2021-2030.

In 2021, the total number of road traffic fatalities on all roads in Ireland was 136, a decrease of 12 fatalities compared to 2020. Of these fatalities, 52 occurred on national roads, representing a decrease of 11 fatalities on national roads compared to the 2020 figures. There were no cycle fatalities on national roads in 2021. In 2021, TII provided €26 million in funding to 110 road safety improvement schemes to create forgiving roadsides, self-explaining roads, and a safe environment for vulnerable road users.

Construction Health and Safety

We promote health and safety on our construction projects. We work to promote a safety culture with our contractors. This starts at the tender process by providing clear expectations on the safety standards required on our projects and extends to carrying out safety inspections across our construction sites.

We carry out regular safety inspections to monitor and check the safety performance of our projects and to report on compliance with best practice in occupational and construction health and safety. In 2021 we continued to implement control measures

for mitigating the spread of COVID-19 on our construction sites.

We engage health and safety advisors to carry out quarterly independent safety inspections on TII-funded projects. These checks highlight good practices and areas for improvement. TII also carries out independent monitoring to check that the provisions for worker welfare and employment regulations are adhered to on TII-funded projects.

We have a role in checking that safety measures at roadworks on national roads are in line with best practice and carry out periodic safety inspections for this purpose. TII collects data on accidents, incidents and near misses on TII construction projects. The reporting system gathers monthly safety statistics from major construction sites. This data allows measurement of TII's annual construction safety performance and facilitates trend analysis.

Reportable Dangerous Occurrences and Near Misses are reported from all TII Major Road and Light Rail construction projects and the MMarCs. In 2021, there were 17 Lost Time Accidents (LTAs), an increase of 2 over the previous year. The Lost Time Accident Frequency rate (LTAfr) for TII construction projects and MMarCs was 0.63 (2020: 0.82). LTAfr is calculated as (Total LTAs/ Total hours worked) x 100,000. There were three Dangerous Occurrences in 2021 (2020: 1) and 27 Near Misses in 2021 (2020: 22) recorded.

Light Rail Safety

Our role in Light Rail safety is to ensure compliance with relevant provisions of the Railway Safety Act 2005 and applicable regulations, Codes of Practice and guidance. We work collaboratively with the Luas Operator, key stakeholders and interested parties to maintain and improve the safety performance on the Luas network. We continually monitor the safety performance of the Luas system and carry out monthly analysis of incidents and accidents to identify trends and emerging safety issues.

There were a total of 9 reportable road traffic collisions in 2021, a reduction of 9 compared to 2020. Red light infringements by motorists accounted for 6 of these collisions. Three collisions were caused by road vehicles infringing into the swept path of the tram along the on-street sections of the tramway.

In 2021 there were four reportable contacts between pedestrians and trams, the same as 2020. There were three reportable contacts between a tram and a cyclist. The number of injuries following a Luas accident decreased to five in 2021 (2020: 6 injuries). There were no fatalities reported on the Luas network during 2021 (2020: one fatality).

A number of Luas safety campaigns were run during 2021 which focused on safe interaction of the Luas network with pedestrians, motorists and cyclists. TII is represented on the Railway Safety Advisory Council and is also a member of the UKTram Tram Heads of Safety Group and the European Urban Tram Safety Forum. Throughout the year we continued to collaborate with these groups to share experience on safety issues, participate in formulating best practice and contributing to enhancing the safety of tramways.

2021 Performance and Outcomes

- Published the 2020 National Road Network Indicators report on TII's website;
- Published 19 standards and 25 technical documents on TII's Publications website; tiipublications.ie;
- Carried out six training programmes on TII standards for local authorities and the roads sector;
- Provided input to public consultations on the DoT's Road Haulage Strategy and Greater Dublin Area Transport Strategy;
- Finalised TII's High Impact & Supporting Actions for Phase 1 (2021-2024) of the Government's new Road Safety Strategy (2021-2030) – this new strategy aims to minimise the number of serious injuries and deaths on Irish roads;
- Worked with the Luas Operator to identify areas to improve the safety of Luas infrastructure and operation;

- Maintained ISO 45001 accreditation of TII's Safety Management System;
- Progressed the Research Project on the automatic detection of archaeological features from LiDAR data using machine learning techniques; and
- Opened a Park and Share facility off the M1 close to Dundalk in Co. Louth with capacity for over 200 vehicles.

Our Goals for 2022

- Publish the 2021 National Road Network Indicators report on TII's website;
- Publish TII's National Roads 2040 Strategy aligning with Project Ireland 2040 and the DoT's National Investment Framework for Transport in Ireland (NIFTI), published in 2021;
- Update TII's project appraisal guidelines to align with the Public Spending Code, NIFTI, the DoT's Common Appraisal Framework, the Climate Action Plan and the DoT's Sustainability Mobility policy 2022;
- Further refine TII's National Emissions Model which models emissions on national roads;
- On behalf of the DoT, commence the organisation of the Transport Research Arena Conference to be held in Dublin in 2024;
- Complete phase IV of the strategic noise mapping programme for TII networks, required by Environmental Noise Regulations;
- Update TII's Strategy for Adapting to Climate Change;
- Publish Climate Change and Carbon Assessment guidelines;
- Progress eight research projects from TII's Research Programme 2021 and initiate a tender competition for 2022; and
- Report on TII actions under Phase 1 of the Road Safety Strategy (2021-2030).



TII Regulatory

Land Use Planning

TII has responsibilities for Land Use Planning (LUP) in addition to the requirement to obtain statutory approval for TII projects. As a statutory consultee for national roads and light rail, TII provides input into national and regional policy and reviews County and Local Development Plans.

In accordance with our statutory consultee role within the Irish planning system, TII processed 3,124 planning applications in 2021 (2020: 2,619 applications) and made 5 appeals to An Bord Pleanála in 2021 (2020: 4 appeals). The planning applications ranged from large mixed-use urban developments, industrial estates, windfarms, and single rural houses. In addition, LUP serviced approximately 86 Environmental Impact Statement scoping requests (2020: 95 requests).

TII also reviewed approximately 56 Plans, including Development Plans, Local Area Plans, and Masterplans (2020: 80 plans). TII is participating in the preparation of the Transport Strategy for the Greater Dublin Area, Limerick/Shannon, and Waterford Metropolitan Area Transport Strategies.

Freedom of Information

The Freedom of Information (FOI) Act 2014 provides that every person has, subject to certain exemptions specified in the Act, the following legal rights:

- The right to access official records held by Government Departments and all public bodies that conform to the provisions of Section 6 of the Act;
- The right to have personal information held on them corrected or updated where such information is incomplete, incorrect or misleading; and
- The right to be given reasons for decisions taken by public bodies that affect them.

Since 2016, TII publishes details of FOI requests received for non-personal information in an FOI Disclosure Log, in accordance with the requirements of the Department of Public Expenditure and Reform's Code of Practice for Freedom of Information for Public Bodies. The Disclosure Log is available to view in the FOI section of our website. A dedicated email address (foi@tii.ie) is available to facilitate FOI requests.



Access to Information on the Environment

The European Communities (Access to Information on the Environment) Regulations 2007 to 2018 give legal rights to those seeking access to information on the environment from public authorities. Under the Regulations, information relating to the environment held by, or for, a public authority must, subject to certain exceptions, be made available on request to any person. A dedicated email address (aie@tii.ie) is available to facilitate requests under the Regulations.

Re-Use of Public Sector Information

Under the European Union (Open Data and Re-use of Public Sector Information) Regulations 2021, public sector bodies are required to facilitate the re-use of most public sector information. Re-use includes copying, modifying, translating, adapting, and distributing.

During 2021, TII continued to supplement the information we make freely available for re-use on the Government's Open Data portal at [Data.gov.ie](https://data.gov.ie).

Official Languages

The Official Languages Act 2003 seeks to promote the use of Irish for official purposes in the State by increasing and improving the quantity and quality of services provided for the public through Irish by public bodies. The Act and Regulations made

under the Act place specific requirements on public bodies, including TII, regarding the use of Irish; for example, in responding to correspondence received in the Irish language and the use of the Irish language on stationery and signs, as well as the publication of certain documents bilingually. Section 11 of the Act requires public bodies to prepare a scheme detailing the services the public body will provide through the medium of Irish, through the medium of English, and both languages. TII's current scheme, which covers the period from 2020 to 2023, was approved by the Minister of State at the Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media in 2020 and is published on the Official Languages section of our website.

Data Protection

The commencement of the Data Protection Act 2018 and the application of the General Data Protection Regulation (GDPR) during 2018 created a new legal framework that has significantly enhanced the data protection rights of individuals and strengthened the responsibilities of organisations when processing personal data. In 2021, TII continued to develop policies, systems and procedures aimed at increasing staff awareness of data protection obligations and ensuring TII's compliance with the requirements of data protection legislation. A dedicated email address (dataprotection@tii.ie) is in place to facilitate data protection queries.

Accessibility

TII supports the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), ratified by Ireland in 2018, whose purpose is to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities. TII is committed to ensuring that our services, infrastructure, premises and information are fully accessible and that our staff receive appropriate accessibility awareness training. A cross-sectoral Accessibility Committee has been established which is tasked with ensuring that the requirements of the Disability Act 2005 are fully observed.

The Committee seeks to ensure, as far as possible, that all appropriate measures and facilities are available for customers and staff with disabilities. In accordance with the requirements of the Disability Act, TII has appointed an Access Officer with responsibility for assisting customers with disabilities in accessing the services and publications provided by TII and for acting as a point of contact for people with disabilities wishing to access such services. Further information in relation to TII's accessibility policy and contact details for our Access Officer are provided on the Accessibility page of our website.

During 2021, TII continued to participate in the DoT's Accessibility Consultative Committee (ACC). The ACC brings together officials from the Department, relevant agencies, representatives from disability organisations and members of the Disability Stakeholder Group (DSG).

In June 2021, TII attended a Joint Committee Oireachtas Hearing on Disability Matters to address accessibility in the planning and delivery of transport projects. Matters discussed included the Metrolink, Motorway Service Areas and TII's internal and external engagement structures with respect to disability.

In August 2021, TII's Senior Executive Team approached the National Disability Authority to discuss opportunities for engagement between the two organisations. This proved constructive, covering the development of standards and the ongoing implementation of accessible public services. It was agreed to meet on an annual basis.

Despite the COVID-19 pandemic, TII also continued to engage with the Luas User Group, through online meetings, which afforded participants the opportunity to highlight and discuss accessibility issues and how they might be addressed.

Key features of these meetings included:

- Presentations from the Metrolink and Finglas teams to the group to update them on progress and to invite feedback and participation;
- Presentations from the NTA regarding COVID-19 related and other accessibility initiatives across all transport modes, throughout the country;
- Presentations on e-mobility, conflict and legislation;
- Discussion regarding the ongoing upgrade of on-board Luas announcements. This initiative will increase the number of destination announcements on-board the trams, providing greater assistance to all customers, particularly customers who are blind or visually impaired. It had been expected that this work would be completed in 2020, however COVID-19 has affected progress and impeded roll-out. The Green Line fleet has now been upgraded, with the Red Line to follow over the coming months; and
- Working with toll road operators to broaden toll exemptions to enable designated drivers of disabled passengers to qualify for toll-free passages.

Customer Service

The provision of quality customer service is central to TII's activities and we strive to continually improve our business practices to provide the highest standards in our dealings with our customers. How TII honours its commitments to providing quality service and monitors performance are set out in the TII Customer Charter and Customer Action Plan 2020–2023, which is available on the Customer Service page of our website. A dedicated email address (customerservice@tii.ie) is in place to facilitate customer service complaints for customers who feel that they may not have been treated adequately, courteously, or fairly in their dealings with the staff of TII.



Concept of Future Metro Link Station, Dublin

TII Governance Statement and Board Members' Report

The Board (Photos and Brief Biographies)



Mr. Gareth Llewellyn (Chairperson designate)

Gareth was appointed as Chairperson designate of TII in November 2021 (confirmed in January 2022) following his retirement as Chief Executive of DVSA, a UK government trading fund providing services to over 40m customers. Prior to this he held global executive roles with National Grid plc and Anglo American plc and was also Executive Director at Network Rail responsible for safety, technical and engineering issues. As a non-executive director Gareth floated the waste management company Biffa plc and established the DfT's Renewable Fuels Agency. Gareth retired as a non executive director at Harwich Haven Authority in December 2021, which provides pilots for the world's largest container ships arriving and departing from Felixstowe. He is also a non executive director at Sage Housing which, backed by Blackstone, is the largest provider of high-quality affordable and social housing in the UK.

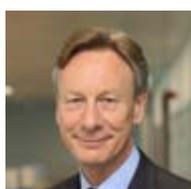
Gareth is a Fellow at the Cambridge Institute for Sustainability Leadership and in 2005 was asked to address the UN General Assembly on human rights and business.



Mr. Cormac O'Rourke (Outgoing Chairperson)

Cormac O'Rourke is a Director of Goodbody Corporate Finance specialising in energy, infrastructure and healthcare. He has over 30 years of experience in investment banking, covering energy, infrastructure/public private partnerships and Telecom. He was previously European Head of Project Finance of KBC Bank NV and Investment Director of ESBI. He was appointed Chairperson of both the National Roads Authority and the Railway Procurement Agency in January 2013 and became the first Chairperson of TII following the merger in August 2015.

Cormac was re-appointed Chairperson from 26 February 2018 for three years and was further reappointed in February 2021 "pro-tem" pending the appointment of a permanent chair. Cormac's term of appointment ended November 2021.



Mr. Peter Walsh (CEO)

Peter Walsh was appointed as TII's CEO on 1 October 2020. Prior to taking up this position Peter was TII's Director of Capital Programme Management since 2015.

Since graduating with a degree in Civil engineering from UCD in 1980 Peter has worked mainly in public service with Local Authorities and the National Roads Authority.



Mr. Joe O'Mahony

Joe O'Mahony was Managing Director of Northern Ireland Electricity from 2011 to 2014 following its acquisition by ESB. He has over 20 years experience managing major power infrastructure projects including a €3bn investment network renewal program for ESB Networks. He is a board member of KTL, Lagan Hibernian and the Centre for Competitiveness in Northern Ireland.



Mr. Seamus Neely

Seamus Neely recently retired as the Chief Executive of Donegal County Council and is currently the Chairperson of Donegal Tourism Ltd. Following a period in the private sector, Seamus has over 29 years of varied Public Service experience with over twenty years at Senior Management Level.



Mr. Aebhric Mc Gibney

Aebhric Mc Gibney (M. Litt (Econ), MBA, C Dir) is the Public & International Affairs Director with Dublin Chamber of Commerce. He is a Chartered Director and has previously served on the Board of C oras Iompair  ireann, chairing its Finance and Property Committee. Previously, he has worked as a lecturer with Trinity College Dublin, an economic consultant with Fitzpatrick Associates and as Senior Economist with IBEC.



Ms. Mary O'Donovan

Mary O'Donovan is a Chartered Director with Board experience in the public, private and charitable sectors. She is currently a Board member of the Residential Tenancies Board and a Board Member of An Post. She has broad experience at a senior level in operations, systems and general management and has held senior roles including Customer Services Director, Chief Information Officer, Chief Operations Officer and General Manager in the Telecommunications and BPO sectors.



Ms. Patricia O'Shea

Patricia O'Shea is a corporate lawyer with over 30 years experience gained largely in the IT and aviation sectors. She worked for a number of years with IBM, holding General Counsel, Company Secretary and Director roles. She is Group Head of Legal & Secretariat at daa plc encompassing its national and international operations. She has served on the Executive Board of the National Maternity Hospital for a long number of years. She is a member of the Advisory Board of Asia Matters.

The Board (cont'd)



Mr. Aidan Skelly

Aidan Skelly former Chief Financial Officer of EirGrid plc. Prior to joining EirGrid he held a number of senior financial and commercial positions in Ireland and the UK. He is a Chartered Accountant with a B.Comm from UCD and an MBS in Corporate Leadership from DCU.



Mr. Damien Ó Tuama

Damien Ó Tuama is a mobilities researcher with over 20 years' experience in the private sector. He completed his doctoral research exploring transitions in mobility systems in 2015 (Trinity College Dublin), and is currently an Evaluator and Steering Committee member for research projects under the EPA Research Programme Annual Call under the pillars of Climate and Sustainability.

He holds the post of National Cycling Coordinator for Cyclist.ie - the Irish Cycling Advocacy Network and An Taisce. He was a board member of the European Cyclists' Federation from 2016 to 2021.



Mr. Desmond Kenny

Des Kenny has over 35 years' experience working in the disability sector in Ireland, both professionally and on a voluntary basis campaigning for the rights and the inclusion of disabled people into mainstream life and services. He served as Chief Executive Officer of the National Council for the Blind of Ireland (NCBI) to his retirement.

Des has contributed to policy formation in the sector and served on a number of statutory boards including two four-year terms on the National Disability Authority. He is a holder of an MBA and an MSC-Econ in Health Care Management.



Ms. Colette Byrne

Colette Byrne is Chief Executive with Kilkenny County Council since August 2015, having previously served as Chief Executive of Offaly County Council. Colette has 40 years' service in the Public Sector, with over 20 at Senior Management level and holds an MA in Public Sector Management. Colette Byrne joined the Board of TII in January 2021.



New Ross Bridge, Wexford

Executive Team



Rachel Cahill

Head of Executive Office and Sustainability Lead

Rachel Cahill is Head of TII's Chief Executive Office with responsibility for leading TII's Sustainability Strategy. Rachel is a chartered accountant with over 25 years' experience working in complex and demanding financial and operational environments including the last 15 years working in the transport and mobility sector. Prior to joining TII, Rachel spent 10 years working in the banking industry in both operational and financial roles.



Pat Maher

Director
Network Management

Pat Maher is Director of Network Management for TII. He is a chartered engineer and holds Masters degrees in civil engineering from UCG and from the University of Calgary, Canada. Having previously worked with consulting engineering firms in the UK and Ireland before he joined the NRA in 1999 and became Head of Network Operations for the NRA in 2006.



Nigel O'Neill

Director
Capital Programme Management

Nigel O'Neill is Director of Capital Programme Management for TII. Nigel has BSc and MSc degrees in engineering and is a Chartered Engineer and member of the Institution of Engineers of Ireland.

Nigel has 28 years' experience in the private and public sectors including civil engineering, project management, public procurement, strategic transport planning, Public Private Partnerships (PPP), tolling operations and light railway operations.



Cathal Masterson

Director
Commercial Operations

Cathal Masterson is Director of Commercial Operations for TII. Cathal is a chartered civil engineer with an MSc in project management and has a strong track record in managing transport and mobility operations and driving change management initiatives. Prior to joining the public sector in 2008, Cathal worked for consulting firms on a variety of transport projects for public and private sector clients.



Ger Hannon

Director
Corporate Services
(Outgoing)

Ger Hannon retired from TII in July 2021. He was the Director of Corporate Services in TII. Ger has almost 40 years' experience across different environments mainly in the commercial state sector, including 16 years at executive director level responsible for a range of portfolios.



Tony Redmond

Director
Corporate
Services
(Incoming)

Tony Redmond is Director of Corporate Services for TII having moved from the Head of Procurement role in July 2021. He is a chartered management accountant with an MBS in Strategic Procurement from DCU. Prior to joining the public sector in 2002, Tony worked in the UK and USA mainly in the airline industry.



Helen Hughes

Director
Professional
Services

Helen Hughes is Director of Professional Services Division for TII. Her previous role was the Head of Strategic and Transport Planning in the National Roads Authority. She has over 30 years of experience in transport planning, project appraisal and project management in the UK, France and Ireland. She is a Chartered Engineer and holds a Bachelor of Civil Engineering degree and a Diploma in Project Management.



Audrey Keogh

Director
Business Services

Audrey Keogh is Director of Business Services. The Business Services Division includes, HR, Finance, Governance and Legal and Land and Property. She is a Fellow of the Institute of Chartered Accountants in Ireland with over 25 years experience in Finance roles in the public sector, practice and industry.



Sean O'Neill

Director
Corporate
Communications

Sean O'Neill is Director Corporate Communications for TII. He has over 20 years working as a communications professional across a diverse range of business sectors from biotechnology to major infrastructure projects. He joined the National Roads Authority as Head of Communications in 2005.

Sean is a member of the Public Relations Institute of Ireland and holds a Masters in Communications Management.



**Edel
McCormack**

Head of
Governance &
Legal Secretary to
the Board

Edel McCormack is Head of Governance and Legal at TII and Secretary to the Board. She is a qualified Solicitor and joined the Railway Procurement Agency (RPA) in 2013 as in-house Property Lawyer, managing all legal property issues for RPA. Edel became Head of Governance and Legal in 2015, with oversight of the provision of legal services to TII and corporate governance matters.

Edel holds a degree in Civil Law, a Masters in European Law and Diplomas in Arbitration and Public Relations. She is also admitted to practice in England and Wales.



Board Responsibilities

Matters Reserved for the Board

The Code of Practice for the Governance of TII outlines all the matters specifically reserved for Board decision. The following key matters are reserved for Board decision:

- approval of TII's Code of Practice;
- approval of Annual Report, Annual Budget and Corporate Business Plan;
- approval of the Financial Statements;
- terms of reference of the Board committees;
- delegated authority levels, treasury policy and risk management policies;
- any decision to perform a function directly rather than through a Local Authority;
- the establishment of new toll schemes or revocation of a toll scheme; new bye-laws for a toll scheme or a rail system;
- Appointment, remuneration, performance management and succession planning in respect of the CEO;
- Significant acquisition, disposal and retirement of assets valued in excess of €1 million.

To ensure that the Board may fulfil its responsibilities with regards to the strategic direction of TII, the following approvals are reserved to the Board for major schemes, defined for consistency with the Public Spending Code as schemes of capital value over €20 million. Any decision to:

- submit a major road scheme CPO and EIS to An Bord Pleanála;
- submit a major Railway Order Application to An Bord Pleanála;
- commence construction of a major scheme;
- enter a PPP contract (all PPP contracts reserved, even if non-major); and
- Under the Government's Capital Works Management Framework, TII is obliged to use the Public Works Contracts (PWC) suite of contract forms. Where these PWC forms are not suitable for use on TII projects, TII may seek a derogation from the Government Contracts Committee for Construction (GCCC) under Section 6 (c) of DPER Circular 01/2016. Before seeking the sanction of the GCCC for such derogation, the approval of the Board is to be obtained. Board approval is also required for any significant variance in contract terms and conditions from those which are either approved by DPER or the GCCC.



Delegation by the Board

The Board has delegated the following:

- use of the Seal, to the CEO, the Director of Business Services, Director of Commercial Operations and the Head of Legal and Governance as Secretary to the Board (the use of which is to be recorded in the CEO Report to the Board);
- approval of Speed Limits, to the CEO or any member of staff that is so authorised;
- planning issues, to the CEO or any member of staff that is so authorised;
- recommendations to the Commissioner of An Garda Síochána about the Road Traffic Acts, as provided for in Section 23 of the Roads Acts;
- appointment of authorised persons, about inspection, surveying and the like, as provided for in Section 78 of the Roads Act; and
- giving directions to Local Authorities as provided for in regulation 3(7) of the Road Infrastructure Safety Management Regulations.

Statement of Responsibilities

The Roads Acts 1993 to 2015, require TII to prepare financial statements for each financial year in such form as may be approved by the Minister for Transport with the consent of the Minister for Public Expenditure and Reform.

The Board of TII is responsible for keeping adequate accounting records which disclose with reasonable accuracy, at any time, the financial position of TII and which enable it to ensure that the financial statements comply with the Roads Acts 1993 to 2015.

TII is also responsible for safeguarding its assets and for taking reasonable steps for the prevention and detection of fraud or other irregularities.

In preparing those financial statements, TII is required to:

- select suitable accounting policies and then apply them consistently;
- ensure that any judgements and estimates that are made are reasonable and prudent;
- state whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements;
- ensure the financial statements present a true and fair view of TII's financial performance and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that TII will continue in operation.

The Board is responsible for approving the annual plan and budget. The performance of TII as against the annual plan and budget is evaluated at every Board meeting. The Board considers the financial statements give a true and fair view of the financial performance and the financial position of TII on 31 December 2021.

Board Structure

The Board's composition is a matter for the Minister as is the appointment and reappointment of Board Members and terms and conditions of their appointment. Under the Code of Practice, where the Chairperson considers that specific skills are required on the Board, he/she can advise the Minister so that the Minister may take the Chairperson's views into account when making appointments.

The Board is satisfied that its Members are free from any business or other relationship that could materially affect, or could appear to affect, the exercise of their independent judgement. All Board Members disclose any interest and absent themselves from Board discussions and decisions where they are conflicted or have a direct or indirect interest as required by the Code of Practice. All Members are subject to the disclosure requirements of Section 37 of the Roads Act 1993 and provide Declarations of Interest as required by Section 40. Conflicts of Interest is a standing item on the agenda of all Board meetings.

Board Members annually complete a Board self-assessment evaluation questionnaire while Audit and Risk Committee members complete a checklist for the effectiveness of the Audit and Risk Committee. The Code of Practice requires an external evaluation of Board Effectiveness every three years and this was completed by TII in 2019.

Gender Balance in the Board Membership

As at 31 December 2021, the Board had three (27%) female and eight (73%) male members, with up to three positions vacant.

The Board therefore does not meet the Government target of a minimum of 40% representation of each gender in the membership of State Boards. The Minister for Transport has sole discretion in appointments to the TII Board under the Roads Act.

The Minister's attention is brought to the gender balance of the TII Board in the annual Comprehensive Report.

Board Members - Schedule of Appointment Terms

	Board Member	Role	Date of First Appointment	Current Term Ends
1	Cormac O'Rourke*	Chairperson (Outgoing)	10.10.12	25.11.21
2	Gareth Llewellyn**	Chairperson designate	26.11.21	25.11.26
3	Peter Walsh	Chief Executive Officer	22.10.20	21.10.25
4	Joe O'Mahony	Ordinary Member	14.02.13	30.06.22
5	Seamus Neely	Ordinary Member	01.11.15	24.11.22
6	Mary O'Donovan***	Ordinary Member	11.10.18	10.10.26
7	Aebhric Mc Gibney****	Ordinary Member	11.10.18	10.10.26
8	Desmond Kenny	Ordinary Member	07.10.20	06.10.23
9	Patricia O'Shea	Ordinary Member	07.10.20	06.10.23
10	Damien Ó Tuama	Ordinary Member	07.10.20	06.10.23
11	Aidan Skelly	Ordinary Member	07.10.20	06.10.23
12	Colette Byrne*****	Ordinary Member	25.01.21	24.01.26

*Cormac O'Rourke's Term of Appointment ended 25 November 2021

**Gareth Llewellyn was appointed Chairperson designate on 26 November 2021

***Mary O'Donovan's Term of Appointment ended 10 October 2021 and was extended for a term of five years from 11 October 2021 to 10 October 2026

****Aebhric McGibney's Term of Appointment ended 10 October 2021 and was extended for a term of five years from 11 October 2021 to 10 October 2026

*****Colette Byrne was appointed to the Board on 25 January 2021 for a term of five years

Board Committees

The Board has an effective Committee structure to assist in discharging its responsibilities. The Board has established two committees, as follows:

Audit and Risk Committee

The Audit and Risk Committee comprises of five Board members and an Independent Chairperson – Aidan Horan. The role of the Audit and Risk Committee (ARC) is to support the Board in their responsibilities for issues of risk, control and governance by reviewing the comprehensiveness of assurances in meeting the Board's assurance needs and reviewing the reliability and integrity of these assurances. The responsibilities of the ARC are outlined in its written terms of reference, which are reviewed annually by the Committee and approved by the Board.

The ARC formally reports to the Board providing such information or advice, as deemed appropriate through the ARC Chair's regular presentations to the Board about committee activities, issues and related recommendations. The ARC provides the Board with an annual report, timed to support

the finalisation of the annual report and financial statements and the review by the Board of the effectiveness of the system of internal control, summarising its conclusions from the work it has done during the year.

Strategy Committee

The Strategy Committee comprises of six Board members. The role of the Strategy Committee is to assist the Board in the preparation and adoption of a strategic plan for Transport Infrastructure Ireland. The responsibilities of the Strategy Committee are outlined in its written terms of reference, which are reviewed annually by the Committee and approved by the Board.

Both Committees formally report to the Board, providing such information or advice as deemed appropriate, through the Committee Chairperson's presentations from time to time to the Board about Committee activities, issues and related recommendations. Both committees provide the Board with a report, timed to support the finalisation of the Annual Report and Financial Statements, summarising its conclusions from the work it has done during the year.

Board Members - Schedule of Attendance

2021	Board		Audit & Risk Committee		Strategy Committee	
	A	B	A	B	A	B
Cormac O'Rourke*	13	12	-	-	7	7
Gareth Llewellyn**	1	1	-	-	-	-
Peter Walsh	13	13	-	-	7	7
Colette Byrne***	13	13	7	7	-	-
Desmond Kenny	13	13	-	-	7	7
Aebhric Mc Gibney	13	12	-	-	7	6
Seamus Neely	13	13	-	-	7	7
Mary O'Donovan	13	12	7	6	-	-
Joe O'Mahony	13	13	-	-	7	7
Patricia O'Shea	13	13	7	7	-	-
Damien Ó Tuama	13	13	7	7	-	-
Aidan Skelly	13	13	7	7	-	-

*Cormac O'Rourke's Term of Appointment ended 25 November 2021

**Gareth Llewellyn attended the Board Meeting and Strategy Committee Meetings held 23 November 2021 as Chairperson designate

***Colette Byrne was appointed to the ARC Committee in January 2021

Column A indicates the number of meetings held during 2021 when the Board Member was a member of the Board and/or Committee.

Column B shows the number of meetings attended during 2021 when the Board Member was a member of the Board and/or Committee.

Note: Special Purpose Meetings of the Board were held in January 2021 and May 2021

Board Members - Schedule of Fees and Expenses

				2021	2021
			Note	Fees (€)	Expenses paid (€)
1	Cormac O'Rourke	Chairperson (Outgoing)		18,580	-
2	Gareth Llewellyn	Chairperson designate		2,024	236
3	Peter Walsh	Chief Executive Officer		-	-
4	Colette Byrne	Ordinary Member		-	-
5	Desmond Kenny	Ordinary Member	Note 1	11,970	-
6	Aebhric Mc Gibney	Ordinary Member	Note 1	11,970	-
7	Seamus Neely	Ordinary Member	Note 1	11,970	-
8	Mary O'Donovan	Ordinary Member	Note 1	11,970	-
9	Joe O'Mahony	Ordinary Member	Note 1	11,970	-
10	Patricia O'Shea	Ordinary Member		-	-
11	Damien Ó Tuama	Ordinary Member	Note 1	11,970	-
12	Aidan Skelly	Ordinary Member		-	-
			Total	92,424	236

Note 1: Non-commercial Public Service Bodies Category 2 Board fees (Chairperson €20,520, Director €11,970) apply from 14 July 2015. In accordance with the Department of Public Expenditure & Reform's "One Person One Salary" principle, Peter Walsh, Patricia O'Shea, Aidan Skelly and Colette Byrne did not receive a fee for serving on the Board.

Key Personnel Changes

In addition to changes at Board level referenced in the table “Board Members - Schedule of Appointment Terms” there was one change to senior management. Tony Redmond replaced Ger Hannon as Director of Corporate Services in July 2021.

Disclosures Required by the Code of Practice for the Governance of State Bodies (2016)

The Board is responsible for ensuring that TII has complied with the requirements of the Code of Practice for the Governance of State Bodies, as published by the Department of Public Expenditure and Reform in August 2016. The following disclosures are required by the Code.

Consultancy Costs

Consultancy costs include the cost of external advice to management and exclude outsourced ‘business-as-usual’ functions.

	2021	2020
Description	€'000	€'000
Legal advice	2,870	2,541
Tax, financial / actuarial advice	188	450
Other – project management and business support	121	986
Total	3,179	3,977
Consultancy costs capitalised	-	-
Consultancy costs charged to the Statement of income and Expenditure	3,179	3,977
Total	3,179	3,977

Legal Costs and Settlements

The table below provides a breakdown of amounts recognised as expenditure in the reporting period in relation to legal costs, settlements and conciliation and arbitration proceedings relating to contracts with third parties. This does not include expenditure incurred about general legal advice received by TII which is disclosed in Consultancy costs above.

	2021	2020
Description	€'000	€'000
Legal fees – legal proceedings	540	457
Conciliation and arbitration	1	2
Settlements	-	75
Total	541	534

These legal costs comprise costs for 3 cases. There are no costs on legal disputes involving other State bodies (2020: Nil). Additional costs and settlements were paid by TII's insurers. The conciliation and arbitration costs above relate to those costs directly incurred by TII and do not include conciliation and arbitration payments paid by Local Authorities.

Travel and Subsistence Expenditure

Travel and subsistence expenditure is categorised as follows:

	2021	2020
Description	€'000	€'000
Domestic		
- Board	-	3
- Employees	194	209
International		
- Board	-	-
- Employees	3	20
Total	197	232

Hospitality Expenditure

Income and Expenditure Account includes the following expenditure:

	2021	2020
Description	€'000	€'000
Staff hospitality	2	1
Client hospitality	-	-
Total	2	1

Risk Management

The Board has overall responsibility for determining the nature and extent of the significant risks it is willing to accept in order to achieve TII's strategic objectives.

While the ultimate responsibility for risk management rests with the Board, it is supported by the ARC, which reports the findings of its reviews to the Board. The ARC receives regular reports from the Corporate Risk Manager and the internal and independent auditors and checks progress against agreed action plans to manage identified risks.

TII Risk Management Policy

TII's Risk Management Policy is subject to annual review and approval by the Board to confirm that it follows best practice and meets the requirements of the Code of Practice for the Governance of State Bodies (2016).

TII Risk Management Framework

TII has adopted an Enterprise Risk Management framework to support its Statement of Strategy and Annual Plan and Budget. The framework includes a tailored risk management process to ensure principal risks are identified, prioritised, managed, monitored and reported consistently across all areas in TII. Enterprise Risks are reviewed by an Enterprise Risk Committee and feed into the Board and ARC wider discussions. All Enterprise Risks are assigned an owner from the Executive team who regularly review their assigned risks.

The Executive team use the strategic objectives to identify potential risk and uncertainty. The output from these exercises is used to review and refresh all risk registers across TII. A defined risk appetite supports and enables prioritisation and mitigation planning.

TII regularly reviews its risk management framework and the application of its risk management practices to ensure that the risk management framework remains current and relevant.

TII implemented a new Risk Management Framework in 2017. The Framework is subject to annual review and approval by the Board.

TII Risk Appetite

Strategies for controlling risk are tailored to the level of TII's willingness to accommodate risk, in line with TII's Risk Appetite Statement. TII managers consider whether current risk controls and mitigation activities are adequate to bring the potential likelihood or consequence of the risk to a tolerable level. Further actions are defined and implemented if the risk is not deemed to be within appetite.

TII's Risk Appetite is subject to annual review and approval by the Board.

Statement of Compliance

TII has instituted appropriate measures to comply with the Code of Practice which sets out principles of corporate governance which the boards of state bodies are required to observe.

TII was in compliance with the Code of Practice for the Governance of State Bodies for 2021.

For 2021, TII was covered by the 2018 Oversight and Performance Delivery Agreement between TII and the Department of Transport

Compliance with Legislation

TII complies with corporate governance and other obligations imposed by the:

- Roads Acts 1993 to 2015;
- Transport (Railway Infrastructure) Act 2001;
- Railway Safety Act 2005 (as amended);
- Ethics in Public Office Act 1995 (as amended);
- Standards in Public Office Act 2001;
- Official Languages Act 2003;
- Disability Act 2005;
- Safety, Health & Welfare at Work Act 2005;
- Freedom of Information Act 2014;
- Regulation of Lobbying Act 2015;
- Protected Disclosures Act 2014; and
- Data Protection Acts 1988 & 2003 and associated legislation



TII Human Rights and Equality

Transport Infrastructure Ireland is committed to ensuring that there is a culture of respect for human rights and equality among our staff and for the people to whom we provide services.

TII supports the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) – ratified by Ireland in 2018 – whose purpose is to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities.

TII continues to support key government programmes such as National Disability Inclusion Strategy (NDIS) - a whole of government approach whose aim is to make transport progressively more integrated and accessible, in both urban and rural areas.

TII also supports the Comprehensive Employment Strategy 2015 – 2024, which seeks ensure that people with disabilities who wish to work are supported and enabled to do so.

Similarly, TII supports associated Department of Transport policy such as Transport Access for All - which places Universal Design at the heart of transport - as well as the recent Sustainable Mobility Policy.

In consideration of the above, TII continues to consult as widely as possible on matters of disability, to adhere to best practice in sustainable and accessible public transport and to seek innovative ways of progressing the goals set out in both international and national policy.

All workers share the right to safe and healthful working conditions. The Safety, Health and Welfare at Work Act 2005 (as amended) sets out the rights and obligations of both employers and employees. TII are fully committed to promoting and preserving the health, safety and welfare of our employees. It is our policy to promote positive and proactive health and safety culture and behaviours by encouraging strong leadership, risk management and employee engagement across the organisation.

In 2020 TII carried out a preliminary assessment of areas in which its functions have the potential to impact upon human rights and equality and outlined plans to develop activity in this area in 2021/2022.

In completing a preliminary assessment, TII took a broad view of human rights and equality and was guided by the principles and rights set out in the Universal Declaration of Human Rights (UDHR). TII identified five key areas in which the organisation has regard to Human Rights and Equality in its activities:

1. Human Health and Safety
2. Accessibility
3. Gender Balance, Diversity and Inclusion
4. Privacy, Participation and Access to Information
5. Sustainable Development



TII completed the following activities in 2021:

- 1. Staff engagement:** TII developed and issued a survey to all staff to ascertain the general level of awareness of the Public Sector Human Rights and Equality Duty in the organisation under the separate headings of TII as a Public Body (Human Rights), TII as an Employer (Human Rights), TII as a Public Body (Equality) and TII as an Employer (Equality). The organisation is now assessing the feedback from the survey in order to identify areas for future human rights and equality activities and to plan next steps.
- 2. Staff engagement:** As part of the staff survey, participants were asked to indicate whether or not they would be willing to participate in working groups to further explore Human Rights and Equality issues for TII. It is planned to convene working groups as staff return to the office in 2022 and to use the groups to identify suitable topics for training and awareness activities.
- 3. Accessibility:** In June 2021, TII attended a Joint Committee Oireachtas Hearing on Disability Matters to address accessibility in the planning and delivery of transport projects. Matters discussed included Metrolink, Motorway Service Areas and TII's internal and external engagement structures with respect to disability.

In July 2021, TII's Access and Inquiry Officers were invited to attend a meeting with the Department of Transport to seek opportunities for further co-operation and engagement.

In August 2021, TII's Senior Executive Team approached the National Disability Authority to discuss opportunities for engagement between the two organisations. This proved very constructive, covering the development of standards and the ongoing implementation of accessible public services. It was agreed to meet on an annual basis. User Group Meetings have continued over the past year, as has attendance at the Department of Transport Accessibility Consultative Committee. As well as ongoing accessibility matters, these meetings have included dedicated in-depth presentations on Metrolink, Luas Finglas and e-mobility. Feedback from these presentations has been very positive.

Recent engagement with members of the Coalition of Disabled Persons Organisations (DPOs) has further expanded TII's engagement with the disability community, in line with a social model of disability, as set out in the UNCRPD.

In February 2020, TII launched its Disability Toll Exemption Scheme. This National Scheme replaced the cards that were previously issued by individual Toll Plazas and not only simplifies the process for applicants but also expands the scheme to enable qualified able-bodied drivers of disabled passengers to - for the first time - avail of an exemption. Around 8,000 vehicles have registered under the scheme to date.

In addition, TII carried out an Accessibility Review of all TII-controlled, as constructed, Motorway Service Areas (MSAs) to establish compatibility with guidance in BS 8300, Building for Everyone and Changing Places Ireland. This entailed both a review by a specialist architectural consultant and input from stakeholders from the disability community. Recommendations arising from this review – relating to changing facilities, aisle widths, disability awareness training and so forth – are currently being rolled out.

And finally, TII are pursuing an innovation project, entitled ‘ALL Aboard: TII’s Accessibility Podcast’. It comprises of a series of six short podcasts focusing on the theme of accessible and sustainable public transport. It is hoped that this medium will facilitate an innovative and informal way of communicating with users and the wider public, promote barrier-free travel and cultivate a better understanding of the needs of users.

- 4. Human Health and Safety:** During 2021, TII continued to implement measures to protect the health & safety of all our employees and visitors from the impact of COVID-19 and to help prevent the spread of the virus, TII were recertified for ISO45001 and we were awarded the Public Service Award in the 2021 National Irish Safety Organisation (NISO) Annual Occupational Safety Awards.

5. Gender Balance, Diversity and Inclusion:

TII launched its first Diversity and Inclusion Programme in 2021 and rolled out a number of initiatives, including a webinar series under the heading of “Enabling skills to support Gender Equality”, an event to mark International Women’s Day, the development and delivery of Right to Disconnect training and the development of supports for staff returning from long term leave (including maternity leave).

Protected Disclosures

The mechanism whereby TII’s staff may raise concerns, or make disclosures in the public interest, in accordance with the Protected Disclosures Act 2014, is outlined in TII’s Protected Disclosures Procedure. TII also publishes procedures on its website for the making of disclosures to TII under Section 6(1)(b) and Section 7. Transport Infrastructure Ireland (TII) received two disclosures, which it treated as potential Protected Disclosures, in the reporting period up to 31st December 2021. Relevant staff of TII undertook investigations of the matters involved and, as appropriate, followed up with the relevant parties. The subject matter of one of the disclosures has been resolved while work is ongoing to address issues raised in the context of the second disclosure.

Prompt Payments

Details	No. of Payments	Value €	% of Total Payments Made
Total payments made in 2021	2,360	581,914,369	100%
Number of payments made within 15 days	1,809	429,902,720	77%
Number of payments made within 16 to 30 days	551	152,011,649	23%
Number of payments made in excess of 30 days	0	0	0%



Gareth Llewellyn

Chairperson

28 June 2022



N56 Kilconnell to Kilmacrenan Pavement Strengthening Scheme

Financial Statements for the year ended 31 December 2021

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Information

Chairperson (Outgoing) Chairperson designate

Cormac O'Rourke***
Gareth Llewellyn**

Board Members*

Collette Byrne**
Desmond Kenny
Aebhric Mc Gibney
Seamus Neely
Mary O'Donovan
Joe O'Mahony
Patricia O'Shea
Damien Ó Tuama
Aidan Skelly
Peter Walsh

Solicitors

McCann Fitzgerald
Riverside One
Sir John Rogerson's Quay
Dublin 2

Arthur Cox
Earlsfort Centre
Earlsfort Terrace
Dublin 2

Bankers

Danske Bank
Corporate & Institutions
International House
3 Harbourmaster Place
IFSC, Dublin 1

Bank of Ireland
College Green
Dublin 2

Ulster Bank
Head Office
Georges Dock
Dublin 2

NTMA
Treasury Building
Grand Canal St Lower
Dublin 2

Housing Finance Agency
46 St. Stephen's Green
Dublin 2

Auditors

Comptroller & Auditor General
3A Mayor Street Upper
Dublin 1

Registered Address

Parkgate Business Centre
Parkgate Street
Dublin 8

*Board Members' appointment terms are set out in the Governance Statement

**Appointed to the Board during 2021

*** Retired from Board during 2021



Ard Reachtaire Cuntas agus Ciste Comptroller and Auditor General

Report for presentation to the Houses of the Oireachtas

Transport Infrastructure Ireland

Opinion on the financial statements

I have audited the financial statements of Transport Infrastructure Ireland for the year ended 31 December 2021 as required under Article 5 of the third schedule to the Roads Act 1993. The financial statements comprise

- the statement of income and expenditure
- the statement of comprehensive income
- the statement of changes in capital and reserves
- the statement of financial position
- the statement of cash flows, and
- the related notes, including a summary of significant accounting policies.

In my opinion, the financial statements give a true and fair view of the assets, liabilities and financial position of Transport Infrastructure Ireland at 31 December 2021 and of its income and expenditure for 2021 in accordance with Financial Reporting Standard (FRS) 102 — *The Financial Reporting Standard applicable in the UK and the Republic of Ireland*.

Basis of opinion

I conducted my audit of the financial statements in accordance with the International Standards on Auditing (ISAs) as promulgated by the International Organisation of Supreme Audit Institutions. My responsibilities under those standards are described in the appendix to this report. I am independent of Transport Infrastructure Ireland and have fulfilled my other ethical responsibilities in accordance with the standards.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Report on information other than the financial statements, and on other matters

Transport Infrastructure Ireland has presented certain other information together with the financial statements. This comprises the annual report including the governance statement and Board members' report, and the statement on internal control. My responsibilities to report in relation to such information, and on certain other matters upon which I report by exception, are described in the appendix to this report.

I have nothing to report in that regard.

Seamus McCarthy
Comptroller and Auditor General

30 June 2022

Appendix to the report

Responsibilities of Board members

As detailed in the governance statement and Board members' report, the Board members are responsible for

- the preparation of annual financial statements in the form prescribed under Article 5 of the third schedule to the Roads Act 1993
- ensuring that the financial statements give a true and fair view in accordance with FRS102
- ensuring the regularity of transactions
- assessing whether the use of the going concern basis of accounting is appropriate, and
- such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Responsibilities of the Comptroller and Auditor General

I am required under Article 5 of the third schedule to the Roads Act 1993 to audit the financial statements of Transport Infrastructure Ireland and to report thereon to the Houses of the Oireachtas.

My objective in carrying out the audit is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement due to fraud or error. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with the ISAs, I exercise professional judgment and maintain professional scepticism throughout the audit. In doing so,

- I identify and assess the risks of material misstatement of the financial statements whether due to fraud or error; design and perform audit procedures responsive to those risks; and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- I obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal controls.
- I evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures.

- I conclude on the appropriateness of the use of the going concern basis of accounting and, based on the audit evidence obtained, on whether a material uncertainty exists related to events or conditions that may cast significant doubt on Transport Infrastructure Ireland's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my report. However, future events or conditions may cause Transport Infrastructure Ireland to cease to continue as a going concern.
- I evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I report by exception if, in my opinion,

- I have not received all the information and explanations I required for my audit, or
- the accounting records were not sufficient to permit the financial statements to be readily and properly audited, or
- the financial statements are not in agreement with the accounting records.

Information other than the financial statements

My opinion on the financial statements does not cover the other information presented with those statements, and I do not express any form of assurance conclusion thereon.

In connection with my audit of the financial statements, I am required under the ISAs to read the other information presented and, in doing so, consider whether the other information is materially inconsistent with the financial statements or with knowledge obtained during the audit, or if it otherwise appears to be materially misstated. If, based on the work I have performed, I conclude that there is a material misstatement of this other information, I am required to report that fact.

Reporting on other matters

My audit is conducted by reference to the special considerations which attach to State bodies in relation to their management and operation. I report if I identify material matters relating to the manner in which public business has been conducted.

I seek to obtain evidence about the regularity of financial transactions in the course of audit. I report if I identify any material instance where public money has not been applied for the purposes intended or where transactions did not conform to the authorities governing them.

Statement on Internal Control

Scope of Responsibility

On behalf of Transport Infrastructure Ireland (TII) I acknowledge the Board's responsibility for ensuring that an effective system of internal control is maintained and operated. The system of internal control includes financial, operational and compliance controls and risk management systems that support the achievement of TII strategic priorities whilst also safeguarding the public and other funds and assets for which TII is responsible. This responsibility takes account of the requirements of the Code of Practice for the Governance of State Bodies (2016).

Purpose of the System of Internal Control

The system of internal control is designed to manage risk to a tolerable level rather than to eliminate it. The system can therefore only provide reasonable and not absolute assurance that assets are safeguarded, transactions appropriately authorised and properly recorded and that material errors or irregularities are either prevented or detected in a timely way.

The system of internal control, which accords with guidance issued by the Department of Public Expenditure and Reform has been in place in TII for the year ended 31 December 2021 and up to the date of approval of the financial statements.

Capacity to Manage Risk

TII has an Audit and Risk Committee (ARC) comprising five Board members and one external member, with financial and audit expertise, one of whom is the Chair. The ARC met eight times in 2021.

TII has an adequately and professionally resourced Internal Audit function, the work of which is informed by analysis of the risk to which TII is exposed. The analysis of risk and the internal audit plans are endorsed by the ARC and approved by the Board.

TII has developed, and the Board has approved, a risk management policy, risk appetite statement,

and risk management plan. TII's Corporate Risk Manager supports the identification, measurement and management of risk and promotes a risk management culture within TII, including through the ongoing training of staff and support of key staff at Enterprise, Divisional, Business Unit and Project levels. The risk management policy has been issued to all staff.

Risk and Control Framework

An Enterprise Risk Committee comprised of TII senior management ensures that appropriate procedures are in place to identify emerging risks, assess and manage risk from a strategic and operational perspective and to monitor implementation of risk management procedures.

An on-line risk management system has been fully rolled out throughout the organisation. Enterprise, divisional, business unit and project risk registers are in place which identify the key risks facing TII, the category of risk, the risk appetite and the controls in place.

The ARC review risk registers, policies, appetite and plans. The enterprise risk register is reviewed by the ARC at each ARC meeting. Their work supplements the contribution of the Board Members to the Board's management and oversight of risk and serves to inform its review and approval of the enterprise risk register together with risk policies, appetite and plans.

The Board and Senior Management have taken steps to ensure an appropriate control environment is in place with the following elements:

- establishing an ARC and a Strategy Committee as sub-committees of the Board,
- a dedicated procurement section within TII and best practice corporate procurement guidelines,
- a dedicated Governance and Legal section within TII, including a dedicated Corporate Risk Manager, an Information Security Officer and an Assurance and Performance Reporting Manager,

- a Governance Committee consisting of senior members of staff to support TII as regards its responsibilities for issues of corporate governance and compliance including risk, and internal control particularly the comprehensiveness of assurances in meeting the requirements of the Code of Practice for the Governance of TII and the ARC and Board's assurance needs,
- Establishing various other committees such as Learning and Development, Health and Safety, Corporate Procurement, Data Protection, Property, Business Continuity and Cyber Security which provide annual assurances to the ARC,
- a Governance Calendar which explicitly sets out how the senior executive work programme aligns within key governance obligations and reporting requirements to the Board and the Board Committees,
- adoption and implementation of the Public Spending Code as related to public expenditure in accordance with Department of Transport (DoT) and TII guidelines for capital projects, capital and operational programmes and PPP projects,
- establishing project governance arrangements for complex / high risk/value projects and operations including MetroLink, Tolling, Luas, PPPs and national roads projects,
- a Code of Business Conduct requiring Board members, management and staff to maintain the highest ethical standards,
- ensuring compliance with the requirements relating to Declaration of Interests as specified in the Standards and Ethics in Public Office Acts and Section 40 of the Roads Act 1993,
- policies and procedures for staff performance management, for professional and technical training and continuing professional development,
- systematic reviews by Internal Audit of internal controls,
- documented procedures for all key business processes,
- specific training and awareness programs designed to mitigate identified risks related to current and emerging threats and significant compliance issues,
- restricting authorisation of disbursement of monies to authorised signatories,
- the assignment of financial responsibilities and corresponding accountability at management level,
- a comprehensive budgeting system with an annual plan and budget which is subject to Board approval,
- systems and processes in place regarding annual/multiyear budgets, allocations and future commitments,
- systems and procedures in place aimed at ensuring the security of the information and communication technology systems,
- financial control systems in place to ensure stewardship of financial resources and the safeguarding of assets,
- control procedures over grant funding to local authorities to ensure the funding has been applied for the purpose intended and in accordance with guidelines issued, and
- procedures for determining and reporting significant control failures and ensuring appropriate corrective action.

Ongoing Monitoring and Review

Formal procedures have been established for monitoring and improving internal control processes. Internal Audit, through their program of audits independently assess and monitor the effectiveness of key internal controls in the organisation. Where control deficiencies are identified, recommendations for improvements are agreed with those responsible. Internal audit report regularly to the ARC and the Executive on the findings from audits and the status of the implementation recommendations.

Statement on Internal Control (continued)

The Board and ARC review their own effectiveness on an annual basis in line with guidance set out in the Code of Practice for the Governance of State Bodies (2016). In addition, the Code requires an external evaluation of Board Effectiveness every three years and this was last completed by TII in 2019.

The system of internal control is based on a framework of regular management reporting, administrative procedures including segregation of duties, authority limits and a system of delegation and accountability.

In particular, it includes:

- key risks and related controls have been identified, documented and processes have been put in place to monitor the operation of those key controls and report any weaknesses,
- ongoing monitoring by the Board and senior management of actual expenditure/predicted outturn compared to the approved annual plan and budget,
- establishment of various committees throughout the organisation, operating subject to CEO approved terms of reference and providing an annual report to the ARC,
- regular reporting to DoT regarding annual/multiyear budgets, allocations and future commitments processes, and
- regular reviews by senior management of periodic and annual performance of both financial and non-financial reports which indicate performance against budgets and other relevant standards.

COVID-19 and Cyber Security

The onset of the COVID-19 pandemic from early 2020 has continued to have a significant impact on TII's business. The move to remote working for the entire workforce and uncertainties around levels of economic activity and patronage being among the most significant. Our operating results, while improving on 2020 levels, continued to show a

decrease over 2019 levels. TII's Board, supported by its committees and management continually assessed the financial and operating scenarios that emerged during 2021 and managed the associated risks through the existing risk structures, ensuring TII maintained an effective control environment.

A range of measures and responses instituted in 2020, continued in 2021 and were enhanced where required. A COVID-19 Business Continuity report issued to the Board each month. Two Executive led COVID-19 response teams dealt with the ongoing response to the pandemic, ensuring safety of staff while working remotely and on their return to the office during the year and any implications for TII of the COVID-19 business restrictions on TII's relationships with its key providers.

The return of staff to the workplace in the year was minimal and was managed in line with Government's "Work Safely Protocol". With the continuation of remote working throughout 2021, all staff were transitioned to TII devices to ensure security of remote access and a wellbeing programme was put in place, with staff encouraged to attend talks and events throughout the year.

Financial transaction processes and associated risks with potentially high impacts were reviewed at the outset of the pandemic and continued to be monitored in 2021. Key controls over these processes remained substantially the same as they were pre-pandemic with increased levels of communication, collaboration and supervision to adapt to the challenge of remote working.

There was a focus during the year on the review and testing of Incident Response plans to a fraud or cyber attack including ransomware simulations. Additional software security controls and monitoring were implemented to mitigate the IT and security risks from remote working and cyber fraud, with associated guidance and continued awareness training for staff.

There was continued engagement with staff throughout the year on requirements under the Code of Practice, Code of Conduct and Protected Disclosures Policy, emergency home working policies were extended and delegations put in place by the CEO to cover the potential incapacity of senior management during the course of the pandemic continued into 2021.

TII's Board and management keep the situation under continual review.

Regional & Local Roads

TII administers the processing, recording and reporting of Local Authority claims for Regional and Local roads for DoT through the Project Reporting System (PRS). The PRS incorporates:

- Allocations and drawdown profiles which are set and amended throughout the year by DoT.
- Regional and Local road allocation data supplied by DoT and then imported into PRS. Reports of budget amounts imported are sent to DoT for verification.
- DoT staff carry out approval of Local Authority claims for Regional and Local road projects.
- Regional and Local Road expenditure reports (including detailed reports by claim number) and financial reports are sent monthly to DoT.

Procurement

I confirm that TII has procedures in place to ensure compliance with current procurement rules and guidelines and that overall during 2021 TII complied with those procedures. In instances where a requirement for improvements to the design or implementation of those procedures was identified, an appropriate response was agreed between the responsible parties and implemented by management under the supervision of the ARC.

Review of Effectiveness

TII's monitoring and review of the effectiveness of the system of internal control is informed by the review and consideration of the programme of Internal Audit and consideration of its reports and findings; review of regular reporting from Internal Audit on the status of the internal control environment and the status of issues raised previously from their own reports; the ARC, which oversees the work of Internal Audit; the Executive Team within TII, who have responsibility for the development and maintenance of the internal control framework; and comments made by the Office of the Comptroller and Auditor General in their management letter or incidents and related reports on material internal control issues.

I confirm that the Board conducted an annual review of the effectiveness of the internal controls for 2021.

Internal Control Issues

Work was undertaken on 15 audits in 2021 by Internal Audit, with 13 reports presented to the ARC in 2021 and a further 2 reports presented in January 2022. Seven of these reports were performed directly by the Internal Audit function while eight were commissioned from external parties. These reports resulted in recommendations which have been implemented or are in the process of being implemented.

No weaknesses in internal control were identified in relation to 2021 that require disclosure in the financial statements.



Gareth Llewellyn

Chairperson

28 June 2022

Statement of Income and Expenditure

For the year ended 31 December 2021

	Note	Administration 2021 €'000	Light Rail & Metro 2021 €'000	Road Network 2021 €'000	Total 2021 €'000	Total 2020 €'000
State Grants	2	29,262	92,202	1,423,582	1,545,046	1,316,921
Grant Refunds	3	0	0	933	933	1,512
Toll Income	4	0	0	157,756	157,756	138,521
Other Income / (deficit)	5	4,844	1,644	3,321	9,809	8,730
Total Income		34,106	93,846	1,585,592	1,713,544	1,465,684
Expenditure	6	(34,610)	(125,695)	(1,446,788)	(1,607,093)	(1,496,677)
Operating surplus / (deficit)		(504)	(31,849)	138,804	106,451	(30,993)
Transfer from / (to) Capital	12	399	31,366	(81,331)	(49,566)	(27,479)
Finance Charges	11	(873)	0	(26,620)	(27,493)	(26,597)
Interest Receivable		55	0	3	58	13,646
Retained surplus / (deficit) for the year		(923)	(483)	30,856	29,450	(71,423)

All income and expenditure for the year relates to continuing activities at the reporting date. The Statement of Cash Flows and notes 1 to 26 form part of these financial statements.

On behalf of the Board of Transport Infrastructure Ireland:



Gareth Llewellyn
Chairperson
28 June 2022



Peter Walsh
Chief Executive Officer
28 June 2022

Statement of Comprehensive Income

For the year ended 31 December 2021

	Note	2021 €'000	2020 €'000
Retained Surplus / (Deficit) for the Year		29,450	(71,423)
Defined Benefit Unfunded Schemes:			
Experience Losses on Defined Benefit Retirement Obligations		(3,377)	(385)
Changes in Assumptions Underlying the Present Value of Defined Benefit Retirement Benefit Obligations		(2,218)	(7,200)
Total actuarial loss for Unfunded Schemes	20c	(5,595)	(7,585)
Defined Benefit Funded Schemes:			
Experience Gains on Defined Benefit Retirement Obligations		333	470
Changes in Assumptions Underlying the Present Value of Defined Benefit Retirement Benefit Obligations		(114)	(256)
Total actuarial gain for Funded Schemes	20c	219	214
Total actuarial loss	20c	(5,376)	(7,371)
Increase in Irrecoverable Surplus on Defined Benefit Retirement Scheme	20c	(227)	(317)
		(5,603)	(7,688)
Adjustment to Defined Benefit Retirement Obligations	20e	5,595	7,585
Net movement in the Year		(8)	(103)
Other Comprehensive Income / (Deficit) for the year		29,442	(71,526)

The Statement of Cash Flows and notes 1 to 26 form part of these financial statements. On behalf of the Board of Transport Infrastructure Ireland:



Gareth Llewellyn
Chairperson
28 June 2022



Peter Walsh
Chief Executive Officer
28 June 2022

Statement of Changes in Capital and Reserves For the year ended 31 December 2021

	Retained Revenue Reserves Administration €'000	Retained Revenue Reserves Light Rail & Metro €'000	Retained Revenue Reserves Road Network €'000	Capital Account €'000	Development Levies and Contributions €'000	Total €'000
At 31 December 2019	(230)	60,469	546,109	2,234,846	78,062	2,919,256
Retained surplus/(deficit) for the year	339	(6,363)	(65,399)	0	0	(71,423)
Movement in Development Levies and Contributions [Note 21]	0	0	0	0	10,835	10,835
Income used to purchase fixed assets or fund capital payments	0	0	0	106,267	0	106,267
Amortisation in line with depreciation/finance charge	0	0	0	(78,784)	0	(78,784)
Asset disposals and impairments	0	0	0	(4)	0	(4)
Other recognised losses	(103)	0	0	0	0	(103)
At 31 December 2020	6	54,106	480,710	2,262,325	88,897	2,886,044
Retained surplus/(deficit) for the year	(923)	(483)	30,856	0	0	29,450
Movement in Development Levies and Contributions [Note 21]	0	0	0	0	7,241	7,241
Income used to purchase fixed assets or fund capital payments	0	0	0	132,756	0	132,756
Amortisation in line with depreciation/finance charge	0	0	0	(83,190)	0	(83,190)
Asset disposals and impairments	0	0	0	0	0	0
Other recognised losses	(8)	0	0	0	0	(8)
At 31 December 2021	(925)	53,623	511,566	2,311,891	96,138	2,972,293

The Statement of Cash Flows and notes 1 to 26 form part of these financial statements. On behalf of the Board of Transport Infrastructure Ireland:



Gareth Llewellyn
Chairperson
28 June 2022



Peter Walsh
Chief Executive Officer
28 June 2022

Statement of Financial Position

At 31 December 2021

	Note	2021 €'000	2020 €'000
Fixed Assets			
Property, Plant and Equipment	13	3,607,970	3,577,255
Current Assets			
Receivables	14	114,455	71,558
Cash and Cash Equivalents		47,658	73,347
		162,113	144,905
Creditors (Amounts Falling Due Within One Year)			
Payables	15	(100,855)	(127,577)
Net Current Assets		61,258	17,328
Creditors (Amounts Falling Due After One Year)			
Payables	16	(528,740)	(544,003)
Provisions for Liabilities and Charges	19	(168,261)	(164,665)
Retirement Benefits			
Defined Benefit Retirement Obligations	20d	(128,138)	(117,854)
Defined Benefit Deferred Retirement Funding	20d	128,138	117,854
Defined Benefit Pension Surplus	20f	66	129
Total Net Assets		2,972,293	2,886,044
Financed By			
Reserves			
Capital Account	12	2,311,891	2,262,325
Development Levies and Contributions	21	96,138	88,897
Retained Revenue Reserves (as per Statement of Changes in Capital and Reserves)		564,264	534,822
		2,972,293	2,886,044

The Statement of Cash Flows and notes 1 to 26 form part of these financial statements.

On behalf of the Board of Transport Infrastructure Ireland:



Gareth Llewellyn
Chairperson
28 June 2022



Peter Walsh
Chief Executive Officer
28 June 2022

Statement of Cash Flows

For the year ended 31 December 2021

	2021 ‘€000	2020 ‘€000
Net Cash Flows from Operating Activities		
Retained Surplus / (Deficit) for the Year	29,450	(71,423)
Depreciation, impairment and disposal of Fixed Assets	64,143	59,642
Amortisation of levies and deferred credits	(1,512)	(1,512)
Transfer to Capital	49,566	27,483
Pension charge	158	(1)
Increase in Receivables	26,295	(17,503)
Increase in Provisions	3,653	24,215
(Decrease) / Increase in Payables	(19,807)	6,642
Net Cash Inflow from Operating Activities	151,946	27,543
Cash Flows from Investing Activities		
Payments to acquire Property, Plant & Equipment	(115,725)	(93,920)
Purchases of Guaranteed Notes	(73,000)	706
Development Levies and Contributions	11,032	7,000
Bank interest received	58	33
Net Cash Outflow from Investing Activities	(177,635)	(86,181)
Net (Decrease) / Increase in Cash and Cash Equivalents	(25,689)	(58,638)
Cash and cash equivalents at 1 January	73,347	131,985
Cash and cash equivalents at 31 December	47,658	73,347

The Statement of Cash Flows and notes 1 to 26 form part of these financial statements. On behalf of the Board of Transport Infrastructure Ireland:



Gareth Llewellyn
Chairperson
28 June 2022



Peter Walsh
Chief Executive Officer
28 June 2022

Notes to the Financial Statements for the year ended 31 December 2021

1. Accounting Policies

The significant accounting policies adopted by Transport Infrastructure Ireland (TII) for the preparation of the financial statements are set out below. They have all been applied consistently throughout the year and for the preceding year.

a) General Information

TII has its head office at Parkgate Business Centre, Parkgate St., Dublin 8.

TII's primary objective is the provision of a safe and efficient network of national roads, light rail and metro infrastructure.

TII is a public benefit entity.

The presentation and functional currency of these financial statements is Euro. All amounts in the financial statements have been rounded to the nearest €1,000.

b) Statement of Compliance with FRS 102

The financial statements have been prepared in compliance with the applicable legislation, and with FRS 102. FRS 102 is the Financial Reporting Standard applicable in the UK and the Republic of Ireland issued by the Financial Reporting Council in the UK.

c) Basis of Preparation

The financial statements have been prepared under the historical cost convention, except for certain assets and liabilities that are measured at fair values as explained in the accounting policies below. The financial statements are in the form approved by the Minister for Transport with the concurrence of the Minister for Public Expenditure and Reform under the Roads Acts 1993 to 2015.

d) Foreign currency

In accordance with TII's treasury policy all contracts are denominated in Euro. Transactions in foreign currencies are translated to TII's functional currency at the foreign exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies at the reporting date are retranslated to the functional currency at the foreign exchange rate ruling at that date. Foreign exchange differences arising on translation are recognised in the Statement of Income and Expenditure.

e) Income

State Grants TII recognises all state grants in the Statement of Income and Expenditure on a cash receipts basis. Grants funding capitalised expenditure are transferred from the Statement of Income and Expenditure to the capital account. Subsequently these grants are amortised to the Statement of Income and Expenditure as the funded assets depreciate.

TII receive grants from the Department of Transport (DoT) and from the National Transport Authority (NTA) under their respective capital and revenue funding programmes.

Notes to the Financial Statements for the year ended 31 December 2021

1. Accounting Policies (Cont'd)

e) Income (Cont'd)

Development levies and contributions

TII receive development levies and developer contributions and (subject to the provisions of relevant agreements) use the income to fund capital expenditure or repay exchequer monies advanced to fund specific Luas infrastructure projects. TII retain the income in a development levies and contributions reserve and it is amortised to the Statement of Income and Expenditure as the funded assets depreciate. Local Authorities collect development levies under the relevant legislative provisions. Developer contributions arise through the conclusion of bilateral agreements with private individuals, companies or partnerships.

Refunds of grants paid to Local Authorities

Grant refunds reflect the actual amounts received from local authorities in the year.

Toll Income TII recognises toll income due from operators on an accruals basis. The toll income represents charges levied by toll operators after deduction of certain charges and interoperability payments.

Toll income also includes amounts receivable in respect of revenue sharing arrangements under PPP schemes.

Provision of Luas infrastructure TII licences the Luas infrastructure to an operator, with whom TII has a contract to operate and maintain the Luas system for a fixed price per annum – the “Base Yearly Amount”. Where revenues collected by the operator exceed the Base Yearly Amount, a surplus arises for TII and where revenues collected by the operator are less than the Base Yearly Amount, a deficit arises for TII. The surplus or deficit is recognised in the Statement of Income and Expenditure on an accruals basis.

Revenue generated from Luas associated assets

TII generates income from Luas associated assets. This income arises from the provision of Park and Ride facilities, advertising income generated from tram wraps, on-board advertising and advertising at the Luas stops. Income from the rental of kiosks along the lines is recognised on an accruals basis.

Other Revenue

Other income is recognised on an accruals basis.

f) Property, Plant and Equipment

Property, plant and equipment are stated at cost less accumulated depreciation, adjusted for any provision for impairment.

Capitalisation

Light rail & metro projects

TII capitalise expenditure on new public transport infrastructure (Light Rail and Metro) following receipt of certain approvals from Government.

For the purposes of these policies, Government approval for light rail or metro projects is defined by reference to the date of submission of a Railway Order Application except where agreement has been obtained from the Government to fund capital expenditure in advance of the receipt of a Railway Order.

Expenditure on feasibility studies and preliminary design for potential but unapproved capital projects is charged to the Statement of Income and Expenditure in the year of expenditure. All expenditure on the acquisition of capital assets, or expenditure which significantly adds to the value, capacity in use, or useful economic life of existing assets, are capitalised as a fixed asset. Fixed assets received from third parties in accordance with commercial agreements pertaining to the provision of light rail and metro projects, are valued appropriately and included in TII's fixed assets.

1. Accounting Policies (Cont'd)

f) Property, Plant and Equipment (Cont'd)

These assets are recorded at their market value. A corresponding creditor is recognised as deferred income. This deferred income is released to the Statement of Income and Expenditure at the rate the asset is depreciated.

Where expenditure relates to the acquisition or creation of an asset that is not operational or in service at the balance sheet date then such expenditure is reported as "Assets under Construction" and is not depreciated. Assets under Construction are assessed for impairment each year.

Expenditure relating to the consideration on the acquisition of property assets is capitalised as a fixed asset only when the property transaction has been fully completed.

Expenditure relating to consideration incurred in respect of property assets prior to completion of the transaction is included in prepayments.

Road network

Road assets acquired under PPP service concession agreements are capitalised and accounted for using the finance lease liability model in the year the concession agreement is signed. The assets comprised in the M50 buy out agreement have also been valued using the finance lease liability model and all costs incurred in this agreement have been capitalised. When a PPP contract is signed, the value of the infrastructure asset and the service concession liability is recognised as the net present value of the future minimum lease payments.

The construction payments set out in the contract are used as a measure of the future minimum lease payments. In discounting the minimum lease payments TII selected a discount rate of 4% following consultation with the National Development Finance Agency (NDFA) on the basis that it reflected an appropriate rate for long term infrastructure assets.

TII has a contract in place for the operation of the Dublin tunnel, the Jack Lynch tunnel and the motorway operations control centre. While TII receives toll income from the Dublin tunnel, ownership of this asset rests with the relevant Local Authority (Dublin City Council). Accordingly, this contract has not been accounted for as a service concession arrangement. The relevant payments are charged to the Statement of Income and Expenditure in the period they arise.

New road assets acquired under traditional procurement are capitalised from the date the main construction contract is approved in accordance with the requirements of the public spending code.

Road asset expenditure on all other assets is recorded at historical cost.

Expenditure Threshold

Expenditure on capital assets exceeding euro 1,000 is capitalised and depreciated over the useful life of the related asset.

Depreciation

Road assets including motorway service areas are not depreciated when subject of a service concession agreement guaranteeing a useful life and operating capacity at the end of the concession equivalent to that of the asset when first commissioned. Luas infrastructure assets are depreciated from the month they enter revenue service and any grants received in respect of their purchase are amortised on the same basis. Other fixed assets where subject to depreciation are depreciated for a full year in the year of acquisition.

Residual value represents the estimated amount which would currently be obtained from disposal of an asset, after deducting estimated costs of disposal, if the asset were already of an age and in the condition expected at the end of its useful life.



Cycleway, Mullingar to Athlone, Westmeath

Notes to the Financial Statements for the year ended 31 December 2021

1. Accounting Policies (Cont'd)

f) Property, Plant and Equipment (Cont'd)

If there is objective evidence of impairment of the value of an asset, an impairment loss is recognised in the Statement of Income and Expenditure in the year. Depreciation methods, useful lives and residual values are reviewed if there is an indication of a significant change since the last annual reporting date in the pattern by which TII expects to consume an asset's future economic benefits.

Depreciation is provided on all other property, plant and equipment, other than freehold land, at rates estimated to write off the cost less the estimated residual value of each asset on a straight line basis over their estimated useful lives, as follows:

	Years
Bridges, underpasses, civil works & enabling works	50
Buildings	30
Track	10-50
Control & communication systems	10-25
Power	20-25
Fare collection	5-15
Park & Ride	30
Luas rolling stock & equipment	15-24
Furniture & fittings, lifts and spares	10-25
Office fixtures and equipment	4-10
Enhancement to leasehold premises	10*
Motor vehicles	5
Signage	20
Safety & sundry equipment	10
Electronic equipment	10
Winter maintenance equipment	10
Ducting	20
Maintenance depots	30
M50 eFlow assets	20**

*Leased assets are depreciated over the shorter of the lease term and their useful lives.

**M50 eFlow assets are depreciated over 20 years or the contract life.

Notes to the Financial Statements for the year ended 31 December 2021

1. Accounting Policies (Cont'd)

g) Leases

Leases in which TII assumes substantially all the risks and rewards of ownership of the leased asset are classified as finance leases. Other leases are classified as operating leases. Leased assets acquired by way of finance lease are stated on initial recognition at an amount equal to the lower of their fair value and the present value of the minimum lease payments at inception of the lease, including any incremental costs directly attributable to negotiating and arranging the lease.

At initial recognition, a finance lease liability is recognised equal to the fair value of the leased asset or, if lower, the present value of the minimum lease payments. The present value of the minimum lease payments is calculated using the interest rate implicit in the lease. The minimum lease payments are apportioned between the finance charge and the reduction of the outstanding liability using the effective interest method. The finance charge is allocated to each period during the lease term giving a constant periodic rate of interest on the remaining balance of the liability.

h) Receivables

Receivables are recognised at fair value, less a provision for doubtful debts. The provision for doubtful debts is a general provision and is established when there is objective evidence that TII will not be able to collect all amounts owed to it. All movements in the provision for doubtful debts are recognised in the Statement of Income and Expenditure.

i) Operating Leases

Rental expenditure under operating leases is recognised in the Statement of Income and Expenditure over the life of the lease. Expenditure is recognised on a straight-line basis over the lease period. Any lease incentives received are recognised over the life of the lease.

j) Interest receivable and interest payable and similar charges

Interest payable and similar charges includes interest payable and finance charges on finance leases recognised in the Statement of Income and Expenditure. Finance charges include charges which represent the “unwinding” or “reversing” of the discount on provisions. Interest income and interest payable are recognised in the Statement of Income and Expenditure as they accrue.

k) Employee Benefits

Short-term Benefits

Short-term benefits such as holiday pay are recognised as an expense in the year and benefits that are accrued at year-end are included in the payables figure in the Statement of Financial Position.

Retirement Benefits

The financial statements reflect, at fair value, the assets and liabilities arising from TII's pension obligations and any related funding and recognise the costs of providing pension benefits in the accounting periods in which they are earned by employees. Retirement benefit scheme liabilities are measured on an actuarial basis using the projected unit credit method. Where a scheme is in surplus, the maximum amount of surplus that can be recognised on the Statement of Financial Position is limited to the value of an employer contribution holiday in perpetuity, measured using the FRS 102 basis. Any irrecoverable amount is recognised in the Statement of Comprehensive Income.

Actuarial gains or losses arising on scheme liabilities are reflected in the Statement of Comprehensive Income. A corresponding adjustment is recognised in the amount recoverable from DoT for the Unfunded Defined Benefit Scheme only. TII operates the following pension schemes:

1. Accounting Policies (Cont'd)

k) Employee Benefits (Cont'd)

Defined Contribution Pension Scheme [Closed to new members]

TII operates a defined contribution pension scheme. Pension benefits are funded over the employees' period of service by way of employee and employer contributions to a defined contribution scheme. Employer contributions are charged to the Statement of Income and Expenditure as they become payable.

Funded Defined Benefit Pension Scheme [Closed to new members]

TII operates a defined benefit pension scheme which is funded by TII and contributions from members.

Unfunded Defined Benefit Pension Scheme [Closed to new members]

TII operates a defined benefit pension scheme which is funded annually on a pay as you go basis from monies provided by DoT. Pension costs reflect pension benefits earned by employees and are shown net of staff pension contributions which are retained by TII. An amount corresponding to the pension charge is recognised as income to the extent that it is expected to be fully offset by the receipt of grants.

Single Public Services Pension Scheme ("Single Scheme")

TII participates in the Single [Public Sector] Scheme, which is a defined benefit scheme for pensionable public servants appointed on or after 1 January 2013. Single Scheme members' contributions are paid over to the Department of Public Expenditure and Reform (DPER). The costs, liabilities and assets related to the operation of this scheme have been included in the disclosures in relation to the unfunded defined benefit pension scheme.

l) Reserve

Surpluses/(Deficits) generated from the Luas infrastructure business are transferred to the Light

Rail & Metro Revenue Reserve. This reserve is ring-fenced by agreement with the NTA to fund future refurbishment of the Luas infrastructure and [or] future Luas operating deficits.

m) Provisions for Liabilities and Charges

TII have entered into road service concessions, with contract provisions providing for payments [variable operational payments] to the operator where traffic volumes fall below specified levels. TII provide for and report in their Financial Statements, all future liabilities relating to these payments. The estimation of future liabilities for variable operational payments places significant reliance on estimates of future traffic flows. The provision for these liabilities is in Note 19 in the financial statements. The total forecast value of variable operational payments were recognised as a charge to Reserves on the Statement of Financial Position of TII together with the estimated liability for future obligations under these service concessions. The valuations and that of the related liability are based on the discounted value of the variable operational payments forecast to be made directly by TII.

An appropriate discount rate has been chosen to discount the future liabilities arising from these roads service concession agreements, that rate having been arrived at in consultation with the NDFA. The forecasting of variable operational payments and the valuation of the liability is performed annually and any movements in the related provision are charged/credited in the Statement of Income and Expenditure.

State grants advanced to fund Luas projects for which development levy schemes were adopted, may subsequently be designated repayable to DoT in accordance with the terms of a project specific Ministerial Direction. Where such obligations exist, estimates of the repayable amounts of any grants received are made based on the information available and the terms of the Ministerial Direction. The amount of grant income that has been received and is estimated to be repayable is retained as a long term liability.

Notes to the Financial Statements for the year ended 31 December 2021

1. Accounting Policies (Cont'd)

m) Provisions for Liabilities and Charges (cont'd)

In arriving at the estimated amount, management must consider a number of risks and uncertainties including development risk, premature cessation of levy scheme, project completion risk and change of law.

Provisions for track restoration and exchequer advances repayable are recognised when TII has a present legal or constructive obligation as a result of past event and it is probable that an outflow of resources will be required to settle the obligation and the amount has been reliably estimated.

Provisions are measured at the present value of the expenditure expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to the passage of time is recognised as an interest expense.

TII does not make provision for legal or insurance claims or tax refunds, the outcome of which are uncertain.

n) Payments to Local Authorities

Payments to local authorities in respect of Greenways, road construction, improvement, maintenance and management are the actual grants paid in the year.

o) Service concession agreements (Public Private Partnerships)

TII has entered into public private partnerships or service concession agreements with private sector entities to construct (or upgrade), operate and maintain infrastructure assets for a specified period of time (concession period).

TII controls or regulates what services the operator must provide using the infrastructure assets, to whom, and at what price; and TII controls the residual interest in the assets at the end of the term of the concession period.

TII makes payments over the life of the concession for the construction, financing, operating, maintenance and renewal of the infrastructure assets and the delivery of services that are the subject of the concession.

In some cases TII may be entitled to a share of the toll revenue earned by the concessionaire while certain concessions provide for variable operational payments by TII if traffic volumes fall below specified levels.

The service concession assets are recognised in the Statement of Financial Position of TII together with the related liability. The asset valuations and that of the related liability are based on the discounted value of the construction payments to be made by TII under the concession agreement. Operational and financing payments made under the concession agreements are recognised in the Statement of Income and Expenditure in the year they are paid. Obligations to make payments of an operational nature over the life of the concession are disclosed in the notes to the financial statements.

p) Critical Accounting Judgements and Estimates

The preparation of the financial statements requires management to make judgements, estimates and assumptions that affect the amounts reported for assets and liabilities as at the reporting date and the amounts reported for revenues and expenses during the year. However, the nature of estimation means that actual outcomes could differ from those estimates. The following judgements have had the most significant effect on amounts recognised in the financial statements:

1. Accounting Policies (Cont'd)

p) Critical Accounting Judgements and Estimates (Cont'd)

Road Network: Valuation, Depreciation and Residual Values

Road assets acquired under PPP service concession arrangements and comprised in the M50 buy-out are capitalised and accounted for using the finance lease liability model in the year the concession agreement is signed. The value of the infrastructure asset and the service concession liability is recognised as the net present value of the future minimum lease payments, calculated on the basis of construction payments made directly by TII. The PPP capitalisation model supports TII's assumptions regarding the split of payments between capital and revenue when valuing the asset.

TII selected a discount rate of 4% following consultation with the NDFA, on the basis that it reflected an appropriate rate for long life infrastructure assets.

The Directors have reviewed the asset lives and associated residual values of all fixed asset classes and have concluded that asset lives and residual values are appropriate.

Infrastructure assets acquired under service concession agreements are, under specific contractual obligations in those agreements, handed back to TII at the end of the concession term with useful lives equivalent to that of the asset when originally commissioned. Performance of the "hand back" provisions is guaranteed by significant financial retentions and penalties provided for in the concession agreements. As a result of these provisions TII does not charge depreciation on these assets.

Provisions and estimates

Significant estimates are made in relation to the calculation of provisions for exchequer advances repayable and variable operational payments.

Exchequer Advances Repayable

State grants provided by the Exchequer for the implementation of certain projects for which development levy schemes are adopted may subsequently be designated repayable in accordance with the terms of a project specific Ministerial Direction. Where such obligations exist, estimates of the repayable amounts of any grants received are made based on the information available and the terms of the Ministerial Direction. The amount of grant income that has been received and is estimated to be repayable is retained as a long term liability (note 19).

In these circumstances the amount of grant repayable is equal to the total amount of levies estimated to be collected over the life of the scheme less any levies used to offset eligible expenditure up to the amount of exchequer funds advanced.

An estimate of the total levies likely to be received over the life of the scheme is critical in the calculation of the provision for exchequer advances repayable. The levy receipts are estimated with the assistance of the local authority's professional town planners who make critical assumptions regarding the rate and volume of commercial retail and residential development over the life of each scheme. To the extent that these assumptions hold true then the amount provided for the repayment of exchequer advances and the actual amount repaid will not vary significantly. If the conditions underlying the assumptions vary significantly, that may have a significant impact on actual outcomes.

Notes to the Financial Statements for the year ended 31 December 2021

1. Accounting Policies (Cont'd)

p) Critical Accounting Judgements and Estimates (cont'd)

Variable Operational Payments:

Two concession (Public Private Partnership) contracts, (M3 Clonee/Kells and the N18 Limerick Tunnel) provide for variable operational payments to the operator where traffic volumes fall below specified levels.

Variable operational payments continue to be payable on both contracts and estimates of future liabilities are provided for in the financial statements (note 19). The estimates of future liabilities are based on observed traffic data, forecasts of traffic growth and inflation. Inflation indices are derived from the forecast Consumer Price Index on the assumption that toll charges will rise in line with that index. Where outturn traffic growth and/or inflation differ from forecasts this will impact on the variable operational payment amounts provided for.

Accruals

TII provides for all material capital and current expenditures incurred before the reporting date for which a liability exists at the reporting date.

Retirement Benefit Obligation

The assumptions underlying the actuarial valuations for which the amounts recognised in the financial statements are determined (including discount rates, rates of increase in future compensation levels and mortality rates) are updated annually by an independent actuary based on current economic conditions, and for any relevant changes to the terms and conditions of the pension and post-retirement plans. The assumptions can be affected by:

- (i) the discount rate, changes in the rate of return on high-quality corporate bonds
- (ii) future compensation levels, future labour market conditions.

q) Inventory

All consumables are written off in the year of purchase.



N56 Dungloe to Cloghbolie

Notes to the Financial Statements for the year ended 31 December 2021

2. State Grants

State grants of €1,541m (2020: €1,314m)^{***} were received in 2021 from the Department of Transport, (Vote 31) and the National Transport Authority (NTA) under the following subheads:

	2021 €'000	2020 €'000
Administration:		
B 3.3 Administration	29,707	29,931
Less Single Pension Scheme contributions remitted	(516)	(446)
Reimbursement for Road material testing from DoT	71	61
	29,262	29,546
Road Network:		
B 3.1 National Road Construction and Improvement	657,900	480,000
B 3.2 National Road Maintenance and Management	34,850	34,850
B 3.4 Public Private Partnership Operations	136,000	129,000
B 3.5a Regional and Local Road Construction and Improvement*	523,554	502,434
B 3.5b Regional and Local Road Maintenance and Management*	43,677	43,698
B 8 Public and Sustainable Transport Investment Programme	23,857	692
Reimbursement for salt stock for Regional roads from DoT	3,744	3,273
	1,423,582	1,193,947
Light Rail and Metro:		
NTA Capital Programme	60,037	63,256
NTA PSO Grant**	32,165	30,172
	92,202	93,428
Total Grants	1,545,046	1,316,921

Grants may only be used for the purposes for which they have been approved.

*Historically, both the National Roads Authority and DoT made payments to local authorities for the construction, improvement, maintenance and management of local and regional roads. In 2014, DoT assumed responsibility for the management of these payments including approval for payment. TII now acts as a paying agent and issues the relevant payments on instruction from DoT. In 2021, TII issued payments totalling €567m (2020: €546m) (notes 9a and 9b) to local authorities from funding received by it from DoT. DoT has always been and continues to be responsible for determining the annual allocations to local authorities in respect of regional and local roads. In addition to the above, DoT makes some payments directly to local authorities for regional and local roads.

** During 2021 and 2020 the NTA provided a Public Service Obligation (PSO) grant in relation to the provision of Luas Services.

*** State Grants Total does not include reimbursement for Salt Stock (€3.7m) and road material testing (€0.07m).

2a. EU Grants

There were no EU Grants received in 2021. (2020: €0.280m in respect of Arc Atlantique Corridor Phase 11 Project).

3. Grant Refunds

Grant refunds from local authorities were as follows:

	2021 €'000	2020 €'000
National Road Construction and Improvement	892	1,403
National Road Maintenance and Management	41	109
	933	1,512

4. Toll Income

	2021 €'000	2020 €'000
Dublin Tunnel	13,739	12,098
M50 eFlow	140,016	123,782
M4 Kilcock/Kinnegad	4,001	2,641
	157,756	138,521

COVID-19 and the related public health measures had a significant impact on toll revenues during 2021 and 2020. TII expect toll revenues will not be as severely impacted in 2022.

Toll income represents:

- Charges levied by toll operators after deduction of certain charges and interoperability payments.
- A share of revenue due under the terms of the PPP contract for the M4 Kilcock/Kinnegad scheme.
- Included in M50/eflow toll income is €7.5m of penalty income.

Notes to the Financial Statements for the year ended 31 December 2021

5. Other Income

	Note	2021 €'000	2020 €'000
Administration	5a	4,844	4,650
Light Rail & Metro	5b	1,644	1,878
Road Network	5c	3,321	2,202
		9,809	8,730

5a. Other Income - Administration

	Note	2021 €'000	2020 €'000
Net Deferred Funding for Pensions	20e	4,689	4,487
Sundry Income		155	163
		4,844	4,650

5b. Other Income - Light Rail & Metro

	2021 €'000	2020 €'000
(Deficit) / Surplus generated from Luas Associated Assets	(121)	139
Rental Income	253	227
Amortised Levies and Deferred Credits	1,512	1,512
	1,644	1,878

Deficit on Provision of Luas Infrastructure in 2020 was reported as income in Note 5b, in 2021 it is reported as expenditure in Note 8.

5c. Other Income - Road Network

	2021 €'000	2020 €'000
Sundry Income	1,661	1,639
Motorway Service Area Revenue Share	857	563
Insurance Risk Sharing Income	803	0
	3,321	2,202

5c. Other Income - Road Network (Cont'd)

Motorway Service Area Revenue Share: TII has awarded two Motorway Service Area (MSA) PPP Contracts. The Tranche 1 MSA Contract was awarded in October 2009 and provided for Motorway Service Areas on the M1 and M4. The Tranche 2 MSA Contract was awarded in July 2018 and provided for Motorway Service Areas on the M6, M9 and M11. Both of these contracts include revenue share provisions. Revenue due for 2021 amounted to €0.9m (2020: €0.6m).

Insurance Risk Sharing: A number of PPP projects have an insurance risk-sharing clause. Under this clause, the insurance costs are reviewed every three years, and depending on costs incurred in the period, compensation may be paid to TII, or payable by TII. Income due in respect of insurance risk sharing in 2021 amounted to €0.8m (2020: €0.0m).

Insurance Risk Sharing	2021 €'000	2020 €'000
N25 Waterford	447	0
Limerick Tunnel	257	0
N11 Arklow Rathnew	99	0
	803	0

Notes to the Financial Statements for the year ended 31 December 2021

6. Expenditure

	Note	2021 €'000	2020 €'000
Administration	7	34,610	33,335
Light Rail & Metro	8	125,695	113,911
Road Network	9/10	1,446,788	1,349,431
		1,607,093	1,496,677

7. Expenditure - Administration Costs

	Note	2021 €'000	2020 €'000
Remuneration and Other Pay costs	7a	28,222	27,033
Accommodation costs	7d	2,755	2,665
Other Administration costs	7e	3,075	3,049
Depreciation		558	594
Disposal of Fixed Assets		0	(6)
Total Administration costs		34,610	33,335

Hospitality of €2k (2020: €1k) is included in the above figures.

7a. Remuneration and Other Pay Costs

	Note	2021 €'000	2020 €'000
Salaries		21,033	20,531
Overtime		71	64
Health Insurance		1	2
Allowances		0	3
Pension Costs	20a	5,151	4,717
Employer's Contribution to Social Welfare		2,045	1,931
Board Members' Emoluments and Expenses		93	81
		28,394	27,329
Less: secondment income		(172)	(296)
		28,222	27,033

Additional Superannuation Contributions, ASC, of €639k (2020 €615k) have been deducted and paid over to DoT.

No termination payments have been made in the year (2020: €Nil).

Notes to the Financial Statements for the year ended 31 December 2021

7b. Employee Benefits Breakdown

Range of total employee benefits earned in the year From To	Average number of employees 2021	Average number of employees 2020
Total number of Whole Time Equivalents	279	265
€60,000 - €69,999	45	39
€70,000 - €79,999	44	39
€80,000 - €89,999	26	39
€90,000 - €99,999	31	14
€100,000 - €109,999	17	27
€110,000 - €119,999	21	10
€120,000 - €129,999	2	3
€130,000 - €139,999	3	2
€140,000 - €149,999	1	1
€150,000 - €159,999	1	2
€160,000 - €169,999	2	1
€170,000 - €179,999	0	0
€180,000 - €189,999	0	0
€190,000 - €199,999	1	1

The table includes employees seconded to other public sector bodies.

7c. Key Management Personnel Compensation

Key management personnel, incorporating the Board, the Chief Executive, the Directors of Commercial Operations, Network Management, Business Services, Professional Services, Corporate Services and Capital Programmes, are those persons having authority and responsibility to plan, direct and control the activities of TII. The total value of employee benefits for key management personnel are set out below:

	2021 €'000	2020 €'000
Salaries and Board Member's Fees	1,126	1,141
Health Insurance	1	1
	1,127	1,142

This does not include the value of retirement benefits accrued in the year. With the exception of the members of the Board, the key management personnel are members of TII's funded or unfunded defined benefit pension schemes and their entitlements in that regard do not extend beyond the terms of those schemes.

7c. Key Management Personnel Compensation (Cont'd)

CEO Remuneration in respect of Michael Nolan (* Outgoing Chief Executive 2020) and Peter Walsh (Incoming Chief Executive) included in key management personnel compensation is as follows:

	2021 €'000	2020 €'000
Remuneration P Walsh	190	44
Remuneration M Nolan *	0	194
	190	238

The Chief Executive is a member of TII's unfunded defined benefit pension scheme and his entitlement in that regard does not extend beyond the terms of the model public sector service pension scheme. The value of retirement benefits accrued in the year is not included in the salary reported.

7d. Accommodation Costs

	2021 €'000	2020 €'000
Rent, Rates and Services	2,254	2,260
Light, Heat and Cleaning	384	254
Repairs, Maintenance and Security	117	151
	2,755	2,665

Notes to the Financial Statements for the year ended 31 December 2021

7e. Other Administration Costs

	2021 €'000	2020 €'000
Telephone and Postage	181	112
Printing and Stationery	8	37
Computer Charges	1,389	1,260
Staff Training, Development and Professional Subscriptions	284	221
Staff Travel and Subsistence National	261	276
Staff Travel and Subsistence International	3	20
Audit Fees	81	81
Books and Periodicals	16	20
Insurances	208	144
Repairs and Maintenance - Equipment	42	49
Sundries	480	331
Consultancy	49	115
Legal Fees	35	176
Staff Appointment Costs	38	207
	3,075	3,049

8. Expenditure – Light Rail & Metro

	2021 €'000	2020 €'000
Depreciation	55,185	50,656
Local Authority Rates	536	194
Project Development Costs	37,829	32,638
Deficit on Provision of Luas Infrastructure	32,145	30,423
	125,695	113,911

9. Expenditure – Road Network

	Note	2021 €'000	2020 €'000
Road Construction and Improvement	9a	1,128,417	1,017,213
Road Maintenance and Management	9b	91,708	87,185
PPP, Tunnel Operations and Tolling	10	218,263	236,640
Depreciation		8,400	8,393
		1,446,788	1,349,431

Notes to the Financial Statements for the year ended 31 December 2021

9a. Road Construction and Improvement

	2021 €'000	2020 €'000
Payments to Local Authorities – National Roads	479,081	404,774
Payments to Local Authorities – Regional and Local Roads [Note 2]	523,554	502,434
Payments to Local Authorities – Greenways Project	23,883	605
Other Payments	101,899	109,400
	1,128,417	1,017,213

Expenditure in 2021 includes payments of €8.3m (2020: €7.4m) made to local authorities to cover costs as a result of conciliation and arbitration proceedings arising from roads construction projects. Figures include VAT, legal, and advisors costs.

Other payments include expenditure on asset renewal projects on the motorway network including pavement overlays, signs and lines, barrier replacement and repairs, bridge renewal works, flood relief and safety measures.

9b. Road Maintenance and Management

	2021 €'000	2020 €'000
Payments to Local Authorities – National Roads	24,092	22,685
Payments to Local Authorities – Regional and Local Roads [Note 2]	43,677	43,698
Other Payments	23,939	20,802
	91,708	87,185

Other payments include expenditure on; purchase and storage of salt; routine road maintenance on the motorway network including grass cutting, winter service and maintenance of drainage systems; the monitoring of national road pavement assets; and provision of winter weather monitoring and treatment predictive systems.

10. Public Private Partnership, Tunnel Operations and Tolling

	Note	2021 €'000	2020 €'000
Ancillary Costs	10a	18,979	19,921
Public Private Partnership Scheme Operation Charges	10b	108,050	100,967
Public Private Partnership Scheme Changes in Provision	10c	4,025	47,131
Tunnel Operations and Tolling	10d	87,209	68,621
		218,263	236,640

10a. Ancillary Costs

Ancillary costs incurred relate to scheme planning, scheme supervision, financial, legal and technical advisory services, tolling interoperability services, statutory notices and marketing.

10b. Public Private Partnership Scheme Operation Charges

	2021 €'000	2020 €'000
N25 Waterford City Bypass	3,993	5,537
N18 Limerick Tunnel	8,779	958
M50 Upgrade	18,770	18,688
M50 Buyout	0	(334)
N6 Galway/Ballinasloe	1,825	3,313
M3 Clonee/Kells	18,333	20,381
M7/M8 Portlaoise	1,326	1,352
M1 Dundalk Western Bypass	194	205
N8 Rathcormac/Fermoy	2,058	2,489
M4/M6 Kilcock/Kinnegad	330	417
N11 Arklow/Rathnew	11,701	12,095
M17/M18 Gort to Tuam	24,226	21,653
M11 Gorey to Enniscorthy	10,133	8,690
Payments to Local Authorities – PPP schemes	145	992
N25 New Ross Bypass	6,237	4,531
	108,050	100,967

There are no amounts included in operation charges arising from settlements (2020: €Nil).

The operation charges shown in the table above include PPP operating, maintenance and finance costs.

Notes to the Financial Statements for the year ended 31 December 2021

10c. Movement in Total Liability for Variable Operational Payments

TII has entered eight Toll Concession PPPs. Toll Concession PPPs are partly or fully financed by the private sector and remunerated by user charges (tolls) and TII payments (mostly construction payments and operational payments). Two of TII's Toll Concession PPP contracts (the M3 Clonee-Kells and N18 Limerick Tunnel PPP Contracts) provide for additional payments referred to as Traffic Guarantee Payments under the Contracts but commonly referred to as Variable Operational Payments ("VOPs").

The key parameter determining the calculation of future VOPs is the gap between the actual average Daily Traffic (ADT) and the guaranteed thresholds specified in the respective PPP contracts. Generally, where actual ADT is higher than guaranteed ADT then VOPs should not apply however, where actual ADT is lower than guaranteed ADT, VOPs become payable. The wider the gap between actual ADT and guaranteed ADT, the greater the level of VOPs payable. TII bears traffic risk below the guaranteed thresholds.

Once the VOPs became payable, a provision is required to provide for the estimated liability for VOPs over the life of the contracts. The amount of the liability estimated to be payable within one year is included in Creditors (Note 15). This part of the liability is recorded here as there is reasonable certainty over the amount and timing of payment. Uncertainty over future traffic flows and discounts requires the balance of the liability to be reported under Provisions (Note 19). Traffic flow estimates and discount rate assumptions are central to the calculation of the estimated liability.

During 2020, actual traffic volumes on these roads fell significantly, caused mostly by the pandemic. In 2020 changes in forecast traffic volumes and the inclusion of VAT caused an increase in the provision of €47m. In 2021, reforecast traffic volumes improved but there was still a further increase in the provision of €4.02m.

Other factors which impacted the calculation of the total liability for VOP's, were the amounts payable for the year and the finance charge to reflect the reversing of the discount on the gross liability.

	Note	M18 Limerick Tunnel €'000	M3 Clonee/Kells €'000	Total 2021 €'000	Total 2020 €'000
At 01 January 2021					
Payable within 1 year	15	10,857	3,897	14,754	3,870
Provision	19	94,729	0	94,729	70,448
Total		105,586	3,897	109,483	74,318
Payable to operators in the year	19	(9,586)	(2,230)	(11,816)	(14,940)
Increase /(decrease) in provision due to Traffic Volume variances plus relevant VAT costs.		5,848	(1,823)	4,025	47,131
Finance charges recognising the impact of discounting for the timing of the discharge of liabilities	11	4,223	156	4,379	2,974
At 31 December 2021		106,071	0	106,071	109,483
Payable within 1 year	15	7,651	0	7,651	14,754
Provision	19	98,420	0	98,420	94,729
Total	18	106,071	0	106,071	109,483

10d. TII Tunnel Operations and Tolling

	2021 €'000	2020 €'000
Dublin Tunnel	19,161	19,785
M50 eFlow	62,387	44,933
Jack Lynch Tunnel	5,661	3,903
	87,209	68,621

These costs relate to operational costs, toll collection costs and local authority charges of the Dublin Tunnel; toll collection costs, bad debt charges and local authority rates of the M50 eFlow and operational costs of the Jack Lynch Tunnel. The table above includes no costs for Motorway Service Areas (MSA). The cost of operating and maintaining the services areas are absorbed by the operators.

10e. General description of schemes

N25 Waterford City Bypass

The Celtic Roads Group (Waterford) Ltd. consortium was awarded the N25 Waterford City Bypass PPP contract in April 2006. The contract term is 30 years. The scheme comprised the construction of the N25 bypass extending from Kilmeaden in County Waterford to Slieverue in County Kilkenny. The route crosses the River Suir at Grannagh thus providing Waterford with a second major bridge over the Suir and allowing traffic on the N25 Cork to Rosslare route to bypass the city. The scheme comprised approximately 23km of dual carriageway, a bridge over the River Suir of approximately 475m in length and approximately 4km of single carriageway construction. The contract included an additional 11km of side roads and tie-ins and a 2km railway realignment.

The scheme, which is tolled, opened to traffic in October 2009. The PPP Co is responsible for the ongoing operation, maintenance and lifecycle works for the contract period.

Motorway Service Area

TII has awarded two Motorway Service Area (MSA) PPP Contracts. The Tranche MSA Contract was awarded in October 2009 and provided for Motorway Service Areas on the M1 and M4. The Tranche 2 MSA Contract was awarded in July 2018 and provided for Motorway Service Areas on the M6, M9 and M11. Both of these contracts include revenue share provisions.

N18 Limerick Tunnel

The DirectRoute (Limerick) Ltd consortium was awarded the Limerick Tunnel PPP contract in August 2006. The contract term is 35 years. The Limerick Tunnel PPP Scheme involved the construction of approximately 10km of new dual carriageway along with associated link roads and side roads. The tunnel crossing of the River Shannon involved an immersed tube tunnel, approximately 0.9km in length, linking the townland of Coonagh on the northern bank with the townland of Bunlicky on the southern bank of the Shannon.

The scheme, which is tolled between junction 2 and 4, opened to traffic in July 2010. The PPP Co is responsible for the ongoing operation, maintenance and lifecycle works for the contract period.

M50 Upgrade

The M50 Upgrade PPP contract was awarded in September 2007 with a contract term of 35 years to M50 Concession Limited. The M50 Upgrade PPP Contract construction comprised the widening of 24km of the M50 from south of the M1/M50 (Turnapin) interchange to the N3 interchange and from south of the Ballymount interchange to the Sandyford interchange, including the upgrade of junctions along these sections. The upgrade works were completed in 2010. The PPP Co's investment costs are recouped through availability payments paid by TII*.

Notes to the Financial Statements for the year ended 31 December 2021

10e. General description of schemes (Cont'd)

In addition to the M50 Upgrade PPP contract, separate M50 Upgrade works were procured through two Design & Build contracts. These contracts provided for (i) the widening of approximately 8km of mainline carriageway between the N4 (Junction 7) and Ballymount (Junction 10) along with the upgrading of the N4, N7 and Ballymount interchanges, and (ii) the widening of 1.3km of motorway south of the N3 interchange. These upgrade works were completed in 2008.

The PPP Co is responsible for ongoing operation, maintenance and lifecycle works of the mainline of the M50 motorway from the M1/M50 (Turnapin) interchange to the Sandyford interchange for the contract period.

*While the M50 is tolled between Junctions 6 and 7 this is unrelated to the M50 PPP Contract. TII has procured a toll service provider to operate the M50 toll collection on TII's behalf.

N6 Galway/Ballinasloe

The N6 Galway/Ballinasloe PPP contract was awarded to the N6 (Concessions) Limited consortium in April 2007. The contract term is 30 years. The scheme involved the construction of approximately 56km of new dual carriageway, a 7km link road to the Loughrea bypass, 32km of side roads and five grade-separated junctions.

The scheme extends from Doughiska, east of Galway City to the existing N6 east of Ballinasloe in County Roscommon.

The scheme, which is tolled between junctions 15 and 16, opened to traffic in December 2009. The PPP Co is responsible for the ongoing operation, maintenance and lifecycle works for the contract period.

M3 Clonee/Kells

The M3 Clonee/Kells PPP contract was awarded to the Eurolink Motorway Operations Ltd consortium in March 2007. The contract term is 45 years.

The scheme, which provides bypasses of Dunboyne, Dunshaughlin, Navan, Kells and Carnaross, involved the construction of a motorway of approximately 47km in length which is linked by ancillary roads within the pre-existing road network through grade-separated junctions at Pace, Dunshaughlin, Blundelstown, Kilcarn, Athboy Road and Kells. The full scheme also includes 10km of new N3 Dual Carriageway road from Kells to North of Carnaross and 4km of the Kells N52 Bypass.

A further 4km of National Secondary Type 1 Dual Carriageway and a total of 40km of Regional and Local Roads were constructed. In addition, over 100 structures consisting of 62 bridges and various culverts and retaining walls were required.

The scheme, which is tolled between junction 5 and 6 and also junctions 9 and 10, opened to traffic in June 2010. The PPP Co is responsible for the ongoing operation, maintenance and lifecycle works for the contract period.

M7/M8 Portlaoise

The M7/M8 Portlaoise PPP contract was awarded to the Celtic Roads Group (Portlaoise) consortium. The contract was awarded in June 2007. The contract term is for 30 years. The project, which provides bypasses of Abbeyleix, Durrow, Cullahill, Mountrath, Castletown and Borris-in-Ossory, involved the construction of a tolled motorway of approximately 41km total length. There are grade separated junctions at Portlaoise, Borris-in-Ossory and Rathdowney as well as a partial motorway to motorway interchange at Aghaboe. The scheme also included a new 3km regional link road from the motorway back to Borris-in-Ossory along with approximately 15km of side roads.

The scheme, which is tolled between Junction 18 (Portlaoise West) and Junction 19 (the M7/M8 interchange junction), opened to traffic in May 2010. The PPP Co is responsible for the ongoing operation, maintenance and lifecycle works for the contract period.

10e. General description of schemes (Cont'd)

M1 Dundalk Western Bypass

The M1 Dundalk Western Bypass PPP contract was awarded to Celtic Roads Group (Dundalk) Ltd. consortium in February 2004. The contract is for a 30-year term. The scheme involved the construction of an 11km stretch of road forming part of the N1/M1 national primary route in the vicinity of the town of Dundalk, Co. Louth, together with approximately 8km of associated side roads and tie-ins.

The construction works were completed in 2005. The PPP Contract also includes the operation and maintenance of existing motorway with an approximate length of 42km, i.e., the Dunleer Bypass and the Dunleer/Dundalk Motorway as well as the operation and maintenance of the tolling facilities between junction 7 and 10 on the M1 (Gormanston to Monasterboice) scheme.

N8 Rathcormac/Fermoy

The N8 Rathcormac/Fermoy contract was awarded to the Direct Route (Fermoy) Ltd. consortium in June 2004 and is for a 30 year concession period. The PPP contract involved the design, construction, operation and maintenance of approximately 17.5 km of motorway. The scheme includes three grade separated interchanges at Rathcormac South, Corrin, and Moorepark and a 450m long viaduct spanning the Blackwater Valley.

The scheme, which is tolled between junctions 14 and 17, opened to traffic in October 2006. The PPP Co is responsible for the ongoing operation, maintenance and lifecycle works of the motorway section for the contract period.

M4/M6 Kilcock/Kinnegad

The M4/M6 Kilcock/Kinnegad PPP Contract was awarded to Eurolink Motorway Operation Ltd in March 2003. The contract is for a 30-year concession period. The scheme involved the construction of 39km of motorway, including 19 overbridges, 7 underbridges and 3 underpasses.

The scheme, which is tolled between junctions 8 and 10, opened to traffic in December 2005. The PPP Co is responsible for the ongoing operation, maintenance and lifecycle works of the motorway section for the contract period.

N11 Arklow/Rathnew

The N11 Arklow/Rathnew PPP contract was awarded to N11 Arklow Rathnew PPP Limited in April 2013. The N11 Arklow/Rathnew PPP contract includes the design, construction, operation, and maintenance of approximately 16.5km of dual carriageway on the Arklow to Rathnew section of the N11, the operation and maintenance of an additional 30km section of the existing M11/N11 route (Arklow-Gorey and Arklow Bypass), the design and construction of the N11 Gorey Service Area and the design, construction, operation, and maintenance of the N7 Newlands Cross Junction Upgrade. The Newlands Cross section was completed in November 2014 and the Arklow/Rathnew section opened to traffic in July 2015. The contract operational period is 25 years from scheme completion and the PPP Co will recoup its investment costs through availability payments paid by TII.

Notes to the Financial Statements for the year ended 31 December 2021

10e. General description of schemes (Cont'd)

M17/M18 Gort to Tuam

The M17/M18 PPP Scheme was awarded to the DirectRoute (Tuam) Ltd. consortium in April 2014. The M17/M18 PPP Contract comprises the design, construction, operation, and maintenance of approximately 53km of motorway along with the design and construction of 4km of dual carriageway. The scheme provides bypasses for the towns of Clarinbridge, Claregalway and Tuam. The contract operational period is 25 years from scheme completion and the PPP Co will recoup its investment costs through availability payments paid by TII. The scheme opened to traffic in September 2017.

M11 Gorey to Enniscorthy

The M11 Gorey to Enniscorthy PPP contract was awarded to Gorey to Enniscorthy M11 PPP Limited in October 2015. The PPP contract includes the design, construction, operation, and maintenance of approximately 31.4km of dual carriageway (M11 and “N80 Link Road” routes) and the design,

construction, and financing of 8.0km of single carriageway (N30 route). The contract operational period is 25 years from scheme completion and the PPP Co will recoup its investment costs through availability payments paid by TII. The M11 mainline section opened to traffic in July 2019 with N30 section opening in August 2019.

N25 New Ross Bypass

The contract for the N25 New Ross Bypass PPP Scheme was awarded to New Ross N25 Bypass Designated Activity Company in January 2016. The PPP contract includes the design, construction, operation and maintenance of sections of both the N25 and N30 routes. More particularly the scheme comprised works of approximately 13.6km of dual carriageway (N25 and N30 routes) and 1.2km of single carriageway (New Ross N30 route). The contract operational period is 25 years from scheme completion and the PPP Co will recoup its investment costs through availability payments paid by TII. The scheme opened to traffic in January 2020.

11. Finance Charges

	Note	2021 €'000	2020 €'000
Pension Scheme Finance Charges	20b.	873	1,064
Finance Lease Costs		19	24
Finance charge relating to Service Concession Liabilities		26,601	25,284
Finance charge relating to M50 Buy-Out Liability		0	225
		27,493	26,597

Under FRS 102, the net of the interest on the defined benefit scheme pension liabilities and the expected return on assets of €0.9m is recorded as a finance charge adjacent to interest (2020:€1.064m) see note 20b.

12. Capital Account

	2021 €'000	2021 €'000	2020 €'000	2020 €'000
At 01 January		2,262,325		2,234,846
<u>Administration</u>				
Income used to purchase fixed assets	159		96	
Amortisation in line with depreciation	(558)		(593)	
Disposals	0		(4)	
Per Statement of Income and Expenditure		(399)		(501)
<u>Light Rail and Metro</u>				
Income used to purchase fixed assets	20,626		35,221	
Amortisation in line with depreciation	(51,992)		(47,463)	
Per Statement of Income and Expenditure		(31,366)		(12,242)
Transfer to provisions		0		0
<u>Road Network</u>				
Income used to purchase fixed assets	75,898		35,639	
Income used to fund service concession liability	35,846		35,084	
Income used to fund finance lease liability	227		227	
Release in line with finance charges	(22,240)		(22,335)	
Amortisation in line with depreciation	(8,400)		(8,393)	
Per Statement of Income and Expenditure		81,331		40,222
At 31 December		2,311,891		2,262,325

13. Property, Plant and Equipment

	Light Rail & Metro Infrastructure €'000	Light Rail & Metro Assets Under Construction €'000	Rolling Stock & Equipment €'000	Road Network Infrastructure €'000	Road Network Under Construction €'000	Furniture Fixtures & Equipment €'000	Enhancement to Leasehold Premises €'000	Total €'000
Cost								
At 1 January 2021	1,492,336	15,358	306,547	2,466,457	6,366	2,670	11,101	4,300,835
Additions in period	7,160	12,540	0	36,567	38,467	124	0	94,858
Disposals and impairments	0	0	0	(11,272)	0	(18)	0	(11,290)
Transfers	0	(20,612)	20,612	0	0	0	0	0
At 31 December 2021	1,499,496	7,286	327,159	2,491,752	44,833	2,776	11,101	4,384,403
Accumulated Depreciation								
At 1 January 2021	475,681	0	161,948	78,974	0	2,429	4,548	723,580
Depreciation charge	38,538	0	16,647	7,995	0	144	819	64,143
Disposals and impairments	0	0	0	(11,272)	0	(18)	0	(11,290)
At 31 December 2021	514,219	0	178,595	75,697	0	2,555	5,367	776,433
Net Book Value At 31 December 2021	985,277	7,286	148,564	2,416,055	44,833	221	5,734	3,607,970
Cost								
At 1 January 2019	1,481,375	41,622	255,396	2,338,348	96,877	2,844	10,982	4,227,444
Additions in period	10,778	25,070	0	31,232	6,366	133	119	73,698
Disposals and impairments	0	0	0	0	0	(307)	0	(307)
Transfers	183	(51,334)	51,151	96,877	(96,877)	0	0	0
At 31 December 2020	1,492,336	15,358	306,547	2,466,457	6,366	2,670	11,101	4,300,835
Accumulated Depreciation								
At 1 January 2020	437,406	0	149,567	70,987	0	2,552	3,728	664,240
Depreciation charge	38,275	0	12,381	7,987	0	180	820	59,643
Disposals and impairments	0	0	0	0	0	(303)	0	(303)
At 31 December 2020	475,681	0	161,948	78,974	0	2,429	4,548	723,580
Net Book Value 31 December 2020	1,016,655	15,358	144,599	2,387,483	6,366	241	6,553	3,577,255

Notes to the Financial Statements for the year ended 31 December 2021

14. Receivables

	2021 €'000	2020 €'000
Toll Income Debtors	10,894	9,959
Prepayments and Other Debtors	7,489	38,576
Purchase of Guaranteed Notes	96,072	23,023
	114,455	71,558

Toll income receivable at year-end in respect of Dublin Tunnel and M50 eFlow is stated after a provision of €5.7m (2020: €5.0m) for eFlow toll charges deemed uncollectable. This provision is based on M50 toll collection rates over a rolling two year period.

The actual bad debt charge for the year was €4.5m (2020: €3.4m).

Prepayments and Other Debtors include €0.1m due after one year (2020: €0.1m).

15. Payables (Amounts Falling Due Within One Year)

	Note	2021 €'000	2020 €'000
Trade Creditors and Accruals		44,524	63,750
VAT		9,389	10,253
Service Concession Liability	18	36,070	35,846
Variable Operational Payments	18	7,651	14,754
CityWest Luas Deferred Income		1,309	1,309
Salaries		1,685	1,438
Obligations under Finance Leases	18	227	227
		100,855	127,577

16. Payables (Amounts Falling Due After One Year)

	Note	2021 €'000	2020 €'000
Service Concession Liability	18	505,829	519,678
CityWest Luas Deferred Income*		22,238	23,547
Trade Creditors and Accruals		242	139
Obligations under Finance Leases	18	431	639
		528,740	544,003

*Creditors includes deferred income reflecting the value of property and services provided by third parties in relation to the CityWest Luas development. This income is released to the Statement of Income and Expenditure in line with the depreciation on the related assets.

17. Commitments

17a. Operating Lease Commitments

At 31 December, TII had lease payment liabilities under non-cancellable operating leases for each of the following periods:	Land & Buildings 2021 €'000	Land & Buildings 2020 €'000
Payable within one year	1,829	1,829
Payable within two to five years	7,315	7,315
Payable after five years	7,478	9,307

Operating lease payments recognised as an expense were €1.8m (2020: €1.7m)

- TII entered into a 16 year and 7 month lease from 01 January 2015 in respect of accommodation at Block A, Parkgate St., Dublin 8. The lease expires on 31 July 2031 and the rent payable is €0.7m per annum.
- TII took over two leases from RPA in respect of accommodation at Parkgate St., Dublin 8:
 - Block B: A 25 year lease from 01 August 2006 to 31 July 2031. The rent payable is €0.6m per annum.
 - Block C: A 28 year lease from 29 September 2001 to 28 September 2029. The rent payable is €0.5m per annum.

Notes to the Financial Statements for the year ended 31 December 2021

17a. Operating Lease Commitments (Cont'd)

At 31 December, TII had lease payment liabilities under non-cancellable operating leases for each of the following periods:	Motor Vehicles 2021 €'000	Motor Vehicles 2020 €'000
Payable within one year	28	16
Payable within two to five years	5	0
Payable after five years	0	0

Operating lease payments recognised as an expense were €0.04m (2020: €0.03m)

At 31 December 2021 TII had operating leases in respect of 4 electric vehicles. Two of the leases expire on 12 August 2022 and two of the leases expire on 24 March 2023. The annual charge in respect of the four leases is €0.03m per annum.

17b. Road Network Forward Commitments

DPER, under the Public Spending Code (version November 2013), has revised the forward contractual commitments limits from those previously set by the Department of Finance. TII has analysed forward contractual commitments, which are forecast costs that are subject to quantum and timing variances, and these are as follows:

Year	Commitment € Million	Department of Public Expenditure and Reform approved capital funding for TII 2022-2024* € Million	Commitment as % of annual allocation	Department of Public Expenditure and Reform sanctioned commitment as % of annual allocation
2022	479	642	75	75
2023	307	539	57	60
2024	186	441	42	50

*Inclusive of available Tolling Income

17c. Public Private Partnership Forward Commitments

Nominal Amount:	2021 €'000	2020 €'000
N25 Waterford City Bypass	8,932	12,804
N18 Limerick Tunnel	15,485	24,264
M50 Upgrade	571,074	589,788
N6 Galway/Ballinasloe	20,458	22,070
M3 Clonee/Kells	161,877	178,742
M7/M8 Portlaoise	1,365	2,678
M1 Dundalk Western Bypass	2,184	2,321
N8 Rathcormac/Fermoy	2,677	4,735
M4/M6 Kilcock/Kinnegad	3,694	3,919
N11 Arklow/Rathnew	320,153	333,389
M17/M18 Gort to Tuam	748,428	773,340
M11 Gorey Enniscorthy	427,278	444,857
N25 New Ross Bypass	283,782	294,364
	2,567,386	2,687,271

The commitments disclosed above are prescribed in the PPP contract schedules. They are stated exclusive of VAT and incorporate payments for construction, financing, operational and lifecycle costs for the remaining life of the agreement. They are indexed @ 2% to approximate CPI and are not discounted to present value. Only the construction element (appropriately discounted) of these forward commitments is reported in TII balance sheet. The total undiscounted amounts for construction payments of €800.5m (2020: €826.9m) are included in the table above. The discounted amounts are disclosed as a liability in note 18.. VOP's which may become payable under the M3 or N18 PPP contracts are not categorised as commitments as they are uncertain and are not included here. See note 10c for full disclosure on VOP's.

17d. Light Rail and Metro Capital Commitments

	2021 €'000	2020 €'000
At the year end the following capital commitments had not been provided for in the financial statements:		
Contracted but not provided for	8,417	18,030
Authorised but not contracted for	1,352	3,488
	9,769	21,518

Notes to the Financial Statements for the year ended 31 December 2021

18. Finance Lease Commitments

The future minimum lease payments at 31 December 2021 are as follows:	Service Concession €'000	Variable Operational Payments €'000	Donegal National Roads €'000	Total €'000
Not later than one year	36,070	7,651	227	43,948
Later than one year but not later than five years	153,380	34,798	454	188,632
Later than five years	635,352	101,905	0	737,257
Total Gross Payments	824,802	144,354	681	969,837
Less: Finance Charges	(282,903)	(38,283)	(23)	(321,209)
Carrying amount of liability	541,899	106,071	658	648,628
Classified as:				
- Payables (amounts falling due within one year)	36,070	7,651	227	43,948
- Payables (amounts falling due after one year)	505,829	0	431	506,260
- Provisions	0	98,420	0	98,420

The future minimum lease payments at 31 December 2020 are as follows:	Service Concession €'000	Variable Operational Payments €'000	Donegal National Roads €'000	Total €'000
Not later than one year	35,846	14,754	227	50,827
Later than one year but not later than five years	152,331	30,621	681	183,633
Later than five years	672,202	104,670	0	776,872
Total Gross Payments	860,379	150,045	908	1,011,332
Less: Finance Charges	(304,855)	(40,562)	(42)	(345,459)
Carrying amount of liability	555,524	109,483	866	665,873
Classified as:				
- Payables (amounts falling due within one year)	35,846	14,754	227	50,827
- Payables (amounts falling due after one year)	519,678	0	639	520,317
- Provisions		94,729		94,729

*TII entered into a twenty year lease from 1 March 2004 with Donegal County Council in respect of accommodation for Donegal National Roads Office. The rent is €0.2m per annum. The above finance lease liabilities are measured at amortised cost.

19. Provisions for Liabilities and Charges

	Variable Operational Payments €'000	Exchequer Advances Repayable €'000	Project Provisions €'000	Track Restoration €'000	Total €'000
At 01 January 2021	94,729	64,947	567	4,422	164,665
Payable to operators in the year	(11,816)	0	0	0	(11,816)
Increase/(decrease) in provision	11,128	0	0	(95)	11,033
Finances charges recognising the impact of discounting for the timing of the discharge of liabilities	4,379	0	0	0	4,379
At 31 December 2021	98,420	64,947	567	4,327	168,261

The provisions have been made in accordance with the accounting policies as set out in notes 1(m), (o) and (p) to these financial statements.

Variable Operational Payments

In the case of two PPP concession schemes (i.e. M3 Clonee-Kells & N18 Limerick-Tunnel) the PPP agreement provides for variable operational payments if traffic volumes fall below specified levels. TII has made a full provision for the amount it expects to pay in relation to these variable operational payments over the remaining life of the relevant PPP contract.

This is reported in the Statement of Financial Position under "Payables" due within one year (€7.7m) and under "Provisions for Liabilities and Charges" (€98.4m).

The provision changes from year to year to reflect changes in the traffic volumes occurring on the relevant road. Changes in the provision are charged/(credited) to the Statement of Income and Expenditure €4.0m in 2021 (2020: €47.1m) Note 10 (c).

The change in the provision of €4.0m is reflected by an increase in the provision of €11.0m and a decrease of Payables due within one year of €7.0m

The amount payable in the year €11.8m (2020: €14.9m) was payable to M3 Clonee-Kells scheme €2.2m (2020 €4.0m) and N18 Limerick Tunnel €9.6m (2020: €10.9m) as traffic volumes are currently below the guarantee threshold levels.

Exchequer Advances Repayable

State grants repayable include State grants provided as advance funding for the implementation of certain projects for which development levy schemes are in place and have been deemed repayable in accordance with Accounting Policy note 1(m). These advances are repayable over the life of the levy schemes and as a result the provision is unlikely to fully unwind in the medium term.

Change in the provision in 2021 was €0.0m (2020: €0.0m).

Project Provisions

TII has adequately provided for project liabilities where the timing of their payment is uncertain. This provision relates to Light Rail and Metro liabilities.

Notes to the Financial Statements for the year ended 31 December 2021

19. Provisions for Liabilities and Charges (Cont'd)

Track Restoration

Track restoration provisions relate to remediation and improvement costs to be incurred. TII expects that the provision will be utilised over the life of the related assets and as a result the provision is unlikely to fully unwind in the medium term.

In 2021, TII made payments of €0.0m (2020: €0.0m) in respect of remediation costs and reduced the provision by €0.1m.

20. Retirement Obligations

Details of TII's pension schemes are provided below:

Defined Contribution Scheme [Closed to new entrants]

A defined contribution pension plan was set up in 2003 for former RPA staff who did not qualify for membership of the funded defined benefit scheme noted below. This plan does not give rise to any funding liability to TII under FRS 102.

Defined Benefit Scheme – Funded [Closed to new entrants]

In order to comply with the provisions of sections 24 and 25 of the Transport (Railway Infrastructure) Act, 2001 RPA established a defined benefit scheme in 2003 to provide for pension entitlements of those employees transferring from the CIE 1951 defined benefit scheme. The new scheme was set up using the template model scheme for public sector pension arrangements as issued by the Department of Finance, modified as necessary in order to replicate the benefits provided under the CIE 1951 defined benefits pension scheme.

An independent professionally qualified actuary carried out a full valuation (February 2022) of the assets and liabilities of the scheme as at 31 December 2021. Those assets and liabilities were valued using the projected unit method.

A pension surplus of €0.1m considered to be recoverable over the life of the scheme has been reported in the Statement of Financial Position. The valuation of the surplus under FRS 102 rules indicated a technical surplus of €9.1m.

However, the maximum amount of surplus that can be recognised is limited to the value of an employer contribution holiday in perpetuity, measured using the FRS 102 basis. Under these rules only €0.1m is considered recoverable and as a result the pension surplus has been reduced by €9.0m to limit the surplus to the estimated recoverable amount of €0.1m.

Defined Benefit Scheme – Unfunded [Closed to new entrants]

The pension scheme is a defined benefit final salary pension arrangement with benefits and contributions defined by reference to current 'model' public sector scheme regulations.

This scheme was only available to former NRA employees who joined before 1 January 2013. The scheme provides a pension (one eightieths per year of service), a gratuity or lump sum (three eightieths per year of service) and spouses' and children's pensions.

20. Retirement Obligations (Cont'd)

Normal retirement age is a member's 65th birthday and pre-2004 members have an entitlement to retire without actuarial reduction from age 60. Pensions in payment (and deferment) normally increase in line with general public sector salary inflation.

An independent professionally qualified actuary carried out a full valuation (February 2022) of the liabilities of the scheme as at 31 December 2021. Those assets and liabilities were valued using the projected unit method.

Single Pension Scheme – Unfunded

TII operates the Single Scheme, which is a defined benefit average salary scheme for pensionable public servants appointed on or after 1 January 2013. Single Scheme members' contributions are paid over to the Department of Public Expenditure and Reform (DPER). The costs, liabilities and assets of TII in relation to the Single Pension Scheme have been included in the disclosures on the Defined Benefit unfunded scheme.

20a. Analysis of total pension costs charged to Statement of Income and Expenditure

	2021 €'000	2020 €'000
Defined Benefit Unfunded Scheme:		
Current Service Cost	5,761	5,244
Employee Contributions	(425)	(440)
	5,336	4,804
Single Pension Scheme:		
Employee Contributions	(516)	(446)
	(516)	(446)
Defined Benefit Funded Scheme:		
Current Service Cost	55	89
	55	89
Total Defined Benefit Scheme costs	4,875	4,447
Defined Contribution Scheme costs*	276	270
Total	5,151	4,717

*The pension charge in respect of the defined contribution scheme plan is equal to the contributions payable by TII for the year.

Notes to the Financial Statements for the year ended 31 December 2021

20b. Analysis of finance charge recognised in Statement of Income and Expenditure

	2021 €'000	2020 €'000
Defined Benefit Unfunded Scheme:		
Interest on pension scheme liabilities	935	1,153
Defined Benefit Funded Scheme:		
Interest on pension scheme liabilities	38	50
Return on scheme assets	(100)	(139)
	(62)	(89)
Total finance charge	873	1,064

20c. Analysis of amount recognised in Statement of Comprehensive Income

	2021 €'000	2020 €'000
Defined Benefit Unfunded Schemes:		
Experience loss	3,377	385
Change in assumptions underlying the present value of the scheme liabilities	2,218	7,200
	5,595	7,585
Defined Benefit Funded Schemes:		
Experience gain	(333)	(470)
Change in assumptions underlying the present value of the scheme liabilities	114	256
	(219)	(214)
Total actuarial loss	5,376	7,371
Change in irrecoverable surplus	227	317
	5,603	7,688

20d. Movement in net retirement benefit obligations/assets during the financial year

Defined Benefit Unfunded Scheme

	2021 €'000	2020 €'000
Net defined benefit retirement obligation at 01 January	117,854	105,789
Current service cost	5,761	5,244
Actuarial loss	5,595	7,585
Interest cost	935	1,153
Pensions paid in the year	(2,007)	(1,917)
Net defined benefit retirement obligation at 31 December	128,138	117,854

Defined Benefit Funded Scheme

	Scheme Assets €'000	Scheme Liabilities €'000	Pension Surplus €'000
At 1 January 2021	14,366	(5,468)	8,898
Current service cost	0	(55)	(55)
Actuarial gain / (loss)	(207)	201	(6)
Expected return on scheme assets	100	0	100
Interest cost	0	(38)	(38)
Contributions by scheme participants	21	(21)	0
Benefits paid	(77)	77	0
Transfer Payments	(1,256)	1,481	225
At 31 December 2021	12,947	(3,823)	9,124

Notes to the Financial Statements for the year ended 31 December 2021

20e. Deferred funding for retirement benefits

Defined Benefit Unfunded Scheme

The Board recognises amounts owing from the State for the defined benefit unfunded deferred liability for pensions on the basis of a set of assumptions at note 20 (g) and a number of past events. These events include the statutory basis for the establishment of the pension scheme and the policy and practice currently in place in relation to funding public service pensions, including contributions by employees and the annual estimates process. The Board has no evidence that this funding policy will not continue to meet such sums in accordance with current practice.

The net deferred funding for retirement benefits recognised in the Statement of Income and Expenditure was as follows:

	2021 €'000	2020 €'000
Funding recoverable in respect of current year retirement benefit costs	6,696	6,397
State grant applied to pay retirement benefits	(2,007)	(1,910)
	4,689	4,487

The net deferred funding for retirement benefits recognised in the Statement of Comprehensive Income was as follows:

	2021 €'000	2020 €'000
Adjustment to Deferred Retirement Benefit Obligation	5,595	7,585

The Defined Benefit Deferred Retirement Funding at 31 December 2021 amounted to €128.14m (2020: €117.85m).

20f. History of defined benefit obligations, assets and experience gains and losses

Defined Benefit Unfunded Scheme:

	31 Dec 2021	31 Dec 2020	31 Dec 2019	31 Dec 2018
Defined benefit obligations amount (€'000)	(128,138)	(117,854)	(105,789)	(92,367)
Experience adjustments on scheme liabilities amount (€'000)	(3,377)	(7,200)	1,445	(444)
As a percentage of scheme liabilities (%)	2.64%	6.10%	1.40%	0.50%
Assumption adjustments on scheme liabilities amount (€'000)	(2,218)	(385)	(10,387)	3,164
As a percentage of scheme liabilities (%)	1.73%	0.33%	9.80%	3.43%

The cumulative actuarial loss recognised in the Statement of Comprehensive Income up to and including 31 December 2021 is €54.6m (31 December 2020: €49.0m).

Notes to the Financial Statements for the year ended 31 December 2021

20f. History of defined benefit obligations, assets and experience gains and losses (Cont'd)

Defined Benefit Funded Scheme:

	31 Dec 2021	31 Dec 2020	31 Dec 2019	31 Dec 2018
Defined benefit obligations amount (€'000)	(3,823)	(5,468)	(5,034)	(4,780)
Defined benefit assets amount (€'000)	12,947	14,366	13,718	12,983
Defined benefit surplus	9,124	8,898	8,684	8,203
Irrecoverable surplus on retirement benefit scheme	(9,058)	(8,769)	(8,452)	7,875
Defined benefit pension surplus	66	129	232	328
Experience adjustments on scheme liabilities amount (€'000)	315	(91)	204	69
As a percentage of scheme liabilities (%)	8.24%	1.70%	4.10%	1.40%
Experience adjustments on scheme assets amount (€'000)	(207)	561	693	177
As a percentage of scheme assets (%)	1.60%	3.90%	5.10%	1.40%

The cumulative actuarial loss recognised in the Statement of Comprehensive Income up to and including 31 December 2021 is €0.4m (31 December 2020: €2.1m). Expected contributions for the following year are €Nil.

20g. General description of the scheme and actuarial assumptions

Defined Benefit Unfunded Schemes

The principal actuarial assumptions at the balance sheet date:

	31 Dec 2021 %	31 Dec 2020 %
Discount rate	1.20	0.80
Future salary increases	2.90	2.40
Future pension increases	2.40	1.90
Inflation rate	1.90	1.40
Future State pension increases	1.90	1.40

20g. General description of the scheme and actuarial assumptions (Cont'd)

The mortality basis adopted allows for improvements in life expectancy over time, so that life expectancy at retirement will depend on the year in which a member attains retirement age (age 65). The table below shows the life expectancy for members attaining age 65 in 2021 and 2041.

Year of Attaining Age 65

	2021 Years	2041 Years
Life Expectancy - Male	21.8	24.1
Life Expectancy - Female	24.2	26.2

Defined Benefit Funded Scheme

The principal actuarial assumptions at the balance sheet date:

	31 Dec 2021 %	31 Dec 2020 %
Discount rate	1.10	0.70
Future salary increases	2.90	2.35
Future pension increases	2.40	1.85
Inflation rate	1.90	1.35

Assumptions regarding future mortality are set based on advice from published statistics and experience. The mortality assumptions are based on standard mortality tables which allows for future mortality improvement in the assumptions.

There are three current pensioners in the scheme. Longevity for members retiring at 65.

	31 Dec 2021 Years	31 Dec 2020 Years
Male	21.8	24.1
Female	24.2	26.2

Notes to the Financial Statements for the year ended 31 December 2021

20g. General description of the scheme and actuarial assumptions (Cont'd)

At 31 December 2021 the scheme assets were invested in the Irish Life Pension Cash Fund, Irish Life indexed 10 Year AAA Bond Series 8 and Irish Life Netherlands 2042 Bond Fund. The Trustees, with the input of their professional advisors, decide on the mix of assets based on the risk profile of the scheme

The fair value of the scheme assets as a percentage of total scheme assets are set out below:

(as a percentage of total scheme assets)	31 Dec 2021 %	31 Dec 2020 %
Bonds	42.5	66.2
Cash	57.5	33.8

Scheme assets do not include any of TII's own financial instruments, or any property occupied by TII.

21. Development Levies and Contributions

	2021 €'000	2020 €'000
At 1 January	88,897	78,062
Development levies and contributions	7,444	11,038
Amortisation of levies	(203)	(203)
At 31 December	96,138	88,897

As outlined in note 1(e), development levies and developer contributions received by TII are retained in a development levies and developer contributions reserve. Where levies are used to fund project delivery, they are amortised to the Statement of Income and Expenditure as the related assets are depreciated.



N4 Sligo Opening

22. Litigation and Claims

TII is involved in a number of legal cases the outcome of which are yet to be determined. TII has not made provision for any costs arising.

23. Related Party Transactions

Please refer to note 7c for a breakdown of the remuneration and benefits paid to key management. TII adopts procedures in accordance with the guidelines issued by the Department of Public Expenditure and Reform covering the personal interests of Board members. In the normal course of business, TII may approve grants or enter into other contractual arrangements with entities in which TII Board members are employed or are otherwise interested.

In cases of potential conflict of interests, Board members do not receive relevant Board documentation or otherwise participate in or attend discussions regarding these transactions. A record is maintained of all such instances.

During the year there were no related party transactions.

24. Comparative figures

Certain comparative figures have been reclassified to accord with their treatment in the current year.

25. Subsequent Events

Events after the reporting period year to 31 December 2021

TII considers that the ongoing COVID-19 Pandemic does not represent an event that requires an adjustment to the financial statements. TII's Board and management have been working closely with both DoT and NTA to address the ongoing challenges.

There have been no other events after the end of the reporting period which would require adjustments or disclosures to figures reported at 31 December 2021.

26. Approval of Financial Statements

These financial statements were approved by the Board on 28 June 2022.

