Highway Asset Management Resilient Network Policy 2025

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Document Information

Title (Sub-Title)	Highway Maintenance Resilient Network Policy
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Document Revision Summary

Minor amendments to the documentation to align with current legislation and Council Policies.

Resilient Network

Introduction

The Highway Infrastructure Resilient Network provides the minimum network of roads which will be maintained in Redcar & Cleveland in times of extreme weather and significant disruption The resilient network will be given priority, in order to maintain economic activity and access to key services and critical infrastructure during extreme weather.

The Redcar & Cleveland 'Resilient Network Policy' has been developed in line with the recommendations set out in the 'Well-managed Highway Infrastructure' Code of Practice 2016. It is linked to Redcar & Cleveland Council's Highway Infrastructure Asset Management Strategy, the Highway Maintenance Resilient Network Strategy, as well as the Winter Service Policy, and it follows the principals set out in both documents.

The 'Resilient Network' is not intrinsically a maintenance hierarchy; however, this network of roads is contained within a range of maintenance hierarchy categories reflective of factors of risk, usage, priority, etc. The 'Resilient Network' is the network of roads used to maintain economic activity, access to key services and to enable the citizens, businesses and visitors of Redcar & Cleveland to go about their daily business in times of extreme weather or other significant disruption.

During periods of prolonged extreme weather, the highway network can be disrupted. This was highlighted during the winters of 2013/14 and 2017/18 where many areas of the country suffered disruption due to the severe weather. In response, the Secretary of State commissioned an Independent Review of the resilience of the nation's transport network, resulting in the 2014 Transport Resilience Review by Department for Transport (DfT). This review made 63 recommendations; 14 of which were directed at Local Authorities.

The Transport Resilience Review recommended that Local Highway Authorities should.

"Identify a 'resilient network' to which they will give priority, in order to maintain economic activity and access to key services during extreme weather" (DfT, 2014).

This principle has been reinforced in the Well-managed Highway Infrastructure Code of Practice (2016) Recommendation 20 which states…

"Within the highway network hierarchy, a Resilient Network should be identified to which priority is given through maintenance and other measures to maintain economic activity and access to key services during extreme weather".

Developing the Resilient Network

The Government considers asset management to be a key part of the provision and ongoing maintenance of a resilient network, as well as deploying effective contingency planning and prioritisation.

The Resilient Network considers which routes are absolutely essential to maintain economic activity and access to key services during extreme weather events and those which can be considered of a lesser a priority.

The resilient network sets out the following:

- Identifies the network routes that form the resilient network

- Identifies critical infrastructure that must be supported by a resilient network

- Where possible, directs programmes of work on its highway assets to ensure the resilience is maintained or improved upon

- Takes a risk-based approach on identifying and assigning resilient network roads to their appropriate hierarchy categories and

- Ensures advanced safety inspections and asset maintenance is carried out as necessary in selective hot spot locations, in preparation of a forecasted severe weather event.

- Leads cyclical maintenance teams to set gully cleansing, bridge drainage, and other environmental activities to ensure that they are adequate to keep drainage systems functioning to their maximum capacity in times of extreme storm conditions

- Links to the Council's Winter Maintenance Plan, for example, the gritting routes are part of the resilient route network.

This reflects on operational priorities in a time of difficulty when resources may be limited or otherwise engaged and it also considers which roads are key to:

- the preservation of life and property
- the protection of those who are vulnerable
- providing access for emergency services
- the availability of food, water electricity, gas and communications
- maintaining a viable economy
- providing serviceable access to critical infrastructure assets

The resilient network is based on risk and priority needs and it should also align with the cross-boundary networks of neighbouring areas and be consistent with the wider 'Resilience Strategy' for the five Tees Valley Combined Authorities and surrounding areas. In addition, the resilient network for Redcar & Cleveland should engage key business, stakeholders, and interest groups.

The development of the resilient network ensures that it provides:

- connectivity between major townships
- links to the Key Route Network
- connections to neighbouring authorities
- links to transport interchanges
- maintains where possible access to emergency facilities including Fire and Rescue, Police, Ambulance Services and Hospitals
- links to critical assets and infrastructure such as water treatment works, pumping stations, etc

The increase in potential for extreme weather events is generally acknowledged to be an impact of 'climate change' and this is likely to increase the severity, duration and magnitude of damaging weather events. Local authorities are expected to make the best use of the most up-to-date climate change forecasting information available and to consider this in the prioritisation of works and services in order to increase the resilience of the highway infrastructure assets to climate change.

Drainage is considered an important function in addressing the increase in localised flooding issues as a consequence of climate change and in the understanding of the condition of the drainage network and ensuring its effective maintenance and performance assists in minimising the damage caused by extreme weather events. The Government's response to the 'Transport Resilience Review' identifies the importance of maintaining an effective drainage infrastructure to ensure a reduction of scale and threat of flooding with a focus on known problem areas.

When preparing and responding to extreme climatic events, the Council may prioritise the inspection, clearing and repair of the resilient network routes in order to keep them open, serviceable and fit for purpose.

A resilient network has been identified for Redcar & Cleveland Borough Council which will, where possible aim to minimise the risk to the local area in terms of its economy and access provisions. The highway network routes that form part of Redcar & Cleveland's resilient network are those which are deemed essential to the highway network and to the support of critical infrastructure around the borough.

Consultation

The following groups have been consulted with during the formulation of the resilient network.

- Tees Valley Neighbouring Highway Authorities
- Fire and Rescue, Ambulance Service and Police
- Network Rail
- Bus Operators
- Local Enterprise Partnership
- Chamber of Commerce
- Ministry of Defence
- Emergency Planning Department
- Utility Operators

Redcar & Cleveland Borough Council Stakeholders: -

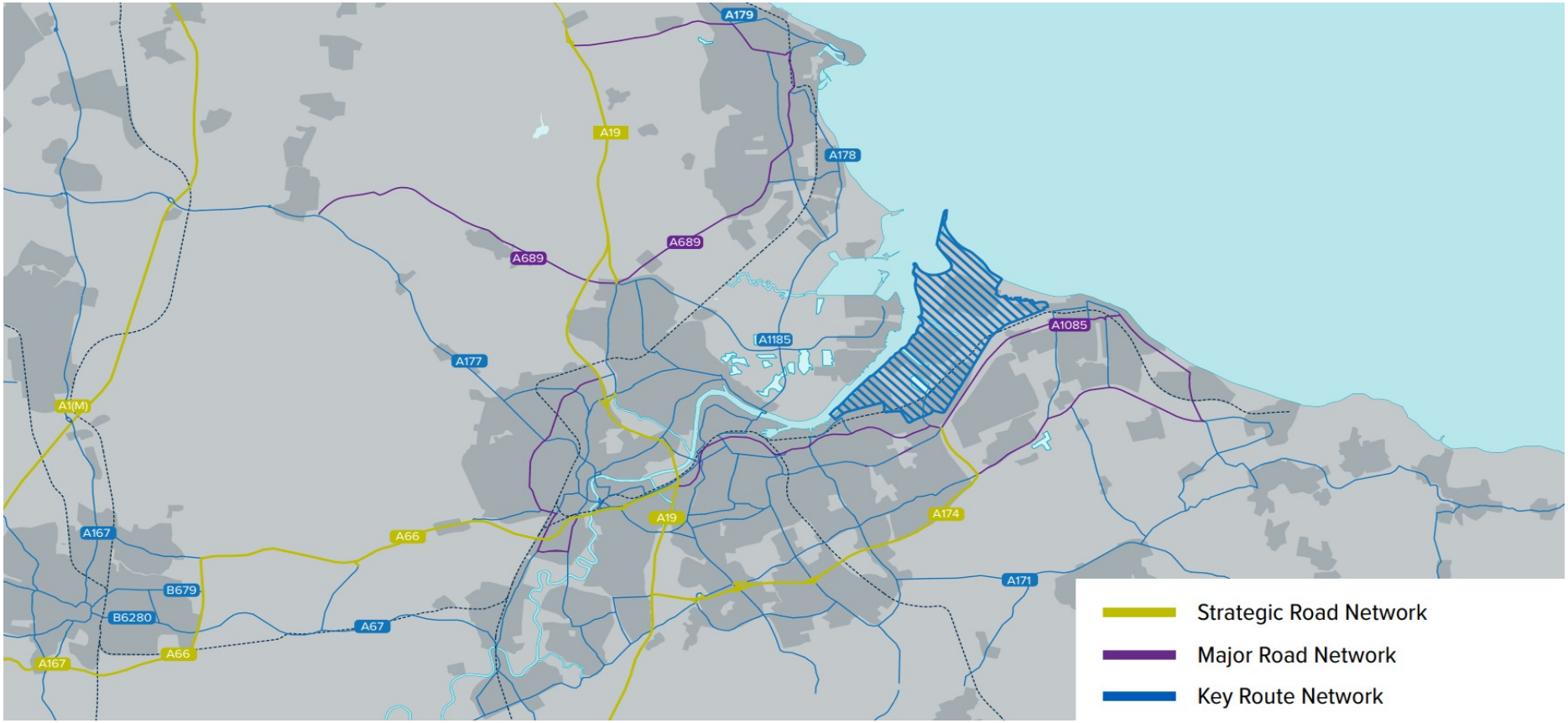
- Highways Maintenance
- Traffic and Safety
- Street lighting
- Structures
- Public Rights of Way
- Drainage

The plans below show Redcar & Cleveland Council's resilient highway network and those of the Tees Valley Combined Authorities, demonstrating cross-boundary resilient network continuity.

Redcar & Cleveland Resilient Network 2025

Redcar & Cleveland Resilient Network 2025 with satellite imagery

Key Regional Networks



*Extract above from the Tees Valley Combined Authority "Strategic Transport Plan 2020-2030".

Monitoring and Review

The resilient network has been created using data currently available.

The identification of the resilient network is a dynamic process subject to transformation as the network grows, its usage changes and critical infrastructure is added or removed.

To ensure the network is kept current and up to date a review of this crucial network will be undertaken every 2 years and it will form part of the infrastructure asset management review involving the following:

- Review critical infrastructure/assets and service locations and update GIS information
- Update traffic flow data
- Review neighbouring Council resilient networks to ensure continuity arrangements are in place.

Any changes to the resilient network should be registered, date stamped and evidenced, as this may have an impact on the Authority's defense of legal challenges.

The 'Resilient Network' is critical to the risk-based operational maintenance management of the Authority's highways infrastructure assets and for the prioritisation and adequacy of its financial investment in suport of asset condition and longevity. Redcar & Cleveland Borough Council have a robust approach to this process which will serve them well into the future.