# **INFRASTRUCTURE 2050**

# The Investment Strategy for Northern Ireland

Draft Consultation Document









#### What Is This Document For?

Infrastructure is important to each person in Northern Ireland. But what is it? Infrastructure is the term used to describe the facilities and services which support our lives, such as water supply, sewage plants, housing, roads, cable networks, food supply facilities, schools, hospitals, airports, community meeting places, business and government buildings, bridges, and railways. It's something we all use every day. So we want to make sure everyone has a chance to read this draft new Infrastructure Strategy and give their opinion on it.

That's what this consultation document is for.

There is a lot of information in this brochure, and we don't expect you to read it all. Just use the Contents page to find the topics you most want to find out about.

# This document is also available in a number of other formats:

- large print
- Braille
- other languages

Please get in touch if you would like one of these formats.



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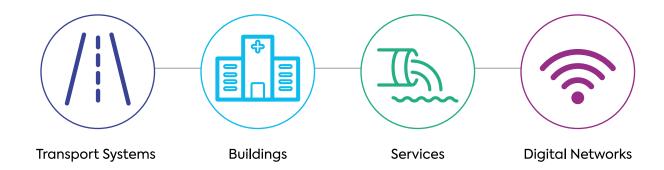
# Who Is Leading This Strategy?

The new Infrastructure Strategy is being led by the Northern Ireland Executive, which is responsible for overseeing government spending and investment. The Executive will be held to account for the successful delivery of the strategy by our MLAs in the Assembly.

#### So What Is Infrastructure?

When we talk about infrastructure, we mean:

- transport systems like roads, railways and airports
- buildings like hospitals and schools
- services like electricity, gas and water
- digital networks like broadband cables and hubs.



These are things we all need and use.

### Why We Need A New Infrastructure Strategy

High-quality infrastructure is at the heart of a modern economy – and a fair society. It can:

- help everyone to lead a happy and healthy life
- support economic growth
- create jobs
- protect our environment.

That's why this strategy is one of the most important plans that the Executive has to deliver.

Over the last ten years, we have invested a lot – nearly £15 billion – in our infrastructure. But there are still areas where we need to make big improvements.

# **The Four Challenges**

On top of that, in the years ahead Northern Ireland will also face four serious new challenges:

- the climate emergency
- our ageing population
- our trade relationships
- new technology and cyber security.





Let's look at each in turn.

# The Climate Emergency

In 2019, the UK Government committed to achieving net zero greenhouse-gas emissions by 2050.



'Net zero' means that the amount of greenhouse gas that goes into the atmosphere is the same as (or less than) we take out.

Reaching that goal will mean major changes for how we design, build and pay for every aspect of our infrastructure.

### **Our Changing Population**

Our population is projected to continue to grow to almost two million citizens by 2050. Over 3,500 new households are being formed each year. And, our population is ageing. The number of people over 65 is expected to increase by more than 200,000, and the number over 85 will more than double.



So our infrastructure needs to adapt to support healthier, active lives for longer.

# **Our Trade Relationships**

On 31st January 2021 the UK left the EU. This changes how we will do business with neighbouring countries and beyond. So we need to have modern transport and communications systems in place.

### **Technology and Cyber Security**

Our increasingly connected world – with its broadband and mobile phone networks, data centres and cloud computing – has to face cyber risks. So protecting our data is a key priority.

# **Physical Infrastructure**

Much of the infrastructure we will use in the coming decades has already been built. However, we haven't spent enough on maintenance, so there are backlogs in housing, roads and wastewater. It will take significant investment to fix this – and ensure the condition, safety and effectiveness of the physical infrastructure.



# How We Developed the Investment Strategy

This consultation document was developed between the autumn of 2020 and summer 2021. It involved a lot of research and analysis, as well as engagement with:

- community organisations, including the Youth Forum and Age NI
- business and industry organisations and representative bodies
- government departments and agencies, their arm's length bodies and public corporations
- Local Authorities and their representative organisations.



# **Investment Needs, Objectives & Priorities**

In developing this strategy, we have identified **five key objectives:** 

- 1. cut emissions
- 2. strengthen our essential services
- 3. make Northern Ireland more competitive
- 4. make our towns and villages nicer places to live
- 5. make the most of new technology.







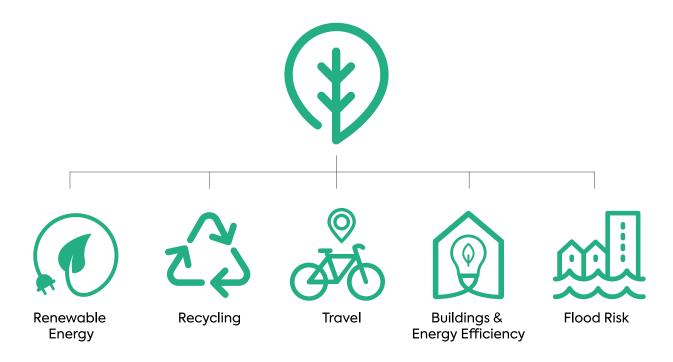






# Objective 1 Cut Emissions

When we burn fossil fuels, such as petrol, coal and gas, we release greenhouse gases. These are a major cause of global warming. In Northern Ireland we still depend too heavily on fossil fuels to power our cars and vehicles and heat our homes and buildings. How can we reduce this?



#### **Renewable Energy**

Over 40% of our energy comes from renewable sources, such as wind. However, more than 65,000 homes here still rely on oil heating. More houses need to be linked to the natural gas network, and the fuel replaced with bio-gas or natural gas blended with hydrogen.

# Recycling

Our recycling rates have steadily increased, but we still export too much of our waste – waste that can be turned into valuable other materials. A more comprehensive waste management system will help change that.

#### **Travel**

We need to cut the number of journeys we take, and make sure more of the trips we do take are by public transport or 'active travel' – namely, walking or cycling.

Also, over 40% of vehicles will need to be electric by 2035 if we are to meet our emissions targets. So we will invest in charging stations and battery recycling, and encourage drivers to switch to alternative fuels.

# **Buildings & Energy Efficiency**

When we build new homes and facilities we must use sustainable, energy-efficient materials and methods. Plus, we need to re-fit existing buildings with these same materials.

#### **Flood Risk**

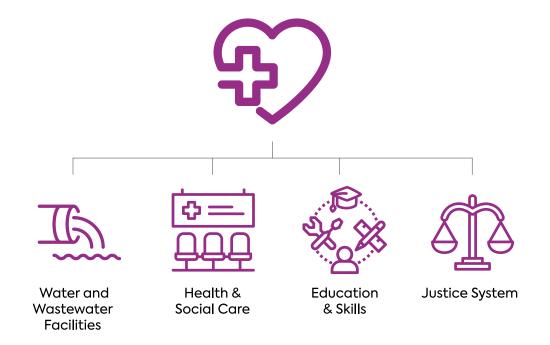
Flooding is the most significant climate risk we face here. Over the next ten years, we'll need to spend more than £155m to tackle this.



- Focus on renewable energy.
- Improve recycling and waste management.
- Ensure new properties are built and heated sustainably.
- Re-fit existing properties.
- Expand the electric vehicle charging networks.
- Invest in public transport, walking routes and cycle paths.
- Move public sector fleet(s) to alternative fuels.
- Invest in flood prevention measures.

# Objective 2 **Strengthen Our Essential Services**

When we talk about essential services we mean the buildings, systems, equipment and technology that are used in healthcare, education, justice and utilities.



#### **Water and Wastewater Facilities**

Wastewater facilities treat domestic and industrial waste and make it safe to reuse. However, many of these facilities desperately need modernised and have more capacity added to cope with demand.

#### **Health and Social Care**

Hospital admissions are 74% higher in our poorest communities. By investing in innovation and new technology we can greatly improve the way we plan and deliver healthcare where it is needed most.



With an ageing society, we also need to focus more on community facilities – improving prevention, social/domiciliary care, outpatient treatment and supporting patients within the community.

#### **Education & Skills**

Our schools and colleges must be sustainable – financially, environmentally and educationally. This means they must have enough pupils to deliver a wide and balanced curriculum and to get value for money from investment in equipment and facilities.

### **Justice System**

Improving IT in the justice system will mean more use of remote hearings, online submissions of documents and faster payment of fines. Our courts themselves also need to be able to meet the needs of vulnerable witnesses and defendants. Better technology in the Prison Service will improve safety, prisoner independence and family access. For the PSNI, some facilities need to be transformed to improve services for victims.

- High-quality water treatment facilities.
- Better planning and delivery for health and social care.
- Modernised education facilities.
- New technology and updated facilities for the justice system.

# Objective 3 Make Us More Competitive

In Northern Ireland we have world-class companies in advanced manufacturing, IT, agri-food and the creative industries. But our economy also suffers from low wages, skills gaps, and low levels of investment in research, development and innovation. Addressing these will make us more competitive and a more attractive place to invest.



#### **Our Road Network**

We need to upgrade our road network to handle more freight, faster – as well as improving leisure routes and trails to support our tourism sector.

# **Public Transport**

Expanding our rail network will help encourage economic growth. We also need to strengthen our rural and urban



transport networks, making them more accessible especially for younger and older people.

# **Ports, Harbours & Airports**

Our ports serve freight and passengers, and increasingly the cruise/leisure travel market. We will need investment to meet these demands.

### **Digital Networks**

Communications systems are essential for a modern economy. Technology changes very quickly, increasing demand for faster speeds, more bandwidth and 5G mobile broadband coverage – especially in rural areas. We have to continue to invest in this. Economic growth depends on it.

# Releasing the Value of Vacant Sites

In Northern Ireland we have a lot of large, vacant former military, defence and other industrial sites. This is potentially very valuable land, and is often in areas where there are shortages of available sites for business and housing. Unlocking these sites should be a key priority for investment.

- Improve strategic transport corridors.
- Strengthen our public transport networks.
- Enhance our digital capacity.
- Unlock the potential of vacant/disused sites.

# Objective 4 Make Our Towns & Villages Nicer Places To Live

Many of our towns and villages have seen decline in recent years, as shops and services have closed or moved out. What can we do about this?



# High Streets: Reuse, Regenerate, Refurbish

We need to rethink what a high street should be. In addition to shopping, we should bring back public-sector tenants, libraries, community services, healthcare and leisure facilities – and housing. We should reuse and refurbish existing buildings instead of constructing new ones. And we should put people first rather than vehicles to help make our high streets more attractive places.



## **Sustainable & Active Transport**

We must rethink how and when we travel, focusing on public transport and improving facilities for active travel – that is, walking and cycling. Active travel needs to be a practical choice in rural as well as urban areas. This will mean, for example, investing in footways and cycle paths.

# Housing

Good-quality, sustainable housing is a key priority. It makes economic and environmental sense. But importantly, good housing helps build communities, and addresses issues around well-being, mental health and loneliness.

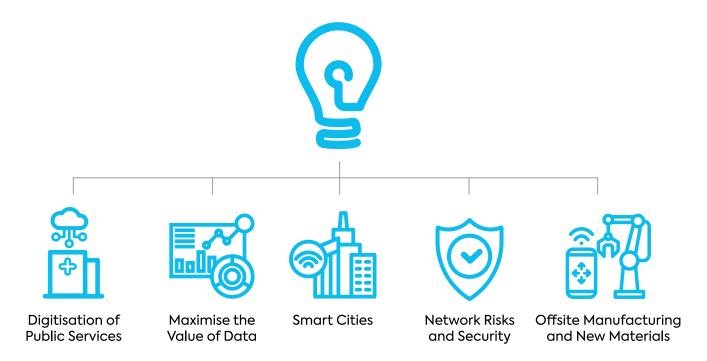
#### **Culture, Arts & Leisure**

Our leisure and cultural facilities are a vital part of our infrastructure. Our creative industry sector is strong. However, our museums need to improve resources, and we also have to make sure everyone has access to high-quality open spaces, as well as to sporting and leisure facilities.

- Regenerate our high streets.
- Prioritise walking and cycling for leisure and commuting.
- Invest in high-quality housing and refurbish existing properties.
- Upgrade facilities and improve access to leisure and cultural spaces.

# Objective 5 Make The Most Of New Technology

65% of all homes and businesses here have access to full-fibre broadband. That's the highest rate in the UK. As we plan investment, we need to ensure that systems are secure and privacy is protected. Accessibility for all is key.



## **Digitisation of Public Services**

Upgrading our digital infrastructure will make it easier for people to get information and use public services faster and more easily. This is particularly important in health and social care, education and the justice system.

#### Maximise the Value of Data

The public sector handles vast quantities of data, which could be used to target services more effectively and make them more responsive to people's needs.



#### **Smart Cities**

A smart city uses data and technology to improve efficiency and provide a better quality of service to people. This technology also enables us to connect regional and national infrastructure networks such as transport, energy and water.

# **Network Risks and Security**

As our world becomes more digitally connected, the risks from cyber attacks increase. Meeting this constant challenge means investing in skills, advanced technology and resources.

## Offsite Manufacturing and New Materials

New 'smart' materials and manufacturing techniques will change the way our physical infrastructure is designed and built. For example, in the transport sector, there are solar roads that generate renewable energy, and surfaces that charge vehicles. Methods like 3D printing mean parts and materials can be fabricated onsite – reducing transportation and construction costs.

- Digitise access to public services.
- Upgrade the public service digital infrastructure.
- Take advantage of data analytics and data science.
- Improve the security of data and networks.
- Embrace 'smart' materials and manufacturing.

# **Planning The New Strategy**

Investment in major public sector projects like this is based on three questions:

- 1. Does evidence prove that it's necessary?
- 2. Is this the best use of resources?
- 3. Will it make a positive difference to people's lives?

#### What will it all cost?

Every year for the past ten years or so we have spent between £1.2 and £1.4 billion on infrastructure. It's hard to be exact about the cost of the new Infrastructure Strategy at this stage, but it will be significantly more than that.

So it's crucial we make the right decisions.

#### **Considerations**

# **Planning**

Stakeholder engagement told us that the planning system has often been seen as a barrier. This is something we need to address.

#### **Skills Gap**

The construction industry needs traditional skills as well as new digital skills.

#### **Resources**

We will need more people and resources to manage the project in both the short and long term.



# **Adding Social Value**

Many public construction contracts contain social value commitments – for example requiring apprenticeships, placements for the long-term unemployed, work experience or community initiatives. This strategy will continue that commitment.

# **Keeping Track Of Progress**

Given the scale of investment involved in the Infrastructure Strategy, it's essential that we monitor its progress at every stage.

This will enable people to see that:

- we consider areas with the greatest need first
- we are delivering projects on time and on budget
- each project is sustainable
- each project is inclusive

And finally, all investment must fully accountable.

Together, these measures will make sure that the strategy delivers the best results for the most people.

# **How To Respond To This Document**

You can respond to this consultation online through our survey on CitizenSpace:

https://consultations2.nidirect.gov.uk/dof/infrastructure-2050-consultation-document.

If you're unable to complete the survey online, please email the ISNI team:

consult.isni@sibni.org.

Completed surveys and written responses can be e-mailed to consult.isni@sibni.org or posted to Investment Strategy for Northern Ireland, Strategic Investment Board, 5th Floor, 9 Lanyon Place, Belfast, BT1 3LP.

Consultation on this draft Investment Strategy closes on 20th April 2022.

We look forward to hearing from you.

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