

Transport

Sector perspective

Ensuring the long-term resilience of the UK's transport system by adapting it to the expected impacts of climate change is an essential part of building, maintaining and operating a transport system that continues to support economic competitiveness and growth.

The UK needs a transport system that balances economic, environmental and social considerations. With a growing population, pressure is on the transport sector to meet increased travel demands while at the same time reducing carbon emissions. Adapting to the expected impacts of climate change is a fundamental part of ensuring we have sustainable transport networks in the future.

The transport sector is making good progress at embedding the need for climate change adaptation. The National Adaptation Programme (NAP) illustrates how the adaptation challenge is being addressed and highlights good practice from transport organisations. The NAP sets actions for the next 5 years for both the Department for Transport (DfT) and the transport sector as a whole.

Climate change risks

In 2012 Government published the first national [Climate Change Risk Assessment \(CCRA\)](#). The most significant and urgent risks identified for infrastructure are associated with flooding. The transport sector is already addressing flood risk but the NAP looks at how far current activities are mitigating the risks and encourages further action where required.

The transport flood risks identified by the CCRA are:

- Roads at significant risk of flooding
- Railways at significant risk of flooding
- Scour of road and rail bridges
- Disruption to road traffic due to flooding

Other transport risks identified by the CCRA include:

- Landslide risks on the road network
- Rail buckling
- Cost of carriageway repairs due to high summer temperatures

The CCRA prioritised risks facing strategic road and railway infrastructure managed by the Highways Agency and Network Rail. However, risks are likely to be more wide ranging, encompassing the aviation and maritime sectors and local transport.

Climate change opportunities

As well as identifying transport's vulnerabilities we need to look at opportunities and take advantage of benefits. The CCRA highlights one opportunity for transport – the possible

opening of [Arctic shipping routes](#) due to sea ice melt. This opportunity is already being [investigated](#) by the [shipping](#) industry so benefits of a new trade route can be realised as soon as it is feasible.

Other benefits may arise, for example warmer summers may increase tourism, boosting use of and revenue from, public transport and warmer winters may reduce the need for gritting and fewer snow/ice related delays and incidents.

Top 3 actions

The NAP actions for transport are included in the infrastructure chapter. This is to promote cross-sector working, for example where transport has interdependencies with energy, water and ICT. The key actions for transport include:

- Infrastructure and asset management

DfT and transport organisations will ensure action is taken to adapt by embedding consideration of climate change in policies, strategies and research e.g. DfT's Road Strategy and National Policy Statements, Network Rail's *Tomorrow's Railway and Climate Change Adaptation* research programme, the Highways Agency's standards and specifications and port and airport risk assessments and business plans.

- The regulatory framework

DfT will work with its regulators the Office of Rail Regulation and the Civil Aviation Authority to incorporate consideration of climate change adaptation in future amendments to the regulators requirements.

- Local transport

DfT, local transport organisations and local climate change groups are developing capacity and knowledge about building the resilience of local transport infrastructure, especially local highways.

How to get involved

Environment Agency Climate Ready support service - provides advice, tools and information to help organisations live with climate change now and in the future. The Climate Ready team works closely with Government Departments and organisations and is open to supporting and engaging new transport organisations interested in getting involved.

<http://www.environment-agency.gov.uk/research/137557.aspx>

The Environment Strategy team in DfT can provide advice on progress being made across the transport sector to adapt to climate change including NAP actions, Government policy and strategy development, adaptation working groups and support arrangements. Please contact jain.dickson@dft.gsi.gov.uk