

National Infrastructure Commission for Wales Annual Report

Executive Summary

The National Infrastructure Commission for Wales was established in 2018 as a non-statutory body to advise and make recommendations to Welsh Ministers on economic and environmental infrastructure over the next five to thirty years.

Our primary objective is to give everyone in Wales the opportunity to improve their social, economic, environmental and cultural well-being by recommending infrastructure to build a dynamic and resilient economy.

In our first year, we have taken an overall view of the current state of Wales' infrastructure and gained some understanding of how changes in the economy, the environment and technology will demand new forms of infrastructure.

We have spoken to stakeholders across Wales to understand both the unique characteristics of our country and the variety of ways people live, work and play in our diverse urban and rural communities.

This has led us to some provisional views on future infrastructure for which we are now seeking further evidence. We have also compiled key issues relating to energy, digital communications and transport which we seek to investigate in greater detail.

Wales is shaped by its scale, history and topography. Once a country of coal, slate and steel, it is now home to cutting edge industries and services. It is a key supplier of food and energy to the UK. Employment is relatively high and supported by strong further and higher education sectors. And we have a distinctive and strong cultural identity.

In terms of the environment, Wales offers huge potential to harness renewable energy. And we perform strongly in terms of household recycling.

But there are challenges to face. This is a small country, thinly populated compared to England and with few large population hubs. Productivity and skill levels are low, a relatively high proportion of jobs are in the public sector.

Spread in small communities, we have become over-reliant on private transport. Our population is ageing and the working age population is declining. And with the rest of the world we face the challenges of economic turmoil and climate change.

Our country's distinctive strengths, opportunities and challenges are helping us to frame our initial findings and key issues. But we must stress that this is still early in the process and we will not rush to make recommendations to the Welsh Ministers until we have found compelling evidence for infrastructure solutions.

Assessing the potential value of new infrastructure projects would be much more effective if there were better data on the performance of past projects. We will be exploring the potential for better evaluation driven by solid data.

The key themes we have identified are decarbonisation, connectivity and resilience.

The Welsh Government has set out a path to decarbonisation in Prosperity for All: A Low Carbon Wales. Infrastructure will be an important enabler of that change.

We will consider the future development of transport networks, congestion and the switch to electric vehicles. We will examine how digital connectivity should be delivered across Wales.

The question of infrastructure's resilience grows more important as climate change and rising sea levels bring fresh challenges.

The development of our infrastructure plan is in its early stages but we have reached some provisional views for which we seek evidence and we have identified key issues on infrastructure which we will consider in the coming year.

Digital Communications

The primary focus for public funds should be on extending superfast broadband to as many households as possible using the lowest cost technology. We seek evidence on whether the UK Government's focus on extending more expensive fibre to the home to every household in the UK will best serve the interests of Welsh citizens, including those who still lack access to superfast broadband.

We seek evidence on whether and what additional measures the Welsh Government could take to significantly improve mobile broadband coverage. Our provisional view is that 4G and 5G mobile broadband may be the lowest cost technology to provide superfast connections to some Welsh households and that a greater proportion of public funds should be allocated to mobile rather than to fixed broadband or other infrastructure objectives.

Energy

We seek to understand how the existing electricity grid is constraining the growth of renewable electricity generation and why these constraints arise. We seek further evidence on how to rapidly improve the relationship between Wales' energy grid and the future growth of renewable energy, including innovations in energy storage, electrical engineering, the planning system, and other government interventions.

We seek evidence on the potential for commercial scale cost effective marine energy generation in Wales and the measures required to realise it. Should

potential economic benefits, in terms of jobs and investment in Wales, be offset against potentially higher costs of marine energy for consumers?

Our provisional view is that decentralised, community-based infrastructure projects could have an important role to play in transforming the energy supply chain. We seek evidence to understand how community schemes might be scaled up and what barriers there are to decentralisation, including the availability of electricity grid and distribution infrastructure. We seek evidence on how these projects might be financed. Should potential economic benefits, in terms of jobs and investment, be offset against potentially higher costs of renewable energy?

Transport

Improving connectivity along the strategic East West Wales corridors, to/from England, in North East and South East Wales is a transport priority. How can capacity be increased and congestion reduced?

Connecting local areas to major economic centres has the potential to support economic development and regeneration, for example in the Heads of Valleys. Which parts of Wales most need such developments and what are the most effective means of connectivity?

Wales has potential to improve connectivity to the rest of the world by air and sea for passengers and freight. How could Wales maximise its connectivity to the rest of the world and what would the costs and benefits be?

The economic case for major road and rail developments between North and South Wales is not strong. We provisionally consider that connectivity between North and South Wales could be improved by

supplementary developments such as better digital connectivity along major transport routes, improved passing places and rest facilities, EV charging infrastructure and improved rolling stock.

Wales' road infrastructure must be prepared for the move to zero emissions vehicles. We want to better understand how the transition to zero emission road transport can be enabled. We are interested in evidence of: Wales' readiness compared to other parts of the UK, the infrastructure barriers to zero emissions and how they can be overcome, especially in rural areas where the market may not provide the solution.

Transport in Wales poses different challenges and requires different solutions in urban and rural areas. How we can ensure an appropriate transport strategy for each?

If there were less need for people to travel then congestion and carbon emissions could be reduced. Options for reducing the need for travel should be explored. How can public policy in other areas reduce the need for people to travel?

In due course the commission will set out its plan for Wales' infrastructure, which will enable the Welsh Government to develop an affordable strategy for our infrastructure needs and help us have a prosperous future in which all can share.

The full Annual Report (including a Call for Evidence) and the commission's Baseline Data report can be found online at: gov.wales/national-infrastructure-commission-wales

