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**Strategic Assessmentof Risk**

2024-25

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**Executive Summary**

This document marks the latest edition of the *Nottinghamshire Fire and Rescue Service's (NFRS) Strategic Assessment of Risk (SAoR)*, designed to underpin and support our Community Risk Management Plan (CRMP). The SAoR ensures that risk management is central to NFRS's decision-making processes, aligning with our mission to "Create Safer Communities."

The SAoR employs the PESTLEO analysis model, examining Political, Economic, Social, Technological, Legal, Environmental, and Organisational drivers that will influence and shape service delivery throughout the lifecycle of our next CRMP. Key areas of focus and their implications are summarised as follows:

**Political**

The local political landscape, including the governance structures of Nottinghamshire County and Nottingham City Councils, will significantly influence the CRMP. Upcoming local elections and the establishment of the East Midlands Combined County Authority (CCA) are expected to impact fire and rescue governance, particularly in light of the ongoing Fire Sector Reform. The Fire Standards Board continues to advance professional standards, and the government's White Paper on *Reforming Our Fire and Rescue Service* underscores the urgent need for reform, focusing on clarifying the roles of fire services, removing unjustifiable variations, and ensuring operational independence for Chief Fire Officers.

**Economic**

Budgetary constraints will play a crucial role in shaping NFRS's resource allocation and service delivery. The impact of the Comprehensive Spending Review and ongoing pension scheme adjustments, particularly in response to the McCloud judgment and other pension-related cases, necessitates careful financial planning. While central government has committed to covering some increased costs, the long-term financial outlook remains uncertain.

**Social**

Understanding the community profile of Nottinghamshire is vital for effective risk management. The SaOR provides an in-depth analysis of community demographics, health trends, socioeconomic status, and crime patterns, which are critical in identifying and mitigating risks. The report highlights vulnerable groups, including the elderly, individuals with care and support needs, and those affected by social issues such as deprivation, fuel poverty, and mental health challenges. The NFRS is committed to addressing these risks through targeted prevention, protection, and response activities, supported by data-driven insights.

**Technological**

The rapidly evolving technological landscape presents both opportunities and challenges for NFRS. Cybersecurity threats, the rollout of the Emergency Services Network (ESN), and the increasing use of mobile technology are key considerations. The SaOR also addresses emerging risks associated with new technologies, such as lithium-ion batteries, electric vehicles, and assistive technologies, which have implications for fire safety and emergency response.

**Legal**

The legal framework governing fire services continues to evolve, with significant implications for NFRS. Key legislation, including the Fire and Rescue Services Act 2004, the Building Safety Act 2022, and recent updates to the Fire Safety Order, sets out stringent requirements for risk management and operational practices. Compliance with these legal standards is crucial to avoid potential financial, reputational, and operational risks.

**Environmental**

Environmental risks are analysed across three key areas: the built environment and infrastructure, climate change, and future developments. The report highlights the impact of climate change on service delivery, the importance of preparedness for extreme weather events, and the need to adapt to changing environmental conditions. The built environment, including critical infrastructure such as transport networks and industrial sites, also presents specific challenges for emergency response.

**Organisational**

The fire sector is undergoing significant change, driven by national reform agendas and the need for greater standardisation and professionalism. The SaOR outlines current and emerging workstreams within the fire sector that NFRS must consider, including recommendations from national inquiries and sector reports. These developments are essential for shaping the future of Fire and Rescue Services in Nottinghamshire.

This Strategic Assessment of Risk provides a comprehensive overview of the key factors that will influence NFRS's service delivery in the coming years. By addressing these risks and aligning our strategies with national standards and best practices, NFRS is committed to ensuring the safety and wellbeing of our communities. This document will serve as a foundational tool for the development and implementation of our next Community Risk Management Plan, guiding NFRS in its mission to create safer communities across Nottinghamshire.

**Introduction**

The *Fire and Rescue National Framework* outlines significant challenges that we must address, including the ongoing threat of terrorism, the impacts of climate change, an ageing population, and the need to reduce the national deficit. In our commitment to "Creating Safer Communities," it is essential that we fully understand these broader challenges to inform our strategic planning and achieve our objectives effectively.

To tackle these challenges, Nottinghamshire Fire & Rescue Service conducts regular risk assessments to evaluate the potential impact of external factors on our organisation. When risks are identified, we must take appropriate action—whether that involves actively mitigating the risk, monitoring it, or, in some cases, choosing to accept it. Our ultimate goal through this *Strategic Assessment of Risk* is to ensure that there is no threat to our vision and that our strategic objectives remain secure.

As a service, we aim to review our risk assessment at least annually, analysing both external and internal operating environments as part of our corporate planning process. It is our responsibility to continuously assess these evolving risks and to protect the communities of Nottinghamshire through effective risk mitigation and prioritisation.

In addition to our annual review, we remain vigilant throughout the year, continually analysing emerging opportunities and threats as part of our ongoing risk management processes.

**1. Political**

**1.1 Local Government Structure and Elections**

The local government structure in Nottinghamshire consists of Nottinghamshire County Council and Nottingham City Council. Nottinghamshire County Council has a two-tier system of local government, the County Council is a first-tier local authority. The second tier is made up of borough and district councils; in some areas there made be a third tier, a town or parish council (Nottinghamshire County Council 2024).

**Borough and District Councils**

Within Nottinghamshire, there are seven borough/district councils:

* Ashfield
* Bassetlaw
* Broxtowe
* Gedling
* Mansfield
* Newark & Sherwood
* Rushcliffe

**Nottingham City Council**

Nottingham City Council is a unitary authority, providing all services within the city boundaries.

**Local Government Elections**

Nottinghamshire County Council last held an election on 6 May 2021. The Conservative Party won a majority of the 66 seats available and maintains a majority control of the Council. The next election will take place in May 2025.

Nottingham City Council last held an election on 4 May 2023, the Labour Party won a majority of the 55 seats available and maintains a majority control of the Council. The next election will take place in May 2027.

**1.2 Nottinghamshire and City of Nottingham Fire Authority**

Nottingham City Council administers meetings of Nottinghamshire and City of Nottingham Fire and Rescue Authority. The Authority is known as a Combined Fire Authority (CFA) due to its composition of 6 Councillors from Nottingham City Council, 12 Councillors from Nottinghamshire County Council and the Nottinghamshire Police and Crime Commissioner (PCC).

The CFA makes decisions on key matters such as strategy, policy, and the budget, and is responsible for ensuring that Nottinghamshire Fire and Rescue Service (NFRS) discharges its duties under the Fire Service Act 2004. There are several sub-committees that report to the full authority, they are:

* Appointments Committee
* Community Safety Committee
* Finance and Resources Committee
* Human Resources Committee
* Personnel Committee
* Policy and Strategy Committee

Local government elections take place at least every 4 years. Nottinghamshire County Council elections will take place in May 2025, whilst Nottingham City elections will take place in May 2027. Each election can result in changes to CFA membership. You can view the current CFA membership [here](https://www.notts-fire.gov.uk/about-us/nottinghamshire-and-city-of-nottingham-fire-authority/)

**1.3 Police Crime Commissioner (PCC)**

The Policing and Crime Act 2017 put in place a legal framework for PCCs to take on responsibility for fire and rescue governance. Under the legislation, PCCs can join their local Fire and Rescue Authority, alternatively PCCs may put forward a business case to the Home Secretary seeking to replace the Fire and Rescue Authority in their area (Nottinghamshire Police & Crime Commissioner 2024). Within Nottinghamshire the PCC has become a voting member of the CFA. The next PCC election is due to take place on 2 May 2024.

**1.4 East Midlands Devolution**

On 7 December 2023, Nottinghamshire County Council, Nottingham City Council, Derbyshire County Council and Derby City Council approved plans to create a Combined County Authority (CCA). This has been made possible by the Levelling Up and Regeneration Act 2023 and will become the first legal entity of this type. The inaugural election for a regional Mayor is due to take place on 2 May 2024.

It is not currently intended that the elected Mayor for the East Midlands CCA

will exercise the functions of the CFA, but they will work with local partners including the CFA, PCC and Home Office to identify an appropriate long term governance model for NFRS that meets the principles of good governance set out in the Fire Reform White Paper.

The elected Mayor will have a clear role in local resilience, following Government’s full consideration of the role and responsibilities of Local Resilience Forums. This may include an opportunity for the East Midlands CCA to participate in future testing and piloting new roles and responsibilities prior to any fuller national roll out (East Midlands devolution deal)

**1.5 Fire Sector Reform**

The Fire Standards Board continues to develop national professional standards for the fire and rescue sector, with a total of 16 standards now approved and published. The annual State of Fire and Rescue assessment published in January 2023, recognised some progress made by the sector against recommendations from the inspection programme, but expressed frustration at the overall lack of progress and highlighted that reform is urgently needed, identifying four recommendations that remain outstanding:

* the Home Office should precisely determine the role of fire and rescue services, to remove any ambiguity;
* the sector should remove unjustifiable variation, including in how they define risk;
* the sector should review how effectively pay and conditions are determined; and
* the Home Office should invest chief fire officers with operational independence, whether through primary legislation or in some other manner. (HMICFRS 2023)

In December 2023, the Government published its response to the Fire Reform White Paper consultation that took place in May 2022. The paper sought to introduce a reform strategy that built upon the learning from independent inspection through His Majesty’s Inspectorate of Constabulary and Fire & Rescue Services (HMICFRS), national reports and the Grenfell Tower Inquiry. Since the consultation, events reported through national media, reports published by HMICFRS on values and culture within the fire service, and the Independent Cultural Review of London Fire Brigade, have reinforced the need for reform within the fire sector.

In the interests of staff and public safety, the reform programme will introduce legislation that requires Fire and Rescue Services to perform Disclosure and Barring Service checks as part of their pre-employment screening process.

The Home Office will explore potential delivery options that will see the creation of a new College of Fire and Rescue. It is proposed that the College will mirror the powers given to the College of Policing and help drive change and professionalism within the fire sector.

The Home Office considered implementing the mandatory transfer of Fire Rescue Authority functions to PCCs, Mayors or single elected individuals. However, following feedback from the consultation, the Home Office does not intend to mandate such governance transfers at this time (Home Office 2023). They will however, support representations that seek a voluntary transfer of governance.

The Fire and Rescue National Framework sets out the Government’s priorities and objectives for fire and rescue authorities. The government has a duty under the Fire and Rescue Services Act 2004 to produce the framework and keep it current. Fire and rescue authorities must provide assurance that they are acting in accordance with the National Framework.

NFRS has a long-term ambition to be one of the best fire and rescue services in England. The delivery of our services is guided by a core purpose of “Creating Safer Communities”. By 2032, we aim to be an outstanding Service, delivering exceptional outcomes for our communities.

NFRS have well established pre-employment checks for all staff that includes Disclosure and Barring Service checks. Members of staff who are based at our joint Police and Fire and Rescue Service Headquarters undergo further security vetting.

**1.6 Industrial Action**

Industrial action poses both a direct and indirect threat to NFRS, with the potential to disrupt the delivery of services to the communities of Nottinghamshire. Industrial action by staff presents a risk to the Service’s ability to discharge its functions in compliance with the Fire Service Act 2004. To a lesser extent, industrial action by trade unions outside of NFRS has the potential to disrupt services, risk property and result in public disorder. These areas are summarised below:

* Disruption to essential services – Services that NFRS provides, or relies on to meet its statutory duty
	+ Response – Core business function to respond to 999 emergency incidents, resolve and return to normality
	+ Protection – Business support and legislative enforcement response
	+ Prevention – Community engagement to educate, prevent incidents and create safer communities
* Potential for public disorder – Whilst not involved in policing, NFRS has a statutory responsibility to save life, protect property and the environment
* Economical – Disruption to services and businesses may result in financial implications that impact on the local, regional and UK economy

The Civil Contingencies Act 2004 places a duty on Category 1 responders to put Business Continuity management arrangements in place to ensure that critical services and functions can, where possible, be maintained during time of disruption and can then be effectively recovered. NFRS has assured degradation, contingency, and business continuity processes in place to maintain core services in the event of industrial action. Moreover, following the introduction of the Strikes (Minimum Service Levels) Act 2023, NFRS is legally required to provide minimum service levels during periods of industrial action. Working with Trade Unions, designated members of the workforce will be notified prior to the commencement of strike action of the requirement for them to work on a given strike day or period.

**2. Economic**

**2.1 Comprehensive Spending Review (CSR)**

Autumn Budget and Spending Review 2021 (SR21) takes place as the country focuses on recovering from a period of unparalleled global economic uncertainty and challenge to move towards a more promising future. The successful vaccination programme and the government’s economic plan have led to faster than anticipated growth, and a strong recovery in employment across the country.

With the economic recovery underway and emergency support winding down, the Budget and SR sets out the government’s plans to build back better over the rest of the Parliament. It does so by investing in strong public services, driving economic growth, leading the transition to net zero, and supporting people and businesses.

Spending Review 2021 (SR21) sets departmental budgets up to 2024-25. Every department’s overall spending will increase in real terms as a result of SR21. Total departmental spending is set to grow in real terms at 3.8% a year on average over this Parliament – a cash increase of £150 billion a year by 2024-25 (£90 billion in real terms).

The Fire Service Budget must commit to a three-year Comprehensive Spending Review which draws a line under short-term budgeting and allows the service to set reliable medium-term financial plan. This should encompass general grant funding, specific grants, and council tax collection. In the event of another pandemic the Fire Service would not be able to fund additional resourcing without support of a specific grant (GOV.UK).

**2.2 Firefighter Pension Schemes**

The remedying legislation for the McCloud became law in October 2023. This addresses the transition arrangements into the 2015 firefighters’ pension scheme which were found to be discriminatory. It is expected that the majority of additional costs will be met from the pension top up grant, however the Service has a £200k earmarked reserve to mitigate against any costs that have to be met internally. Further information on this can be found in the Firefighter Pension Scheme Immediate Detriment Review report considered by Policy and Strategy Committee on 1 April 2022.

The remedying legislation is expected to increase the overall costs of the firefighters’ pension scheme. These are expected to be largely funded by Central Government but additional costs falling to the Fire Authority cannot be ruled out.

Another pensions case, Matthews and O’Brien, identified discriminatory conditions against part time workers. Remedying legislation similarly became law in October 2023. This legislation allows further backdating of the Modified pension scheme from 2006 to when On-Call firefighters first joined the fire service. When the Modified scheme was created, backdated costs were met by the Government, and it is expected that this will similarly be the case for costs relating to further backdating.

Both remedies are having a large impact on the workload of staff dealing

with the cases and additional resources were allocated in 2023/24 in order that this

work can be undertaken.

The pension administration function is with West Yorkshire Pension Fund, from 1 December 2020.

The 2016 Government Actuaries Department (GAD) revaluation of the firefighter’s pension fund resulted in a headline rate increase of 12.4% of employer pension costs, which equated to £2.5m for the service. The Home Office agreed to fund £2.3m of this pressure in 2019/20 but has been kept at the same cash value, leaving increases in costs due to pay inflation to be met by the service. The £2.3m grant is to continue into 2024/25, and now to be added to the baseline funding for the authority rather than being paid as a Section 31 grant.

The results of the 2020 valuation are expected soon and could potentially result in a

similar increase in employer pension costs. Funding for any additional costs has

been committed to by Central Government until the end of 2024/25. After this date,

any funding will have to be negotiated as part of the Funding Settlement. There

remains a risk that these costs will not be funded in full.

**2.3 Future Pay Awards**

As part of the 2021 Comprehensive Spending Review (CSR) ​(HM Treasury, 2020), the Chancellor announced that public sector workers would receive pay rises over the next three years, reflecting the recovery in the economy and labour market, and a return to a normal pay-setting process. However, the pay for both firefighters and support staff is determined by independent bodies.

For this reason, NFRS budgets have been planned with the assumption that the firefighter pay award for 2023/24 would be 5%. The Medium-Term Financial Strategy (MTFS) includes a 5% increase for 2024/25, followed by 3% for 2025/26, and 2% for subsequent years. Any increase beyond these assumptions would result in a cost pressure, with a 1% pay increase equating to approximately £320,000 in ongoing costs per year.

The 2023/24 pay award for support staff was agreed as a flat increase of £1,925, which equates to an approximate 4% increase in Green Book costs. This is higher than the 2% increase budgeted for 2023/24, leading to an additional £120,000 in costs.

The pay award for support staff for 2024/25 has not yet been agreed. The MTFS includes a provision for a 5% increase for 2024/25, followed by 3% for 2025/26, and 2% for subsequent years.

**2.4 Council Tax Collection**

Many council taxpayers are currently experiencing financial hardship due to reduced income levels and rising unemployment. Despite these challenges, collection rates have held up better than anticipated, resulting in a surplus of £336,000 for the 2024/25 financial year. This surplus has been further bolstered by improved collection rates from prior years' debts.

Legislation mandates that any under- or over-collection of business rates or Council Tax must be adjusted in the following year's collection fund.

The Council Tax base is calculated based on the estimated full-year equivalent number of chargeable dwellings, expressed as the equivalent number of Band D dwellings in the Council’s area. This calculation accounts for factors such as dwelling demolitions, completions during the year, Council Tax exemptions, discounts, disabled reliefs, premiums, and the estimated collection rate. Typically, the Council Tax base increases by just over 1% annually, reflecting new build properties and thereby providing additional income to the Service. For 2024/25, the Council Tax base has increased by a modest £19,000 from 2023/24. Council Tax base figures are projected to rise by 1.35% in 2025/26.

**2.5 Business Rates Collection**

Effective from 1 April 2024, the rateable values of all non-domestic properties in England will be updated to reflect the property market as of 1 April 2021. This update will effectively reset the baseline for Non-Domestic Rates (NDR). Under the current system, precepting authorities retain any growth above their established baseline.

In the Autumn Statement on 22 November, the Chancellor announced several key measures:

* A transitional relief scheme to limit bill increases resulting from changes in rateable values.
* A 75% rate relief scheme for Retail, Hospitality, and Leisure sectors for 2024/25.
* A freeze on business rates multipliers, ensuring no inflationary increases in charges to businesses.
* The introduction of a new Supporting Small Business relief scheme.

The Authority will be compensated for any lost income resulting from these measures through additional section 31 grants. The top-up grant component of this compensation was released in the Local Government Finance Settlement on 19 December, and this has been incorporated into the business rate income estimates.

The planned reset of business rates has been postponed until the next parliament, and assumptions have been made in the budget for 2024/25 and beyond.

**2.6 Investment in Technology and Innovation**

Technological advancements and cybersecurity requirements must be continuously reviewed, alongside the acquisition of new software packages.

These demands are placing increasing pressure on the Information & Communication Technology (ICT) Department. The department is committed to securing the necessary equipment and software in the coming years to facilitate improved working methods. To support this, funding will need to be incorporated into the base budgets, amounting to £2.626 million. Of this budget, £2 million is allocated to the Regional Mobilising System (RMS), a collaborative project with Derbyshire Fire and Rescue, for the 2024/25 financial year. Additionally, it is anticipated that further investment in the ICT team will be necessary in the coming years.

**2.7 Grenfell Tower Inquiry Outcomes**

Following the tragic Grenfell Tower incident in 2017, the subsequent Hackitt Review and Grenfell Tower Inquiries highlighted the significant work required within the sector to address deficiencies in the built environment. This will lead to an increased regulatory workload for NFRS, along with the need to enhance fire safety competency and capacity.

Over the past four years, the Service has received various grants to support the implementation of the recommendations from these reviews. In 2023/24, a Fire Protection Uplift grant of £146,000 was received, with further funding anticipated for 2024/25, although this has not yet been confirmed.

Additionally, the Authority is receiving New Burdens funding from the Home Office, related to the establishment of a new regional Building Safety Regulator. This funding is expected to continue into 2024/25.

**3. Social**

Within Nottinghamshire, we have a range of communities in both the city and wider county. For NFRS to understand where social risk exists it is essential that data is analysed to create an in-depth working knowledge of the community profile of Nottinghamshire. This knowledge has been developed from:

* Community Demographics
* Health Demographics
* Socio Economic Demographics
* Crime Trends

When considering the factors that may contribute to a greater potential of being at risk of fire, we have taken the following into account:

* Care and support needs
* Hoarding
* Alcohol and drug use
* Reduced mobility
* Isolated living
* Inappropriate smoking
* Elderly

**3.1 General Population**

Our communities continue to grow, in doing so they become more diverse. Typically, people are living longer, and there has been an increase in those living alone. Resident population for the City and County of Nottinghamshire was captured during the 2021 Census. A total of 1,148,454 people were identified as living within the county of Nottinghamshire, comprising of 824,822 throughout the county and 323,632 within the city boundaries (ONS 2023).

**Table 1 - General Population**

|  |  |  |
| --- | --- | --- |
| **District** | **Age Band** | **Gender** |
| 0 - 19 | 20 - 64 | 65+ | 85+ | Female | Male |
| Ashfield | 28,593 | 72,828 | 22,044 | 2,840 | 64,441 | 61,859 |
| Bassetlaw | 24,923 | 66,800 | 22,958 | 3,123 | 59,391 | 58,413 |
| Broxtowe | 23,004 | 63,716 | 21,035 | 3,189 | 56,542 | 54,398 |
| Gedling | 25,259 | 66,714 | 22,003 | 3,282 | 60,384 | 56,879 |
| Mansfield | 24,463 | 64,721 | 18,726 | 2,576 | 56,089 | 54,393 |
| Newark & Sherwood | 25,934 | 69,349 | 24,307 | 3,364 | 62,458 | 60,498 |
| Rushcliffe | 26,430 | 66,907 | 22,005 | 3,736 | 60,729 | 58,348 |
| Nottingham City | 87,571 | 198,091 | 32,664 | 5,301 | 164,628 | 159,004 |
| **Total** | **266,177** | **669,126** | **185,742** | **27,411** | **584,662** | **563,792** |

(ONS 2021)

**3.2 Household Projections**

NFRS will continually review our prevention, protection and response work activities to ensure we deliver services that meet the needs or our changing communities. We will help to prevent death and injury resulting from fire and other emergencies, prevent the occurrence of fires and other emergencies, and support our wider commitment to the health and wellbeing of the people that live in, work and travel within the city and county of Nottinghamshire.

The projected population of households in England is projected to grow to 28.0 million from 22.7 million by 2039, an increase of 5.3 million (23%) from 2014. This equates to an average of 210,000 additional people per year. The projected change in household population over the same period is an additional 8.7 million people, increasing the household population in England to 62.0 million by 2039 and representing a 16% change (GOV.UK, 2021).

**3.3 Household Composition**

Data from the 2021 Census identities a total of 481,864 households within the county of Nottinghamshire and Nottingham City. 13% of all households are single person occupied, over the age of 66. 11% of all households are lone parent occupied. 9.5% of all households are occupied by single families, all aged over 66.

**Table 2 - Household Composition**

|  |  |
| --- | --- |
| **District** | **Household Composition** |
| One-person age 66+ | Single family all age 66+ | Other (including full-time students & age 66+) | Single family: Lone parent family | Single family: Cohabiting couple family | Single family: Married or civil partnership couple |
| Ashfield | 7,056 | 5,457 | 1,262 | 6,288 | 7,925 | 16,163 |
| Bassetlaw | 7,262 | 5,946 | 1,083 | 5,159 | 6,695 | 15,968 |
| Broxtowe | 6,843 | 5,520 | 1,784 | 4,417 | 6,045 | 15,001 |
| Gedling | 7,173 | 5,669 | 1,245 | 5,551 | 6,837 | 15,629 |
| Mansfield | 6,264 | 4,568 | 1,383 | 5,282 | 6,625 | 14,309 |
| Newark & Sherwood | 7,700 | 6,368 | 1,340 | 5,073 | 6,912 | 16,741 |
| Rushcliffe | 6,881 | 6,184 | 1,620 | 3,890 | 5,636 | 17,841 |
| Nottingham City | 13,512 | 6,104 | 10,482 | 17,045 | 14,906 | 28,615 |
| **Total** | **62,691** | **45,816** | **20,199** | **52,702** | **61,579** | **140,262** |

(ONS 2021)

NFRS will continually review our prevention, protection and response work activities to ensure we deliver services that meet the needs or our changing communities. We will help to prevent death and injury resulting from fire and other emergencies, prevent the occurrence of fires and other emergencies, and support our wider commitment to the health and wellbeing of the people that live in, work and travel within the city and county of Nottinghamshire.

**3.4 Ethnicity**

The county of Nottinghamshire is home to a broad demographic of people who identify with a cultural or ethnic group. The ONS defines ethnicity identification as “ethnic group and national identity are self-identification measures reflecting how people define themselves” (Office of National Statistics, 2021).

Data from the 2021 Census identified that 79.7% (914,869) identified as White: English, Welsh, Scottish, Northern Irish or British. This is higher than the national average for England of 73.5%. 15.6% (179,407) identified as Other Black and Minority Ethnic (BME) groups, including:

* Asian, Asian British or Asian Welsh
* Black, Black British, Black Welsh, Caribbean or African
* Mixed or Multiple ethnic groups
* White: Irish
* Other ethnic group
* Other ethnic group: Arab

Nottingham City has the largest BME community, with 35.9% (116,238 of 323,635) of residents identifying as from a BME background. Asian, Asian British or Asian Welsh was the largest minority ethnic group, which represents 6.3% (72,740) of the overall population of Nottinghamshire. Breaking this data down further, this comprises of Pakistani 2.3% (26,697), Indian 1.9% (21,859) and Chinese 0.7% (8,153) communities. (ONS 2021)

NFRS is committed to delivering excellent services to the public and providing inclusive workplaces for its employees. As an employer, we continue to focus on recruiting a diverse workforce, but we also want to make sure that we are equipped to serve an increasingly diverse community in Nottingham and Nottinghamshire. The delivery of inclusive services is a significant part of our offering. We continue to promote NFRS and the role of firefighting to black, Asian and minority ethnic communities, women and LGBT people across the City and County.

**3.5 Religious Beliefs**

Nottinghamshire is home to a broad demographic of people who connect with a religion. The ONS defines religious affiliation as “how respondents connect or identify with a religion, irrespective of whether they actively practice it” (Office of National Statistics, 2021). Within Nottinghamshire, most people identified as having no religion 44% (502,934), which is above the national average for England of 36.7%. 43% of respondents (493,832) identified as Christian, which is below the national average for England of 46.3%.

Other religious beliefs recorded within the Census data for Nottinghamshire included Buddhist (0.35%), Jewish (0.14%), Muslim (4.42%), Sikh (0.71%), Other Religion (0.52%), did not provide an answer (6.15%) (ONS 2021).

NFRS is committed to delivering excellent services to the public and providing inclusive workplaces for its employees. As an employer, we continue to focus on recruiting a diverse workforce, and we want to make sure that we are equipped to serve an increasingly diverse community in Nottingham and Nottinghamshire. The delivery of inclusive services is a significant part of our offering. We continue to promote NFRS and the role of firefighting to black, Asian and minority ethnic communities, women and LGBT people across the City and County.

**3.6 Deprivation**

The Indices of Deprivation provides a set of relative measures for 33,755 Lower Layer Super Output Areas (LSOAs) across England. As a result of the census in 2021, the number of LSOAs was increased to ensure that population and household thresholds were met (ONS).

The English Indices of Deprivation was last published in 2019 (IoD2019) and is based on seven domains of deprivation which include the following factors:

* Income
* Employment
* Education
* Health
* Crime
* Barriers to housing services
* Living environment

As the IoD2019 has not been updated since the introduction of addition LSOAs, the following information is based upon at total of 32,844 LSOAs across 317 local authorities throughout England, published in 2019.

The domains are combined to produce the overall Index of Multiple Deprivation (IMD), this is used as the official measure of relative deprivation for LSOA’s in England. LSOA’s are ranked from 1 (most deprived) to 32,884 (least deprived). IMDs are ranked from 1 (most deprived) to 317 (least deprived). Nottingham City comprises of 182 LSOA’s with 7 Districts of Nottinghamshire County Council comprising of a further 497. The table below breaks down the LSOA’s for each district.

**Table 3 – Lower Layer Super Output Areas (LSOA)**

|  |  |  |
| --- | --- | --- |
| **District** | **Number of LSOAs** | **Total LSOAs** |
| Ashfield | 74  | 679 |
| Bassetlaw | 70  |
| Broxtowe | 71  |
| Gedling | 77  |
| Mansfield | 67  |
| Newark and Sherwood | 70  |
| Rushcliffe | 126  |
| Nottingham City | 182  |

**Nottingham City Council LSOA Overview**

56 of the 182 (30.8%) City LSOAs fall amongst the 10% most deprived in the country. 104 falls in the 20% (57.1%) most deprived. This compares to 61 and 110 LSOAs respectively from the previous publication in 2015. The lowest ranking LSOA in the City is in Bulwell (LSOA Ref: E01013877), which ranks 130th nationally out of 32,844. In comparison to 2015 publication, no City LSOA ranks in the most deprived 100 LSOAs in the country. 8 LSOAs in the City rank in the 20% least deprived in the country. Nottingham City ranks 11th most deprived out of 317 districts in England using the IMD measure. ​(Nottingham City Council, 2021)​

**Nottinghamshire County Council (NCC) LSOA Overview**

31 of the 497 (6.2%) NCC LSOAs fall amongst the 10% most deprived in the country. 79 fall in the 20% (15.9%) most deprived. This compares to 25 and 71 LSOA’s respectively from the previous publication in 2015. The most deprived LSOA’s are concentrated in the districts of Ashfield (12 LSOAs), Mansfield (10), Bassetlaw (5) and Newark & Sherwood (3). The most deprived LSOA lies within Mansfield district. It is ranked the 36th most deprived out of the 32,844 LSOAs in England (a relative improvement on 16th in 2015) ​(Nottinghamshire County Council, 2021)​. The table below provides an overview of the top 10 most deprived LSOA’s in the county of Nottinghamshire.

**Table 4 - Top 10 Most Deprived LSOAs in Nottinghamshire**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Rank** | **LSOA Code** | **District** | **Location** | **National Rank (Out of 32,844)** |
| **1** | E01028276 | Mansfield | Carr Bank  | 36 |
| **2** | E01013877 | Nottingham | Bulwell Centre  | 130 |
| **3** | E01013861 | Nottingham | Bilborough East  | 145 |
| **4** | E01028263 | Mansfield | Oak Tree  | 154 |
| **5** | E01013948 | Nottingham | Radford Flats  | 207 |
| **6** | E01028256 | Mansfield | Lindhurst  | 256 |
| **7** | E01013818 | Nottingham | Broxtowe East  | 265 |
| **8** | E01027974 | Ashfield | Sutton in Ashfield  | 438 |
| **9** | E01033411 | Nottingham | St Anns Plantagenet St  | 453 |
| **10** | E01013817 | Nottingham | Broxtowe | 594 |

**3.7** **Fuel Poverty**

Fuel poverty in England is measured using the Low-Income Low Energy Efficiency indicator (LILEE). A household is defined as fuel poor if:

* A home has a Fuel Poverty Energy Efficiency Rating (FPEER) of band D or below and,
* After subtracting energy costs and housing costs, residual income is below the official poverty line

**Table 5 - Fuel poor households within Nottinghamshire and Nottingham City by district area**

|  |  |  |
| --- | --- | --- |
| **District** | **Number of households in fuel poverty** | **Proportion of households (%)** |
| Ashfield | 7,878 | 14.2 |
| Bassetlaw | 7,437 | 14.2 |
| Broxtowe | 6,002 | 12.2 |
| Gedling | 6,059 | 11.5 |
| Mansfield | 7,099 | 14.5 |
| Newark and Sherwood | 7,360 | 13.5 |
| Rushcliffe | 5,380 | 10.6 |
| Nottingham City | 22,999 | 18.1 |

Department for Energy Security & Net Zero (2023)

It is predicted that proportion of households in England experiencing fuel poverty will reduce to 12.7% in 2024. The total reduction in energy costs needed to take all households out of fuel poverty is known as the ‘aggregate fuel poverty gap’ and incorporates energy prices. It is estimated that the aggregate fuel poverty gap increased by 67% between 2020 and 2023 (UK Parliament 2024).

Households experiencing fuel poverty may employ unconventional methods to heat and light their property. For example, a greater reliance on space heaters, electric blankets, or the use of tea lights and burning furniture in fireplaces. (London Economics 2023).

NFRS recognises the link between deprivation and the risk of fire occurring in a household. To identify those most at risk of fire in the home we analyse many datasets. This includes publicly available information, Experian data, Exeter data, operational incident trends, and we combine this with our knowledge of Nottinghamshire and the city of Nottingham built up over many years of serving our communities.

We work closely with partner agencies, using well established referral pathways to ensure that any member of the community identified as being at risk of fire in the home is engaged with by the Service. We proactively deliver our “Safe and Well” visits to those most at risk of fire.

**3.8 Mental Health**

NHS England explains that one in four adults will experience at least one diagnosable mental health problem in any given year. The number of Children and young people accessing mental health services has increased by 17% between February 2022 and February 2024 (NHS England).

Mental health affects people in all walks of life and can happen at any stage of life. NHS England identifies that mental health problems represent the single biggest cause of disability in the UK.

The NFCC commissioned Nottingham Trent University to explore the association between mental health diagnosis and incidents of fire. Recommendations from this work identify the need to develop a shared national definition for mental health to enable a greater level of data to be captured and for further analysis to take place.

**3.9** **Crime and Antisocial Behaviour**

Antisocial behaviour is defined as 'behaviour by a person which causes, or is likely to cause, harassment, alarm or distress to persons not of the same household as the person' (Antisocial Behaviour Act 2003).

Nottinghamshire Police recognise antisocial behaviour as causing significant concern to the people of Nottinghamshire. During the period April 2023 to March 2024, 36,676 crimes attributed to antisocial behaviour were recorded by Nottinghamshire Police. Anti-social behaviour is not a low-level crime, or nuisance, it includes deliberate fire setting, vandalism and property damage. In 2023/24 Nottinghamshire Fire and Rescue Service responded to 1341 deliberate fires, 13% of all incidents attended.

**3.10** **Terrorism**

Terrorism represents a serious and sustained threat to the UK and interests abroad. At the time of writing (July 2024), the Joint Terrorism Analysis Centre (JTAC) assess that the threat to the UK (England, Wales, Scotland and Northern Ireland) from all forms of terrorism is SUBSTANTIAL; an attack is likely.

Islamist terrorism represents the most significant domestic threat, accounting for 67% of attacks since 2018, and 64% of those in custody for terrorism-connected offences (Home Office 2023). Less sophisticated attack methodologies involving bladed weapons and vehicles have become more common.

As part of our emergency preparedness, NFRS maintains a cadre of specially trained personnel should a terrorist attack occur. This capability is available for national deployment as part of national resilience arrangements, and regularly trains with partner agencies in multi-agency exercises designed to test our response and that of our partners. In addition, NFRS maintains a cadre of National Interagency Liaison Officers (NILO’s) who receive in depth training responding to terrorism related incidents and organised crime.

In discharging its functions under the Civil Contingencies Act 2004, NFRS actively collaborates with Nottinghamshire Local Resilience Forum partners to ensure that joint plans and coordinated ways of working are in place for risks throughout the county in the event of a terrorist attack.

**3.11 Modern Slavery and Human Trafficking**

Unfortunately, thousands of people across the UK are subjected to forced labour, they live in fear, work in exhausting and often dangerous conditions with little or no pay. Means of escape is impossible, forbidden or punished. There is no typical victim of modern slavery and human trafficking. Victims are often tricked into exploitation and often do not speak English.

The number of referrals for modern slavery and human trafficking in the UK has increased. In the year ending December 2022, 7,936 referrals were made reporting potential victims of exploitation, an increase of 10.3% on the previous year (National Crime Agency).

Victims are forced into modern slavery for:

* Prostitution or marriage
* Forced labour (for example, in a factory, building construction or car washes)
* Begging or benefit fraud

Victims may:

* Be working against their will
* Lose their freedom to go where then want, when they want
* Have their identity documentation taken away from them
* Be subjected to physical threat or harm
* Not know their address
* Live in overcrowded and unsanitary conditions
* Be denied access to a GP, school or other local services
* Be living with people they are not related to
* Live in constant fear for their safety

NFRS not only recognises and responds to the risks from fire and other life-threatening scenarios but across a broader range of themes associated with those who may be at risk from harm. We ensure that appropriate measures and practises to safeguard and promote the welfare of children, young people and adults at risk are in place, and that matters requiring the attention of other relevant authorities are brought to their attention as soon as possible to prevent serious harm. This is underpinned by the requirement for NFRS employees to undertake mandatory safeguarding training.

**3.12 Care and Support Needs**

The Care Act 2014 provides a legal framework that places person-centred care and support planning and the promotion of wellbeing at the core of local authorities’ functions. A local authority can promote a person’s wellbeing in a variety of ways, taking account of individual circumstances, a person’s needs and wishes and how these impact on their wellbeing (Department of Health & Social Care).

Living with a disability or ill health that requires care and support can increase a person's vulnerability to fire. Failing health also decreases a person’s ability to survive an injury or recover from a traumatic experience such as a house fire.

NFRS understands that care and support needs differ from person to person, and that those needs will change over time. We undertake Safe and Well Visits at domestic premises throughout Nottinghamshire. We engage with residents about their needs and provide support or make referrals to our partner agencies to initiate or improve care provision where needed.

**3.13 Hoarding**

Hoarding is the excessive collection and retention of any material to the point that living space is sufficiently cluttered to preclude activities for what they are designed for (Multi-Agency Hoarding Framework). The NHS describes a hoarding disorder as being where someone acquires an excessive number of items, often with little or no value and stores them in a chaotic manner, usually resulting in unmanageable amounts of clutter (NHS).

Hoarded items comprise fire escape routes and often deprive hoarders themselves of access to their bedroom or bathing facilities. Hoarding increases the volume of combustible materials within a premises, increasing the chance of a fire starting and contributes to fire spread and intensity.

**3.14 Alcohol**

Hoarding is a complex condition, often requiring a variety of agencies engaging with the same person. NFRS is a member of the Multi-Agency Hoarding Framework for Nottingham City and Nottinghamshire. During Safe and Well visits, we use a clutter image rating tool to determine the level of hoarding within a premises, which enables us to provide support to residents and share information with partner agencies to ensure that care and support arrangements are established.

Alcohol depresses the central nervous system, and within a relatively short time can cause unsteadiness, blurred vision, slowed reaction times, and impaired memory. Alcohol consumption increases the likelihood of having a fire, it inhibits good judgement and affects the ability to respond appropriately in an emergency. The risks factors become much higher if we carry out activities such as smoking or cooking whilst under the influence of alcohol.

Alcohol specific mortality continues to get worse, with 7,912 people losing their life in England in 2022 compared with 5,819 in 2019. This trend continues in alcohol related mortality, with 21,912 people losing their life in England in 2022, compared with 18,666 in 2016 (OHID, 2024).

Alcohol is a significant factor in accidental dwelling fires, contributing to 8% (2,483) of accidental dwelling fires in England in 2011/12. In these instances, it was over three times more likely that the fire would result in a fire-related death, and tragically, more than half (56%) of the casualties were not the person drinking. The rate of serious injuries in dwelling fires is also four times higher where alcohol is a factor.

The Department for Transport provides estimates of casualties arising from reported accidents involving at least one motor vehicle driver or rider over the legal alcohol limit for driving. These statistics, especially the number of fatalities, are subject to considerable uncertainty which means that it is impossible to be sure of the precise number of casualties, so ranges and confidence intervals are used.

A drink-drive accident is defined as one where someone is killed or injured, and either one or more drivers involved either failed a roadside breath test, refused to give a specimen or died within 12 hours and was found to have a level of alcohol in their blood.

Data for 2021 shows that between 240 and 280 people were killed in collisions in the UK where at least one driver was over the drink-drive limit, with a central estimate of 260 deaths. An estimated 6,740 people were killed or injured when at least one driver was over the drink-drive limit. This represents a reduction of 22% from 8,600 killed or injured in 2017.

**3.15 Drug Abuse**

Being under the influence of drink or drugs impairs an individual’s senses and ability to make rational decisions. This increases the potential for injury, fires and road traffic collisions and the likelihood of accidents and fatalities.

In the year ending March 2023, there were 9,690 hospital admissions due to drug misuse-related poisoning in England, representing a 24% decrease from the previous year. Males are disproportionately affected, with a particularly high number of admissions among those aged 16 to 24. Hospital admissions are notably more prevalent in deprived areas.

During a Safe & Well Visit, NFRS personnel will determine if there are concerns about fire safety. There may be concerns regarding the effects of lifestyle choices, including alcohol consumption and drug use, which could increase risk in the event of a fire. Where there are significant concerns for an increased risk of fire, personnel can make a partner referral.

**3.16 Reduced Mobility**

A person with reduced mobility may not be at a higher risk of a fire occurring in their home. However, in the event of a fire, their ability to evacuate may be compromised or even impossible, which can significantly increase the risk and severity of injury.

During a Safe & Well Visit, NFRS personnel assess whether an individual is fully independent, requires mobility equipment for support, or relies entirely on others for mobility. If the risk of fire is deemed high, we can offer additional fire safety measures, such as fireproof bedding. Our Occupational Therapist provides enhanced support and guidance, and we will also refer to partner agencies to ensure a care package is in place.

**3.17 Isolated Living**

Analysis of accidental house fires shows that people who live alone are more at risk from fire. In Nottingham City and Nottinghamshire, 13% of all households are single person occupied, over the age of 66. The risk of fire is due to the potential for a fire to start and develop unnoticed, delaying the time taken to raise the alarm or to escape from a fire.

**3.18 Smoking**

NFRS categorizes smoking materials to include cigarettes, e-vapes, cigars, pipes, and tobacco products. According to data from the Annual Population Survey (APS), the prevalence of smoking among adults in England continues to decline, with approximately 12.7% of adults currently identified as smokers. In the year ending March 2023, smoking materials were the source of ignition in 8.2% of accidental dwelling fires in England but accounted for 35% of fire related fatalities in accidental dwelling fires (GOV.UK, 2023).

A breakdown of smoking prevalence in Nottinghamshire and Nottingham City can be seen below:

**Table 6 – Smoking Prevalence within Nottinghamshire and Nottingham City by district area**

|  |  |  |  |
| --- | --- | --- | --- |
| **District** | **Current Smokers** | **Ex Smokers** | **Never Smoked** |
| Ashfield | 16.3% | 26.5% | 57.2% |
| Bassetlaw | 14.9% | 26.1% | 59% |
| Broxtowe | 12.8% | 28% | 59.2% |
| Gedling | 12.3% | 27.5% | 60.2% |
| Mansfield | 17.4% | 25.8% | 56.8% |
| Newark and Sherwood | 13.8% | 27% | 59.2% |
| Rushcliffe | 9.7% | 29.4% | 60.9% |
| Nottingham City | 14.8% | 25.5% | 59.7% |

Nottinghamshire Insight, NHS Nottingham and Nottinghamshire ICS

Across Nottinghamshire over a 5-year period, fires in the home caused by smokers’ materials account for 5.1% of all accidental dwelling fires:

 **Table 7 – Smoking Related Fire Statistics**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **2019/20** | **2020/21** | **2021/22** | **2022/23** | **2023/24** | **Total** |
| Number of accidental dwelling fires  | 606 | 583 | 640 | 586 | 586 | 3,218 |
| Accidental dwelling fires caused by smoking materials | 33 | 27 | 31 | 32 | 29 | 165 |
| Percentage of accidental dwelling fires caused by smoking materials | 5.4% | 4.6% | 4.8% | 5.5% | 4.9% | 5.1% |

When delivering Safe & Well Visits, NFRS personnel will determine if there are concerns about fire safety in relation to the use of smoking materials. We will initially engage with residents and provide advice on home fire safety guidance and the appropriate use of smoking materials. Residents will also be offered additional support for smoking cessation, which will result in signposting to advice and information, or referral to partner agencies for dedicated support.

**3.19 Elderly**

The risk of dying in a fire increases markedly with age. In the year ending March 2023, nearly half (47%) of all fire-related fatalities in England were among individuals aged 65 and over (GOV.UK, 2023). During this period, the fire fatality rate was 9.9 per million for those aged 65 to 79, compared to less than 4.0 per million for each age group under 54. Notably, the fatality rate escalates to 16.4 per million for those aged 80 and above.

There are a variety of physiological and societal factors that can affect people as they grow older. For example, age is the biggest risk factor for the development of dementia. Around 2 in every 100 people have dementia aged between 65 and 69, as a person ages, the risk roughly doubles every five years (Alzheimer’s Society, 2021).

Dementia can impair an individual’s memory, concentration, and ability to recognise their surroundings or solve problems, particularly in unfamiliar situations. These cognitive challenges can significantly affect their ability to respond appropriately in a fire emergency. Additionally, as people age, physiological changes can reduce their ability to recover from serious injuries or cope with traumatic experiences, further increasing their vulnerability in such situations.

As adults age, they may find themselves living alone following the death of a partner. The National Institute for Health and Care Excellence (NICE) recognises that bereavement, along with the loss of friends, reduced mobility, and limited income, can make older individuals particularly vulnerable to social isolation. Additionally, some older people live in conditions that increase the risk of fire and hinder their ability to escape in an emergency. These conditions may include reliance on open fires, or the use of ineffective or poorly maintained heating and cooking appliances, which elevate the risks of fire, carbon monoxide poisoning, and hypothermia.

When delivering Safe & Well Visits, NFRS personnel will determine if there are concerns about fire safety in relation to a residents age and their general health and wellbeing. We will initially engage with residents and provide advice on home fire safety guidance. Residents will also be offered additional support through signposting to partner agencies for further support and guidance.

**4. Technological**

**4.1 Cyber Security and Data Security**

Fire and rescue services increasingly rely on digital systems for their operations, making them attractive targets for cyber threats. A significant concern is the risk of cyber-attacks, as highlighted by the 2022 incident involving Fire Rescue Victoria in Australia. Such attacks can cause system outages, severely compromising the ability of these services to respond to emergencies effectively. Moreover, sensitive data, including personal and operational information, may be exposed, raising privacy concerns and the risk of data misuse. The growing complexity of cyber threats, including the emergence of AI-driven ransomware and double extortion tactics, further heightens these challenges.

Fire and rescue services must adopt a proactive and adaptive approach to cybersecurity. Implementing robust security measures such as multi-factor authentication, strong passwords, and regular software updates is essential to protect against potential threats. Regular cybersecurity risk assessments are crucial for identifying vulnerabilities and prioritizing remediation efforts. Establishing network access controls can also help mitigate the risk of insider threats. Additionally, training staff to recognize and respond to cyber threats is vital for enhancing overall security. Staying informed about evolving cybersecurity threats and malicious techniques is critical to maintaining the integrity and resilience of digital systems.

**4.2 Emergency Services Network (ESN)**

The ESN project is currently on hold, pending re-contracting following Motorola’s withdrawal. Once completed, the ESN is expected to become the new critical communication system for all Emergency Services and public safety users across the UK. Utilising the latest technology, the ESN will provide fast, secure voice communication and broadband data services. It will transmit voice, video, and data swiftly and securely across the 4G network, enabling first responders to access vital, real-time information, images, and data during live incidents and emergencies on the frontline.

The ESN is designed to offer a mobile network with extensive coverage, high resilience, robust security measures, and advanced functionality, allowing users to communicate effectively even in the most challenging situations. This enhanced communication capability will enable control room operators and commanders to make more informed decisions during incidents.

**4.3 Increased Mobile Technology Usage**

Daily computer usage continues to rise across all age groups. While younger generations are often seen as the primary users of digital technology, recent trends show that older generations are experiencing the highest increase in usage. An increasing number of people now access information and services through mobile devices such as smartphones and tablets.

The expansion of online technology and mobile communications will place greater emphasis on e-access to services, social media engagement, cybersecurity, and the proper handling of personal data. Technological advancements are likely to support working practices, such as providing remote assistance to personnel during incidents or within the community. As a result, it will become increasingly important for workforces to adapt to and effectively utilise new technologies.

NFRS is implementing a comprehensive programme to support smarter and more flexible working, including significant investments in mobile access to systems and information via cloud-based services. The existing mobilising system, which is used to deploy resources to operational incidents, will be upgraded with the installation of new mobile data terminals in fire appliances. This enhancement will improve both the reliability and functionality of the system, ensuring a more efficient and effective emergency response.

**4.4 Online Community Engagement**

According to the latest data from the Office for National Statistics (ONS), 94% of adults in the UK were recent internet users in 2023, up from 92% in 2020. Among adults aged 16 to 44, internet usage remains nearly universal at 99%. However, significant growth has been observed among older adults, with 61% of those aged 75 and over now using the internet, compared to just 54% in 2020 and 29% in 2013.

In Nottingham City, internet usage has seen substantial growth, with 95% of people over the age of 16 using the internet in 2023, up from 93.4% in 2020 and 74.4% in 2014. Nottinghamshire has also experienced an increase, with usage rising from 89.2% in 2020 to 91% in 2023. This growing digital engagement reinforces that online community initiatives can be an effective way for NFRS to reach a larger portion of the population.

However, the ONS notes that despite overall increases in internet usage, many older or disabled individuals remain offline. Notably, approximately 42% of women aged 75 and over have never used the internet. In Nottinghamshire, the number of adults who have never used the internet has decreased to around 75,000 in 2023, down from 88,000 in 2020.

In recent years, NFRS has actively engaged and consulted with the public through online platforms. The Service is transitioning public-facing information to web-based formats to enhance accessibility and leverage the increasing shift towards digital engagement. Nevertheless, we will continue to offer alternative methods of engagement to ensure that all individuals have full access to and can access our services.

**4.5 Critical National Infrastructure**

National infrastructure encompasses the facilities, systems, sites, information, personnel, networks, and processes essential for the functioning of a country and upon which daily life depends. It also includes areas that, while not critical to the maintenance of essential services, require protection due to potential risks to public safety, such as civil nuclear and chemical sites.

In the UK, national infrastructure is divided into 13 sectors: Chemicals, Civil Nuclear, Communications, Defence, Emergency Services, Energy, Finance, Food, Government, Health, Space, Transport, and Water. Several of these sectors include defined sub-sectors; for example, Emergency Services are further categorised into Police, Ambulance, Fire and Rescue Services, and the Coast Guard.

The Centre for the Protection of National Infrastructure (CPNI) focuses on providing guidance and support to those responsible for safeguarding these critical elements of the UK’s national infrastructure from national security threats. The responsibility for protecting critical national infrastructure (CNI) IT networks, data, and systems from cyber-attacks lies with the UK’s National Cyber Security Centre (NCSC). CPNI collaborates closely with the NCSC to deliver comprehensive advice that addresses all aspects of protective security.

**4.6 Assistive Technology**

Assistive technology refers to products or services designed to enhance the independence, wellbeing, and safety of individuals. It enables them to perform tasks they might otherwise be unable to do, or it increases the safety and ease with which these tasks are completed. There is a recognised correlation between the profile individuals who would benefit from assistive technology and an increased risk of fire. NFRS has observed a rise in the number of Automatic Fire Alarm (AFA) attendances in domestic dwellings, primarily due to the growing number of people receiving in-home care and the associated use of call systems. As the adoption of this technology continues to rise, it is likely that the number of such calls will increase correspondingly.

**4.7 Lithium-ion Batteries**

The rising popularity of Lithium-ion powered devices and vehicles has introduced significant challenges in managing fires involving these batteries. The rapid increase in the use of e-scooters and e-bikes is particularly noteworthy. It is estimated that there are now over 750,000 private e-scooters and more than 160,000 e-bikes in use across the UK, with these numbers continuing to grow. Consequently, the risk of fire-related incidents is also increasing. Reports have surfaced of items being 'self-converted' or charged incorrectly, further elevating the risk.

The National Fire Chiefs Council highlighted that in the first half of 2023 alone, London fire crews responded to 19 e-scooter fires and 73 e-bike fires. During the same period, NFRS crews attended five fires linked to faulty e-scooter or e-bike batteries, resulting in four injuries.

The growing use of e-cigarettes or ‘vapes’ also raises concerns. While it could be argued that these devices may not inherently present a greater fire risk than traditional cigarettes, the rise of counterfeit or faulty products, along with poor charging practices, can significantly increase the danger.

Additionally, new regulations will require all consumer products, including vapes, to have replaceable or rechargeable batteries by 2027. These sustainability regulations are expected to increase the number of lithium batteries in use within our communities, potentially exacerbating the associated fire risks.

**4.8 Electric Vehicles**

While the reduction in air pollution from electric vehicles is a significant benefit for our towns and cities, there is growing concern about the challenges they present when involved in a fire. Electric vehicles are generally safe, but the primary danger arises if the lithium-ion battery is damaged, which can occur if it is exposed to excessive heat, or the battery cell wall is compromised.

When a lithium-ion battery enters ‘thermal runaway’, a chemical reaction perpetuates combustion within the battery cells. Once thermal runaway is initiated, the fire becomes extremely difficult to extinguish, leading to prolonged incidents. Larger batteries, which may contain hundreds or even thousands of cells, can reignite hours or even days after the initial event, even after being cooled.

With increasing consumer demand and the growing availability of electric vehicles, the number of electric cars on UK roads is rapidly expanding. As of December 2023, there are over 975,000 fully electric cars and an additional 590,000 plug-in hybrids in use across the UK.

**4.9 Self-Driving Vehicles**

New legislation introduced to Parliament in November 2023 outlines the legal framework for self-driving vehicles. This new safety framework will clearly define liability for users, establish the safety standards required for legal self-driving, and implement a regulatory scheme to monitor the ongoing safety of these vehicles while they are in use.

Self-driving vehicles have the potential to significantly reduce deaths and injuries caused by drink driving, speeding, and driver fatigue, as human error is a contributory factor in 88% of road collisions. However, before these vehicles are permitted on our roads, they must meet or exceed the stringent new safety requirements set out in law (GOV.UK, 2023).

While this technology holds promise for preventing accidents caused by human error, it is important to acknowledge that technology-related issues, such as failed software updates or technical glitches, remain potential risks at this stage.

**4.10 Replacement Mobilisation System (RMS)**

In October 2023, the contract for 'Lot One' of the RMS project was awarded to SAAB. 'Lot One' encompasses the Integrated Communication Control System and the Computer-Aided Dispatch system, both of which are essential components of the solution. While the 'SAFE' system is already in use by multiple police forces, it is new to the fire sector.

This project is a collaborative effort with colleagues from Derbyshire FRS and is expected to be operational by October 2025. During the development phase, the current supplier, Systel, will continue to provide the existing mobilising system. However, operating within an extended contract period with Systel could pose risks to NFRS during the transition to the new system.

The procurement process has taken place in a highly competitive market with few suppliers, during a period of high demand for their services.

**5. Legal**

**5.1 Fire Services Act 2004**

The Fire & Rescue Services Act 2004 sets out that Nottinghamshire Fire & Rescue Service must:

* Make provisions for the purpose of extinguishing fires and protecting life and property in the event of fires in its service area.
* Make provisions for the purpose of rescuing people in the event of road traffic collisions and protect people from serious harm to the extent that is reasonable to do so within its area.
* The Secretary of State may by order confer on a fire and rescue authority functions relating to emergencies, other than fires and road traffic accidents. An order under the emergencies section may require functions conferred on a fire and rescue authority under this section to be discharged outside the authority’s area.
* Secure provision of Personnel, services and equipment as necessary to meet all normal requirements and training of that personnel.
* Make arrangements for dealing with calls for help and for summoning personnel. Take reasonable steps to prevent or limit damage to property resulting from actions taken for extinguishing the fire, protecting life or property.

**Reinforcement Schemes and Arrangements for Discharge of Functions by Others**

Section13/16 of the Fire & Rescue Services Act 2004 sets out that a Fire & Rescue Authority (FRA) must, as far as practicable, enter into a reinforcement scheme with other FRAs for securing mutual assistance for response and rescue duties.

This reinforcement scheme may make provisions for apportioning costs incurred between Authorities within the scheme in taking measures to secure efficient operation of the scheme.

FRSs are also permitted to enter into arrangements with any other person or persons to carry out response and rescue duties, with a caveat written in the Act that specifies any arrangements for the function of firefighting can only be put in place if the person or persons employs firefighters.

**5.2 Fire and Rescue Service National Framework for England**

The Fire and Rescue Service National Framework for England (2018) requires fire and rescue services to produce integrated risk management plans that takes account of a number of priorities; these include:

* Make appropriate provision for fire prevention and protection activities and response to fire and rescue related incidents.
* Identify and assess the full range of foreseeable fire and rescue related risks their areas face.
* Collaborate with emergency services and other local and national partners to increase the efficiency and effectiveness of the service they provide.
* Be accountable to communities for the service they provide.
* Develop and maintain a workforce that is professional, resilient, skilled, flexible, and diverse.

In addition, each fire and rescue service is required to produce the following documentation:

* Integrated Risk Management Plan
* Annual Statement of Assurance
* Financial Plans

The Fire and Rescue Services Act 2004 requires the Home Secretary to report every 2 years on fire and rescue authorities’ compliance with the fire and rescue national framework for England. The most recent report was published in 2023 and covers the years 2019/20 and 2020/21. The 2023 progress report outlines the extent to which fire and rescue authorities are complying with the framework. The report covering 2021/22 and 2022/23 will be published in2025.

**5.3 Civil Contingencies Act 2004**

The Civil Contingencies Act 2004 (CCA) is the framework for emergency power and response in the UK, the CCA separates responders into categories 1 and 2. Category 1 responders have a greater set of duties than category 2. Nottinghamshire Fire & Rescue Service is designated as an emergency service and falls into Category 1, which sets out the following duties:

* Assess the risk of emergencies occurring and use this to inform contingency planning.
* Put in place, emergency plans.
* Put in place, business continuity arrangements.
* Put in place, arrangements to make information available to the public about civil protection matters and maintain arrangements to warn inform and advise the public in the event of an emergency.
* Share information with other local responders to enhance coordination.
* Co-operate with other local responders to enhance coordination and efficiency.

**5.4 Regulatory Reform Fire Safety Order 2005**

The Regulatory Reform (Fire Safety) Order 2005 (FSO) is the current legislation enforcing fire safety standards in England and Wales. The Order replaced all previous fire safety legislation repealing all previous fire safety law into a single piece of legislation. Fire certificates are no longer provided and those previously issued have no legal status.

The Order requires any person who exercises some level of control for premises (the ‘responsible person’) to take reasonable steps to make a suitable and sufficient assessment of the risk from fire, implement relevant control measures and ensure that people can escape safely if a fire does occur.

The FSO applies to virtually all premises in England and Wales and covers nearly every type of building, structure, and open space, but it excludes single private domestic dwellings. It does include areas used in common in blocks of flats and other multi-occupied dwellings.

**5.5 Building Safety Act 2022**

The Act introduces major changes to the regulation of ALL controlled building work, with statutory registration of all building control inspectors, whether public sector or private sector. It creates a category of “Higher Risk Buildings” which are subject to a new regime during their construction and, for residential higher risk buildings, throughout their operating life. There are new regulations for the building control arrangements for HRBs.

The Act establishes a more rigorous regime for the planning, design, construction, and operation of specified classes of buildings. It introduces new planning and building control gateways, accountable persons, safety cases, and a statutory "golden thread" of information, all of which are linked to a formal certification by the regulator confirming the building’s fitness for occupancy.

Additionally, the Act includes significant provisions related to construction products and the liabilities associated with defective materials.

The Act also enables the introduction of new regulations governing the competence of all individuals involved in building work, with new statutory roles for designers and contractors on all projects. These have been implemented through the introduction of Part 2A of the Building Regulations.

Furthermore, the Act brings about substantial changes to building control processes. The use of Building Notices for major works is no longer permitted, and the application process for full plans approval has been reinforced. This is detailed in Regulation 12, which is described in more detail in the relevant regulatory documents.

New fire safety laws came into force on 1 October 2023 and amended the FSO. Section 156 of the Building Safety Act 2022 (BSA) has made a number of amendments to the FSO to improve fire safety in all regulated buildings. These improvements form Phase 3 of the Home Office’s fire safety reform programme, building on Phase 1 (the Fire Safety Act 2021) and Phase 2 (the Fire Safety (England) Regulations 2022).

**5.6 Fire Safety Act 2021**

The Fire Safety Act 2021 amended the Regulatory Reform (Fire Safety) Order 2005 to enhance fire safety measures. The Act clarifies that, in addition to their general responsibilities under the Fire Safety Order, responsible persons (RPs) for buildings containing two or more domestic premises must now also manage and mitigate fire risks associated with the building's structure and external walls. This includes cladding, balconies, windows, and the entrance doors of individual flats that open onto communal areas.

**5.7 Fire Safety (England) Regulations 2022**

These regulations legally require responsible persons of high-rise blocks of flats to provide essential information to Fire and Rescue Services to support effective planning and, if necessary, a coordinated operational response.

For high-rise residential buildings, responsible persons must:

* **Building Plans**: Submit up-to-date electronic floor plans to the local Fire and Rescue Service and ensure a hard copy is available on-site.
* **External Wall Systems**: Provide detailed information to the local Fire and Rescue Service about the building's external wall system, including any material changes, associated risks, and mitigation measures taken.
* **Lifts and Key Firefighting Equipment**: Conduct monthly checks on lifts and key firefighting equipment intended for firefighter use, and report any defects to the local Fire and Rescue Service as soon as they are detected.
* **Information Boxes**: Install and maintain a secure information box within the building. This box must contain the contact details of the Responsible Person and hard copies of the building's floor plans.
* **Wayfinding Signage**: Install signage that remains visible in low light or smoky conditions, clearly identifying flat and floor numbers in the stairwells.

For residential buildings with storeys over 11 metres in height, responsible persons must:

* **Fire Doors**: Conduct annual checks on the entrance doors to flats and quarterly checks on all fire doors in common areas.

For all multi-occupied residential buildings with two or more sets of domestic premises, responsible persons must:

* **Fire Safety Instructions**: Provide residents with relevant fire safety instructions, including how to report a fire and the appropriate actions to take based on the building’s evacuation strategy.
* **Fire Door Information**: Inform residents about the critical role of fire doors in ensuring fire safety.

**5.8 Building Regulations 2010**

NFRS serves as a statutory consultee in the Building Regulations process and is allotted 15 working days to respond to any consultation. When a new building is to be constructed or alterations are proposed to an existing premises, Building Regulations approval is required. Typically, proposed plans for new buildings or alterations are submitted to either the local Authority Building Control department or an Approved Inspector. These plans are then forwarded to the local fire and rescue service for statutory consultation.

New constructions and modifications to existing buildings must comply with five key fire safety requirements:

* B1: Means of warning and escape
* B2: Internal fire spread (linings)
* B3: Internal fire spread (structure)
* B4: External fire spread
* B5: Access and facilities for the fire and rescue service

Certain types of premises, such as schools and hospitals, also have specific design guides, such as BB100 for schools and the Health Technical Memorandum for hospitals.

NFRS will provide a written consultation response for each application, addressing relevant design considerations for the premises or proposed alterations. This response will also include guidance on how to comply with the Regulatory Reform (Fire Safety) Order 2005 once the premises is occupied.

**5.9 Health & Safety at Work Act 1974**

The Health and Safety at Work etc. Act 1974 (HSWA) is the cornerstone of UK legislation, placing a duty on all employers to "ensure, so far as is reasonably practicable, the health, safety and welfare at work" of their employees (Health and Safety at Work Act, 1974).

The Health & Safety Executive acknowledges that firefighters and managers often face challenging moral dilemmas and must make decisions in highly hazardous, emotionally charged, and rapidly evolving situations during emergency responses (Health and Safety Executive, 2010). In the UK, the HSWA applies to all activities of Fire and Rescue Authorities, who are responsible for the welfare of their fire and rescue service staff.

Under the HSWA, employers are required to ensure that their operations do not negatively impact the health and safety of their employees or others. However, these health and safety duties are not absolute; they are qualified by the principle of what is "reasonably practicable," balancing operational duties with health and safety obligations within the fire and rescue service. The Act does not mandate the elimination of all risks, and the Health & Safety Executive recognises that "even when all reasonably practicable precautions have been taken to deal with foreseeable risks, harm could still occur" (Health and Safety Executive, 2010).

**5.10 General Data Protection Regulations 2018**

The Data Protection Act 2018 received Royal Assent on 23 May 2018, repealing the previous Data Protection Act 1998. This Act was introduced to modernise the UK's data protection laws, making them fit-for-purpose in an increasingly digital economy and society, as part of the government's commitment to updating these laws.

Strong data protection laws, along with appropriate safeguards, are crucial for enabling businesses to operate across international borders, underpinning global trade. Unhindered data flows are essential for the UK as it establishes itself as a competitive and ambitious trading partner. The Act facilitates the continued innovative use of data while simultaneously strengthening the control and protection individuals have over their personal information (HM Government, 2021).

The 2018 Act comprises several key elements:

* General data processing
* Law enforcement processing
* Intelligence services processing
* Regulation and enforcement

Since 2022, the government has focused on Data Protection and Digital Information. A Bill has been introduced to make provisions for the processing of personal data, amending parts of the Data Protection Act 2018 and the Privacy and Electronic Communications Regulations (PECR). As of 19 December 2023, the Bill has passed its second reading in the House of Lords. Following this, it will undergo further review and a third reading before moving towards Royal Assent to become law. The timeline for the next stage is yet to be confirmed.

The Bill aims to:

* Reduce compliance costs in the sector and minimise the paperwork required to demonstrate compliance.
* Alleviate burdens by allowing businesses to continue using existing cross-border data transfer mechanisms if they are already compliant.
* Provide organisations with greater confidence regarding the circumstances in which they can process personal data without consent.
* Boost public and business confidence in AI technologies.
* Establish a framework for digital verification services, enabling digital identities to be used with the same confidence as paper documents.
* Increase fines for nuisance calls and texts under the PECR.
* Update the PECR to reduce 'user consent' pop-ups and banners.
* Facilitate the flow and use of personal data for law enforcement and national security purposes.

**5.11 Emergency Workers Obstruction Act 2006**

The Emergency Workers (Obstruction) Act 2006 establishes it as an offence to obstruct or hinder individuals who are providing emergency services, including police officers, firefighters, ambulance workers, and other designated emergency personnel, while they are carrying out their duties. This legislation is designed to ensure that emergency workers can perform their critical roles without interference, thereby safeguarding public safety and ensuring that vital services are not disrupted. (GOV.UK, 2024)

**5.12 Equality Act 2010**

The Equalities Act 2010 (UK Government, 2010) brought together what was previously separate pieces of legislation into one single legal framework to protect the rights of individuals and advance equality of opportunity for all. The Act protects everyone in Britain against discrimination. Discrimination can be broken down into four main types:

* Direct
* Indirect discrimination
* Harassment
* Victimisation

The Equalities Act covers nine protected characteristics; these are:

* Age
* Disability
* Gender reassignment
* Marriage and civil partnership
* Pregnancy and maternity
* Race
* Religion or belief
* Sex
* Sexual orientation

Those subject to the Act must, in the exercise of their functions, have due regard to the need to:

* Eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by the Act; and
* Advance equality of opportunity between people who share a protected characteristic and those who do not; and foster good relations between people who share a protected characteristic and those who do not.

The duty also includes two specific duties:

* Publish sufficient information to demonstrate compliance with the general equality duty across functions, and
* Prepare and publish one or more objectives that it reasonably thinks it should achieve to meet one or more aims of the general equality duty, at intervals of not greater than four years.

The Equality Act also sets out a Public-Sector Equality Duty (PSED) which requires public bodies to have due regard to the need to eliminate discrimination, advance equality of opportunity and foster good relations between different people when carrying out their activities.

From October 2024, an amendment of the Equality Act 2010 means employers will need to comply with a new duty to take 'reasonable steps' to prevent sexual harassment of employees. This follows the passing of the Worker Protection Act 2023.

**5.13 Gender Pay Gap Information Regulations 2017**

The Gender Pay Gap Regulations, formally known as the Equality Act 2010 (Gender Pay Gap Information) Regulations 2017, came into force in the UK in April 2017. These regulations require all private and voluntary-sector employers with 250 or more employees to publish data on their gender pay gap.

NFRS is obligated to report this data by 31st March each year to remain compliant with the regulations.

Beyond the legal requirement to publish gender pay gap data, ensuring that pay systems are free from inherent gender bias is crucial. This not only promotes fairness but also serves as a critical defence against any equal pay claims brought under the Equality Act, which covers work of equal value.

**5.14 Homelessness Reduction Act 2017**

The Homelessness Reduction Act 2017 came into force in April 2018; this Act requires public services to notify local authorities if they come into contact with someone that they think may be homeless or at risk of becoming homeless

**5.15 Localism Act 2011**

The Localism Act 2011 (UK Government, 2011) is an Act of Parliament that changes the powers of local Government in England. The aim of the Act is to facilitate the devolution of decision-making powers from Central Government control to individuals and communities.

**5.16 Police and Crime Act 2017**

The Policing and Crime Act 2017 amends the Fire and Rescue Services Act 2004, empowering Police and Crime Commissioners (PCCs) to assume governance of their local fire and rescue services by establishing new PCC-style Fire & Rescue Authorities. The Act also introduces a statutory duty for enhanced collaboration across emergency services, reinforcing the need for closer working relationships among blue light services.

Following these amendments, the current PCC for Nottinghamshire and the City of Nottingham sits on the Combined Fire Authority but has not assumed exclusive governance.

**5.17 Crime & Disorder Act 1998**

The Crime and Disorder Act 1998 imposes a statutory duty on responsible authorities—including local authorities, the Police, Probation Trusts, Fire and Rescue Authorities, and Clinical Commissioning Groups—to develop and implement strategies aimed at reducing crime and disorder, including anti-social behaviour. Additionally, these strategies must address the misuse of drugs, alcohol, and other substances, as well as focus on reducing reoffending rates.

**5.18 Children’s Act 1989/2004 and The Care Act 2014**

While parents and carers have the primary responsibility for their children's care, local authorities, in collaboration with partner organisations and agencies, have specific duties to safeguard and promote the welfare of all children within their jurisdiction. The Children Acts of 1989 and 2004 outline these responsibilities:

* **Section 17 of the Children Act 1989** requires local authorities to provide services for children in need within their area, regardless of where they are located.
* **Section 47 of the Children Act 1989** mandates local authorities to initiate enquiries if they suspect a child has suffered, or is at risk of suffering, significant harm.

These duties can only be effectively fulfilled with the full co-operation of other partners, many of whom have their own responsibilities under Section 11 of the Children Act 2004.

Furthermore, Section 10 of the Children Act 2004 places a duty on local authorities to foster co-operation between themselves and other organisations and agencies to improve the wellbeing of local children. This co-operation should be seamless and effective across all levels of an organisation, from strategic planning to operational execution.

The **Children Act 2004**, as amended by the **Children and Social Work Act 2017**, reinforces this crucial relationship by imposing new duties on key agencies within a local area. Specifically, the police, clinical commissioning groups, and local authorities are required to work together, alongside other local partners, to safeguard and promote the welfare of all children in their area. Every individual who interacts with children and families has a role to play in this safeguarding process.

For the purposes of this guidance, safeguarding and promoting the welfare of children is defined as:

* Protecting children from maltreatment.
* Preventing impairment of children’s mental and physical health or development.
* Ensuring that children grow up in conditions that provide safe and effective care.
* Taking action to enable all children to achieve the best possible outcomes.

Additionally, the **Care Act 2014** (UK Government, 2014), which came into force in England on 1 April 2015, introduced new duties and responsibilities for local authority adult social services as the lead agencies in protecting adults at risk. This Act clearly outlines NFRS’s responsibility, as a public authority, to ensure that the adults and children it interacts with are protected from harm.

**5.19 Freedom of Information Act 2000**

The Freedom of Information Act 2000 (FOIA) was introduced as part of the UK government’s commitment to promoting 'Open Government'. The primary aim of the Act is to increase transparency, allowing the public to access information about the activities of public services and to assess whether they are providing good value for money. Consequently, the FOIA applies exclusively to public authorities and does not extend to private businesses (Government.co.uk, 2021).

**5.20 Human Rights Act 1998**

This legislation outlines the fundamental rights and freedoms to which everyone in the UK is entitled. A crucial aspect related to risk management is Article 2 of the Act, which imposes a duty on public bodies to consider an individual’s right to life when making decisions that could place them in danger or impact their life expectancy. As such, key decisions related to risk management and resource allocation must be carefully evaluated to ensure compliance with this aspect of the Act, safeguarding the right to life.

**Overview of Legal Influences:**

Amendments to primary legislation bring significant changes to the sector and the way we deliver our services. In the wake of the Grenfell Tower fire inquiries, ongoing recommendations and legislative updates continue to shape how we serve our communities and provide business support. Non-compliance with these legal requirements could result in financial, reputational, workforce, or productivity consequences for NFRS. More severe breaches may lead to criminal investigations.

**6. Environmental**

The environmental section explores a range of ‘environmental risks’ aligned to three key areas:

**A**. The built environment and infrastructure

Detail and context relating to the built environment and infrastructure that could feature or be impacted as part of an operational response.

**B**. Climate change and environmental

The effects and impact of climate change and the new and emerging technology that is designed to help reduce this. There is greater awareness and planning to support preparedness for an operational response.

**C**. Future developments

Future developments, plans and strategies from partner organisations that will change the environmental landscape of the county in future years.

**6 (A) The Built Environment and Infrastructure**

**6.1 Air Transport and Aerodromes**

Nottinghamshire does not have any major air transport hubs, with the nearest being East Midlands International Airport, located in the neighbouring county of Leicestershire. However, the county is home to several aerodromes, airfields, and private runways, including:

* Langer Airfield, Harby Road, Langar – 2 Runways
* Netherthorpe Airfield, Thorpe Salvin, Worksop – 2 Runways
* Nottingham (Tollerton) Airport, Tollerton Lane, Tollerton – 2 Runways
* RAF Syerston, Fosse Road, Flintham, Newark – 3 Runways
* Retford (Gamston) Airport, Ollerton Road, Retford – 2 Runways
* Costock Heliport, Loughborough Road, Costock
* Widmerpool Heliport, Fosse Way, Widmerpool

**6.2 Road Networks**

In 2023, a total of 4.81 billion vehicle miles were travelled on roads in Nottinghamshire. The road network includes major routes such as the M1, A1 and A46.

The M1 motorway runs along the western edge of Nottinghamshire, with 14.4 miles passing through the county as it enters from and exits into Derbyshire. Within Nottinghamshire, Junctions 25 and 26 are situated along this stretch, with Trowell Services located between these junctions.

Highways England is responsible for the national strategic road network, which includes trunk roads. In Nottinghamshire, this responsibility covers the M1, A1, A453, A46, and A52. Nottinghamshire County Council manages the remainder of the roads within the county, except for private roads and those located within the City Council boundary.

**6.3 Rail and Tram Networks**

Two principal rail routes run through Nottinghamshire: the East Coast Main Line (ECML) and the Midland Mainline. The ECML is a 393-mile (632 km) electrified, high-speed railway connecting London and Edinburgh, passing through Nottinghamshire with key stops at Retford and Newark Northgate railway stations. This line serves as a vital transport artery along the eastern side of the UK, running roughly parallel to the A1 road.

The Midland Mainline is a major railway route in England that links London, Nottingham, and Sheffield. It supports suburban commuter services around London as well as longer-distance travel to the three largest cities in the East Midlands. Nottingham Station is the primary railway hub in Nottingham, serving both the national rail network and the city’s tram system, making it a critical point in the national infrastructure.

**High Speed 2 (HS2) Development**

As of 21 February 2024, the High Speed 2 (HS2) line is still planned to include a stop in Nottinghamshire at East Midlands Parkway, located just south of Nottingham. The HS2 line will link the East Midlands to the West Midlands, with trains continuing from East Midlands Parkway to Nottingham city centre via the existing main rail network. The line will also have stops in Derby and Chesterfield.

**Nottingham Tram Network**

The Nottingham Express Transit (NET) network consists of two lines that traverse the city, covering 20 miles (32 km) of track that runs along both road networks and dedicated sections. The trams are powered by overhead line equipment operating at a voltage of 750 V DC.

Trams run at frequencies ranging from 4 to 8 trams per hour, with combined services providing up to 16 trams per hour on the shared section of the network. In the 2022/23 financial year, it was estimated by the Department for Transport that 14.4 million passenger journeys were made on the NET.

NFRS operational personnel maintain their competence through specialised technical training focused on responding to rail and tram incidents. This training is supplemented by Operational Information Notes specific to these types of incidents. Given the unique risks and challenges associated with rail and tram emergencies, NFRS also maintains a dedicated heavy rescue response capability to ensure an effective and specialised response.

**6.4 Rivers, Canal Networks and Marinas**

Nottinghamshire has a significant network of rivers and canals, including:

* **River Trent**: The most significant river in Nottinghamshire, it flows through the county and passes through several towns including Nottingham and Newark-on-Trent.
* **River Soar**: Although it primarily flows through Leicestershire, it briefly touches the western border of Nottinghamshire.
* **River Idle**: This river flows through the northern part of the county, including towns like Retford.
* **River Erewash**: Forming part of the border between Nottinghamshire and Derbyshire, this river flows through the Erewash Valley.
* **River Maun**: Flowing through the town of Mansfield, this river is a tributary of the River Idle.
* **River Meden**: Also a tributary of the River Idle, the River Meden flows through north-west Nottinghamshire.
* **River Leen**: This river runs through Nottingham, joining the River Trent.
* **Nottingham Canal**: Although mostly disused, parts of this canal still exist within Nottinghamshire.
* **Grantham Canal**: Connecting the River Trent at Nottingham with Grantham, this canal runs through the southern part of the county.
* **Chesterfield Canal**: This canal runs through the northern part of Nottinghamshire, passing through towns like Worksop and Retford.
* **Erewash Canal**: Flowing along the western edge of Nottinghamshire, it closely follows the course of the River Erewash.

**River Trent**

The River Trent is one of England’s major rivers, flowing approximately 95 miles northward from Shardlow, through Nottingham and Newark-on-Trent, before joining the River Ouse at Trent Falls. From there, the combined waters flow into the Humber Estuary. The Trent is tidal up to Cromwell Lock, near Newark, located about 20 miles downstream from Trent Bridge. The river is known for its periodic tidal bore, referred to as an 'Aegir'. This natural phenomenon occurs when a spring tide meets the downstream flow of the river, creating a wave that can reach up to 1.5 metres in height at certain times of the year.

Upstream of Colwick, the water level is regulated by sluices operated by the Environment Agency (EA). These sluices function automatically to maintain a minimum water level and are typically either fully or partially open. The Environment Agency is also responsible for flood prevention and protecting the river from pollution.

Despite the decline in industrial use, the River Trent still supports a significant amount of commercial traffic, particularly in its lower reaches. British Waterways, now part of the Canal & River Trust, is the navigation authority responsible for ensuring the safety of navigation on the river.

In addition to the inherent risks associated with moving or deep water, the Trent and its connected waterways present various other hazards, including weirs and locks.

**Weirs**

Weirs present a significant hazard. Cromwell Weir is Nottinghamshire’s most notable weir located on the river Trent. Other weirs on Nottinghamshire’s waterways are:

* Averham Weir- River Trent (non-tidal section)
* Beeston Lock Weir- River Trent (Western end)
* Gunthorpe Lock Weir- River Trent (non-tidal section)
* Home Lock Sluices River Trent (non-tidal section)

**Locks**

A lock is a mechanism used to raise and lower boats between stretches of water at different levels along rivers, canals, and other waterways. The key feature of a lock is its fixed chamber, where the water level can be adjusted to allow vessels to move between varying elevations. This system, while essential for navigation, can pose significant risks due to its complex nature. Several locks are situated along the waterways in Nottinghamshire, including sections of the River Trent and other major canals:

* River Trent 10 Locks
* Nottingham & Beeston Canal 3 Locks
* River Erewash (Canal) 14 Locks
* Chesterfield Canal 65 Locks

**Marinas**

There are several marinas located along the river network in Nottinghamshire, including:

* Beeston Marina
* Farndon Marina
* Kings Marina
* Newark Marina
* Nottingham Castle Marina
* Sawley Marina
* Shireoaks Marina

In all cases these marinas are home to several features and services which include:

* Permanent and temporary moorings on fixed and floating pontoons
* Hard standing for boat storage
* Marine hoist for lifting boats from the water
* Diesel / LPG Storage

NFRS operational personnel maintain their competence through specialised technical training in responding to water-related incidents. This operational response is further supported by detailed Operational Information Notes covering areas such as Fires Onboard Vessels, Water Rescue, and Flooding incidents. Given the unique risks and challenges these situations present, NFRS maintains a dedicated specialist water rescue response capability.

**6.5 Industrial Sites – COMAH & REPPIR**

Businesses in the UK are legally required to protect their employees, third parties, and the public from potential hazards arising from their operations. Additionally, they must ensure that their activities do not harm the environment. Companies that handle or store hazardous substances must implement robust measures to prevent

or mitigate the impact of accidents on both people and the environment. Businesses that use or store more dangerous substances are strictly regulated under the Control of Major Accident Hazards Regulations 2015 (COMAH) and the Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPPIR).

**COMAH Sites**

The Control of Major Accident Hazards (COMAH) regulations are designed to prevent and mitigate the effects of major accidents involving dangerous substances that could cause serious harm to people or the environment. COMAH treats environmental risks with the same level of seriousness as those posed to human health. The regulations operate on two levels, depending on the quantity and type of hazardous substances stored or used by an organisation. Facilities that handle amounts exceeding the lower threshold of a hazardous substance are classified as "Lower Tier" establishments, while those exceeding the higher threshold are designated as "Upper Tier" sites.

Currently there are six sites within Nottinghamshire that are subject to COMAH regulations:

* British Gypsum, East Leake (Upper Tier)
* DHL Supply Chain Limited (Upper Tier)
* DMW Logistics Limited (Lower Tier)
* ITP Aero UK Limited (Lower Tier)
* Misterton PSD, Misterton (Upper Tier)
* Uniper UK Limited, Ratcliffe-on Soar Power Station (Lower Tier)

These sites are required to compile safety reports and develop major accident prevention policies appropriate to their tier classification. These documents must detail and demonstrate the comprehensive safety measures in place to minimise the risks posed by the hazardous substances stored on-site, while also considering the impact on local communities and the environment. Additionally, they must notify the relevant competent authorities, such as the Health & Safety Executive and the Environment Agency, to facilitate the planning of inspection programmes and ensure compliance with their regulatory responsibilities.

**REPPIR**

The REPPIR (Radiation Emergency Preparedness and Public Information Regulations) are focused on ensuring preparedness for radiation emergencies. These regulations establish a framework of measures designed to ensure effective response both on-site, where the emergency occurs, and off-site, where members of the public may be affected.

REPPIR places legal obligations on:

* **Operators of premises** where work involving ionising radiation is conducted, such as licensed nuclear sites, hospitals, universities, ports, airports, and factories.
* **All local authorities**, not only those with REPPIR operators within their jurisdiction.
* **Employers of individuals** who may be required to intervene in a radiation emergency, including emergency services.

As of now, Nottinghamshire has no REPPIR sites registered with the Health and Safety Executive (HSE).

In addition to these regulations, off-site plans are developed by the Nottingham & Nottinghamshire Local Resilience Forum (LRF), of which NFRS is an active partner. This collaborative approach enables the creation of comprehensive contingency plans through a multi-agency framework, ensuring a coordinated response in the event of an incident.

NFRS personnel conduct regular inspections of these sites and develop detailed Site Specific Risk Information (SSRI), which is reviewed periodically. This ensures that critical information is readily available to our staff should an incident occur.

The NFRS Protection Department is responsible for safeguarding people in and around public and work-based premises by ensuring compliance with fire safety regulations and statutory requirements. NFRS engages from both regulatory and community safety perspectives. Premises are incorporated into an ongoing work programme within the Protection Department, with risk intelligence being generated as Site Specific Risk Information for operational response.

NFRS operational personnel maintain their competence through specialised technical training focused on responding to industrial incidents. This operational readiness is further supported by Operational Information Notes covering Industry, Radiation, Pipelines, and Utilities. Specialist support is provided through Hazardous Materials Environmental Protection Advisors (HMEPA) and Radiation Protection Supervisors (RPS).

**6.6 Football Grounds, Sports Stadiums and Arenas**

Each week thousands of sporting fans travel throughout Nottinghamshire to spectate matches or events at local stadiums and arenas:

**Table 8 – Stadia and Arena Capacity**

|  |  |
| --- | --- |
| **Sports Venue** | **Capacity** |
| Nottingham Forest Football Club | 30,445 |
| Notts County Football Club | 19,840 |
| Mansfield Town Football Club | 9,186 |
| Nottinghamshire County Cricket Club | 17,500 |
| Nottingham Ice Arena | 10,000 |

The relevant local authority is responsible for ensuring that stadiums comply with sports ground safety guidelines in order to obtain the necessary safety certificate under the Safety of Sports Grounds Act 1975. The Sports Ground Safety Authority (SGSA) oversees local authorities in their role, ensuring that sports grounds meet the required safety standards. Additionally, the SGSA provides expert advice on safety and security, covering aspects such as physical infrastructure and safety management for existing, new, and refurbished stadiums.

**Safety Advisory Groups**

A Safety Advisory Group (SAG) is established to provide expert advice to the local authority, enabling it to fulfil its responsibilities under the Safety of Sports Grounds Act 1975 and the Fire Safety and Safety of Places of Sport Act 1987. The SAG serves as a forum where the local authority and other agencies can collaborate to develop a cohesive approach to safety at sports grounds, while each agency continues to exercise its own distinct responsibilities. It is important to note that the local authority, not the SAG, is responsible for issuing the safety certificate and for advising and assisting the certificate holder when necessary.

**Temporary Events**

A key aspect of emergency planning is preparing for events, especially those that are large-scale or high-risk. NFRS collaborates with partners and event organisers to promote safety and mitigate potential risks. All large-scale or high-risk events are subject to a Safety Advisory Group (SAG) meeting, which is led by the upper-tier local authority.

**6.7 Heritage and Listed Properties**

There are a wide variety of heritage and cultural risks across the county of Nottinghamshire, including 4,500 listed buildings, structures and monuments. Listed buildings are graded to reflect their relative special architectural and historic interest. Within the UK there are three categories of listed buildings:

* Grade I buildings are of exceptional interest, nationally only 2.5% of listed buildings are listed as Grade I.
* Grade II\* buildings are particularly important buildings of more than special interest; nationally 5.5% of listed buildings are Grade II
* Grade II buildings are of special interest; 92% of all listed buildings in the UK are in this class and is the most likely grade of listing for a homeowner.

The National Heritage List for England (NHLE) provides a comprehensive overview of all properties in Nottinghamshire. The breakdown of listed buildings from the NHLE across Nottinghamshire identifies the following number of sites in 2023:

* Grade I – 138
* Grade II\* – 171
* Grade II – 4263

Listed and heritage sites often present unique challenges that can influence the operational tactics adopted by NFRS. To address these challenges, NFRS personnel regularly inspect these sites and develop detailed Site Specific Risk Information (SSRI), which is reviewed periodically to ensure that critical information is readily available to our teams in the event of an incident.

NFRS operational personnel maintain their competence through specialised training focused on responding to heritage-related incidents. This operational readiness is further supported by detailed Operational Information Notes, which cover topics such as Preventing Damage to Heritage Buildings and Managing Fires in Historic Structures.

**6.8 High Rise Buildings**

Following the outcomes of the Grenfell Tower inquiries, significant changes have been made to fire safety regulations and legislation related to the design, construction, and management of high-rise buildings. Currently, several buildings in Nottinghamshire are classified as high-rise and have cladding similar to that used in Grenfell Tower.

NFRS defines high-rise buildings as those that are 18 metres or taller; however, this definition may change based on ongoing work by the National Fire Chiefs Council (NFCC) and potential amendments to Building Regulations, specifically Approved Document B: Fire Safety. The 18-metre threshold is based on the requirement for additional fire safety measures, such as the installation of rising mains and protected lobbies, which are crucial for firefighter safety. This definition also takes into account the capabilities of operational high-rise firefighting appliances.

Properties are identified using Ordnance Survey (OS) gazetteer data, building height information, and are catalogued by unique property reference number (UPRN). Multi-storey, multi-occupied buildings, which may include both residential and commercial units, can have multiple UPRNs associated with a single structure. OS Gazetteer data identifies buildings using map points, and in some cases, buildings may have multiple entries. This can lead to discrepancies in records, requiring further analysis and filtering by GIS teams.

**Table 9 – Number of Unique Properties by UPRN**

|  |  |
| --- | --- |
| **Building Height** | **Number of Properties (UPRN)** |
| Under 11m | 625,040 |
| 11-17.99m | 14398 |
| 18-29.99m | 6102 |
| 30m+ | 2683 |

**Table 10 – Total Number of Buildings by Building Height**

|  |  |
| --- | --- |
| **Building Height** | **Number of Buildings\*** |
| Under 11m | 482,256 |
| 11-17.99m | 1724 |
| 18-29.99m | 240 |
| 30m+ | 41 |

\*Based on OS Gazetteer data – pre-analysis and filtering by GIS

**Table 11 – Number of Buildings 30m+ in Height**

|  |  |
| --- | --- |
| **Building Name / Address** | **Height (m)** |
| Pine View, Norton Street, Radford | 60.0 |
| Southchurch Court, Farnborough Road, Clifton | 59.9 |
| Bowman Telephone Exchange, Bath Street, Nottingham | 57.9 |
| Burrows Court, Windmill Lane, St Ann’s | 55.4 |
| High Point, Noel Street, Hyson Green | 53.1 |
| Victoria Centre, Nottingham | 51.6 |
| Ash View, Norton Street, Radford | 48.8 |
| Newton House, Maid Marian Way, Nottingham | 48.7 |
| Newland House, Mount Street, Nottingham | 48.6 |
| Nottingham One Tower, Canal Street, Nottingham | 47.8 |
| West Burton Power Station, North Road, West Burton | 46.8 |
| Woodthorpe Court, Chestnut Walk, Nottingham | 44.7 |
| The Litmus Building, Huntingdon Street, Nottingham | 44 |
| Kingston Court, Sneinton Road, Nottingham | 43 |
| Bentick Court, Manvers Street, Nottingham | 43 |
| Jurys Inn, Waterfront Plaza, Nottingham | 42.9 |
| Britannia Hotel, St James’s Street, Nottingham | 42.8 |
| Winchester Court, Winchester Street, Nottingham | 42.7 |
| Oak View, Norton Street, Radford | 42.4 |
| Manvers Court, Manvers Street, Nottingham | 41.7 |
| Colwick Woods Court, Colwick Road, Nottingham | 41.4 |
| Market Square House, St James’s Street, Nottingham | 41.3 |
| Bentinck Court, Manvers Street, Nottingham | 40.4 |
| Marco Island, Huntingdon Street, Nottingham | 39.3 |
| Park Plaza, Maid Marian Way, Nottingham | 38.8 |
| Trent Bridge House, Radcliffe Road, West Bridgford | 37.6 |
| Shakespeare House, North Church Street, Nottingham | 37.4 |
| Travelodge, New City House, Maid Marian Way, Nottingham | 36.4 |
| Pearl Assurance House, Friar Lane, Nottingham | 35.5 |
| Kings Court, Commerce Square, Nottingham | 34.7 |
| Castle Heights, Maid Marian Way, Nottingham | 34.6 |
| Imperial Tobacco Warehouse, Wollaton Road, Nottingham | 34.4 |
| The Ice House, Bolero Square, Nottingham | 34.2 |
| Cottam Power Station, Outgang Lane, Cottam | 33.7 |
| Loxley Court, St James’s Street, Nottingham | 33.3 |
| The Atrium, Waterfront Plaza, Nottingham | 32.6 |
| The Frontage, Queen Street, Nottingham | 30 |

Operational crews regularly visit high-rise buildings to develop detailed Site Specific Risk Information (SSRI), ensuring that critical information is immediately accessible to our staff in the event of an incident. NFRS operational personnel maintain their competence through specialised training focused on responding to incidents in tall buildings. This preparedness is further supported by comprehensive Operational Information Notes on Fires in Tall Buildings and Evacuation Procedures.

**6.9 Reinforced Autoclaved Aerated Concrete (RAAC)**

Reinforced Autoclaved Aerated Concrete (RAAC) is a lightweight form of pre-cast concrete that was widely used in the UK, particularly for roof construction, from the mid-1950s to the mid-1990s. RAAC panels have been associated with a risk of sudden, partial, or complete structural collapse.

Given the potential for further structural failures in buildings containing RAAC, urgent remediation works are being carried out across the UK. In response to these concerns, the National Fire Chiefs Council (NFCC) has recently published guidance to support Fire and Rescue Services in understanding and addressing the safety risks associated with incidents involving RAAC.

NFRS has conducted a thorough inspection of its service estates to ensure that RAAC is not present in any of its buildings. Operational readiness is further enhanced through the use of Operational Information Notes specifically addressing RAAC-related risks. Additionally, an eLearning package has been introduced to provide operational personnel with further information and heightened awareness of the issues associated with RAAC.

**6.10 Underground Mines and Workings**

**Mines**

Although there are no longer any active coal mines in Nottinghamshire, former mining sites and their surrounding areas can still pose significant risks. The most widespread impact of past underground mining is surface subsidence. It is estimated that nearly half of the county has either been affected by subsidence or is within the range of existing or former mine-take areas. This subsidence can lead to the sinking of the ground surface, potentially causing damage to nearby properties and roadways.

Abandoned mines were either filled or capped, but some former colliery sites still retain buildings, equipment, and other features of historical interest. Notable examples of winding house structures can still be seen at sites such as Bestwood and Clipstone.

**Quarries**

To facilitate the extraction of minerals and natural resources, Nottinghamshire is home to numerous active and disused quarrying sites. These sites pose significant risks, including challenging rescue scenarios and hazards such as heights, deep water, unstable ground, and the presence of industrial machinery and vehicles (Nottinghamshire County Council, 2023).

These sites are regularly inspected by NFRS personnel, who develop detailed Site Specific Risk Information (SSRI) to ensure that crucial information is readily available to our staff in the event of an incident. This information is reviewed periodically to maintain its accuracy and relevance. NFRS operational personnel maintain their competence through specialised technical training focused on responding to incidents involving heights, subsurface environments, and confined spaces. Their operational readiness is further supported by detailed Operational Information Notes on Working at Height, Mines, and Confined Spaces.

Although no longer under the control of the Coal Authority, the Mines Rescue Service in Mansfield Woodhouse continues to hold valuable expertise in confined space rescues, working at height, and long-duration breathing apparatus operations.

**6.11 Waste, Recycling and Scrap Sites**

Nottinghamshire is home to a diverse array of waste, recycling, and scrap metal sites. These facilities handle not only conventional household waste but also various types of hazardous materials, including asbestos, chemicals, batteries, solvents, and oils. Waste sites in the county range from landfills, which typically manage household refuse, to specialised scrap metal recycling centres that focus on processing and recycling metal. While some waste sites are located in open areas, many private waste processing and recycling plants operate within large, open-plan, steel-framed buildings.

**Lithium-ion (Li-ion) Batteries**

As the use of lithium-ion batteries continues to rise, so does the risk associated with their improper disposal. Due to their chemical composition, lithium-ion batteries have been increasingly linked to waste fires in the UK.

These batteries are commonly found in smaller household items such as electric toothbrushes and mobile phones. E-cigarettes are also a significant concern, with approximately 1.3 million disposable vaping devices discarded each week, despite being fully recyclable (Material Focus). When lithium-ion batteries end up in residual or mixed recycling waste streams either loose or still inside waste electrical and electronic items they can cause fires if punctured or damaged in the compactor of a refuse collection vehicle or during waste processing and sorting operations.

**6.12 Composite Fence Panels**

Composite fencing is a synthetic material composed primarily of wood fibres and plastic, often referred to as "plastic wood." These materials are typically recycled, making composite fencing an attractive eco-friendly option.

This material is increasingly being adopted by local authorities, resulting in its presence in close proximity to housing areas. The use of composite fencing and decking is also becoming more prevalent in private residences and commercial properties due to its low maintenance requirements.

However, these products pose a significant fire risk, as they can lead to rapid and extensive fire spread due to the intense heat radiated when they ignite. Additionally, fires involving composite materials produce large volumes of smoke, which is often more acrid and hazardous than that produced by natural materials.

**6.13 Tourist Attractions**

Tourism in Nottinghamshire continues to flourish, with the local visitor economy exceeding £2 billion in 2022, marking a record year for the region. Visitor numbers have also seen significant growth, increasing by 14.2% from 2021, with nearly 33 million visits recorded. The most popular time to visit is from July to September, accounting for 30% of all visits. Nottingham and Newark-on-Trent remain key destinations, contributing substantially to the region's tourism appeal.

**6.14 Airbnb**

The rise in popularity of Airbnb-style short-term rentals is increasingly drawing the attention of fire and rescue services. New fire safety regulations, introduced in October 2023, place greater responsibility on duty holders, including the requirement to conduct fire risk assessments. However, unlike traditional visitor accommodations such as hotels, obtaining location and safety details for these properties can be challenging.

In 2023, 8.4 million guests used Airbnb accommodation, with the East Midlands being a leading region for domestic travel, attracting 53% of UK-based guests.

**6.15 Universities**

Nottinghamshire is home to two major universities, both located within the City Council boundary, serving as educational centres for over 65,000 students (Higher Education Statistics Agency, 2023).

**The University of Nottingham (UoN)**

The University of Nottingham is one of the largest universities in the UK, with a registered student population of 38,365 in 2022/23, making it the 8th largest in the country. UoN’s campuses include:

* University Park Campus
* Jubilee Campus
* Sutton Bonington Campus
* Kings Meadow Campus

**Nottingham Trent University (NTU)**

Nottingham Trent University is also among the largest, with 36,785 students in 2022/23, ranking 10th in the UK. NTU’s campuses include:

* City Campus
* Brackenhurst Campus
* Clifton Campus
* Creative Quarter Campus
* NTU in Mansfield

**6 (B) Climate Change and Environmental**

**6.16 Decarbonisation**

Our changing climate is having a profound and devastating impact on people worldwide. The past four years have been the warmest on record, with extreme and destructive weather events, such as floods and heatwaves, becoming increasingly severe and frequent. In July 2022, the UK recorded its highest-ever temperature of 40.3 °C, and 2023 was confirmed as the warmest year globally on record.

The urgency of this situation has prompted over 300 local authorities across the UK to declare climate and ecological emergencies. This widespread acknowledgment underscores the critical need to significantly reduce carbon emissions to near-zero levels to mitigate further damage.

NFRS is actively supporting the NFCC's guidance on environmental sustainability and is working towards a comprehensive ‘Decarbonisation Strategy’. Our roadmap to decarbonisation includes an ambitious vision of becoming carbon neutral by 2040.

As part of this initiative, we are leveraging the Public Sector Decarbonisation Fund to help mitigate the environmental impact of our buildings, particularly through our programme of station rebuilds and renovations. Additionally, NFRS has been transitioning its light vehicle fleet to electric-powered vehicles in alignment with the government’s zero-emission vehicle mandate.

**6.17 Local Climate Impacts Profile (LCLIP)**

The Local Climate Impact Profile (LCLIP) for Nottingham and Nottinghamshire was conducted to enhance both local authorities' understanding of the county’s vulnerability to severe weather events (Nottingham City Council, 2021; Nottinghamshire County Council, 2021). Based on data assessing a ten-year period from 2000 to 2010, the LCLIP aimed to inform local authorities about the weather events that could impact their assets, infrastructure, and capacity to deliver services. Additionally, the LCLIP provides insights into the effects of these weather events on other public service providers and local communities.

**6.18 Conservation and Sites of Special Scientific Interest (SSSI)**

Nature sites and countryside areas can be designated as protected areas due to their natural and cultural significance. These designations impose restrictions on activities and developments that could impact these areas, including adjacent lands. Protection ensures that these sites:

* Have clearly defined boundaries.
* Are safeguarded by laws and personnel to prevent harm to nature and wildlife.
* Can sometimes be used for recreation and study, within the bounds of conservation.

Protected areas are established by:

* Organisations such as Natural England.
* Local councils through bylaws.
* National and international laws and bodies, such as the International Union for Conservation of Nature (IUCN).

In Nottinghamshire, key nature conservation sites receive legal protection, including:

* **Sherwood Forest National Nature Reserve** – Managed primarily by Nottinghamshire County Council in the southern part.
* **Birklands and Bilhaugh Special Area of Conservation** – Nottinghamshire County Council oversees the majority of the southern area as part of Sherwood Forest.
* **67 Sites of Special Scientific Interest (SSSIs)** – Covering woodland, heathland, grassland, wetland, and quarries, with Nottinghamshire County Council managing parts of four sites.
* **49 Local Nature Reserves (LNRs)** – Nottinghamshire County Council is wholly or partly responsible for seven of these reserves (Nottinghamshire County Council, 2023).

Fire and Rescue Services can be held liable for clean-up costs and face prosecution if their actions cause or exacerbate pollution. However, Regulation 40 of the Environmental Permitting Regulations 2010 provides a defence against prosecution if all three of the following criteria are met:

* A discharge is made in an emergency to avoid danger to human health.
* All reasonably practicable steps were taken to minimise pollution.
* The relevant environmental agency is informed of the incident as soon as possible.

NFRS operational personnel maintain their competence through specialised technical training focused on responding to incidents and protecting the environment. This operational readiness is supported by detailed Operational Information Notes covering Wildfires and Environmental Protection. To further enhance the initial response, NFRS also deploys a first-response capability, including Hazardous Materials and Environmental Protection Advisors (HMEPA).

**6.19 Wildfire and Woodlands**

The threat of wildfires is increasing due to climate change. A wildfire is defined as a large, uncontrolled, destructive fire that spreads quickly over woodland or brush. There were 442 wildfires in England and Wales by Summer 2022, compared with 247 in 2021. Periods of warmer and drier weather create conditions that elevate the risk of wildfires. According to the Met Office, wildfires are projected to increase globally by 14% by 2030, 30% by 2050, and 50% by 2100. The warmer summer

temperatures of 2022 likely contributed to a spike in grassland and vegetation fires. An increase in wildfires in Nottinghamshire could impact fire cover, the economy,

flood risk, habitats, wildlife, and air quality. There may also be a need to assist colleagues in other counties during times of heightened wildfire activity

NFRS operational personnel maintain their competence through specialised technical training focused on responding to incidents and protecting the environment. This operational readiness is further supported by detailed Operational Information Notes on Wildfires and Environmental Protection.

Recognising the growing risk of incidents caused by heatwave events, NFRS is making strategic investments in its rural firefighting capabilities. These enhancements will improve our operational preparedness for wildfires and spate conditions in rural areas.

**6.20 Extreme Weather Events**

Extreme weather events impact all levels of society, leading to significant economic costs, population displacement, and loss of life. Research by the Met Office has explored the link between these events and climate change, revealing that extreme heat is becoming more frequent, while the risk of extreme cold is decreasing. Additionally, the UK is experiencing wetter winters and drier summers, presenting increasingly complex and challenging conditions.

The National Risk Register identifies four primary types of severe weather risks:

* **Storms and gales**: Including hurricanes and tornadoes, with potentially damaging winds and lightning.
* **Low temperatures and heavy snow**: Prolonged periods of sub-zero temperatures and snow.
* **Heatwaves**: Extended periods of high temperatures that can severely affect public health.
* **Drought**: Extended periods of low rainfall leading to water shortages.

The consequences of severe weather may include:

* Fatalities and injuries, both physical and psychological.
* Evacuation and sheltering of residents or business employees.
* Widespread damage to property and infrastructure.
* Disruption to essential services, especially transport and communications.
* Interruptions to utility services.
* Environmental damage.

Severe weather can also hinder fire and rescue service operations by:

* Preventing employees from reaching work.
* Obstructing vehicle movement due to road conditions.
* Making premises inaccessible or causing damage.
* Compromising firefighting water supplies.
* Causing equipment and vehicle malfunctions, particularly in extreme temperatures (UKFRS, 2022).

The latest UK State of the Climate report highlights the following trends:

**Heatwaves**

The UK is experiencing higher maximum temperatures and longer warm spells. On 19th July 2022, a new UK record temperature of 40.3°C was set, contributing to the warmest year on record since 1884. The risk associated with heatwaves is rising, with an estimated 4,507 heat-related deaths in England in 2022 (Met Office, 2023).

**Dry Periods & Drought Events**

There has been a decline in the longest sequence of consecutive dry days in recent decades. However, while dry spells are getting shorter, this does not necessarily indicate a change in drought levels in the UK. Drought events are complex, influenced by various meteorological, hydrological, and societal factors, making it difficult to determine whether they are becoming more common or prolonged due to climate change. The Met Office’s UK Climate Projections (UKCP) suggest a trend towards drier summers, particularly in southern parts of the UK.

**Cold Events**

In the most recent decade (2011–2020), there has been a 16% decrease in the number of days with air frost and a 14% decrease in days with ground frost compared to the 1981–2010 average. The number of icing days has also decreased since the 1960s. While the UK is projected to experience warmer, wetter winters and hotter, drier summers, colder-than-average winters and summers will still occur, though they are expected to become less frequent in the future (Met Office, 2023).

**6.21 Flooding**

Coastal, fluvial, and surface water flooding are highlighted as significant risks in the 2023 National Risk Register, posing serious threats to the UK. According to the National Audit Office (NAO) report on government resilience to extreme weather, approximately 5.7 million properties in England are at risk of flooding in 2023, with key infrastructure also facing substantial risk.

In Nottinghamshire, over 85,000 properties are at risk of flooding from various sources, with 12 major flood events over the past 12 years. Nottingham City Council and Nottinghamshire County Council maintain Flood Risk Management Strategies that aim to manage future flood risks and adapt to climate change.

Flooding related incidents account for a small number of our total operational incidents, however, flood conditions often pose challenges that require significant resources during spate conditions. In 2023-24, we attended 44 incidents due to

flooding, 14 of which involved vehicles.

**6.22 Earthquakes**

The British Geological Survey, through its National Earthquake Information Service, operates a nationwide network of seismograph stations across the UK. Earthquakes occurring in the UK and its coastal waters are detected based on the distribution of these seismograph stations and are measured on a magnitude scale ranging from 1 to 10, with 1 being weak and 10 being extreme.

Although earthquakes in the UK are moderately frequent, they rarely cause severe damage. In 2020, the UK experienced 431 seismic events, one of which was recorded in Wysall, Nottinghamshire, on 17th August, with a magnitude of 1.7 on the seismic scale (British Geological Survey, 2021).

Structural collapses can occur due to various factors, including natural causes (such as deterioration, earthquakes, subsidence, or flooding), accidental causes (such as explosions, impacts, or fires), or deliberate actions (such as the use of explosive devices). The risk of collapse is also present in unstable structures.

When such incidents occur, the fire and rescue service is typically the best-equipped emergency service to respond. These services possess the knowledge, skills, experience, and equipment necessary to manage these challenging environments (UKFRS, 2022).

NFRS operational personnel maintain their competence through specialised technical training focused on responding to incidents involving collapsed structures and confined spaces. This readiness is further supported by detailed Operational Information Notes covering Subsurface, Heights, Structures, and Confined Spaces.

The UK Fire and Rescue Service maintains a national network of trained Urban Search and Rescue (USAR) operatives. These USAR teams are strategically positioned across the UK to ensure a rapid response when needed. Additionally, some USAR personnel are designated as tactical advisors and can be mobilised to provide expert support during such incidents.

**6.23 Fracking**

Hydraulic fracturing, commonly known as ‘fracking,’ is a technique designed to extract gas and oil from shale rock formations. The process involves drilling deep into the earth and then injecting a high-pressure mixture of water, sand, and chemicals into the shale rock layer. This high-pressure injection fractures the rock, allowing the trapped gas or oil to be released and recovered. The term "fracking" specifically refers to the fracturing of the shale by this high-pressure mixture.

Although there is currently no active fracking in Nottinghamshire, exploratory tests for shale gas have been conducted at two sites:

* **Springs Road, Misson**: Planning permission was granted in May 2017 for the development of a hydrocarbon wellsite and the drilling of up to two exploratory hydrocarbon wells on land off Springs Road. In November 2020, the site operator applied to extend the evaluation and restoration period for an additional three years, until November 2023.
* **Tinker Lane, near Barnby Moor and Blyth**: Testing at this site has been discontinued. The site operators have confirmed that the well will be plugged and abandoned, with the land restored to its original agricultural use.

In October 2022, the Government announced the reinstatement of a temporary suspension on fracking in England due to public concerns about environmental uncertainties.

**6.24 Infectious Disease**

A pandemic occurs when a new infectious disease spreads rapidly across a large population, affecting many people in a short period. According to the World Health Organization (WHO), an outbreak is classified as a pandemic when the infection is caused by a novel pathogen with no existing natural immunity, infects humans, and spreads easily and sustainably across regions.

In 2020, the COVID-19 pandemic, also known as coronavirus disease, spread globally after first being identified in Wuhan, China, in December 2019. The virus has been responsible for over 7 million deaths worldwide, making it one of the deadliest pandemics in history, ranking fifth among the most lethal epidemics and pandemics. An influenza-type pandemic remains the highest-rated natural hazard, with the potential for significant impacts on our communities.

Zoonotic diseases are infections that can be transmitted from animals to humans, posing risks of illness or fatalities. Non-zoonotic animal diseases, while not transmissible to humans, can still have devastating effects on livestock, which the public depends on for food, trade, and maintaining ecosystems. Several outbreaks of various diseases have occurred in recent years, with the foot-and-mouth outbreak in 2001 being one of the most devastating in modern history.

**6.25 Industrial Technical Utilities**

Nottinghamshire is traversed by five government oil pipelines, with four located in the north and east of the county and a fifth crossing the southwest. Additionally, high-voltage energy transmission lines run across the county, transporting power from stations along the River Trent to domestic and industrial users.

These government oil pipelines are primarily used for transporting methane gas, oil, motor spirit, and similar petroleum products. The county is also home to a network of 12 major natural gas pipelines, all regulated under the Pipelines Safety Regulations 1996.

Pipelines have long been utilized for transporting crude oil to refineries and shipping terminals. While petroleum and its derivatives remain the primary substances moved through these pipelines, the growing consumption of goods and advancements in technology have expanded their use to include various industrial materials and chemical products.

In the event of service disruptions, both the public and fire and rescue service personnel may encounter hazardous components at operational incidents, which could lead to risks such as electrocution, asphyxiation, or explosion.

NFRS operational personnel maintain their competence through specialized training focused on responding to incidents involving utilities. This operational readiness is further supported by detailed Operational Information Notes covering Pipelines, Substation & Electrical Distribution, and Electricity.

**6.26 Wind Turbines**

Wind power has become a crucial energy source in the UK, contributing significantly to both consumer and industrial energy needs. As of 2023, wind power accounted for approximately 28.8% of the UK's total electricity generation, reflecting a steady increase in capacity and output. This growth is supported by both onshore and offshore wind farms, with the UK’s total installed wind power capacity reaching over 30,000 megawatts (MW)(Power Technology).

Onshore wind farms continue to play a vital role, with nearly 1,500 operational across the country. In Nottinghamshire, there are 14 onshore wind turbines that collectively contribute to an overall generation capacity of 41.8 MW of electricity. These turbines are subject to local authority planning regulations.

**6.27 Solar Farms**

Solar farms are large-scale installations of solar photovoltaic (PV) panels designed to generate electricity, typically feeding directly into the national grid. These renewable energy sources vary in size, covering areas from 1 acre to over 100 acres, and are generally situated in rural locations. As of 2024, there are approximately 500 operational solar farms across the UK, with an increasing number under construction to meet the growing demand for renewable energy.

Solar power is expected to play a crucial role in the UK's energy mix, with the country's solar capacity projected to increase by 500% by 2030. This expansion is part of the UK's broader strategy to achieve its renewable energy targets and reduce carbon emissions. On average, a 5 MW solar farm can power around 1,500 homes annually, requiring approximately 25 acres of land for such an installation.

In Nottinghamshire, there are currently 34 operational ground-mounted commercial solar PV farms, which collectively generate 242.1 MW of electricity. Additionally, 17 more sites have pending applications or are scheduled for construction, reflecting the county's ongoing commitment to expanding its renewable energy infrastructure.

NFRS operational personnel maintain their competence through specialized training focused on responding to incidents involving utilities. This operational readiness is further supported by detailed Operational Information Notes covering Pipelines, Substation & Electrical Distribution, and Electricity.

**6.28 Battery Energy Storage**

Battery storage systems are essential for storing energy generated from renewables like solar and wind, allowing it to be released when demand is highest. These technologies play a crucial role in transitioning from fossil fuels to renewable energy, with lithium-ion batteries currently dominating the market due to their effectiveness in stabilising electricity grids.

In Nottinghamshire, there are two commercial battery storage projects with a combined capacity of 49.5 MW:

* **West Burton B**: Operational since 2018, this facility is one of Europe's largest battery storage projects, developed as part of a UK-wide 200 MW solution. Managed by EDF Renewables, it comprises 20 industrial containers with a total capacity of 49 MW, allowing the UK grid to respond to fluctuations in electricity demand within 0.5 seconds.
* **Trent Basin Community Battery**: Europe’s largest community battery project, it can store up to 2.1 MWh of energy and deliver 0.5 MW of power. Part of a community energy demonstration project led by the University of Nottingham, it plays a key role in the 250-acre Waterside Regeneration area in Nottingham.

Additionally, three new battery storage installations are planned in Nottinghamshire:

* Staythorpe Road, Averham
* West Leake Lane, West Leake
* Kestrel Road, Mansfield

NFRS operational personnel maintain their competence through specialised technical training focused on responding to incidents involving utilities. This preparedness is further enhanced by comprehensive Operational Information Notes covering Renewable Energy, Electricity, and Photovoltaic Systems.

**6 (C) Future Developments**

**6.29 Nottingham City Council Local Plan 2020**

The Nottingham City Council Local Plan 2020, adopted in January 2020, updates and replaces the previous 2005 Local Plan. It includes the following key components:

* **Local Plan Part 1**: The aligned Core Strategy with Broxtowe and Gedling Boroughs, adopted in September 2014, outlines the overarching strategic planning framework for Greater Nottingham, including a spatial vision and objectives.
* **Local Plan Part 2 (LAPP)**: This document details site allocations, development management policies, and guides future land-use planning in line with the Core Strategy.
* **Nottingham and Nottinghamshire Waste Core Strategy**: Adopted in 2005, this plan governs waste management and will be replaced by the new Waste Local Plan, currently under development since 2019.
* **Neighbourhood Plans**: In accordance with the Localism Act 2011, these plans provide planning policies for specific neighbourhood areas and become part of the statutory Development Plan upon successful referendum.

The LAPP, together with the Greater Nottingham Strategic Plan 2028, aligns core strategies across Rushcliffe, Erewash, Broxtowe, Gedling, and Nottingham, forming the Nottingham Core Housing Market Area. The aligned Core Strategy outlines the spatial vision and objectives for Greater Nottingham, consistent with the Nottingham Local Plan 2020 and national planning policies, aiming to achieve these goals by 2028 (Nottingham City Council, 2021).

**6.30 Nottingham City Council – Building a Better Nottingham**

Significant regeneration efforts are underway across Nottingham, focusing on new housing, transport infrastructure, and key development sites. These initiatives are not only revitalising areas of the city but also driving growth, attracting investment, and increasing local employment opportunities. Nottingham City Homes, in collaboration with Nottingham City Council, is spearheading the creation of hundreds of new council homes to fulfil the council’s commitment to high-quality affordable housing.

A robust transport system is essential for enhancing quality of life, with increasing numbers of residents relying on trams, trains, and buses. Ongoing investments in transport and the city’s clear strategic vision are helping Nottingham maintain its status as a leader in public transport and supporting economic growth. The City Council and its partners are working diligently to coordinate construction and minimize disruptions during major transport projects, ensuring long-term benefits (Nottingham City Council, 2021).

These projects are divided into six key areas:

* Transport
* Regeneration
* Housing Developments
* Heritage Regeneration
* Development Opportunities
* Broadmarsh Area Transformation

**Overview of Environmental Influence:**

The impacts of climate change are increasingly evident, particularly during extreme weather events. This trend is expected to continue, with predictions of more intense rainfall, extreme weather patterns, and wetter winters. Surface water flooding remains one of the most likely risks identified in the National Risk Register.

As climate change progresses, the types and frequency of incidents we attend are shifting. Hot weather can lead to more forest, wildland, and outdoor fires, while wetter conditions result in more localized and widespread flooding. Both extremes create spate conditions, heightening demand for our services.

As Nottinghamshire continues to develop and urbanize, there is also significant growth in renewable energy production. Emerging technologies such as wind and solar farms, along with the increasing use of alternatively fuelled vehicles, introduce new risks that require careful assessment and, in emergencies, a safe operational response.

**7. Organisational**

**7.1 National Risk Register 2023**

The **2023 National Risk Register (NRR)** serves as the external version of the UK's National Security Risk Assessment (NSRA). The primary purpose of the NRR is to provide a comprehensive overview of the most significant risks that could impact the UK at a national level. These risks include both non-malicious threats, such as natural disasters and accidents, and malicious threats, such as terrorist attacks and cyber threats. The NRR is intended to inform government bodies, businesses, emergency responders, and community planners, aiding them in preparedness and response planning. It supports local community risk registers by offering a detailed assessment of national risks, which can then be adapted to local contexts for more tailored risk management strategies.

**Hazards Identified as Presenting the Most Risks**

The National Risk Register identifies a wide range of hazards, which can be categorized under several key themes:

1. **Terrorism**
* International terrorist attacks
* Terrorist attacks in venues and public spaces
* Malicious attacks on transport and critical infrastructure
1. **Cyber Threats**
* Cyber attacks on critical national infrastructure
* Cyber attacks targeting financial institutions and public services
1. **State Threats**
* Attacks on the UK’s financial systems
* Disruption of transatlantic telecommunications
1. **Accidents and Systems Failures**
* Major accidents in transportation (rail, maritime, aviation)
* Failure of critical infrastructure, such as electricity or water supply
* Industrial accidents, including chemical releases and explosions
1. **Natural and Environmental Hazards**
* Severe weather events, including storms, floods, and heatwaves
* Wildfires
* Geological events like earthquakes and volcanic eruptions
1. **Human, Animal, and Plant Health**
* Pandemic outbreaks
* Major outbreaks of animal and plant diseases
1. **Societal Risks**
* Public disorder
* Industrial action
1. **Conflict and Instability**
* Attacks on UK allies requiring international response
* Nuclear miscalculations involving UK or its interests

These risks are assessed for their likelihood and impact, providing a framework for national and local authorities to prioritise and plan their risk mitigation strategies effectively.

The assessment is designed to help various stakeholders, including Local Resilience Forums (LRFs), in understanding the national risk landscape and ensuring that local risk registers reflect the most significant and relevant threats to their communities.

**7.2 Nottingham and Nottinghamshire Community Risk Register**

The Nottingham and Nottinghamshire Community Risk Register serves as a comprehensive guide for identifying and assessing potential risks that could affect the Nottinghamshire community. It is a critical resource produced by the Nottingham and Nottinghamshire Local Resilience Forum (LRF) in compliance with the Civil Contingencies Act 2004. The primary purpose of the document is to inform the public and local authorities about the major emergencies that could occur in the region and to help them prepare accordingly. It includes detailed risk assessments, strategies for preparedness, and advice on how to mitigate the effects of these emergencies.

**Purpose:**

* **Informs the Public and Authorities:** The document is designed to keep the public informed about potential risks in their area, enabling them to take precautionary measures.
* **Guides Emergency Planning:** It supports local authorities and emergency responders in planning and preparing for major emergencies, ensuring coordinated and effective responses.
* **Enhances Community Preparedness:** By understanding the risks, communities can be better prepared to deal with emergencies, reducing their impact and aiding in quicker recovery.

**Significant Hazards Identified:**

The Community Risk Register identifies and highlights the following significant hazards that present the most risk to Nottinghamshire:

* **Loss of Critical Infrastructure:** Disruptions to electricity, water, gas, telecoms, fuel, transport, health, and financial services can have severe impacts.
* **Pandemic:** The risk of pandemics, particularly influenza, remains high, with the potential to affect human health severely.
* **Flooding:** Both fluvial (river) and surface water flooding are major concerns, with the potential to cause widespread damage to property and infrastructure.
* **Extreme Weather:**
	+ **Heatwave:** Increasingly frequent and intense heatwaves pose risks to health, infrastructure, and public services.
	+ **Low Temperatures and Snow:** Severe cold spells and snow can disrupt transport, utilities, and public services, posing risks to vulnerable populations.
* **Industrial and Transport Accidents:** Accidents in transport and industrial settings can escalate quickly, causing significant harm and disruption.
* **Malicious Risks:** The threat of malicious attacks, though not specific to Nottinghamshire, remains a concern, with various scenarios requiring preparedness.
* **Other Risks:**
	+ **Cyber Attacks:** Increasing in frequency, cyber-attacks threaten data security and the functionality of critical systems.
	+ **Natural Hazards:** Though less common, natural hazards like earthquakes and geomagnetic storms are noted.
	+ **Structural Collapse:** Though rare, building collapses can have severe local impacts.
	+ **Animal Health Risks:** Outbreaks of diseases among livestock can have economic and health implications.

The Nottingham and Nottinghamshire Local Resilience Forum (LRF) has developed the Community Risk Register, drawing insights from the National Risk Register. This register offers a comprehensive local perspective on the risks facing Nottinghamshire, ensuring that local emergency responders are well-informed, thoroughly trained, and properly equipped to handle potential emergencies.

This initiative is in line with the requirements of the Civil Contingencies Act (2004), which mandates a coordinated response to emergencies. By fulfilling these obligations, the Nottinghamshire Fire and Rescue Service (NFRS) is better prepared to effectively manage and respond to emergencies.

Operational responses to incidents are predetermined and tailored to specific types of emergencies, guided by the framework established in the National Operational Guidance. Additionally, business continuity procedures are in place to manage and mitigate disruptions that could impact routine operations, ensuring resilience in the face of various hazards.

**7.3 National Fire Chiefs Council (NFCC)**

The National Fire Chiefs Council (NFCC) is the professional body representing the leadership of the UK Fire and Rescue Service (FRS). Established in 2017, it succeeded the Chief Fire Officers Association (CFOA) to become the authoritative voice on fire safety, operational standards, and national policies related to fire services across the UK.

**Purpose and Structure**

The NFCC's primary purpose is to drive improvement and development throughout the UK's Fire and Rescue Services. It provides strategic leadership and coordination across various areas of fire and rescue work, influencing national policy and ensuring that fire services are prepared to meet current and emerging challenges.

**Committee Structure**

The NFCC's work is organised through a series of Coordination Committees, each focused on specific areas of priority:

* **Operations Coordination Committee**: Focuses on enhancing operational response capabilities, developing national operational guidance, and ensuring interoperability among fire services.
* **Protection and Business Safety Committee**: Deals with fire safety regulations, enforcement, and building safety. This committee is particularly focused on implementing the recommendations from major inquiries, such as the Grenfell Tower fire.
* **Prevention and Protection Coordination Committee**: Works on community safety initiatives, public awareness campaigns, and strategies for preventing fires and other emergencies.
* **Workforce Coordination Committee**: Addresses issues related to fire service personnel, including training, health and safety, recruitment, and workforce development.
* **Resilience Committee**: Concentrates on national resilience planning, including response to major incidents such as natural disasters or large-scale emergencies.

**Delivering Against Priorities**

Each committee is tasked with delivering work aligned with the NFCC's strategic priorities. These priorities are set by the council and are aimed at ensuring that the Fire and Rescue Services across the UK are:

* **Prepared**: Ensuring that FRS can respond effectively to a wide range of incidents.
* **Resilient**: Building the capacity to manage major emergencies and unexpected events.
* **Efficient**: Streamlining processes and sharing best practices to deliver high-quality services with available resources.
* **Innovative**: Encouraging the adoption of new technologies and methods to improve service delivery.
* **Collaborative**: Fostering partnerships with other emergency services, local authorities, and national bodies to ensure coordinated and effective responses.

The work of the committees is crucial in developing national policies, providing operational guidance, and ensuring consistency in service delivery across the UK. Each committee contributes to the NFCC's overarching goals by focusing on its specific area of responsibility, thereby driving continuous improvement in the Fire and Rescue Services.

**7.4 NFCC Central Programme Office and Fire Standards Board**

NFCC Central Programme Office (CPO): The Central Programme Office (CPO) is the project management hub of the National Fire Chiefs Council (NFCC). Its primary role is to coordinate and manage the implementation of various national programmes and projects that align with the strategic priorities set by the NFCC. The CPO supports the development of fire and rescue services across the UK by ensuring that these initiatives are delivered effectively, on time, and within budget. It provides essential project management expertise and resources, helping to standardise practices, share best practices, and drive continuous improvement across the fire and rescue services.

Fire Standards Board (FSB): The Fire Standards Board (FSB) plays a critical role within the NFCC framework by setting and maintaining high standards for the UK fire and rescue services. Established to ensure consistency and excellence across all services, the FSB is responsible for developing and approving national Fire Standards. These standards serve as benchmarks for service delivery, operational procedures, and organisational effectiveness within the fire and rescue services.

**Purpose of the FSB**:

* **Developing Fire Standards**: The FSB is tasked with creating clear, evidence-based standards that fire and rescue services across the UK should follow. These standards cover various aspects of fire service operations, including fire safety, emergency response, leadership, and community engagement.
* **Promoting Consistency**: By establishing national standards, the FSB ensures that all fire and rescue services operate to the same high level of quality, providing consistent and reliable services to the public.
* **Encouraging Continuous Improvement**: The FSB regularly reviews and updates the standards to reflect new developments, challenges, and innovations within the fire service, promoting a culture of continuous improvement.
* **Enhancing Public Safety**: Ultimately, the FSB’s work aims to enhance public safety by ensuring that fire and rescue services are well-prepared, professional, and capable of responding effectively to emergencies.

**7.5 HMICFRS Inspection and Annual State of Fire Report**

His Majesty's Inspectorate of Constabulary and Fire & Rescue Services (HMICFRS) is an independent body responsible for assessing and reporting on the effectiveness and efficiency of police forces and fire & rescue services in England, Wales, and Northern Ireland. The organisation plays a crucial role in ensuring that these services operate in the public interest by providing transparent and evidence-based evaluations.

**Purpose of HMICFRS in the Fire Sector**

In the fire sector, HMICFRS's primary purpose is to promote continuous improvement across fire and rescue services (FRSs) by:

* **Conducting Inspections**: HMICFRS carries out regular inspections of FRSs, evaluating their performance in key areas such as operational response, prevention, protection, and efficiency.
* **Publishing Reports**: The findings from these inspections are published in reports, which highlight both the strengths and areas for improvement within the services. This transparency helps to hold FRSs accountable to the public and government.
* **Making Recommendations**: Based on their inspections, HMICFRS provides actionable recommendations designed to improve service delivery, enhance public safety, and ensure efficient use of resources.

**How HMICFRS Drives Improvement**

HMICFRS drives improvement in the fire sector through several mechanisms:

* **Benchmarking and Accountability**: By comparing the performance of different FRSs, HMICFRS helps services identify best practices and areas where they lag behind their peers, encouraging a culture of continuous improvement.
* **Spotlight on Critical Issues**: HMICFRS reports often focus on systemic issues, such as leadership, culture, and workforce management, pushing FRSs to address these challenges proactively.
* **Enhanced Monitoring**: For services that are underperforming, HMICFRS places them under enhanced monitoring, requiring more frequent reporting and oversight to ensure improvements are made swiftly.

**Summary of the Key Findings from the Most Recent State of Fire Report (2023)**

The 2023 State of Fire and Rescue report highlighted several critical issues facing the sector:

* **Progress and Challenges**: While many FRSs have made significant progress in key areas, there are still concerns regarding the consistency of performance across the country. Some services have shown declining performance, particularly in areas like protection, multi-agency incidents, and getting the right people with the right skills.
* **Cultural and Leadership Issues**: The report emphasized the need for urgent improvements in values, culture, and the management of misconduct within some FRSs. Leadership within the sector needs to take a more strategic approach to drive these improvements.
* **Systemic Challenges**: The report also pointed out systemic challenges, such as the unsustainability of the On-Call duty system and the need for clearer operational independence for chief fire officers.
* **Government Reforms**: HMICFRS stressed the importance of government reforms to address these systemic issues and highlighted the slow progress in implementing some of its earlier recommendations.

**7.6 Government White Paper – Reforming Our Fire and Rescue Service**

The UK Government's Fire Sector Reform White Paper, titled "Reforming Our Fire and Rescue Service," aims to introduce comprehensive reforms to enhance the effectiveness, professionalism, and governance of fire and rescue services across the country. The reform was driven by the lessons learned from the Grenfell Tower Inquiry, independent inspections, and the broader impacts of the COVID-19 pandemic.

**Key Proposals in the White Paper**:

* **Establishment of a College of Fire & Rescue** - A new professional body aimed at raising standards, improving training, and strengthening leadership within the fire and rescue services.
* **Operational Independence for Chief Fire Officers** - Proposals to grant operational independence to Chief Fire Officers, allowing them to manage their services with greater autonomy while being held accountable to elected officials.
* **Review of Pay Negotiation Mechanisms** - Tasking the National Joint Council to review how pay negotiations are conducted within the fire and rescue services to ensure fair and effective processes.
* **Improving Integrity and Culture** - Initiatives to enhance the integrity and workplace culture within fire and rescue services, including better training, more transparent recruitment practices, and the introduction of a statutory code of ethics for fire and rescue personnel.
* **Enhanced Public Safety Measures** - Strengthening public safety by implementing many of the Grenfell Tower Inquiry recommendations into law, focusing on improving fire safety in residential buildings.

These reforms are intended to modernise the fire sector, ensuring fire and rescue services are better equipped to handle current and future challenges while maintaining high levels of public trust and confidence.

**7.7 Workforce Planning and Assumptions**

Effective management of workforce establishment levels is crucial to the overall control of staffing budgets, which account for 73% of the total revenue budget for NFRS. While predicting workforce needs can be challenging, it remains essential for accurate budget setting. Factors such as overall staffing levels, the distribution of personnel across roles, and the number of staff in development significantly impact budget planning.

The Workforce Plan 2023-2025 is an integral component of the business planning process, supporting the delivery of the Community Risk Management Plan (CRMP). Developed by the People and Organisational Development department, the plan aims to identify workforce trends, anticipate potential planning issues, and create an action plan to address these challenges. It is based on projections of anticipated turnover and inputs from all departments regarding their workforce needs for the upcoming year.

**The plan aims to forecast:**

* Workforce reductions due to retirements, projected turnover, and other factors.
* Workforce increases required by the implementation of new service demands.
* The necessity for succession planning in specialist and managerial roles.
* Areas of concern within NFRS that may impact workforce stability.
* Resource requirements to meet operational and strategic goals.

**7.8 Staff Health, Safety and Wellbeing**

NFRS is dedicated to ensuring the highest standards of workplace safety and support for our employees, placing the health, safety, and well-being of our workforce at the forefront of our priorities. To achieve this, the NFRS Wellbeing Strategy has been developed as a key component of the NFRS People Strategy, with a specific focus on "developing and maintaining a healthy workforce." This strategy is closely aligned with the Community Risk Management Plan (CRMP).

The Wellbeing Strategy is designed not only to support the overall well-being of all NFRS employees but also to enhance employee engagement, fostering a workforce that is fully committed to achieving organisational success.

**7.9 Grenfell Tower Inquiries**

The Grenfell Tower Inquiry was established to investigate the circumstances leading up to and surrounding the devastating fire at Grenfell Tower in June 2017, which resulted in the tragic loss of 72 lives. The inquiry is divided into two main phases, each focusing on different aspects of the disaster.

**Phase 1**

Published in October 2019, Phase 1 of the inquiry primarily focused on the events of the night of the fire. It examined how the fire started, how it spread, and how the emergency services responded. The report provided a series of recommendations aimed at improving fire safety, particularly in high-rise buildings. Key recommendations included:

* Reviewing "stay put" advice for residents in high-rise buildings during a fire.
* Improving communication between fire and rescue services and the public during emergencies.
* Enhancing training and equipment for fire services to better manage high-rise building fires.
* The findings of Phase 1 highlighted significant failings in fire safety management and emergency response, leading to urgent calls for reform across various sectors, including building regulations and fire service operations.

**Phase 2**

Scheduled for publication on 4 September 2024, Phase 2 of the inquiry delves deeper into the systemic issues that contributed to the disaster. This phase examines the broader context, including the design and construction of the building, the role of various contractors, and the adequacy of the regulations and standards that were in place. It also explores the actions of local and central government, and the impact of these on the safety of residents.

The final report from Phase 2 is highly anticipated and is expected to include further recommendations for systemic change. The outcomes of the Grenfell Tower inquiries have already led to significant changes in fire safety regulations and the way buildings are managed in the UK. The inquiries have brought to light major shortcomings in building safety practices, leading to a wider review of high-rise building safety across the country.

**7.10 Manchester Arena Inquiries**

The Manchester Arena Bombing Inquiry, particularly Volume 2, focused on the emergency response to the 2017 attack, highlighting significant failings in how emergency services, including the fire service, reacted on the night of the incident.

**Key Findings and Learnings for Emergency Services:**

Delayed Response: The Greater Manchester Fire and Rescue Service (GMFRS) faced substantial criticism for their delayed response. Firefighters did not arrive at the scene until over two hours after the explosion, largely due to miscommunication and an overly cautious approach in waiting for confirmation that the area was safe. This delay meant that critical support for the injured was not provided in a timely manner, potentially impacting the survival chances of some victims.

Communication Failures: The inquiry identified serious communication breakdowns between the emergency services. There was a lack of coordination between the police, ambulance services, and the fire service, leading to confusion and delays. The fire service, in particular, was not adequately informed of the nature of the threat, leading them to incorrectly assume there was an active shooter, which contributed to their hesitation.

Training and Preparedness: The inquiry pointed out that previous training exercises, which had highlighted similar coordination and communication issues, had not led to effective improvements in the actual response during the bombing. This highlighted a gap between training exercises and real-world application, particularly in how different emergency services interact during a major incident.

Recommendations: The report recommended several measures to improve future responses, including better inter-agency communication protocols, more realistic and integrated training exercises, and clearer leadership structures to ensure that decision-making is swift and effective during emergencies.

**Overview of Organisational Influences:**

Nationally, there is a sustained push for reform within the fire sector, driven by the Government's White Paper and HMICFRS analyses, which highlight the need for greater workforce diversity, enhanced accountability, and increased productivity. There is also a growing focus on demonstrating value for money and fostering innovation. This reform agenda is further strengthened by the introduction of new sector standards through the Fire Standards Board and the government's detailed proposals in the White Paper Reforming Our Fire and Rescue Service. The NFCC has assumed a pivotal role in advancing these reforms through its 'Fit for the Future' initiative, which prioritises collaboration, innovation, standardisation, evidence-based risk assessment, and the creation of a more inclusive culture. The NFCC is leading a comprehensive transformation programme to bring these changes to fruition. Additionally, national inquiries and sector reports continue to shape the future direction of Fire and Rescue Services.