Cleveland Fire Brigade

Strategic Assessment of Risk

2026-2030

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Cleveland Fire Authority
Endeavour House
Training and Administration Hub
Queens Meadow Business Park
Hartlepool
TS25 5TH
Telephone: 01429 872311
Email: communications@clevelandfire.gov.uk

Document History

This document is a draft version pending review with Trade Unions.

Final publication of this document will follow the conclusion of our CRMP consultation process in 2026.

Foreword

Cleveland Fire Brigade is committed to ensuring the safety of our community. To do that, we regularly assess all foreseeable risks that could affect our area and the people who live and work here. This document explains what we've learned from our latest Strategic Assessment of Risk, and how we will plan the delivery of our service to keep our community safe.

We have combined information from a range of sources, including public consultation, professional expertise and data insights. In doing so, we improve our understanding of the concerns of all our stakeholders, and how these concerns could impact our service.

This risk assessment helps to shape our Community Risk Management Plan (CRMP), a document which sets out the priorities for our service over the next four years in consultation with you, the public.

Peter Rickard

Chief Fire Officer

David Coupe

Chair of Cleveland Fire Authority

Want to Know More?

If you have any questions about this document, or the work we do, visit our website or contact us to learn more.

Introduction

Cleveland Fire Brigade is committed to supporting our communities to be safer and stronger by understanding and reducing the risks that affect the people, places, and infrastructure in our area. This Strategic Assessment of Risk (SAoR) forms a foundation to our community risk planning approach, ensuring that all areas of our service delivery are underpinned by a robust understanding of local needs and emerging threats.

Our risk management framework involves adopting a proactive, intelligence-led and inclusive approach to identifying risk, as defined by The National Fire Chiefs Council (NFCC) as a combination of the likelihood and consequences of hazardous events. Effective risk management is not only about mitigating risks once they have occurred, but also about working to prevent them and build resilience across our communities. This approach requires us to integrate data, community insight, professional judgement and collaboration with partners.

The SAoR supports the delivery of our Community Risk Management Plan (CRMP) for 2026-2030 by identifying where the greatest risks exist and how our services can be aligned to meet them efficiently and equitably. It incorporates national guidance from the National Fire Chiefs Council (NFCC), legislative requirements such as those outlined in the Fire and Rescue Services Act (2004) and Civil Contingencies Act (2004), and the latest evidence from local risk profiles to ensure our strategic decisions are transparent, justified, and looking ahead to the future. This document was previously known within the service as the Community Risk Profile.

This document outlines our approach to identifying, assessing, and mitigating risks across our service area. The assessment ensures that we allocate our resources effectively to prevent, protect against, and respond to emergency incidents. Additionally, the assessment enables us to deliver a service that reflects the needs of our communities.
Through this assessment, we aim to:

- Understand the diverse characteristics and vulnerabilities within our communities
- Identify current and future risks to public safety, health, and wellbeing
- Identify current and future risks to the effective and efficient delivery of our service
- Inform our service priorities across people, emergency response, prevention, protection, resources and strategic planning

The outcome of our assessment reflects the challenges we face, informing our Community Risk Management Plan priorities over the next four years to ensure that we respond to these challenges effectively and efficiently. We intend to build on our approach to this assessment moving forward to ensure continuous improvement in our identification and management of risk. Our intentions for this methodology, and the review of it, are outlined in the Additional Information section.

Our Area

Cleveland is an area in the North East of England, home to urban centres, rural communities, coastal zones, and significant industrial assets. Cleveland Fire Brigade provides fire and rescue services to an area of approximately 597km^2, encompassing four local authority areas:

- Hartlepool
- Middlesbrough
- Redcar & Cleveland
- Stockton-on-Tees

As a service we protect...

579,287
people

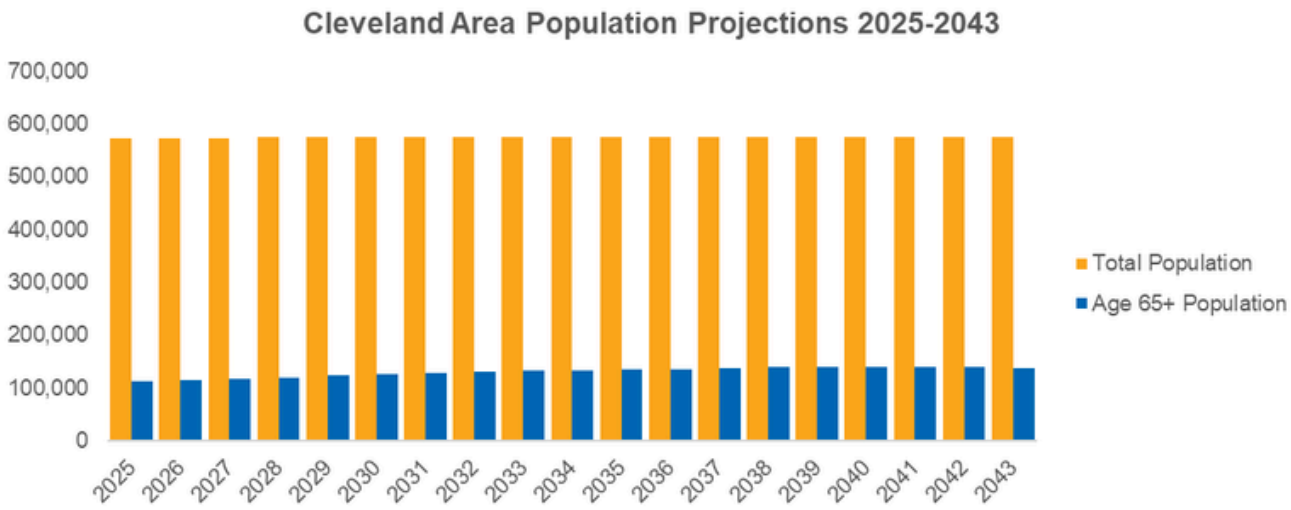
267,396
dwellings

16,338
industrial and commercial premises

Communities

Age and Population

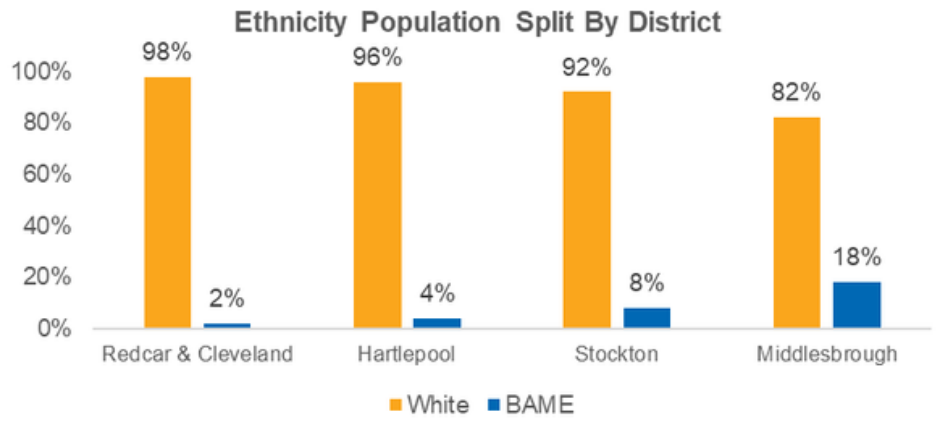
The demographics of Cleveland's population continue to shift. Around 19% of our population are over 65 which is closely comparable to 18% nationally. Cleveland closely reflects the age profile across England, with the proportion of lone pensioner households, 6% compared to 5% nationally. People who live alone, particularly the elderly, face increased risk of emergencies. Population projections suggest that by 2043 24% of Cleveland residents will be over 65. This trend will increase demand for social care, health care, and emergency support. Conversely, some areas of our region, such as central Middlesbrough, are projected to see modest growth in younger populations due to new housing developments and migration to the area[1].



Diversity

Cleveland is evenly split in terms of gender assigned at birth, with 51% female and 49% male, closely in line with national figures. 2% of adults in Cleveland identify as lesbian, gay or bisexual (LGB), which is slightly below the UK average of 3%. This varies between districts, with slightly higher rates of LGB individuals in Hartlepool and Middlesbrough (3%) compared to Redcar and Cleveland or Stockton (2%)[2].

94% of Cleveland's total population identify as White, compared to the national average of 81%. The remaining 6% identify as belonging to an ethnic minority group, lower than the national average of 19%. Some areas of Cleveland are more diverse than others, with pockets of greater diversity in Middlesbrough (18%) and Stockton (8%)[3].



With the exception of English, the predominant spoken language varies by local authority area[4]:

- **Hartlepool** – Polish (0.5%)
- **Middlesbrough** – Arabic (0.8%)
- **Redcar** – Arabic (0.1%)
- **Stockton** – Urdu (0.3%)

The area is predominantly of the Christian religion (50%). In line with national trends, an increasing number identify as having no religion (39% compared with 37% nationally)[5].

Health, Vulnerability and Disability

A greater proportion of Cleveland residents report living with long-term illness or disability compared to the national average. People with disabilities or ill-health, are at increased risk in the event of an emergency. Through our prevention work we focus on identifying and supporting these individuals to ensure they are safe from fire risks in their home. 21% of Cleveland residents report their activities are limited in some way by a physical or mental disability, compared to 17% nationally[6]. Our service area reports a higher than the national average rate across all four of our district of usual residents in bad or very bad health of all English fire authorities[7]. Prevalence of ill-health concerns varies by district and includes excess weight, smoking and limited physical activity, in some areas worse than the average rate for England. Life expectancy across the county is lower than the England average.

Cleveland has a greater proportion of individuals entitled to Disability Living Allowance (2.5%) compared to the national average (2.1%)[8] and a higher proportion of 18 to 64 year-olds receive long term support in residential care or in the community[9].

Education and Employment

Cleveland faces notable challenges in education and employment. 22% of residents in the Cleveland area have no formal qualifications, significantly higher than the national average of 18%[10]. However, Cleveland reports a greater rate of learners starting apprenticeships and subsequently achieving their apprenticeship than any other Fire Authority area in the country[11] and 14% of pupils achieve a standard pass (Grade 4 or above) in GCSE examinations, compared to the national average of 13%[12]. Employment levels stand at 72%, slightly lower than the national average of 75%. These disparities contribute to lower levels of income, reduced opportunities for economic mobility and increased reliance on services.

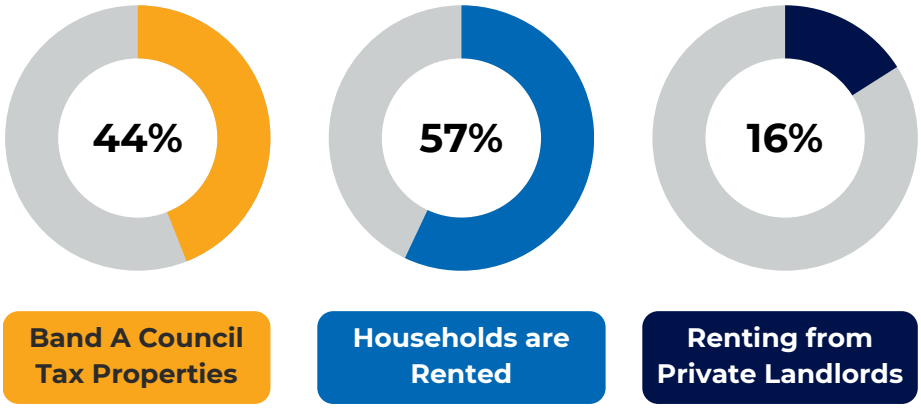
Crime

Cleveland Police report the highest crime rate per 1,000 population of any force in England and Wales, at a rate of 124.6 compared to the national figure of 86.8[13]. Police figures for criminal damage and arson show Cleveland recording the highest with a rate of 15.8 per 1000 population (closely followed by Durham with a rate of 14.1 per 1000 population). This equates to over double the national rate for this category of offence.

Cleveland reports a significantly higher rate of deliberate fires, with 700 deliberate fires per 100,000 population compared to a national rate of 108. This poses a significant challenge to our service, taking up operational resources and requiring provision of targeted services.

Housing

Cleveland has one of the highest proportions of Band A council tax properties in England (44% compared to 23% nationally), reflecting the prevalence of low-value housing stock. According to the 2021 Census, around 57% of households in in the Cleveland area are rented, significantly above the national average of 38%[14]. Owner-occupancy rates are on a par with national levels (80% compared to 81% nationally). Overall renting from private landlords in the Cleveland area has increased from 12.8% of dwellings in 2011 to 16% of dwellings in 2021. Cleveland has a relatively low rate of Houses in Multiple Occupation, with an estimated 0.6% compared to an average of 1.4% across all English fire authorities (equating to an estimated 1,665 properties)[15].



Based upon The Decent Homes Standard's criteria for housing, Cleveland performs better than the national average in relation to percentage of non-decent homes, homes with category one hazards and homes with damp. At the last Census (2011), 3.2% of houses in Cleveland were overcrowded, with one or more rooms too few. This compares to 6.4% of houses in England overall. A household is said to be fuel poor if it needs to spend more than 10 per cent of its income on fuel to maintain an adequate standard of warmth. 10.2% of households in Cleveland are in fuel poverty. This proportion has fallen since the previous year.

Deprivation

People in deprived areas are more likely to be affected by fires in their homes, have underlying health conditions, and experience longer recovery times[16]. Socioeconomic deprivation also correlates with higher rates of arson and anti-social behaviour[17].

41%

of Cleveland's Lower Super Output Areas (LSOAs) are among the 20% most deprived areas in England

79%

of fire incidents occurring in Cleveland between January 2020 and December 2024 were located in these LSOA's

Within the LSOAs in Cleveland which are amongst the 20% most deprived areas in England, the service reports the following occurences over a four year period:

- **79%** of Cleveland's overall fire incidents
- **68%** of all dwelling fires attended
- **87%** of all deliberate fires in our area

Our incident data shows a link between areas of deprivation, as measured by national deprivation standards, and the demand on our service.

Cleveland has a lower-than-average cost of living compared to many other parts of the UK, with average weekly household expenditure in the North East approximately £511 compared to the UK average of £587 [18].

Whilst housing costs are generally lower, affordability does not necessarily equate to financial stability or safety. As of late 2023, the economic inactivity rate in the North East stands at approximately 23.2%, higher than the UK average of 21.5%[19]. This includes individuals who are long-term sick, disabled, or caring for family members. 6% of residents in Cleveland provide more than 20 hours unpaid care a week, compared to 4.4.% nationally[20].

In Cleveland specifically, Universal Credit claimant rates are also significantly above the national average, with areas like Middlesbrough and Hartlepool among the highest in the country [21]. The proportion of individuals claiming Pension Credit aged 65+ is higher than England overall (14.4% compared to 13.5%)[22]. The dependency on welfare support highlights a vulnerability to economic shocks and health crises, which in turn can elevate fire and safety risks.

Infrastructure

Transport Infrastructure

Cleveland's key transport infrastructure includes road, rail and air. Investment in the A19 and A66 corridors, improvements at Teesport, and rail enhancements to support freight and passenger capacity all contribute to increased traffic volume and complexity. While beneficial for economic growth, they increase likelihood of incidents on our roads, pose access constraints during construction phases, and demand updated multi-agency response planning[23]. Tees Valley Combined Authority have committed to a vision for transport in the area. The vision sets out to make Tees Valley a leader in using digital technology to improve road network performance. An allocation of £60million was agreed by Cabinet in January 2024 to upgrade existing technology and roll out new cutting-edge tech. The project will work alongside the Digital Strategy to support Tees Valley's aim to become the UK's first "smart region" by 2032. Whilst this opens up opportunities for the area, there is inevitably risk associated with new infrastructure developments and technological developments.

Air

Teesside International Airport is one of the country's smallest, dealing with just under 227,000 passengers during 2024. A 10-year plan is in place to increase the Airport's operations, and the airport now operates year-round flights. The plan encompasses the securing of investments and creating jobs. Alongside the new logistics and manufacturing park on the airport's southside, the airport will be a base for European Aircraft maintenance, which will involve carrying out work on a wide variety of commercial aircraft types. Teesside International is also increasing use of net zero technologies, including the piloting of hydrogen vehicles and adoption of sustainable aviation fuel[24].

Road

The area has a mixture of Class 'A' and Class 'B' and other roads with no motorways covering 2,518 km. The A19 and A66 are key commuter routes in the area, with a large number of vehicles travelling through these road networks on a daily basis. Cleveland rank above the national average for Road Traffic Collisions per 100,000 population and incidents attended by the service on our roads increased 8% on the previous year.

Freight

Teesside is home to the UK's sixth largest port and England's largest export port by tonnage, the UK's largest freeport and a range of industries and major renewable energy projects that depend on the maritime sector. A new regional partnership aims to grow Teesside's maritime sector. The private sector-led initiative is dedicated to accelerating economic growth in Teesside by harnessing the region's maritime sector and championing efforts to become a hub for the UK's Net Zero ambitions. As with other technological developments, this may pose new risks for the service[25].

Infrastructure Growth

Cleveland is undergoing notable infrastructure growth, including the expansion of housing developments, new industrial investments, and upgrades to transport networks. These changes bring long-term economic opportunities but also introduce emerging fire and rescue risks that require proactive planning.

Cleveland reports a relatively low number of new dwellings completed per year, with 2,150 new dwellings ready for occupation at last reporting (2023/24). This figure has increased over the past five years and is now comparable with development prior to the Covid pandemic. As a percentage of total dwellings this equates to 0.8%, which is higher than the average of 0.7% for all English Fire Authority areas[26].

Industrial, Commercial & Built Environment

Freeport

Tees Valley was announced as one of the first areas to get Freeport status under the new Government policy to create Freeports across the country. Covering 4,500 acres (equivalent of 2,550 football pitches), the Teesside Freeport is the largest in the UK and covers sites across the region, including Tees works, Wilton International, Teesside International Airport, the Port of Middlesbrough, the Port of Hartlepool, Liberty Steel, Able Seaton Port, Wilton Engineering, 2M Group and LV Shipping.

The Teesside Freeport initiative, including expansion around Teesworks and Wilton International, introduces large-scale industrial premises, energy facilities, and logistics hubs. These bring increased HGV traffic, hazardous material storage, and complex risk.

Tall Buildings

68 residential buildings within the Cleveland area are over 11 metres in height, of that number 28 exceed 18 metres. These buildings are primarily distributed across Middlesbrough and Stockton-on-Tees [27]. Post-Grenfell Tower guidance has led to significant national and local reassessment of tall building fire safety, including external wall systems, cladding materials, and internal compartmentation. Cleveland Fire Brigade maintains a dynamic register of high-rise buildings, supported by a programme of regular fire safety audits, operational familiarisation visits, training exercises and partnership working.

Heritage

Heritage assets in Cleveland include scheduled monuments, listed buildings, and conservation areas. Key examples include the Grade I-listed Gisborough Priory, Captain Cook Birthplace Museum, and the historic Hartlepool Headland. These sites present unique challenges in terms of fire protection, access, and emergency response due to their age, construction, and preservation requirements. The National Heritage List for England identifies more than 1,200 listed sites across Cleveland's four boroughs[28].

Industry

With 26 COMAH (Control of Major Accident Hazards) sites, battery energy storage, and biomass facilities, industrial risk in Cleveland is among the highest in the UK. These sites require significant response capability, pre-planning, and inter-agency coordination. Hartlepool Power Station is located within the Brigade's area, as well as two Battery Energy Storage sites (BESS). Following the rise in renewable energy production, Cleveland is now home to five solar powered energy farms, five onshore and one offshore windfarm and five Biomass Power Stations [29].

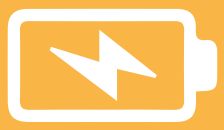
Environment and Society

Terrorism and Public Disorder

The national threat level remains "substantial," meaning an attack is likely. Risks include attacks on crowded places, critical infrastructure, transport hubs, and symbolic sites[30] . Fire and rescue services must be prepared for incidents involving explosives, firearms, incendiary devices, or chemical, biological, radiological and nuclear (CBRN) materials.

Civil unrest, such as riots or spontaneous public disorder, also poses operational risks. Previous events in the UK have demonstrated how these situations can place pressure on emergency response, diverting resources, and increasing risks of arson and attacks on staff. Cleveland's higher-than-average levels of deprivation and unemployment may exacerbate tensions in times of economic or political stress.

New Technology



Lithium-Ion Batteries

Emergence of new technology has the potential to expose our service, and the communities we serve, to new risks.
The rising prevalence of lithium-ion batteries in electric vehicles (EVs), e-scooters, and domestic energy storage systems has resulted in a national increase in related fire incidents. Fires caused by batteries can be challenging to extinguish and pose unique operational risks[31].

Cyber

Digital and cyber vulnerabilities pose an increasing risk to services across a range of sectors. Cyber attacks on critical infrastructure could hinder emergency response and public safety[32]. Additionally, the fast pace of technological evolution requires expertise and skills to ensure the organisations digital infrastructure is fit for purpose and does not expose the service to further risk.

New Construction Methods

Emerging construction techniques, such as modular building systems, timber-frame housing, and lightweight composite cladding, pose evolving fire and structural risks[33] . If new materials and designs are not regulated to the highest fire safety standards there may be an increased risk of rapid structural failure under fire conditions[34]. Sufficient fire prevention measures are essential during the design and build phases of new structures.

Climate Change

Cleveland faces an evolving range of climate-related risks, including increased frequency and severity of flooding, heatwaves, and wildfires.

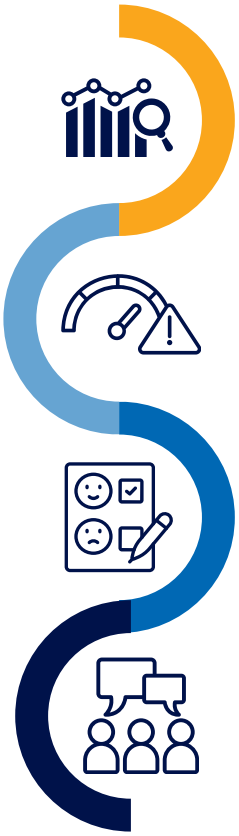
The North East is expected to experience warmer, wetter winters and hotter, drier summers by 2050[35], with an increased likelihood of extreme weather events. This trend is already evident in more frequent localised flash flooding, prolonged heat events, and greater seasonal variability. Low-lying coastal areas in Redcar and Cleveland, as well as floodplains along the River Tees, are particularly vulnerable. Increased surface water flooding from intense rainfall events can impact urban drainage systems and critical infrastructure, while hotter summers raise the risk of moorland and grassland fires in rural areas in areas such as Eston Hills.

Climate Change poses an emerging risk to the service, with the nature and scale of flooding and wildfire incidents the service attends changing over time. This ultimately stands to increase demand on our service and potentially impact on firefighter and public safety.

Our Risks

Methodology

Our methodology for this assessment incorporates the following strands of intelligence:



Analysis of Incident and Societal Data

Using historical incident and response data over a specific time frame, socio-demographic statistics, and property data.

Risk Modelling

Applying GIS-based tools to map risk across geographic areas and independent, third-party modelling of our incidents and use of resources.

Stakeholder Consultation

Engaging with the public, partner agencies and local businesses through a public survey to gather perceived satisfaction and public concerns.

Professional Judgement

Drawing on internal experience and expertise to understand reasonable worst-case scenarios and our organisational position to mitigate them, as well as staff consultation through a survey and a range of focus groups

Our approach enables to us to assess current and emerging risks and ensure our CRMP is grounded in evidence. Our assessment is influenced by risks at the national, local and organisational levels through the following mechanisms:

National Risk	Local Risk	Organisational Risk
Assessment of all risk takes cognisance of the assessments contained within the UK National Risk Register.	Local development, infrastructure and multi-agency working, including the Cleveland National Resilience Forum (and associated risk register).	Corporate Risk Registers, Directorate Risks and Operational Risk Assessments

Our assessment provides a foundation for our CRMP (2026-2030), aligned to the CRMP Strategic Framework published by the NFCC.

Service Demand

Analysis of our service demand shows that overall our demand has increased in recent years, particularly around operational risks such as deliberate fires, road traffic collisions and suicides. This increased demand requires continual strategic decision making to ensure we effectively resource to these risks. Conversely, water rescue incidents and fires at key locations such as Care Homes, High Rise buildings and Waste Management Facilities have slowly decreased.

	CFB Rate of Incidents (per Year)											
Incident Type	20/21	21/22	22/23	23/24	24/25	3-Year Average	5-Year Average	% Change over 3-Years	% Change over 5-Years	CFB Trend Direction	National Rate (24/25)	29/30 CFB Forecast
Number of 999 Calls	1943.9	2464.7	2877.7	2121.7	2323.2	**2440.9**	**2346.3**	-19.3%	+19.5%		1960.5	2295.3
All Fires	660.1	909.3	986.0	673.8	825.8	**828.5**	**811.0**	-16.2%	+25.1%		249.5	776.0
Primary Fires - Deliberate	68.3	81.6	92.9	75.8	90.1	**86.3**	**81.7**	-3.0%	+32.0%		27.1	84.1
Deliberate Vehicle Fires	36.3	49.0	53.2	45.7	53.5	**50.8**	**47.5**	+0.6%	+47.3%	↑	12.1	50.0
Primary Fires - Accidental Dwelling	6.5	7.3	8.8	7.7	6.8	**7.8**	**7.4**	-22.2%	+5%		9.9	7.4
Care Home Fires (All Causes)	0.4	0.2	0.5	0.1	0.2	**0.2**	**0.3**	-62.5%	-57.1%	↓	0.1	0.2
Prison Fires (All Causes)	0.1	0.2	0.5	1.1	2.5	**1.4**	**0.9**	+366.7%	+2000%	↑	0.8	1.6
Industrial and Commercial Fires	13.0	13.2	13.8	11.2	13.6	**12.9**	**13.0**	-1.3%	+5.0%		Not Available	12.6
Non-Domestic Fires	30.2	30.7	31.4	26.6	34.2	**30.7**	**30.6**	+8.8%	+13.2%	↑	Not Available	30.5
High Rise Building Fires	0.7	1.2	1.0	0.7	0.2	**0.6**	**0.8**	-83.3%	-75.4%	↓	1.2	0.5
COMAH Site Fires	0.2	0.2	0.2	0.2	0.2	**0.2**	**0.2**	+/-0.0%	+/-0.0%	⟷	Not Available	0.2
Lithium Ion Battery Fires	0.0	0.4	0.9	1.0	1.7	**1.2**	**0.8**	+100.0%	+100.0%	↑	1.6	1.3
Secondary Fires (All Causes)	529.7	757.0	812.9	532.7	669.6	**671.7**	**660.4**	-17.6%	+26.4%		138.0	624.7
Wildfires (Hot Weather)	1.4	0.5	3.1	1.6	0.2	**1.6**	**1.4**	-94.4%	-87.7%	↓	0.1	1.1
Waste Management Fire	1.8	1.4	0.9	1.0	0.3	**0.7**	**1.1**	-60.0%	-80.3%	↓	Not Available	0.7

Table Key ↑ Increasing ↓ Decreasing Unstable Trend ⟷ Unchanging Trend

	CFB Rate of Incidents (per Year)											
Incident Type	20/21	21/22	22/23	23/24	24/25	3-Year Average	5-Year Average	% Change over 3-Years	% Change over 5-Years	CFB Trend Direction	National Rate (24/25)	29/30 CFB Forecast
False Alarms (All Causes)	495.6	533.7	568.1	544.8	555.2	**556.0**	**539.5**	-2.3%	+12.0%		455.7	552.0
False Alarm Dwelling (Apparatus)	24.2	23.3	26.0	29.6	27.5	**27.7**	**26.1**	+5.8%	+13.6	↑	49.8	28.3
False Alarm Dwelling (Good Intent)	25.5	25.4	29.3	31.9	32.2	**31.1**	**28.9**	+10.0%	+26.5%	↑	11.7	31.7
False Alarm Non-Domestic (Apparatus)	71.3	74.8	73.7	88.7	80.8	**81.1**	**77.9**	+9.6%	+13.4%	↑	105.9	83.5
False Alarm Non-Domestic (Good Intent)	11.6	20.7	20.4	22.8	27.8	**23.6**	**20.6**	+36.4%	+139.9%	↑	13.8	24.7
False Alarm Malicious	15.4	21.9	25.9	23.5	17.8	**22.4**	**20.9**	-31.3%	+15.1%		10.0	21.2
Special Service (All Types)	201.5	288.5	263.8	267.9	275.9	**269.2**	**259.5**	+4.6%	+36.9%	↑	369.9	271.0
Flooding (All Types)	16.5	9.7	10.9	15.5	13.5	**13.3**	**13.2**	+23.8%	-18.4%		29.1	14.1
Road Traffic Collisions	41.8	63.4	58.5	63.0	67.8	**63.1**	**58.9**	+15.9%	+62.4%	↑	56.2	64.7
Assisting Other Agencies	18.3	21.8	21.2	19.2	19.7	**20.0**	**20.0**	-7.3%	+7.8%		53.2	19.6
Water Rescue	1.2	1.4	0.9	1.0	0.7	**0.9**	**1.0**	-20.0%	-43.8%	↓	3.4	0.9
Bariatric Rescue	4.4	6.7	9.5	6.2	6.7	**7.5**	**6.7**	-29.1%	+53.4%		4.0	6.8
Suicides and Attempts	5.4	10.9	14.3	16.2	20.0	**16.9**	**13.4**	+39.8%	+268.0%	↑	5.6	17.7
Medical Incident First Responder /Coresponder	5.8	9.5	8.1	9.3	12.8	**10.1**	**9.1**	+57.4%	+120.6%	↑	23.8	10.73
Effecting Entry or Exit	18.6	27.2	28.7	23.3	24.3	**25.4**	**24.4**	-15.1%	+30.8%		69.6	24.3
Hazardous Materials Incident	3.2	3.5	4.1	1.9	2.9	**3.0**	**3.1**	-29.2%	-7.1%	↓	7.5	2.6
Removal of Objects from People	17.6	19.0	16.4	15.4	17.6	**16.5**	**17.2**	+7.4%	+0.3%	↑	11.5	16.5
Spills and Leaks	14.9	20.9	19.9	25.2	21.8	**22.3**	**20.5**	+9.6%	+45.8%	↑	5.5	23.1

Table Key ↑ Increasing ↓ Decreasing Unstable Trend ⟺ Unchanging Trend

Service Response

Availability and Mobilisations

Analysis of our service response shows high levels of availability, particularly among first appliances in our wholetime fleet. Availability in our wholetime fleet has remained roughly consistent over the past three years. Availability data highlights a risk regarding decreasing On-Call appliance availability in some areas, this is particularly prevalent in the East Cleveland area.

Station - Appliance Call Sign	% Availability 2024/25	% Availability Change over 3-Years	Total Number of Mobilisations (All Types)	Number of Life Risk Incidents (Building) Mobilisations	Rate of Life Risk Incident Mobilisations (Buildings) Per Day
Middlesbrough - A1	99.53	0%	1056	489	1.3
Middlesbrough - A3	90.54	-1%	1512	529	1.4
Stockton - B1	99.28	0%	1043	446	1.2
Stockton - B3	84.38	9%	1281	441	1.2
Stockton - B4 (On-Call)	32.83	-42%	146	62	0.2
Grangetown - C1	99.54	0%	953	433	1.2
Grangetown - C3	85.28	4%	1214	426	1.2
Redcar - D1	99.42	0%	971	300	0.8
Redcar - D3 (On-Call)	24.96	94%	101	35	0.1
Thornaby - E1	99.53	0%	643	297	0.8
Thornaby - E3	88.49	-2%	885	371	1.0
Billingham - G1	98.15	-1%	574	256	0.7
Coulby Newham - H1	99.10	-1%	804	249	0.7
Hartlepool - I1	99.68	0%	952	409	1.1
Hartlepool - I3	88.07	-7%	1402	429	1.2
Headland - J3 (On-Call)	14.16	-20%	28	13	0.0
Yarm - K3 (On-Call)	45.19	66%	56	19	0.1
Guisborough - L3 (On-Call)	53.08	-18%	182	73	0.2
Saltburn - M1 (On-Call)	59.56	-35%	283	175	0.5
Skelton - N1 (On-Call)	55.63	-26%	276	122	0.3
Loftus - O3 (On-Call)	73.19	-23%	205	58	0.2

Where availability of appliances decreases, the service resource to risk by detaching staff and/or appliances from another station with improved coverage, to ensure continuous emergency response across Cleveland.

The service maintains the following response standards:

Call Handling

- **Answer 999 calls** within **7 seconds**
- **Dispatch a Fire Appliance** to emergency incidents **within 1 minute 40 seconds** of answering the call (or within 2 minutes on 98% of calls)

Mobilising

- **Wholetime crews mobilise within 2 minutes** of instruction on 100% of occasions
- **On-Call crews mobilise within 5 minutes** of instruction on 100% of occasions

Building Fires (Dwellings and Other Buildings)

- **First Fire Appliance arrives at Building Fires** in an average of **7 minutes** (from time mobilised)
- **Second Fire Appliance arrives at Building Fires** in an average of **10 minutes** (from time mobilised)
- **90% of Building Fires** are **attended within 10 minutes** (from time mobilised)

Road Traffic Collisions

- **First Fire Appliances arrives to a Road Traffic Collision** in an average of **8 minutes** (from time mobilised)

Industrial Fires

- **First appliance on the scene** within an average of **7 minutes**
- **Full reasonable worst-case planning scenario resource** requirement being on scene within an average time of **20 minutes**
- Initial PDA attendance to **Life Risk Incident on High Hazard Sites** within an average time of **16 minutes**

National Resilience

- **Prepared to mobilise** the appropriate resources within **60 minutes**

Our current response standards are based on a survivability methodology used to identify the optimum time between the receipt of the first call to first response arrival. Data is based on live fire tests, conducted in actual dwellings, to assess the tenability and survivability of people in various fire situations.

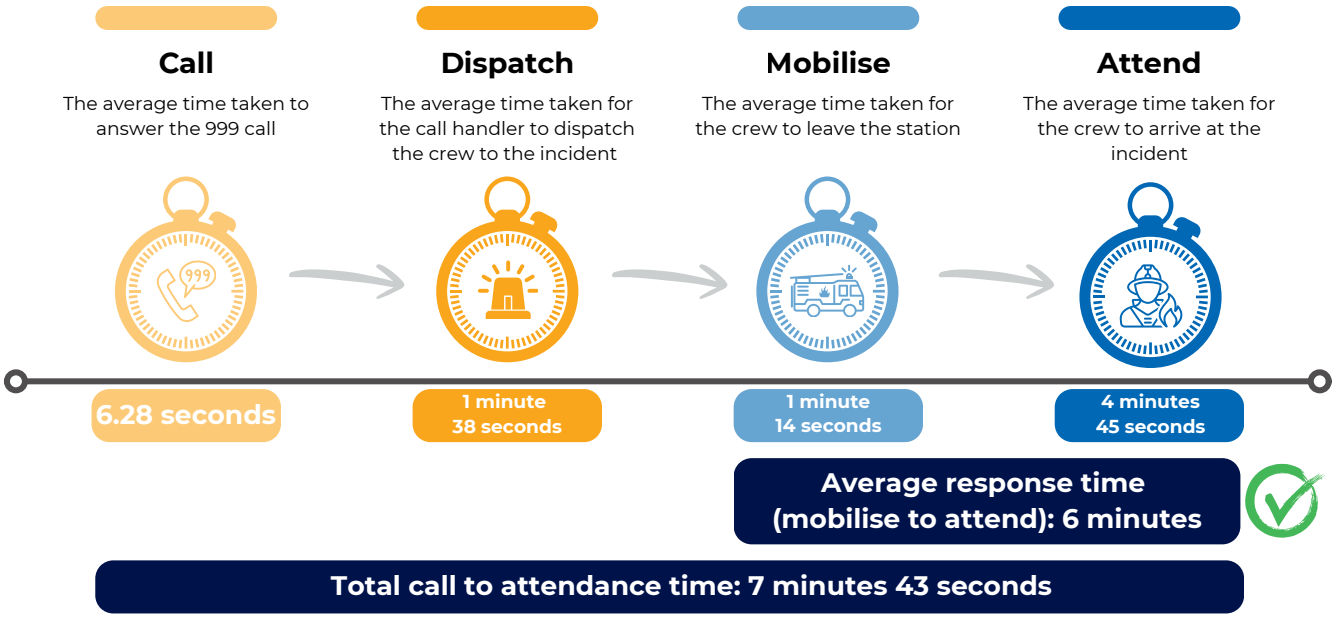
Our On-Call staff are not always at the station when a call is received but are required to live within five minutes of the On-Call station. This means On-Call appliances require a longer mobilisation time to allow for staff to turn-in to the station before the appliance is mobilised. This is reflected in the increased target time to mobilise for On-Call (five minutes compared to two minutes for wholetime appliances).

Independent Review of Fire Service Cover

In addition to our internal work to monitor performance against our response standards, prior to the development of this document and the services CRMP, we commissioned an external, independent fire cover review. This review involved analysis of our incident data against our response standards to verify our performance and utilisation of resources. Following internal scrutiny of the independent report, the following learning was fed into the strategic assessment of risk and wider CRMP process:

- On-Call availability overall has decreased
- On-Call configuration and availability in East Cleveland impacts upon performance against response standards in the area

Response Times: Building Fires

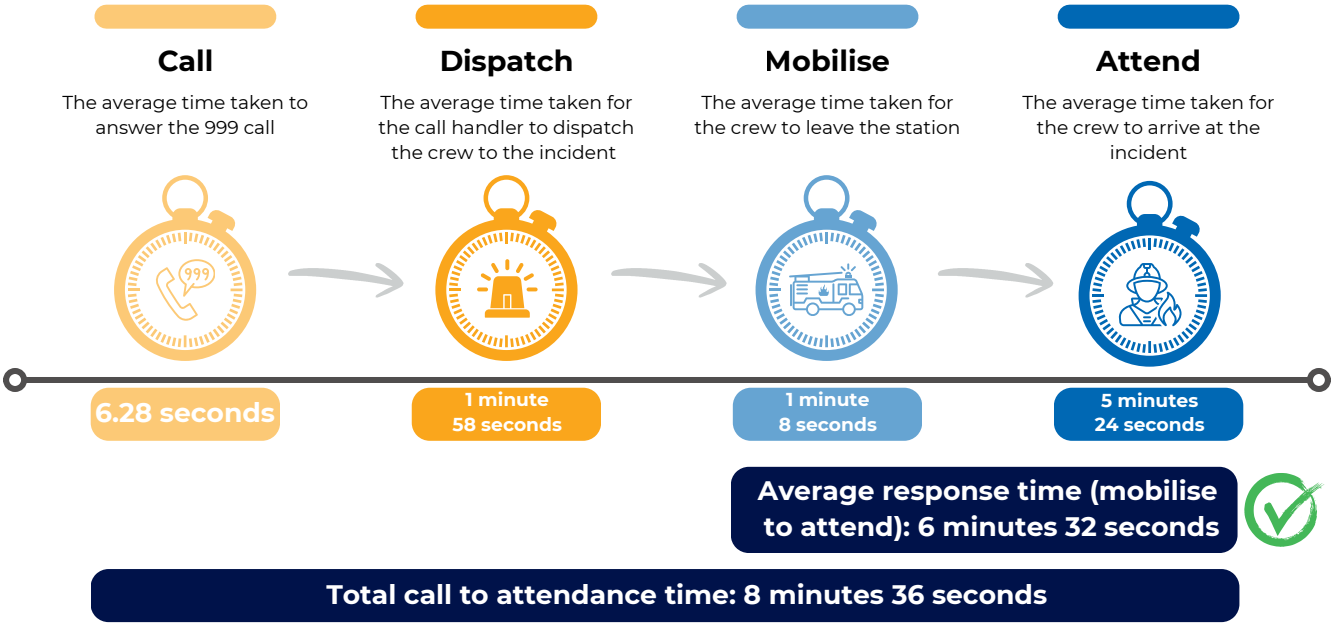


	Response Time to Building Fires by District					
District	**Call Answer Within (Average)**	**Appliance Dispatched Within (Average)**	**Appliance Mobilised Within (Average)**	**Incident Attendance Within (Average)**	**Time from Mobilisation to Attendance**	**Time from Call to Attendance (Average)**
Hartlepool	6.28 seconds	1 minute 39 seconds	59 seconds	4 minutes 32 seconds	**5 minutes 32 seconds**	**7 minutes 16 seconds**
Middlesbrough	6.28 seconds	1 minute 33 seconds	54 seconds	4 minutes 45 seconds	**5 minutes 38 seconds**	**7 minutes 18 seconds**
Redcar and Cleveland	6.28 seconds	1 minute 39 seconds	2 minutes	4 minutes 21 seconds	**6 minutes 21 seconds**	**8 minutes 6 seconds**
Stockton on Tees	6.28 seconds	1 minute 27 seconds	1 minute 5 seconds	5 minutes 17 seconds	**6 minutes 22 seconds**	**7 minutes 55 seconds**

	Response Times to Building Fires by Appliance Type					
Appliance Type	**Call Answer Within (Average)**	**Appliance Dispatched Within (Average)**	**Appliance Mobilised Within (Average)**	**Incident Attendance Within (Average)**	**Time from Mobilisation to Attendance**	**Time from Call to Attendance (Average)**
Wholetime Appliances	6.28 seconds	1 minute 35 seconds	56 seconds	4 minutes 52 seconds	**5 minutes 49 seconds**	**7 minutes 29 seconds**
On-Call Appliances	6.28 seconds	1 minute 27 seconds	4 minutes 36 seconds	3 minutes 29 seconds	**8 minutes 5 seconds**	**9 minutes 38 seconds**

Data Note - Call response time is provided by the services telecommunications provider and is not able to be split by district.

Response Times: Road Traffic Collisions



	Response Time to Road Traffic Collisions by District					
District	**Call Answer Within (Average)**	**Appliance Dispatched Within (Average)**	**Appliance Mobilised Within (Average)**	**Incident Attendance Within (Average)**	**Time from Mobilisation to Attendance**	**Time from Call to Attendance (Average)**
Hartlepool	6.28 seconds	1 minute 41 seconds	58 seconds	5 minutes 30 seconds	**6 minutes 27 seconds**	**8 minutes 15 seconds**
Middlesbrough	6.28 seconds	1 minute 55 seconds	59 seconds	4 minutes 40 seconds	**5 minutes 39 seconds**	**7 minutes 40 seconds**
Redcar and Cleveland	6.28 seconds	1 minute 49 seconds	1 minute 48 seconds	6 minutes 13 seconds	**8 minutes**	**9 minutes 56 seconds**
Stockton on Tees	6.28 seconds	2 minutes 12 seconds	58 seconds	5 minutes 27 seconds	**6 minutes 25 seconds**	**8 minutes 43 seconds**

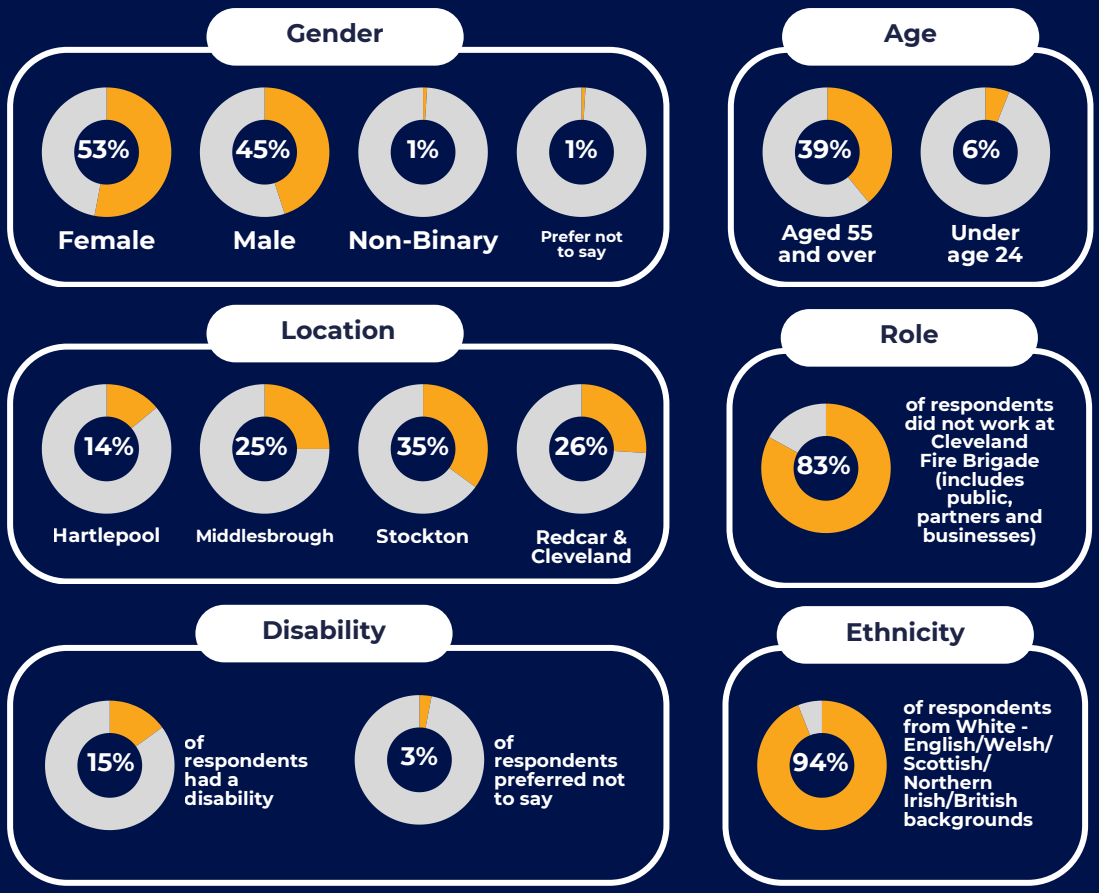
	Response Times to Road Traffic Collisions by Appliance Type					
Appliance Type	**Call Answer Within (Average)**	**Appliance Dispatched Within (Average)**	**Appliance Mobilised Within (Average)**	**Incident Attendance Within (Average)**	**Time from Mobilisation to Attendance**	**Time from Call to Attendance (Average)**
Wholetime Appliances	6.28 seconds	1 minute 55 seconds	56 seconds	5 minutes 27 seconds	**6 minutes 24 seconds**	**8 minutes 24 seconds**
On-Call Appliances	6.28 seconds	2 minutes 40 seconds	4 minutes 3 seconds	4 minutes 31 seconds	**8 minutes 33 seconds**	**11 minutes 20 seconds**

Data Note - Call response time is provided by the services telecommunications provider and is not able to be split by district.

Stakeholder Consultation

Consultation Survey

A public survey gathered feedback from the community, staff, partner agencies and local businesses over four weeks in June 2025. The survey gathered a total of 1125 responses which were utilised as a strand of intelligence to shape the development of proposed CRMP priorities for a further 12-week public consultation.

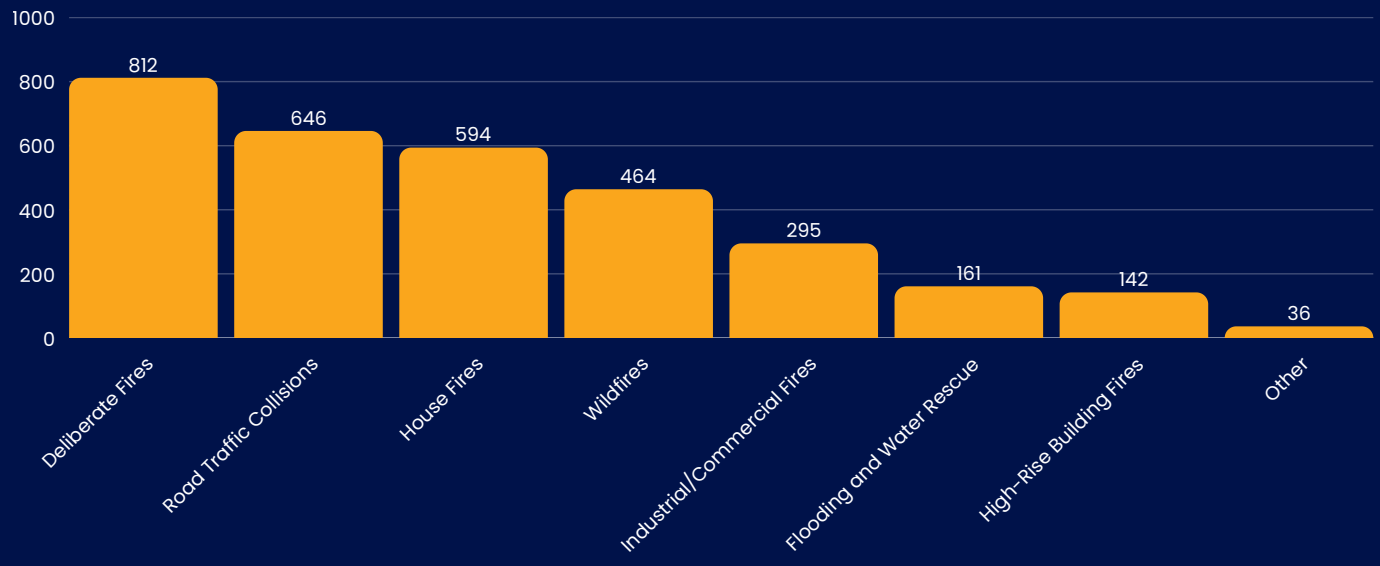


Analysis of survey evidence showed that:

- Respondents were predominantly satisfied with the service CFB provides to address community risk. 86% felt that CFB completely or mostly understands and addresses the concerns and needs in their local community.
- Perception of the service's emergency response was overwhelmingly positive, with 91% being confident or very confident that the service would act quickly and effectively in an emergency, and only 4% reporting that they, or someone they knew, had experienced a delay in emergency response.
- There is some concern about underfunding, ageing equipment, and staffing shortages, which are seen as threats to both firefighter safety and public service quality. There are fears that future cuts will further erode service effectiveness.

In regards to operational risks in local communities, most respondents felt that deliberate fires, road traffic collisions and house fires were their key concerns. Wildfires were identified as a concern by a significant number of respondents, highlighting this as an emerging risk for Cleveland's communities.

Respondent Perceptions of the Biggest Concerns in their Area



Staff Focus Groups

Staff focus groups were split into six core organisational themes:

- Emergency Response
- Prevention
- Protection
- People
- Resources
- Strategic Planning

Feedback from the focus groups highlighted a number of additional areas requiring a strategic focus as part of the services upcoming strategic plan. They included:

- Resourcing our emergency response resources to risk and improve availability of our On-Call appliances
- Identifying and addressing vulnerability through targeted preventative interventions
- Fulfilling our statutory duty to ensure safety across our built environment and delivering enforcement activity to protect the public
- Maintaining fit for purpose assets such as digital systems, fleet and estates
- Providing value for money and sufficient financial planning
- Fostering effective leadership, a positive workplace culture and staff wellbeing
- Ensuring staff have the training and development to support them to carry out their roles
- Committing to improving our approaches to governance, intelligence and service improvement

Full details of all proposed priorities are available in the CFB Community Risk Management (2026-2030) draft document.

Risk Assessment

Using our strategic risk assessment methodology, an exercise was completed in June 2025 to identify and score Cleveland Fire Brigade's current and emerging risks. Identification of risks followed a process of mapping alignment of specific operational risks with those identified by the Cleveland Community Risk Register, as coordinated by the Cleveland Local Resilience Forum. Additionally, the services existing risk registers, risks identified through staff through a range of topical focus groups, and concerns identified by the public in a consultation survey, were incorporated into the risk item list.

The methodology considered reasonable worst-case scenarios of the identified risks. Risk scenarios were then rated using available data and professional judgement to assess the impact if the event were to occur, the likelihood of the event occurring, and the services ability to mitigate the risk. Risks included in the assessment are intended to cover the main thematic operational and non-operational risks posed to the organisation and are not meant as an exhaustive list of all specific risks the service may be required to mitigate or respond to.

The assessment separated incident risks from other risks as assessment criteria for these categories differed, as a result scores for operational risks cannot be compared to those for non-operational risks. The calculation for the total risk matrix score was made up of the following factors:

((**Harm**)x(**Likelihood**)) x (**Organisational Position**) = **Risk Matrix Score**

Incident Risk Scoring Factors		
Harm Factors	**Likelihood Factors**	**Organisational Position Factors**
Physical harm to individuals Psychological harm to individuals Financial implications to individuals Community impact Public expectation/feeling Environmental harm	Frequency of activity Volume of activity Trend (Last 12 Months) Forecast (Next 12 Months)	Reputation & Politics Economic Cost (Resource Impact) Capacity Capability

Societal Risk Scoring Factors		
Harm Factors	**Likelihood Factors**	**Organisational Position Factors**
Effect on future demand, number and severity of incidents Effect on employees (morale/motivation) Community impact Public expectation/feeling Environmental harm	When the impact could arrive Volume of impact activity Trend (Last 12 Months) Forecast (Next 12 Months)	Reputation & Politics Economic Cost (Resource Impact) Capacity Capability

The methodology produced the following assessment of identified risk items.

Operational Risks Summary

Matrix ID	Operational Risks	Risk Matrix Score
I1	Large Industrial or COMAH Incident	126
I2	Chemical (Hazmat) Incidents	90
I3	Major Non-Fire Casualty Rescue	87
I4	Arson and Deliberate Fire Setting	82
I5	Terrorism	81
I6	Flooding	73
I7	High Rise Building Fire	65
I8	Care Home Fire	59
I9	Severe Air Pollution	49
I10	Wildfires	47
I11	Accidental Dwelling Fire	46
I12	Hot Weather (Incident Increases)	46
I13	Airport Terminal Fire	41
I14	Road Traffic Collisions	41
I15	Waste Management Facilities Fire	35
I16	Vehicle Fires	29
I17	Secondary Fires	27
I18	Lithium Ion Battery Fire	26
I19	Heritage Incident	24
I20	Cold Weather, Snow and Storms	18
I21	Drought	17
I22	Prison Fire	12
I23	Earthquake	9

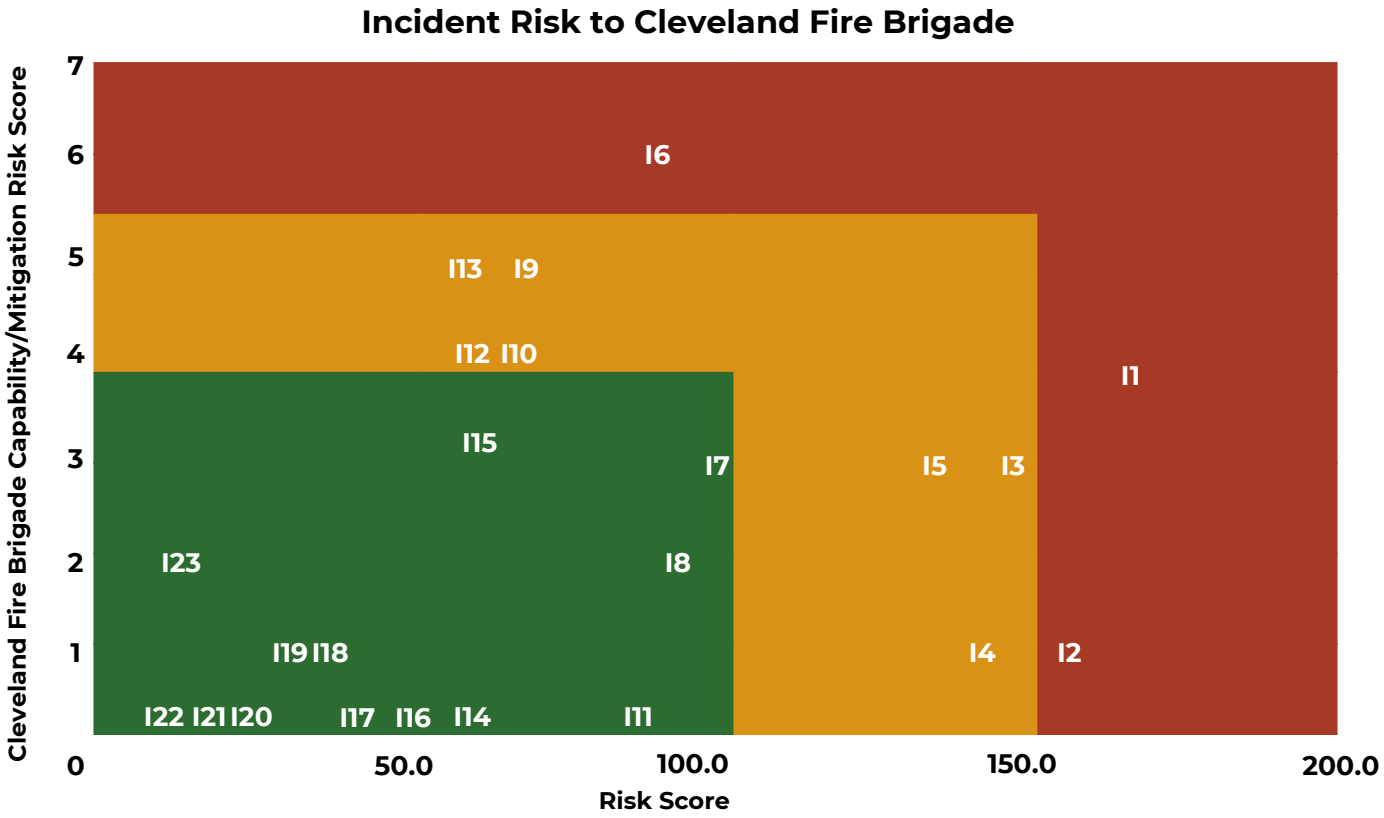
Risks have been ranked from highest to lowest Risk Matrix Score, however scores with a higher impact score may be reflected lower down the table if they services assessment has calculated that the likelihood of the risk occurring is low, and/or the ability of the service to mitigate the risk is high.

Based on the assessment and final risk matrix scores, the methodology highlighted three risks as having a combination of a high organisational resource implication and a high risk factor should the risk occur. These were:

- **Large Industrial or COMAH Incident**
- **Chemical (Hazmat) Incidents**
- **Flooding**

Six more risks from the identified risk items were highlighted within the Amber section of the matrix and the remaining ten risks were outside of these areas, suggesting the organisation feels the likelihood of the reasonable worst case scenario occurring, or that inability of the service to respond to this scenario, is unlikely. All risks within the matrix will continue to be assessed and mitigated to ensure continued delivery of an effective and efficient service that keeps the people of Cleveland safe.

The remainder of this section provides summaries of some of the areas of our operational risks based on our varied strands of intelligence.



Large Industrial or COMAH Incident

As outlined in the overview of our area, Cleveland is host to a significant industrial landscape, including 26 COMAH sites. This subsequently poses significant risks that the service must be prepared to respond to. Potential risks within this category include major fire incidents, complex rescue incidents and nuclear incidents or attacks at the Power Plant. Whilst our matrix scoring identified the impact of a potential incident was high, due to regulation and our work to support fire safety within the industrial sector, we believe the likelihood of a major incident to currently be low. Additionally, our internal planning and operational preparedness result in a better organisational preparedness than other some other risks.

Chemical (Hazmat) Incident

The impact of a chemical incident is potentially severe, placing this risk high on our assessment. Additionally, smaller scale chemical incidents, such as spills and leaks, have increased over the last 12 months. Whilst impact of the risk in a worst case scenario could be high, our assessment shows our service have the skills and capacity to respond to incidents of this type.

Flooding

Flooding can have a significant impact to communities, property and the environment, resulting in a fairly high impact score on our assessment. Should demand increase for emergency response to flooding incidents, the service may experience capacity issues. However, our assessment shows that the trend of flooding incidents is decreasing, suggesting that worst-case scenario flooding incidents have a low likelihood.

Arson & Deliberate Fire Setting

In our public consultation respondents identified this risk as their primary concern in their area. We recognise that arson and deliberate fire setting negatively impact our communities. The likelihood of arson and deliberate fire setting in Cleveland is high and occurs daily, placing us the highest of any area in the country, as reflected in our assessment scoring. Whilst a worst case-scenario for this category of incident can be severe for individuals who are personally impacted, overall the most likely scenario requiring our emergency response is that of smaller deliberate fires, usually using occurring on grassland and using refuse as fuel. Our service has significant experience in responding to these incidents and as a result we are equipped to mitigate this risk.

Hot Weather Incident Increases

Temporal analysis of our incident data shows that incidents often increase during periods of hot weather. This can be due to accidental causes, such as careless handling of fire (eg campfires) or deliberate causes, such as malicious fire-setting in dry conditions resulting in fire spread. Risk on our assessment is calculated as low due to these incidents usually having a smaller impact on individuals and communities than severe fire incidents, however our service may experience capacity issues to respond to significant increases in incidents. Incident data in this document relates to April 2024 to March 2025. Since then the service has experienced a significant increase in incidents, likely linked to hot weather conditions. This may impact future assessments of the likelihood of this risk.

Accidental Dwelling Fires

Respondents in our public consultation identified house fires as their second highest concern. Accidental fires in the home can have a severe impact to those personally involved, potentially resulting in physical, psychological and financial harm. These incidents occur at a lower rate in Cleveland compared to the national average and our assessment shows we have the ability to respond. Incident data in this document relates to April 2024 to March 2025. Since then the service has experienced a significant increase in accidental dwelling fires which may impact future assessments of the likelihood of this risk.

Road Traffic Collisions

Respondents in our public consultation identified incidents on Cleveland's roads as their second highest concern. Whilst incidents on our roads occur frequently, and can have a severe impact for individuals, community impact is limited and our assessment identifies we currently have the ability to respond effectively.

Societal Risks Summary

Matrix ID	Societal Risks	Risk Matrix Score
S1	Public Perception & Organisational Reputation	134
S2	Staff Sickness	93
S3	Recruitment and Retention	57
S4	Deprivation	45
S5	Mental Health Issues	42
S6	Population Changes	39
S7	Funding Pressures	39
S8	Staff Skills	38
S9	Cyber Attack - CFB	34
S10	Infrastructure or System Failure - CFB	34
S11	A workforce not aligned with the diversity of the population	30
S12	Public Disorder, Protest and Mass Gatherings	29
S13	Health Pandemic	29
S14	On-Call Availability	29
S15	Infrastructure or System Failure - Regional or Local	29
S16	Infrastructure or System Failure - National	29
S17	Industrial Action - Firefighters	28
S18	Crime Rate	27
S19	Cyber Attack - Other	26
S20	Use of Intelligence to Inform Organisational Understanding of Risk & Service Delivery	22
S21	Mobility Issues & Life Limiting Conditions	22
S22	Supply Chain Disruption	20
S23	Unemployment (Economic Inactivity)	19
S24	People Living Alone	16
S25	Fraud & Corruption	16
S26	Governance of Processes & Organisational Development/Improvement	16
S27	Fast Paced Technology Change	15
S28	Alcohol & Drug Misuse	13
S29	Industrial Action - Other Sectors	5
S30	Changes in Smoking Habits	4

Risks have been ranked from highest to lowest total Risk Matrix Score, however scores with a higher impact score may be reflected lower down the table if they services assessment has calculated that the likelihood of the risk occurring is low, and/or the ability of the service to mitigate the risk is high.

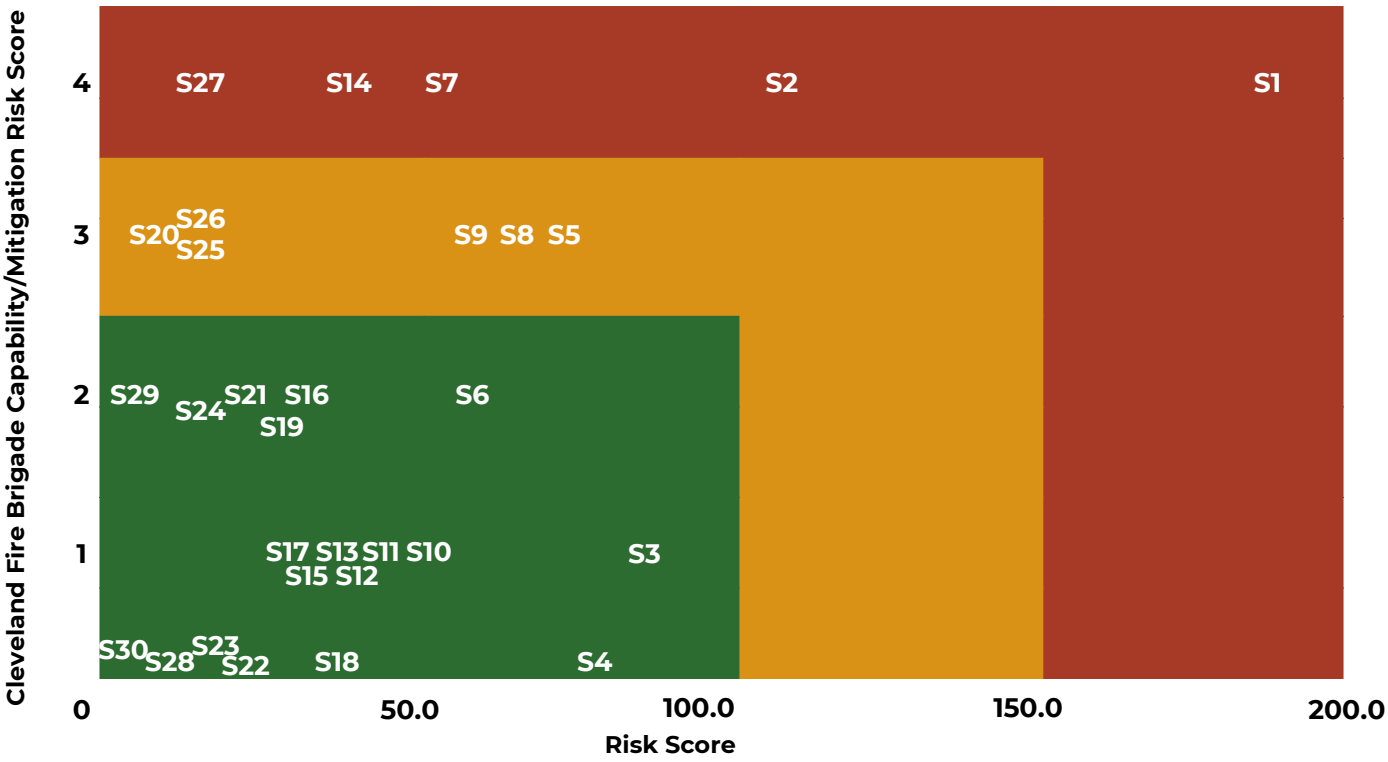
Based on the assessment and final risk matrix scores, the methodology highlighted five risks as having a combination of a high organisational resource implication and a high risk factor should the risk occur.
These were:

- **Public Perception & Organisational Reputation**
- **Staff Sickness**
- **Funding Pressures**
- **On-Call Availability**
- **Fast Paced Technology Change**

Six more risks from the identified risk items were highlighted within the Amber section of the matrix and the remaining nineteen risks were outside of these areas, suggesting the organisation feels the likelihood of the reasonable worst case scenario occurring, or that inability of the service to respond to this scenario, is unlikely. All risks within the matrix will continue to be assessed and mitigated to ensure continued delivery of an effective and efficient service that keeps the people of Cleveland safe.

The remainder of this section provides summaries of some of the areas of our societal risks based on our varied strands of intelligence.

Societal Risk to Cleveland Fire Brigade



Public Perception & Organisational Reputation

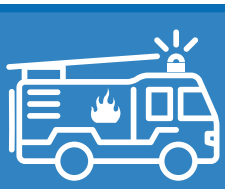
Loss of public confidence in our service poses a significant risk which would impact the service in a number of ways including our ability to deliver prevention and protection work in the community and to recruit and retain staff. An event, or succession of events, that impact public perception of our service are likely to attract media attention. scrutiny from governing bodies and put partnership and funding opportunities at risk. Our matrix scoring in this area reflects the severity of this risk and the widespread impact it may have on our communities, staff and operations.

Staff Sickness

Staff sickness has remained at a high level over recent years and therefore the likelihood is currently assessed as high. This requires organisational resources to provide support to staff and ensure consistency in service delivery. If staff sickness causes operational disruption this may result in declining public confidence, strain on our remaining workforce and financial pressures as a result of filling staffing gaps. Our scoring in this area reflects that the risk is significant to the organisation, as well as our assessment that we must improve our organisational position on managing staff sickness.

Funding Pressures

Comments submitted by respondents to our public consultation survey highlighted service funding as a concern. Sustained reductions in funding pose risks to our service. A sustained shortfall in government funding would impact our ability to maintain the same level of service delivery, with wide reaching impacts. Whilst the service maintains stringent financial management to ensure a balanced budget and value for money, aspects of service funding sit outside of the services control, as reflected in a high score on our risk matrix.



On-Call Availability

As outlined in the availability data on page 20, availability for most of our on-call appliances has declined in recent years. CFB, as witnessed nationally across the Fire Sector, have seen a steady decline in on-call appliance availability. This is a result of recruitment and retention struggles, with availability levels of On-Call appliances being a continuing concern.

Fast Paced Technology Change

Technology underpins all areas of a modern fire service. Fit for purpose technology is required to ensure an effective emergency response and where technology is not fit for purpose this poses risks to our community. Updates to technology will require the service to replace legacy systems, which in turn have financial implications and require service capacity.
As technology develops the service must ensure staff skills to utilise technological solutions in their roles. Our assessment reflects that the service currently maintain a number of legacy systems that must be updated and efficiently maintained over the coming years and that the national picture for the fire sector reflects challenges in keeping up with the pace of technological change as public sector organisations.

Mental Health Issues

As outlined in the incident data on page 19, the rate of suicides and attempted suicides our service attended has increased in recent years. This reflects a changing picture in society and requires our service to evolve its delivery, including how we train our staff, work with partner agencies and provide staff welfare and support following these incidents, which can be traumatic for those involved. Our assessment reflects increasing likelihood and the impact on staff and the community.

Staff Skills

It is vital our staff receive the appropriate training to carry out their roles effectively. As the role of a modern fire service evolves so do the skills required of our workforce. This encompasses operational skills to respond to incidents, including specialisms, corporate specialist skills and leadership skills. Risk of not having staff with the right skills was highlighted throughout staff consultation focus groups. Our assessment scoring reflects that the risk of staff skill gaps could be significant but that currently the service have the appropriate capability to mitigate this risk.

Recruitment & Retention

To discharge our full duties effectively it is essential we have the right people. In some areas the service has struggled to attract new staff and retain existing staff, posing a risk to our service delivery. Retention challenges may result in loss of certain skillsets which relate to single points of failure and subsequently result in service disruption. Our assessment scored risk as high in this area, particularly due to the potential impact on service delivery and the morale of other staff working for the service. However our current scoring reflects that the service are in a position to work towards improving this picture with renewed strategic focus moving forward.

Additional Information

Next Steps

1. The assessment outlined in this document, comprised of all strands of intelligence, will underpin development of suggested priorities for inclusion in the draft CFB Community Risk Management Plan.

2. We will carry out additional consultation over 12-weeks with the public, staff, partner agencies, businesses and trade unions to ensure the suggested priorities and wider CRMP reflect the needs of our service and communities.

3. Following publication of the final CRMP, our risk methodology will continue to be a live process, with reviews of available intelligence to inform assessment of risks as they evolve. We intend to fully embed our methodology within the service to ensure an improved and evidence-based understanding of our strategic risks. We will seek annual peer review of our methodology to ensure our approach continues to sufficiently assess our risk landscape. Additionally, we will update this document annually to ensure the most up to date service demand and response evidence is publicly available.

Additional Documents

To view additional documents linked to this Strategic Assessment of Risk and the CFB Community Risk Management Plan (2026-30) visit:

https://www.clevelandfire.gov.uk/crmp/

Appendices

Appendix 1: Data Capture and Incident Reporting

Internal incident information contained within this document is derived from data exported from the Incident Recording System (IRS). IRS entries are completed following the resolution of each incident by the officer in charge of the incident. The Risk and Performance Team carry out quality assurance of incident records to ensure accuracy. This table provides a breakdown of the different incident types included in this document. Incidents included in the service demand table within this document has been calculated in the following way to allow for comparison of rates against national incidents.

Incident Types Calculated as Rate per 10,000 Dwelling:

- Accidental Dwelling Fires
- False Alarm Good Intent Dwelling
- False Alarm Apparatus Dwelling

Incident Types Calculated as Rate per 1,000 Non-Domestic Properties:

- Care Home Fires
- Prison Fires

All other incident types are calculated as rate per 100,000 population.

Appendix 2: Risk Item Definitions and Scope

This section provides further information on the scope of risk items scored against the risk methodology and outlined from pages 27 to 33. Scoring of risks considered reasonable worst case scenarios. Some risks incorporate multiple specific types of incident into one broader category.

Category	Risk	Scenario Scope
Incident	Accidental Dwelling Fire	A large fire at a place of residence, including a House of Multiple Occupation, where residents are present at the time of the incident.
Incident	Airport Terminal Fire	A major incident such as a fire or explosion at Teesside International Airport.
Incident	Arson and Deliberate Fire Setting	Deliberate fires with a worst-case scenario of a deliberate fire set in a residential building such as a block or multiple self contained flats, where residents are present at the time of the incident.
Incident	Care Home Fire	A fire risking on the premise of a registered Care Home which risks the safety of residents and staff.
Incident	Chemical (Hazmat) Incidents	An incident involving release, either deliberate or non-deliberate, of chemicals, including toxic chemical releases, spills and leaks.
Incident	Cold Weather, Storms and Snow	Periods of adverse weather which increase risks on our roads due to poor driving conditions and impact our availability to respond to incidents in line with our response standards.

Category	Risk	Scenario Scope
Incident	Drought	Prolonged dry weather resulting in conditions which increase risk of fire and reduce the supply of water available to respond to emergency incidents.
Incident	Earthquake	A tremor resulting from an earthquake with potential to result in structural damage to buildings.
Incident	Flooding	Significant environmental flooding incidents including overflows of rivers and other bodies of water as a result of intense rainfall, leading to requirements for water rescue of individuals and damage to property.
Incident	Heritage Incidents	Incidents located at listed Heritage sites in Cleveland, at which emergency response may be more complex and damage to structures would have a negative impact on communities.
Incident	High Rise Fire	A fire in a multi-storey building of at least 18 meters in height, either residential or non-domestic.
Incident	Hot Weather (Incident Increases)	Sustained increased temperature resulting in greater impact on emergency response due to increased grass and wildfires and risk to life of vulnerable individuals.
Incident	Large Industrial or COMAH Incident	A large scale incident at a COMAH (Control of Major Accident Hazards) site or other large industrial premise including releases of hazardous materials, major fires, explosions, major incidents requiring rescue of multiple casualties, and targeted terrorism at key industrial sites, including nuclear attacks.
Incident	Lithium Ion Battery Fire	Fires caused by lithium ion batteries, either singular batteries in household objects such as chargers or fires in battery storage facilities.
Incident	Major Non-Fire Casualty Rescue	Incidents where the service responds to situations with the potential to involve a large number of casualties (people injured or in danger) that are not related to fires. Scenario planning considers risks including building or structure collapse, rail, aviation and vessel incidents, drone incidents.
Incident	Prison Fire	Fires set within the estate of His Majesties Prisons, set deliberately or accidentally.
Incident	Road Traffic Collisions	Incidents involving any type of road vehicle colliding with other vehicles, people or property.
Incident	Secondary Fires	An incident that did not occur at a Primary location, was not a chimney fire in an occupied building, did not involve casualties and was attended by four or fewer appliances Examples include grass land and refuse fires.
Incident	Severe Air Pollution	An incident resulting in a high concentration of pollutants in the atmosphere which can cause significant harm to human health and the environment.
Incident	Terrorism	Violent criminal acts committed by individuals or groups who are associated with, designated foreign terrorist organisations or nations. Scenarios include any malicious acts committed intended to seriously disrupt or endanger public safety, or damage property, with the goal of advancing a specific cause.
Incident	Vehicle Fires	Fires involving road vehicles where the cause can be categorised as accidental or deliberate.
Incident	Waste Management Facilities Fire	Fires located at any premises that are involved in the handling of waste materials, this includes collection, transportation, treatment and disposal.
Incident	Wildfires	Any uncontrolled vegetation fire where a decision of action is needed about its suppression. A wildfire will meet one or more of the following criteria: • Involves a geographical area of at least 1 hectare (10,000 square metres) • as a sustained flame length of more than 1.5 metres • Requires a committed resource of at least 4 fire appliances/resources • Requires resources to be committed for at least 6 hours • Presents a serious threat to life, environment, property, and infrastructure

Category	Risk	Scenario Scope
Societal	A workforce not aligned with the diversity of the population	Risks incurred to the services engagement and relationships with the communities it serves as a result of having a workforce that does not reflect or understand the needs of the community related to its diversity.
Societal	Alcohol & Drug Misuse	The impact of alcohol and drug misuse on individuals likelihood of experiencing a fire in their home.
Societal	Changes in Smoking Habits (Traditional Smoking to Vaping)	Risks associated with the increased use of electronic vapes and the potentials for fires related to batteries and chargers.
Societal	Crime Rate	The impact of increased crime on demand on the service. Examples include anti-social behaviour and arson endangering life.
Societal	Cyber Attack - CFB	A malicious attack on the digital infrastructure of the service and its systems, with impacts to public safety.
Societal	Cyber Attack - Other	A malicious attack on any other computer system, network or digital infrastructure, not maintained by CFB, which may impact public safety.
Societal	Deprivation	The impact of rates of deprivation, as measured by the Indices of Multiple Deprivation, on the needs and vulnerabilities of the community and consequently on the likelihood of fire and rescue incidents.
Societal	Fast Paced Technology Change	The potential risks to the organisation as a result of keeping up with changes to technology, including financial impacts, staff training requirements, impacts on legacy systems, cyber risks
Societal	Funding Pressures	Encompasses all risks to the service incurred through pressures resulting from sustained shortfall in financial funding, primarily from government.
Societal	Governance of Processes and Organisational Development/Improvement	Risks to the organisations effectiveness and efficiency as a result of not embedding stringent governance processes and mechanisms to develop and improve the service.
Societal	Health Pandemic	Includes any airborne or contagious disease with the potential to spread widely and negatively impact the health and wellbeing of the community.
Societal	Industrial Action - Firefighters	Activities undertaken by Firefighters, in periods of dispute with the employer, which prevent the service from operating in a business as usual manner.
Societal	Industrial Action - Other Sectors	Activities undertaken by employees from any other sector, in periods of dispute with the employer, which have an indirect effect on the fire service, preventing business as usual operations.
Societal	Infrastructure or System Failure - CFB	A failure in key internally maintained systems which impacts on emergency response and risks public safety.
Societal	Infrastructure or System Failure - Regional and Local	A failure in a regional or local system relied upon by the service to deliver its statutory duties.
Societal	Infrastructure or System Failure - National	A failure in a national system relied upon by the service to deliver its statutory duties.
Societal	Mental Health Issues	The impact of increasing prominence of mental health issues in society on community vulnerability and service demand.
Societal	Mobility Issues and Life Limiting Disabilities	The increased vulnerability of individuals with mobility issues and life limiting disabilities to experience a fire incident in their home or experience difficulties evacuating their property.
Societal	On-Call Availability	Encompasses the risks posed by limited availability of on-call appliances, for any reason, to respond to incidents and the need to re-distribute wholetime resources to ensure sufficient response coverage. Impacts include potential increases to response times.
Societal	People Living Alone	The increased vulnerability of individuals living alone to experience a fire incident in their home or have delays in recognising the onset of fire and evacuating their property.
Societal	Population Changes	The impact on service demand of changes to the population, including the impact of an increasing elderly population.
Societal	Public Disorder, Protest and Mass Gatherings	Increased demand on the service in response to risks posed by large gatherings, including or not including gatherings where anti-social behaviour is a feature.

Category	Risk	Scenario Scope
Societal	Public Perception and Organisational Reputation	The impact to the organisations ability to deliver a service if there is a deterioration, for any reason, of public perception of the organisations trustworthiness, values or ability.
Societal	Recruitment and Retention	Risks posed to service delivery as a result of being unable to recruit and retain staff with the appropriate skills, values and attributes.
Societal	Staff Sickness	The impact of staff absence from their employment due to sickness on the services ability to deliver, including but not limited to,operational staff sickness which impacts availability of emergency appliances or results in financial impacts as a result of overtime incurred.
Societal	Staff Skills	Risks associated with a lack of staff with the skills needed at each level of the organisation, including specialisms.
Societal	Supply Chain Disruption	The impact to the service of disrupted supply chains, notably parts, equipment and PPE.
Societal	Unemployment (Economic Inactivity)	Risks associated with increased economic inactivity which may result in heightened deprivation and subsequently higher levels of vulnerability and service demand.
Societal	Use of Intelligence to Inform Understanding of Organisational Risks and Service Delivery	A failure in the services ability to effectively and efficiently gather and utilise data and intelligence to identify risks in our communities and understand our performance in responding to them.

Appendix 3: Glossary

Term	Definition
Accidental Fires	Fires where the motive for the fire was presumed to be either accidental or not known (or unspecified).
Assisting Other Agencies	Incidents where the Brigade will assist Police or ambulance e.g. assisting in lifting people or retrieving items from a height.
Bariatric Rescue	These incidents involve safely moving and handling of obese patients who may be limited in movement due to their weight.
COMAH Site	COMAH stands for Control of Major Accident Hazards. It refers to regulations in the UK designed to prevent major accidents involving dangerous substances at industrial sites.
Deliberate Fires	Fires where the motive for the fire was 'thought to be' or 'suspected to be' deliberate. This includes fires to an individual's own property, others' property or property of an unknown owner. Despite deliberate fire records including arson, deliberate fires are not the same as arson. Arson is defined under the Criminal Damage Act of 1971 as 'an act of attempting to destroy or damage property, and/or in doing so, to endanger life'. Arson is not recorded as a distinct category in the IRS.
Dwelling	Include all types of private residences and homes. It covers houses, flats, houses in multiple occupation (HMOs) and self-contained sheltered housing. In this document, 'other residential' has also been included in this category which covers places of communal living and where people receive care, like residential care homes. It also includes short term accommodation residential accommodation like student halls, hostels and hotels, but only where the fire occurred in the individual living area.
Effecting Entry or Exit	These incidents involve actions taken by firefighters to gain access or egress from a building, vehicle or other structure in an emergency.
False Alarms	Where the FRS attends a location believing there to be a fire incident, but on arrival discovers that no such incident exists, or existed. If the appliances are 'Turned around' by Command & Control before arriving at the incident – then the incident is not classed as having been attended and does not need to be reported. Categories include: • False Alarm Good Intent - calls made in good faith in the belief that the FRS really would attend an incident. • False Alarm Apparatus - calls initiated by a fire alarm and/or fire-fighting equipment operating that involve a non-domestic property. • False Alarm Malicious - calls made with the intention of getting the FRS to attend a non-existent incident, including deliberate and suspected malicious intentions.
Flooding	Water related incidents that can be domestic causes, eg leaking water pipes in the home, outside of the home examples are blocked drains or environmental flooding caused by excessive weather conditions.
Geographical Information System (GIS)	A system designed to capture, store, manipulate, analyse, manage, and present all types of geographical data.
Hazardous Materials Incident	This involves the uncontrolled release of dangerous substances that pose a threat to people. property or the environment.
High Rise Building	Generally defined as a building that is 7 or more storeys tall or at least 18 metres high.
Incident	Any event that occurs that requires the intervention of a Fire and Rescue Service.
Industrial and Commercial	Includes buildings designed for manufacturing, processing or warehousing, e.g. factories, assembly plants and power plants. Commercial premises include buildings designed to interact with the public or conduct administrative tasks e.g. offices, retail outlets, restaurants, hotels and hospitals.
Lithium Ion Battery	A type of rechargeable battery that uses the reversible intercalculation of Li + ions into electronically conducting solids to store energy.
Lower Super Output Area (LSOA)	This is a geographical unit used for statistical purposes specifically for the release of census and other official data. LSOAs are built up from Output Areas (OAa) and are designed to have a consistent population size, typically between 1,000-3,000 residents
Medical Incident First Responder/Coresponder	First Responder involves incidents where the Fire Service have arrived attended and incident and medical assistance is necessary prior to the arrival of ambulance crews. Co-Responder involves incidents where through a prearranged agreement Fire Crews are sent to high priority ambulance incidents when they are able to make a quicker attendance than the ambulance crew.

Term	Definition
Mobilisation	Each individual resource which is sent to an incident is known as a mobilisation. Unless otherwise specified, in this document number of mobilisations are just counting fire appliances which booked in attendance at incidents (i.e. did not get stood down en-route), but otherwise a mobilisation can also be of a special appliance, such as the Water Incident Unit or Aerial Appliance, or an Officer.
Non-Domestic	Includes premises that are not a usual residence, including Industrial Commercial properties along with town halls, libraries, community centres, B&B accommodation and holiday homes.
Primary Fire	Potentially more serious fires that cause harm to people or damage to property. To be categorised as primary these fires must either: • occur in a (non-derelict) building, vehicle or (some) outdoor structures • involve fatalities, casualties or rescues • be attended by 5 or more pumping appliances
Response Standards	Response time targets to different incident types and property: • Answer 95% of 999 calls within 7 seconds • Dispatch a fire engine to emergency incidents within 1 minute 40 seconds of answering the call • Dispatch a fire engine to emergency incidents within 2 minutes on 98% of occasions • Average of 7 minutes for the attendance of the 1st appliance to all building fires Minutes • Average of 10 minutes for the attendance of the support appliance to all building fires • First appliance on the scene within an average of 7 mins to Industrial fires • Average of 8 minutes for the first appliance to Road Traffic Incidents involving rescues and immediate life-threatening calls
Response Time	The duration from the time the crews are mobilised by control, to the time taken for the first appliance to arrive at the incident.
Removal of Objects from People	This incident can involve fire crews being called to remove any item that a person may have attached to them the most common object is removal of rings from swollen fingers.
Secondary Fire	Generally small outdoor fires, not involving people or property. These include refuse fires, grassland fires and fires in derelict buildings or vehicles, unless these fires involved casualties or rescues, or 5 or more pumping appliances attended, in which case they become primary fires.
Special Services	Non-fire incidents which require the attendance of an appliance or officer and include: • Local emergencies e.g. road traffic incidents, rescue of persons, 'making safe' etc • Major disasters • Domestic incidents e.g. water leaks, persons locked in or out etc • Prior arrangements to attend incidents, which may include some provision of advice and inspections.
Spills and Leaks	This involves attendance to any uncontrolled spills e.g petrol or where there may be a gas leak.
Waste Management site	Any premises that are involved in the handling of waste materials, this includes collection, transportation, treatment and disposal.
Water Rescue	Incidents involving the rescue of persons from any body water other than a swimming pool.
Wildfires	Any uncontrolled vegetation fire where a decision of action is needed about its suppression. A wildfire will meet one or more of the following criteria: • Involves a geographical area of at least 1 hectare (10,000 square metres) • Has a sustained flame length of more than 1.5 metres • Requires a committed resource of at least 4 fire appliances/resources • Requires resources to be committed for at least 6 hours • Presents a serious threat to life, environment, property, and infrastructure

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For further inquiries about the contents of this document, please contact:

Cleveland Fire Authority
Endeavour House
Training and Administration Hub
Queens Meadow Business Park
Hartlepool
TS25 5TH
Telephone: 01429 872311
Email: info@clevelandfire.gov.uk