

**Transport Infrastructure Ireland** 

# Sustainability Implementation Plan

## Our Future



### Foreword

Transport Infrastructure Ireland has a vision 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 including vulnerable groups, strengthen our resilience to address climate change, maintain our commitment to the environment and continue to prioritise safety. This is the context in which we have developed our Sustainability Implementation Plan – Our Future.



Delivering on this vision requires the Irish transport sector to work collaboratively with government, across communities and with our valued partners and stakeholders to collectively deliver on priorities as framed by Project Ireland 2040. To achieve this vision for our transport networks, TII must respond to the promise of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals. TII's Light Rail and Road networks link our citizens, connect our local communities, drive our development and facilitate Ireland's trade. It enables people to access what they need and contributes to enhanced health and well-being for all when delivered effectively.

Balancing our critical role in supporting economic competitiveness, quality of life and social cohesion with protecting our environment, addressing climate change and respecting planetary boundaries means we must overcome great challenges if we are to reach a future in which transport is sustainable. We believe that the demand for sustainable modes of mobility and the development of transportation technologies will all shift as we continue to enable access to employment markets, housing, education and health care. The COVID-19 pandemic has raised our awareness of significant global challenges such as biodiversity, climate change and social inequality. We continue to have deep concerns about environmental quality, social equity, and economic vitality that have informed our approach to sustainable development. Never has there been such a need to rapidly address and promote sustainable and active modes of transport.

We hope you will join us on our journey to be a leader in sustainable transport, delivering a better quality of life, supporting balanced growth and respecting the environment.



Peter Walsh Chief Executive

### Introduction

Transport Infrastructure Ireland 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.

TII Statement of Strategy 2021 - 2025

Across everything we do, we are driven by our purpose: to provide sustainable transport infrastructure and services, delivering a better quality of life, supporting economic growth and respecting the environment.

We have a significant role to play in understanding and delivering to national expectations on these aspects and have therefore committed ourselves to becoming a leader in delivering and operating sustainable transport infrastructure in line with Project Ireland 2040, the Programme for Government, the UN Sustainable Development Goals and the European Green Deal.

TII is committed to good governance and ethical practice, and as part of this we recognise the importance of sustainability as a corporate responsibility. Transport must provide benefit to all equally and through the provision of a safe, reliable, and equitable transport system TII can support integrated sustainable transport planning through appropriately balanced development of transport modes, while also introducing new transformations to meet our longer-term sustainability aims. Consolidating years of ongoing commitment and effort, and building on our existing strengths, this plan sets 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 10 years to support this ambition.

We cannot achieve our societal sustainability ambitions alone, and Figure 1 demonstrates the plan's reach. This will require cross-cutting activities and collaboration, combining strong leadership with dedicated input from all of our staff and wider engagement with you, our external stakeholders to support the implementation of the plan.



### Introduction



Figure 1: Implementation and Embedment structure for TII Sustainability Implementation Plan

### **Background on sustainability**

#### **Definition of Sustainability**

Our Statement of Strategy is underpinned by sustainability, and as a public organisation we are driven and governed by external stakeholders, and so we must consider the wider national and international sustainability context. The most comprehensive and long-term goals for Ireland are contained in the National Planning Framework as part of Project Ireland 2040.

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

- (Our Common Future – Brundtland Commission)

The 10 National Strategic Outcomes of the National Planning Framework are aligned with the UN SDGs and are therefore reflected within this plan. There is also a strong link to Ireland's National Implementation Plan (2018-2020) which is the vehicle driving the implementation of the SDGs across the Irish Government.

Adopting an integrated approach to managing sustainability reflects the interrelatedness of the SDGs as expressed in the Government's National Implementation Plan (2018-2020). Through our sustainability ambitions we want to deliver value in terms of the circular economy, enhanced air quality and biodiversity, reduced noise impact, and wider societal value and cohesion. As part of the work carried out in developing this Sustainability Implementation Plan, a detailed policy review was undertaken of policies, legislation and governmental aims that are relevant to sustainable transport. The policy review covered regional, national and international documentation.



### Background



These principles focus on our key priority areas for the sustainable development agenda within our organisation. They are the product of internal consultation, external collaborations and horizon scanning. Our six key TII Sustainability Principles have been developed to reflect our organisational ambitions and the future we envision delivering with our Sustainability Implementation Plan.





#### Provide effective, efficient and equitable mobility

Enable compact urban growth and regional accessibility through networks and services that support more efficient journeys, more effective connectivity and increased accessibility.

- TII has a remit that encompasses national connectivity (our national roads network) as well as urban mobility (our Luas and Metrolink).
- The National Planning Framework includes strategic outcomes related to both Compact Growth and Regional Accessibility; we must support both of these goals through our work. This means making sure that a balance is achieved between development and provision for an increasing number of urban dwellers across Ireland's towns and cities, as well as ensuring that rural communities are well connected and can make more sustainable travel choices.
- We pride ourselves on efficiency and effectiveness in everything that we do in TII, and this extends to how we consider the nation's transport needs. We commit to putting people at the heart of our decisions and focusing on improving our transport provision for the benefit of people, making journeys easier, safer, more sustainable and multi-modal.

- We recognise that to create a sustainable future, we need to actively reduce the need to travel, encourage more sustainable choices, facilitate a transition to low carbon vehicles using our networks and provide integrated transport solutions.
- Providing effective, efficient and equitable • mobility is something that TII cannot solve alone, but we can work with others to ensure that transport infrastructure provision is a key part of creating well connected neighbourhoods, where people can easily reach key local services that support a high guality of life. This means integrating our public transport services in close proximity to existing local centres and shaping the delivery of new public transport links to connect sustainable new communities in key locations for growth. It means considering how our provision of public transport and roads can facilitate more sustainable choices for longer-distance travel; making high-capacity public transport options like metro and light rail and active transport modes the easy, obvious choice for most people and making it easy to combine these modes of transport to reach your destination. It also means looking at ways of managing demand on our networks and incentivising behaviour change, including the role that road user charging has to play within this.
- Our services and infrastructure also need to be equitable. We provide important connections for people to reach key services, amenities and destinations across Ireland, and there is a strong link between the quality of transport infrastructure, economic development and quality of life.
- We need to ensure that our work helps to provide equal opportunities for employment, education and essential needs. Our contribution to the long-term planning for Ireland needs to continue to improve connections in the most disadvantaged regions in the most sustainable way possible.
- We need to ensure that we meet all customers' needs and provide accessible services that cater for everyone regardless of age, gender, or physical ability.
- The costs involved in using our services need to be fair, and need to consider the externalised costs that often go unaccounted for including the public health benefits of improving air quality and enabling more physical activity, economic benefits of enabling access to employment, and environmental benefits of reducing the emissions.



#### Enable safe and resilient networks and services

Enable safe, secure, accessible and inclusive travel through the provision of transport networks, services, systems and assets that are resilient to future change.

- Safety has always been our number one priority as an organisation; it is one of our core goals and Ireland has an internationally recognised road safety record.
- As the provider of key national transport infrastructure, we have an important responsibility to ensure that our services can be used safely and that our infrastructure is secure.
- We are going beyond traditional approaches to safety and recognise that our users' perception of safety is as important as ensuring transport infrastructure is technically safe. A safe user experience is an important component in ensuring our infrastructure and services are inclusive for all demographics and facilitate sustainable choices. Safety needs for all road users must be considered.
- Our work also provides a wider benefit in terms of the links between resilience and safety; transport links are lifelines for many communities, and our ability to continue to provide a safe, functioning and resilient service in the face of disruptive events and wider stresses is crucial to people's lives and livelihoods across the country.
- We need to be responsive, adaptable and resilient in providing transport infrastructure for Ireland during an increasingly uncertain future, with impacts from climate change as well as wider physical, societal and economic pressures likely. We will focus on building the resilience of the services that we provide, to keep the networks available to all in an equitable way.
- We will develop our current practices to move from planning for specific risks and thresholds to planning for resilience and safe failure with limited consequences and quick recovery. We will do this through developing a systemsthinking approach and collaborating with others, and embedding resilience thinking through our organisational processes and procedures.
- We know that effective management and stewardship of our existing network requires timely interventions, and this can be facilitated by data-driven asset management, which also has a positive impact on resilience.
- Improving our resilience brings with it other benefits, to safety, reduced travel disruption, minimising damage and deterioration of our assets and infrastructure.





#### **Collaborate for a holistic approach**

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.

- We cannot single-handedly solve the environmental, social and economic issues of the present and future. Collaboration is key to delivering truly sustainable outcomes for society, and this is a central aspect of our approach to sustainability in the implementation of this plan.
- We have a significant opportunity to deliver sustainability through the infrastructure and services that we are directly responsible for, but we need to ensure that the wider impacts and benefits are fully understood, through consulting and engaging effectively with other service providers that use and interact with our networks.
- We also have even bigger opportunities to accelerate national, regional and local implementation of sustainability through areas where we don't have full control, but can influence outcomes through dialogue, contributions and partnerships.

- We will focus on taking a holistic approach to all aspects of our work; from ensuring smooth integration of our services within the wider network and inter-agency collaborations; identifying improvements to new and existing schemes that deliver multiple benefits; and applying a strategic approach to the maintenance and management of our assets as well as delivering more sustainable operations. We will exploit new technology and encourage innovative approaches to achieve this.
- A core part of taking a holistic approach is considering the costs, benefits and impacts of any solution over its whole lifetime. Often, when options are compared on this basis, the most sustainable option is also the most cost-effective one over time but may require a higher up-front investment.

- Activities will be undertaken that relate that relate to improving our approach to making decisions that account for whole-life impact, which requires a longer-term view and mindset change.
- It also requires clear guidance and policies at every stage of the life cycle of an asset or service to ensure that all benefits are realised, and total costs are minimised, from the earliest stages of options appraisal through to design, operation and end-of-life. This includes addressing noise, emissions, impacts on cultural heritage, and ensuring that we won't impede the plans of other agencies.





#### **Deliver end-to-end improvements**

Deliver enhanced whole-life-cycle value through impact and influence on stakeholders, partners and suppliers.

- We are part of a much wider sector and value chain. We rely on our suppliers, customers and partners to support us in our ambition for a sustainable future, using fewer resources, while delivering more useful networks to improve the quality of life for all.
- We have a huge opportunity, through our supply chain, to improve the sustainability of the work we commission, but also to drive change in the wider market and use contracts and procurements to build total value.
- To achieve this, we need to provide clarity about our intentions, identify the challenges we face, guide our supply chain stakeholders via standards, specifications and contracts and work with our suppliers and partners to find solutions together. This will involve encouraging innovation to share risks more equally and gain greater shared value as a result.
- Through this plan, we aim to become leaders in delivering sustainability not just through what we deliver and operate, but in how we procure the goods and services needed to do this. We have a particular opportunity to deliver on this principle through the standards and specifications that we control.

- Through our procurement policies and standards, we can influence the use of sustainable materials, better design and environmental performance but also social impacts such as access to employment, equality and diversity, supporting local small and medium-sized enterprises and ensuring fair wages.
- Taking a life cycle view in procurement decisions will support these changes, and we will enable our staff to do this by providing the necessary guidance and internal policies to support prioritisation of sustainability at the heart of decision making.
- We can also lead the industry through mobilising our partners and stakeholders for collective action to create internationally recognised, industry-leading best practice and normalise this for infrastructure provision in Ireland.







#### **Transition to net zero**

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 choices.

- Climate change is a global issue, and the world is currently on track to exceed 1.5°C of warming between 2030 and 2052 if emissions continue to rise. The Irish Government, alongside other nation states from around the world, has committed to reducing emissions to net-zero by 2050 to safeguard our future and the future of the next generation.
- TII has a significant role to play in supporting the transition to net zero, both by decarbonising our own activities, but also looking at how we can enable people to make more sustainable travel choices by the way we plan, develop and operate our services and how we work with other service providers to do this. Part of this involves challenging ourselves to plan how travel can be avoided

where it is unnecessary – reducing vehicles on our networks, enabling public transport services, walking and cycling to become the preferred options for more citizens and also making sure our networks are ready for lowand zero-emission vehicles.

- We cannot consider how to decarbonise without also considering how to reduce the amount of materials we use. As an infrastructure provider, we use significant quantities of both energy and materials in the construction, maintenance and operation of our networks. The extraction and processing of these materials depletes natural resources and releases carbon into the atmosphere.
- We need to reduce our resource consumption alongside committing to net zero emissions. We will do this by re-thinking how we use our existing infrastructure, re-engineering our systems to optimise material use, and through better maintenance, repair and refurbishment to increase the lifetime of our assets. In doing this, we will pave the way in establishing a circular economy.







#### Create total value for society

Maintain and enhance the balanced delivery of economic, environmental and social value through robust planning, rigorous appraisal and decisions that prioritise sustainability.

- Each year we invest significantly into the transport infrastructure and services that help keep Ireland moving. This is a critical ingredient for economic development at a national and local scale, but it also supports people's quality of life across the country, linking people and places, connecting communities, enhancing cultural heritage and providing access to employment, services and amenities.
- But there are other benefits from our activities too and it's important that the additional value created by our schemes and services is captured and distributed fairly, and that negative impacts are avoided.

- We refer to this as creating total value for society – not just looking at the economic case but understanding the social, natural and financial costs and benefits of any decision, and acting accordingly.
- By taking into account these other areas of value, we can make more informed, sustainable decisions. We commit to placing sustainability at the heart of every decision we make, thinking about our land as public space, for public good, and using it to preserve and enhance the environment, capture carbon emissions and help the fight against climate change, whilst providing space for people to not only move safely and access essential services, but also to socialise, and connect with each other and the environment.
- By applying this perspective, we can focus on the outcomes we seek to achieve through our work and have a greater impact – maximising opportunities to do more with less, finding solutions with multiple benefits, and ensuring the positive and negative impacts of our work are not just balanced, but actively create and preserve public value.

### **Overarching principles**

In addition to the six core principles, we have established two overarching principles that ensure connectivity across the themes.

These two overarching principles are:

Acting as a connective spine throughout

Leadership, Collaboration and Partnership

Additional cross-cutting 'enabling' principle

Working Together and Enabling People

This first principle focuses on our role as a proactive stakeholder in public policy making, where we influence within our remit and develop partnerships for successful delivery. This will set us on a course for closer interagency collaboration.

The second principle supports our people, in driving the sustainability agenda and positive impact forward. This includes supporting new programmes that foster systemic change and help people make more sustainable choices in their everyday lives.



### **Connecting principles with outcomes**



### **Plan timeline**

In order to deliver on our sustainability principles, we will undertake activities across the whole organisation. Many of these activities will focus on embedding sustainability into our core functions and everyday work in the provision of sustainable transport infrastructure.

Activities must span every part of the organisation, and involve collaboration with our stakeholders and partners. This plan represents a pathway for us to achieve our sustainability ambition and create a positive influence on areas outside our direct control.

The six sustainability principles act as our guiding framework for the implementation of key activities across our organisation. We understand that to achieve sustainable development across Ireland we need to play our part, delivering on our remit and going beyond this to support and influence our stakeholders. We envisage this plan supporting the delivery of seven systems-level outcomes. These systemic outcomes include:

- Modal shift
- Inclusive transport, social benefits and safety of vulnerable road users
- Asset management and resilience
- Effective partnerships and stakeholder engagement
- Sustainable procurement and supply chain
- Environmental enhancement biodiversity/cultural heritage
- Resource efficiency and emissions reductions

To realise a truly sustainable future for Ireland we must recognise that the delivery of these seven systemic outcomes may start now but span time horizons of up to 5, 10 or even 15 years.



### **Plan timeline**

#### **Internal Focus**

### 1 - 2 years

**Embed sustainability internally** 

Communicating, educating and building internal stakeholder knowledge for delivering the plan.

Continue to build on sustainability initiatives already underway.

Develop stakeholder engagement plan and commence engagement with external stakeholders.

Commence update of identified internal documents, including standards and guidance.

Develop new policies, e.g. sustainable procurement.

Commence targeted initial research and develop further research requirements into a clear programme going forward.

Identify and advertise research packages.

#### 3 - 5 years

Integrate sustainability into external delivery mechanisms

Building external knowledge and awareness of the plan, with active engagement from core stakeholders.

Establish new initiatives based on the 6 principles in close partnership with internal and external collaborators.

Build stakeholder learning and industry knowledge into the evolution of sustainability initiatives and actions.

Continue to update standards and guidance documents and roll out communication and training on these.

Identify gaps where increased emphasis on sustainability in policies is required, and develop.

Continue with research to inform standards updates. Incorporate research findings into standards, policy and guidance documents.

Carry out research & identify new areas of research.

#### **External Influence**

#### 6 - 10+ years

Sustainability is business-as-usual for TII

Continue capturing experiences from communication around the plan informing future learning and development opportunities.

Sustainability initiatives underway in all parts of the organisation. Continuity and consistency internally on delivering sustainable outcomes. Plans, programmes and projects in progress with our delivery partners.

Stakeholders fully on board and actively engaging in the evolution of initiatives and development of new initiatives.

Share knowledge and work with other stakeholders to develop well-integrated documents and standards across providers.

Shape and influence emerging external national policy, supporting the network of stakeholders.

Review and revise research needs for continual improvements to standards, policies and guidance. Work with other stakeholders to increase scale of research impact.

Build research into standards, continue to expand on research ideas.

### What does success look like?

We recognise that our transport system will continue to evolve and will remain a critical enabler for our economy and society. Sustainable transport solutions can positively impact our health and well-being, while enabling our access to services, education and employment opportunities. We believe that more liveable spaces and places can be achieved through the improved design and planning of our transport system.

In determining what 'success looks like' we have envisioned a future, Our Future, in which our plan delivers change through a more sustainable transport system. In doing so, this shapes a better quality of life for all citizens.

In the following scenarios we imagine the change we aspire to seeing through successfully implementing our sustainability vision:

	A. F.	5
5 years	- 10 years	- 15+ years
Increased resilience of our transport network with enhanced environmental benefits.	<ul> <li>Increased network capacity for public transport usage, more localised facilities and connections into our cities and towns. Congestion is eased on our road network.</li> </ul>	<ul> <li>An improved, safe sustainable and resilient transport network that supports Ireland's villages, towns and cities, enabling a continuous movement of people and goods.</li> </ul>
Progressed development of multi-modal facilities to enable improved movement of people and goods around our villages, towns and cities.	<ul> <li>Public transport to be visibly integrated on our networks, convenient and reliable to enable people to move around the villages, towns and cities in a more efficient way.</li> </ul>	<ul> <li>Our villages, towns and cities are well-connected, enabling citizens to move around 'places and spaces' more efficiently with increased transport options that a multi-modal and accessible and inclusive to all.</li> </ul>
Expansion of access for all to active travel e.g. cycle lanes, footpaths, greenways, and segregated from other modes where possible.	<ul> <li>Cycling and walking to be safe, enjoyable and accessible and the first choice for local journeys (combined with public transport for longer journeys).</li> </ul>	<ul> <li>Our villages, towns and cities are accessible by both active and sustainable transport and attractive for citizens to live and work in without having reliance on a private car.</li> </ul>
A greening of electricity supply usage for our buildings and transport system.	<ul> <li>100% green powering of our buildings via an active smarter low carbon grid.</li> </ul>	<ul> <li>A carbon-neutral transport system resourced from green electricity, biofuels and hydrogen.</li> </ul>
More use of public transport with more low emission vehicles on the road.	<ul> <li>Reduced impact of vehicles in our town and city centres, enabling more attractive and accessible public spaces.</li> </ul>	- Our cities and towns connected by sustainable transport with low emission vehicles the norm.
More efficient transport corridors that utilise available space to move the largest number of people, while supporting economic growth.	- Visibly more space within our towns and villages, enhancing safety of movement and liveability.	<ul> <li>Land-use, spatial and transport planning fully evolved a sustainable integrated logic.</li> </ul>
Investigation into restoration of degraded ecosystems through sustainable management and continuing to address biodiversity loss, protecting nature and restoring habitats.	- Bring nature back into our lives in accordance with the EU Biodiversity Strategy.	<ul> <li>Biodiversity conservation and green infrastructure directing economic benefits across sectors of our economy and improving rural livelihoods.</li> </ul>
Improved procurement models emerging for infrastructure projects reflecting a growing trend for sustainability standards and circular economy principles.	<ul> <li>All new infrastructure built in accordance with our sustainability principles, to be restorative and regenerative by design, and which aims to keep assets, components and materials at their highest utility and value at all times.</li> </ul>	<ul> <li>Finite resource use in infrastructure completely phased out, reusing or incorporating circularity, biomaterials as alternatives.</li> </ul>
Communities, schools and businesses engaged in sustainable transport, changing behaviour and making sustainable transport choices.	<ul> <li>Increased collaboration across transportation agencies and networks, working with industry to support more sustainable alternatives.</li> </ul>	<ul> <li>Irish citizens, communities and businesses positively react to technological change, embracing citizen- centric transport services that deliver social and environmental benefits and outcomes.</li> </ul>

### **Measuring progress**

#### **Annual review**

We will review our Sustainability Implementation Plan on an annual basis. This will enable us to benchmark our progress, realign our ambition and determine if there are new opportunities to take that will accelerate our journey to a sustainable future.



### **Next steps**

At TII we believe our people are central to delivering sustainability and are integral to our next steps.

Working together with you, our partners, supply chain and other agencies, everyone will have a role to play as we establish our position as leaders in sustainability not only as an organisation, but an industry as a whole. We will achieve this through leadership, collaboration, and partnerships, working together and enabling our people to deliver on our sustainability commitments.

We are excited to bring about change by thinking creatively, updating how we do things and futureproofing our organisation. Therefore, our next steps will centre around education, training and research to prepare ourselves for this challenge. We will identify the immediate actions that are necessary to unlock future opportunities, and we will look for ways to support and guide our projects, programmes, and our corporate activities as we establish a sustainability mindset across all of our activities.

This implementation plan is our framework for achieving sustainability in what we do, and it sets out many demanding challenges. We will build a structure around which we can deliver on the promise of this document and we will prioritise activities that will guarantee we make the best start in meeting this commitment. We recognise the size of the task but also that there is an extraordinary opportunity for us to build a more resilient organisation, demonstrate our leadership and shape a brighter future together. Now is the time to act to build a better future for everyone

