

Assessment of Risk for London 2026

Report to:

Date:

Risk and Assurance Board	15 April 2026
Commissioner's Board.....	6 May 2026
Deputy Mayor's Fire Board	30 June 2026
Audit Committee.....	23 July 2026
London Fire Commissioner	

Report by:

Tom Ronan, Station Commander, Risk

Authorising Head of Service:

Tom Goodall, Assistant Commissioner, Head of Risk, Assurance, Strategy and Portfolio

Report classification:

For Decision

For publication

Values met

Service
Integrity
Teamwork
Equity
Courage
Learning

I agree the recommended decision below.



Jonathan Smith
London Fire Commissioner

This decision was remotely
Date **signed on 9 July 2026**

PART ONE

Non-confidential facts and advice to the decision-maker

Executive Summary

The Assessment of Risk for London (AoR) provides the annual update on the risks facing London and the incidents to which the London Fire Brigade may be required to respond. It informs the London Fire Commissioner's (LFC) approach to reducing risk, as set out in the Community Risk Management Plan (CRMP) and its six service strategies: Prevent, Protect, Respond, Prepare, Recover and Engage.

This assessment includes the changes to the risk profile identified in the updated AoR for 2026 as well as an "Horizon Scan," which details plausible extreme manifestations of identified risk up to 2030, to allow longer term planning.

Following approval of the updated AoR;

- Heads of Service should ensure they understand the updated risk picture and review their strategies with a view to developing future departmental plans and necessary budget bids/resource allocation to meet any emerging risks (especially capability gaps) so that planned activity remains appropriate.
- The Head of Strategy and Planning should review the AoR to determine whether amendments to the CRMP are required.
- The Head of Portfolio should review the AoR to assess whether any adjustments to the Prioritisation Framework are necessary.
- The Head of Risk will work with Heads of Service to identify any risks requiring escalation to the corporate risk register.

Recommended decision – For the London Fire Commissioner

That the London Fire Commissioner accepts the recommendation of the Risk and Assurance Board to approve the AoR 2026 as reflecting the LFC's understanding of risk for London within the scope set out in the AoR Policy.

1 Introduction and background

- 1.1 The London Fire Brigade (LFB) operates in a demanding risk environment and is accountable to a wide range of stakeholders, including London's communities, and both central and local Government.
- 1.2 The objective of the AoR is to provide the LFC with a robust and defensible assessment of all foreseeable risks to which LFB may have to respond or which may impact response. It supports a common understanding of operational risk across services and departments. The changes to the risk profile identified in the update for 2026 need to be considered by the owners of service strategies and delivery plans, who may need to adjust those strategies and plans to better manage risk based on the updated assessment.
- 1.3 The AoR is distinct from the Corporate Risk Register (CRR). The AoR considers outward-facing risks in the community and foreseeable hazards that may require a Brigade response, or that may affect the Brigade's ability to respond. The CRR takes an inward-facing organisational view. Where community risks identified in the AoR present significant organisational impact or reveal capability gaps, these may be escalated to the CRR.
- 1.4 The layered structure of the assessment is intended to identify all foreseeable risks in both day-to-day and reasonable-worst-case manifestations. Layer four of the assessment uses scenario planning techniques and forecasting tools to explore future development of risks and plausible extremes. The Horizon Scan provided in layer four details plausible extreme manifestations of identified risk up to 2030 to allow longer term planning.
- 1.5 The AoR does not introduce new control measures. Mitigations are defined through existing strategies, departmental plans, policies, and local risk management arrangements.

2 Key Findings

- 2.1 The summary below outlines the principal insights identified through this year's multi-layered analysis and highlights the implications for the Brigade's services.
- 2.2 **Public Perceptions and Community Risk:** Public concern regarding crime typically exceeds concern regarding fire service-related risks. Among those who do express concern about fire, the predominant focus is on fires in purpose-built flats, aligning with the Brigade's own data, which identifies these properties as higher risk. This underscores the need for the Brigade to maintain strong, targeted fire-safety messaging around high-rise residential buildings and to prioritise purpose-built flats within its community prevention work.
- 2.3 **Geopolitical Factors and Malicious Risk:** The current geopolitical climate has heightened anxiety within some communities regarding malicious acts, including terrorism. The Brigade should consider how best to offer public reassurance about its readiness to respond to terrorist incidents. It would also be beneficial to articulate the Brigade's wider role in supporting community safety and countering extremism through partnership working with the police, local authorities, and other agencies, potentially through BRMPs.

- 2.4 Capacity Under Normal Operating Conditions:** Projections over the next five years indicate increases in certain incident types; however, these changes are not expected to exceed the Brigade's routine capacity. As such, the Brigade can remain reasonably confident in its ability to deliver a high standard of service to Londoners under normal operating conditions.
- 2.5 Increasing Demand for Certain Incident Types:** The requirement to deliver rescue in a broader range of incidents may lead to increased demand. Rising demand in incident categories such as "collapsed behind locked doors" and "persons threatening to jump" signals potential requirements for enhanced training or additional support for firefighters. These incident types involve complex physical and mental ill-health demands which firefighters have increasing exposure to. Persons threatening to jump, whether from buildings, or other structures often involve the implementation of safe working at height practices to resolve.
- 2.6 Increasing Complexity of Built Environment:** The rapid adoption of new fuels, technologies and modern construction methods continues to reshape risk in the built environment at a pace that often exceeds the speed of regulatory development and oversight. New fuels including lithium-ion batteries are now commonplace throughout London in domestic, commercial and industrial settings. As innovation advances more quickly than the frameworks designed to govern it, this creates potential long-term exposure to systemic vulnerabilities and an elevated likelihood of emerging fire behaviours, particularly within complex premises, tall buildings and other high-risk structures. These shifts contribute to increasingly complex risk profiles across the built environment. As a result, the Brigade may need to consider the development of additional specialist capabilities to ensure it can effectively assess, prevent and respond to incidents arising from these evolving challenges.
- 2.7 Resilience to High-Impact, Low-Frequency Events:** Although the Brigade is well positioned to manage normal day-to-day demand, there remains a credible risk of resource depletion during prolonged extreme-weather events, such as extended periods of extreme heat or significant flooding. The London Risk Assessment provides valuable scenarios that the Brigade should incorporate into its testing and exercising programmes to strengthen readiness for such high-impact, low-frequency incidents.
- 2.8 Preparedness for Simultaneous Events:** The Brigade's operating environment is inherently complex, and it is plausible that multiple major events could occur concurrently, for example, a protracted high-rise fire, extreme climate conditions, and a civil disturbance. The Assessment of Risk should therefore also inform preparation for multi-incident scenarios, ensuring resilience under simultaneous operational pressures.
- 2.9 Potential Future Resilience Requirements:** Scenarios developed up to a planning horizon of 2030 indicate LFB may be required, within this timeframe, to deliver wider civil resilience, national resilience arrangements or support Home Defence. This would be in line with established frameworks such as the Civil Contingencies Act or relevant to new legislation. Should these demands occur, they will interact with the impacts of climate, demographic, and built environment change described in the plausible 2030 operating environment. They will not be isolated from them. Such considerations should be integrated into the Brigade's testing and exercising frameworks to ensure operational readiness for emerging threats.

3 Detailed analysis reports.

- 3.1** To provide a robust assessment of all foreseeable risks, the AoR is structured in four, "layers." Each layer presents a different type of risk information for a specific purpose and audience. Although the layers are presented separately for clarity, the same risk may appear in more than one layer.
- 3.2** Appendix one provides a summary report that sets out the key findings from 2026's assessment of risk by layer. This report is intended to provide a quick reference regarding the highest risks. The summary report also sets out the approach and structure of the wider assessment. Further information and context is available in the detailed report for each layer.
- 3.3** Appendix two, contains the detailed report for, Layer One Public Concern and Public Risk Perception. This assessment layer reflects the level of concern expressed by the public about different risks. This will not necessarily reflect the measured frequency or severity of incidents but may be an early indicator of change. Public concern will also be influenced by factors such as the recency and visibility of risks, such as notable fires locally or in the news.
- 3.4** Appendix three, contains the detailed report for; Layer Two Data Lead Assessment of Ordinary (commonly occurring) Risks. This assessment layer considers frequent incidents, such as dwelling fires in purpose-built flats. These occur relatively regularly and can result in casualties, often affecting individuals or small numbers of people rather than large numbers in a single incident. This layer also provides tools to understand the geographic disposition of commonly occurring risks.
- 3.5** Appendix four contains the detailed report for Layer three, Extraordinary risks and reasonable-worst-case scenarios, including London Risk Register. This assessment considers low-likelihood but high-impact events, such as a single, large residential high-rise fire causing many casualties. 2026's AoR includes version 14 of the London Risk Register (LRR), published in 2025. Version 15 is expected to be published by London Resilience in early 2026. The AoR will be updated appropriately once this happens. Review of the unpublished draft indicates that no material change will be needed to the AoR post publication of the LRR.
- 3.6** Appendix five contains the detailed report for; Layer four Horizon Scanning for new and emerging risks. This assessment layer considers how risks may change or present differently in the future. For example, how the changing built environment may influence the frequency and severity of fires in flats, or how climate change may influence demand.
- 3.7** Users intending to use the AoR for decision making should access the detailed report for the layer of interest. Where decision making regarding risks from the London Risk Register is required, users should access the detailed scenario descriptions for each risk available to authorized users through Resilience Direct in addition to LFB AoR.

4 Consultation feedback – high level summary

- 4.1** Consultation on the Draft Assessment of Risk Policy was undertaken with key stakeholders across the Brigade in February and March 2026.
- 4.2** Stakeholders expressed a concern that the inclusion of e-bike and e-scooter fires within wider risks related to new-fuels and technologies and within fires in buildings more generally did not provide sufficient visibility within the assessment. Lithium-ion fires including e-bikes and e-scooters are now included separately as a "Highlighted Risk," within Layer Two of the

assessment.

5 Expert review of AoR methods and approach.

- 5.1 The draft AoR 2026 was reviewed by an external panel of academics and subject matter experts, as in previous years. The purpose of the Panel is to provide independent academic and subject matter expert feedback on the robustness and defensibility of the AoR approach and methodology. The Head of Risk, Planning Assumptions, Learning and Exercising, at London Resilience chaired the Panel.
- 5.2 The inclusion of a panel statement as to the robustness of the AoR provides assurance to the LFC that this assessment of risk is robust and defensible against industry and academic best practice.
- 5.3 The Panel endorsed LFB's AoR 2026 and considers it to represent leading practice. The Panel recommends that it be shared regionally and nationally with other services and agencies. The full, Panel statement is below:
- 5.4 *"The Panel recognises that, through the Assessment of Risk (AoR), London Fire Brigade (LFB) has continued to develop and strengthen its approach to assessing fire and rescue-related risks in London. LFB's approach demonstrates a strong commitment to engaging London's communities in constructing the community concerns layer, alongside the effective use of internal and external expertise in developing the emerging trends, extraordinary, and future risks layers. The Panel welcomes the clearer articulation of the scope of assessment, the intended users of risk information, the explanation of how the layers complement one another, and the further development of LFB's foresight function (Layer 4), as recommended by the 2025 Panel. The 2026 Panel has made a number of specific and general recommendations to the Brigade. These include consideration of case studies (particularly for Layer 1); greater exploration of the risk implications of frequent and protracted incidents; additional data on scale of response in relation to compartment of origin; and improved understanding of the interaction between layers. The Panel also recommends clearer explanation of the document's evolution (including the previous use of the Three Horizons method and the rationale for moving away from this), and explicit reference to the triangulation methodology used in Layer 1 and the benefits this provides. These enhancements will further strengthen the AoR's robustness, defensibility, and impact. In conclusion, the Panel endorses LFB's 2026 AoR and will continue to work with the Brigade on its future development as it refines and enhances its approach to understanding fire and rescue-related risk in London. The Panel considers LFB's AoR to represent leading practice and recommends that it be shared regionally and nationally with other services and agencies."*

6 Values Comments

- 6.1 The LFC notes the Fire Standards Board requirements around adopting and embedding the Core Code of Ethics at an individual and corporate level. Following extensive engagement, the LFC has introduced Brigade values which build on and do not detract from the Code of Ethics.
- 6.2 The Brigade values are:
- Service: we put the public first
 - Integrity: we act with honesty
 - Teamwork: we work together and include everyone

- Equity: we treat everyone fairly according to their needs
- Courage: we step up to the challenge
- Learning: we listen so that we can improve

6.3 This report proactively supports the Brigade values as follows:

- Service: The AoR prioritises the needs and concerns of London's communities by incorporating public risk perception as the first layer of assessment. This ensures that planning, prioritisation and resource allocation are informed by the lived experiences of the public and reflect the risks Londoners identify as most significant
- Integrity: The AoR promotes transparency and accountability by inclusion of the AoR methodology, making the assessment publicly accessible, and establishing processes for external challenge. These measures ensure openness in how risks are identified, analysed and prioritised, thereby strengthening trust between the Brigade and London's communities.
- Teamwork: The AoR is developed through extensive collaboration across LFB teams and with wider partners, including the London Resilience Forum and subject matter experts. Publicly shared scoring mechanisms and multi-agency perspectives ensure that risk assessments reflect collective expertise and support coordinated planning.
- Equity: The layered assessment approach recognises that risk varies across circumstance, location, exposure and incident type. Using methodologies that reflect heightened vulnerability alongside pan-London data sets and public perception data allows a nuanced risk understanding. This informs resource decisions that are proportionate to differing levels of need.
- Courage: The AoR demonstrates organisational courage through its commitment to assess low-frequency, high-impact scenarios and emerging future risks alongside day-to-day demand. This includes analysing reasonable worst-case events, conducting horizon scanning and modelling plausible future scenarios that may test the Brigades' response arrangements. This allows the Brigade to prepare to respond to complex and uncertain risks and to avoid a, "failure of imagination," leading to organisational under preparedness.
- Learning: The AoR reflects a continuous learning approach to assessing risk in London by drawing on public engagement, national methodologies, operational and international learning, partner input, and external expert scrutiny. The inclusion of independent expert review ensures that methods, assessments and assumptions remain robust, defensible, and aligned with best practice.

7 Equality Comments

7.1 The LFC and the Deputy Mayor for Planning, Regeneration and the Fire Service are required to have due regard to the Public Sector Equality Duty (section 149 of the Equality Act 2010) when taking decisions. This in broad terms involves understanding the potential impact of policy and decisions on different people, taking this into account and then evidencing how decisions were reached.

7.2 It is important to note that consideration of the Public Sector Equality Duty is not a one-off task. The duty must be fulfilled before taking a decision, at the time of taking a decision, and

after the decision has been taken.

7.3 The protected characteristics are: age, disability, gender reassignment, pregnancy and maternity, marriage and civil partnership (but only in respect of the requirements to have due regard to the need to eliminate discrimination), race (ethnic or national origins, colour or nationality), religion or belief (including lack of belief), sex, and sexual orientation.

7.4 The Public Sector Equality Duty requires decision-takers in the exercise of all their functions, to have due regard to the need to:

- eliminate discrimination, harassment and victimisation and other prohibited conduct.
- advance equality of opportunity between people who share a relevant protected characteristic and persons who do not share it.
- foster good relations between people who share a relevant protected characteristic and persons who do not share it.

7.5 Having due regard to the need to advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it involves having due regard, in particular, to the need to:

- remove or minimise disadvantages suffered by persons who share a relevant protected characteristic where those disadvantages are connected to that characteristic.
- take steps to meet the needs of persons who share a relevant protected characteristic that are different from the needs of persons who do not share it.
- encourage persons who share a relevant protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionately low.

7.6 The steps involved in meeting the needs of disabled persons that are different from the needs of persons who are not disabled include, in particular, steps to take account of disabled persons' disabilities.

7.7 Having due regard to the need to foster good relations between persons who share a relevant protected characteristic and persons who do not share it involves having due regard, in particular, to the need to:

- tackle prejudice
- promote understanding.

7.8 An equality impact assessment (EIA) has been conducted and updated for the 2026 Assessment of Risk, appendix six. An EIA was also conducted specifically for public engagement carried out in support of production of the layer one assessment. This is included as appendix seven.

8 Other considerations

Workforce comments

8.1 There are no immediate consequences on the workforce arising from this report, however the implementation of new control measures or reallocation of resources based on the AoR's

findings may have implications in the future and/or require consultation with representative bodies.

Sustainability comments

8.2 There are no known sustainability implications arising from this report.

Procurement comments

8.3 There are no known procurement implications arising from this report.

Communications comments

8.4 This is an internal facing document that is used to inform service strategies, departmental plans and BRMPs (Borough Risk Management Plans). It also informs prioritisation of work in central departments, such as Operational Policy and Assurance. The document is not primarily intended as a tool for communicating risk information to the public, but communication and community engagement teams should use the document to inform their work.

9 Financial comments

- 9.1** The update to the AoR will not directly result in any financial consequences. However, in line with reviewing all of LFB's material risks, if it is identified that the organisation's control measures require change, then there will be cost implications (both potentially in savings and additional investment). The cost implications would be because of placing increased mitigating factors to ensure the risk is managed appropriately.
- 9.2** Potential additional budgetary pressures relating to the update of the AoR will be managed within existing departmental budgets.
- 9.3** Any changes to the assessment of risk would be assessed to its financial implications and form part of the budget cycle process

10 Legal Comments

- 10.1** Under section 9 of the Policing and Crime Act 2017, the London Fire Commissioner ("Commissioner") is established as a corporation sole with the Mayor appointing the occupant of that office.
- 10.2** Section 1 of the Fire and Rescue Services Act 2004 states that the Commissioner is the fire and rescue authority for Greater London.
- 10.3** Under section 327D of the GLA (Greater London Authority) Act 1999, as amended by the Policing and Crime Act 2017, the Mayor may issue to the Commissioner specific or general directions as to the manner in which the holder of that office is to exercise his or her functions.
- 10.4** By direction dated 1 April 2018, the Mayor set out those matters, for which the Commissioner would require the prior approval of either the Mayor or the Deputy Mayor for Fire and Resilience (the "Deputy Mayor").
- 10.5** Paragraph 3.1 of Part 3 of the said direction requires the Commissioner to consult with the

Deputy Mayor as far as practicable in the circumstances before a decision is taken on (inter alia) any "[c] decision that can be reasonably considered to be novel, contentious or repercussive in nature, irrespective of the monetary value of the decision involved (which may be nil)".

- 10.6** The decisions recommended in this report are considered to be 'novel, contentious or repercussive' and therefore the Deputy Mayor must be consulted before a final decision is taken.
- 10.7** When carrying out his functions, the Commissioner, as the fire and rescue authority for Greater London, is required to "have regard" to the Fire and Rescue National Framework prepared by the Secretary of State ("Framework") (Fire and Rescue Service Act 2004, section 21).
- 10.8** The production of an Integrated Risk Management Plan (IRMP) is a requirement of the Framework. In line with guidance from the National Fire Chiefs' Council, the Commissioner is now referring to the IRMP as a Community Risk Management Plan (CRMP).
- 10.9** The Framework states that the Commissioner's CRMP "must" meet certain requirements, in considering the Assessment of Risk Policy the Commissioner must therefore have regards to the following requirement of the Framework; that the CRMP must reflect up to date risk analyses including an assessment of all foreseeable fire and rescue related risks that could affect the area of the authority.
- 10.10** To assist the Commissioner in coming to a view on this matter it is recommended that the Commissioner should consider whether the CRMP properly reflects the updated AoR. It would not be sufficient to state it is met by reference to additional documents, the CRMP itself must demonstrate this in and of itself. When considering if the risk analysis is properly reflected in the CRMP it is not required that it reproduces the analysis completely but instead that it represents it accurately and in an appropriate way.
- 10.11** The recommendation in this report is that the CRMP does not need amending in response to the changes to the AoR 2026. If the Commissioner agrees with this recommendation, then it falls to the Commissioner to decide following consultation with the Deputy Mayor.

List of appendices

Appendix	Title	Open or confidential*
1	Assessment of Risk 2026 Summary Report	Open
2	Detailed report: Layer One, Public Concern and Public Risk Perception.	Open
3	Detailed report: Layer Two, Data Lead Assessment of Ordinary (commonly occurring) Risks	Open
4	Detailed report: Layer Three, Extraordinary risks and reasonable- worst-case scenarios, including London Risk Register.	Open
5	Detailed report: Layer Four, Horizon Scanning for New and Emerging Risks	Open
6	EIA Assessment of Risk 2026	Open
7	EIA Assessment of Risk 2026 Public Engagement	Open
8	Assessment of Risk Methodology	Open

Part two confidentiality

Only the facts or advice considered to be exempt from disclosure under the FOI Act should be in the separate Part Two form, together with the legal rationale for non-publication.

Is there a Part Two form: NO

OFFICIAL

Appendix One

Assessment of Risk 2026 Summary Report

Table of contents

Table of contents	3
Foreword	4
Section 1. Introduction and Approach.....	5
Introduction.....	5
Who should use the Assessment of Risk (AoR)?	5
Our approach to risk.....	6
Our approach to individual vulnerability	6
Section 2. Key Findings 2026	8
Key findings Layer One: Public Concerns and Public Risk Perception.....	9
Key findings Layer Two: Day-to-day Risks relating to property, place and incident type	10
Key findings Layer three: Extraordinary risks and risks from the London Risk Register.....	13
Key findings Layer four: New and Emerging Operational Risks: 2030 Horizon Scan	14

Foreword

The Mayor of London's City Resilience Strategy 2020 ¹describes London as a global city and the economic engine of the United Kingdom (UK), accounting for 23 per cent of the UK's economic output. London is a city with an unusual density of risk. As well as being the seat of the UK government, London holds the residence of the head of state, is the UK's financial hub and contains approximately 15 per cent of the United Kingdom's population.

London's unusual density of risk is reflected in the range of risks recorded in the London Risk Register. This document is informed by the National Security Risk Assessment; and the public facing National Risk Register. These registers describe low frequency high impact events nationally, however the density of risk in London means that risks on these registers have a higher likelihood of being realised in London than most other areas of the UK. In some cases, the exposure to these risks in London drives the national risk rating because events occurring in London have national impact.

Geopolitical turbulence and conflict have been a noted feature of 2025. As a global city the impacts on London are likely to be complex and varied. The London Risk Register includes cyber-attacks, energy cut-offs, assassinations, terror attacks and direct attacks of various kinds. London Fire Brigade (LFB) is required to maintain service provision during periods of disruption and to respond directly and in partnership to emergencies where its capabilities are needed.

Both the UK Government and London's Mayor's Office have declared a climate emergency. London has experienced both surface water flooding and wildfires in recent years.

The City Resilience Strategy states that sudden impact events can immediately disrupt a city and may have wide ranging and unexpected impacts. Consequently, resourcing to risk for LFB indicates the Brigade must resource and plan to be able to respond both to demand under normal requirements and to the likely occurrence of one or more extraordinary risks which may have national impacts.

The purpose of this assessment is to allow LFB to understand and prioritise the risks in its operating environment and align its resources appropriately.

¹ [london_city_resilience_strategy_2020_digital.pdf](#)

Section 1. Introduction and Approach

Introduction

The Fire and Rescue National Framework for England 2018 places a duty on all Fire and Rescue Services to, "identify and assess all foreseeable fire and rescue related risks that could affect their communities, whether they are local, cross-border, multi-authority and/or national in nature from fires to terrorist attacks". Fire services must also, "have regard to Community Risk Registers produced by Local Resilience Forums," for London, this is the London Risk Register. Under the framework, each Fire Service must produce an Integrated Risk Management Plan that must reflect up to date risk analyses including an assessment of all foreseeable fire and rescue related risks that could affect the area of the authority. The London Fire Commissioner's (LFC) Assessment of Risk for London (AoR) is the Brigade's response to meet these requirements.

The AoR meets these requirements by identifying and assessing all foreseeable hazards to which the LFB might be reasonably expected to respond, including reasonable-worst-case risks from the London Risk Register and by assessing their likelihood and consequence.

The National Risk Register is a public facing document based on the National Security Risk Assessment, the 2025 is available here; [National Risk Register - 2025 edition](#)

The London Risk Register 2026 is available here; <https://www.london.gov.uk/media/108075/download?attachment>

In the CRMP the LFC made a commitment to introduce Local Risk Management Plans, co-designed with local residents and business. Borough Risk Management Plans are the vehicle for this local level engagement and can be found here; [Community | London Fire Brigade](#)

Who should use the Assessment of Risk (AoR)?

The AoR is intended to be used primarily as a technical document by LFB staff to direct and prioritise work. It is available to the public, but it is acknowledged that due to its complexity it is not intended to be a public risk communication tool. LFB teams involved in direct risk communication work with the public should refer to the AoR when planning and prioritising their communication but use appropriate tools for the specific audience they are communicating with.

The AoR is intended to be a tool for understanding risk to London and to Londoners as these risks manifest in the community. It is not an assessment of risk to firefighters. Potential firefighter risk incurred whilst responding to incidents described in the AoR is not considered within it. This is intentional. LFB has other systems and control measures for assessing and managing firefighter risk.

The AoR is distinct from the corporate risk register (CRR) in that it focuses on 'outward facing' community risks and foreseeable hazards to which the Brigade may be expected to respond to, or which may impact the Brigade's ability to respond to these incidents. In contrast the CRR takes a more 'inward facing' approach, focusing on risks that could prevent the Brigade operating effectively or impact its ability to achieve its organisational objectives. However, risks from the AoR may be escalated to the CRR if assessed to be of sufficient organisational impact or there is an identified capability gap.

The AoR is not intended to identify new control measures for highlighted risks. Control measures for risks are identified in supporting documents which may include service strategies, departmental plans, and policies, and in local risk management plans.

Our approach to risk

To provide a robust assessment of all foreseeable risks, the AoR is structured into four layers. Each layer presents a different type of risk information for a specific purpose and audience. The layers are presented separately as individual reports for clarity. As a result, similar risks may appear with different scores and in different layers.

- Layer one (public concern) reflects the level of concern expressed by the public about different risks. This will not necessarily reflect the measured frequency or severity of incidents but may be an early indicator of change. Public concern will also be influenced by factors such as the recency and visibility of risks, such as notable fires locally or in the news.
- Layer two (commonly occurring risk) considers frequent incidents and incident locations, such as dwelling fires in purpose-built flats. These risks occur relatively regularly and can result in casualties, often affecting individuals or small numbers of people rather than large numbers in a single incident. This layer looks at which risks cause most casualties and also where these risks are most likely to manifest geographically.
- Layer three (reasonable worst-case scenarios) considers low-likelihood but high-impact events, such as a single, large residential high-rise fire causing many casualties.
- Layer four (Horizon Scanning for new and emerging risks) considers how risks may change or present differently in the future. For example, how the changing built environment may influence frequency and severity of fires in flats or how climate change may influence fire service incidents.

Public concerns and perception of risk are intentionally presented as layer one of the assessment, ensuring communities' views are highlighted.

Our approach to individual vulnerability

The United Nations Office for Disaster Risk Reduction define vulnerability as, "The conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards."

Because individual susceptibility to the impacts of a hazard is distinct from the likelihood or consequence of that hazard being realised in London, specific personal vulnerability data sets are not used in this assessment. However, by adopting the NFCC methodology for combined dwelling fire risk in layer two of this assessment, any individual factors associated with heightened susceptibility to the consequence of dwelling fires is addressed. This is through the inclusion of the identified personal factors that correlate with consequence of fire. The NFCC definition of risk dwelling fire risk map can therefore be viewed as including vulnerability to dwelling fire within it.

LFB's Prevention Strategy and LFB Policy 1010 identify common characteristics of those who are most at risk of, and vulnerable to the effects of, fire. These data are used in planning the allocation of Home Fire Safety Visits and other preventative work. The six characteristics below are used within LFB as indicators of vulnerability or risk to dwelling fire.

- Smoker.
- Lives alone.
- Over 60 years old.
- In receipt of care (informal, formal or both).
- No working smoke alarms.
- User of mobility aids, or chair/bed bound.

In addition to these, disability and evacuation difficulties have been referenced as identified vulnerabilities in fires from coroners' reports.

Individuals can be susceptible to the impacts of non-fire hazards through these factors and others. The exposure of individual members of the public to various risks will differ significantly with their location and activity, this exposure may be correlated to or independent from protected characteristics. The layered approach adopted to assessing risk ensures that each type of fire service-related risk an individual may be exposed to is assessed for likelihood and severity. The relevant factors indicating heightened vulnerability will differ depending on the context of the incident type and the hazard to which an individual may be exposed. LFB staff who support communities at incidents or during their work are trained to identify vulnerability including but not limited to; socio-economic, mental health, and physical needs. Crews are trained to identify possible safeguarding issues and take immediate actions to support vulnerable members of the community, keep them safe and refer to the appropriate agency for further support if required.

For these reasons, the AoR does not seek to assess all forms of individual vulnerability across all circumstances. Its purpose is to provide a strategic, risk-based assessment to inform service-wide prioritisation and planning.

Section 2. Key Findings 2026

The following tables set out the key findings from 2026's assessment of risk by layer. These tables are intended to provide a quick reference. Further information and context is available in the detailed report for each layer.

Users intending to use the AoR for decision making should access the detailed report for the layer of interest. Where decision making regarding risks from the London Risk Register is required, users should access the detailed scenario descriptions for each risk available to authorised users through Resilience Direct.

Key themes identified are;

- **changing baseload demand;** an increasing proportion of non-fire, physical and mental health related incidents
- **increased volatility and malicious threats;** peaks in demand driven by climate change and geopolitics
- **enduring chronic risk;** Risks inherent in the complex built environment and the development of new technologies

These themes are not separate, they interact, shaping both day-to-day activity and exposure to extreme events. It is plausible for acute risks identified in this report, such as large complex-building fires and high volumes of people in crisis, to occur within the context of more chronic risks such as extreme heat, widespread flooding, or civil disturbances caused by social and political tensions. The concurrent nature of acute and high-impact incidents with chronic environmental or societal stressors, increases demand on response functions. This is the basis of the 2030 Plausible Operating Environment presented in the layer four assessment, "New and Emerging Operational Risks: 2030 Horizon Scan".

Key findings Layer One: Public Concerns and Public Risk Perception

Risk	Key Findings	Implication
Crime – High concern to public	Members of the public expressed high levels of concern about crime, including knife crime, attacks, theft, burglary and drug activity. In polling, crime was rated as being of equal or greater concern fire and rescue risks highlighted by LFB.	Because concern regarding crime may exceed concern regarding threats such as fire, this may impact public engagement with fire and rescue safety messaging.
Fires in flats and shared living – High concern to public	Fires in flats and shared living are perceived by participants to be the most concerning risk of during community workshops and in YouGov polling.	Fires in purpose-built-flats are the highest risk property fire type in the measured data for 2026. This indicates public perception of risk reflects measured risk at a pan-London level, although not necessarily individual/personal risk.
Malicious threats and terrorism – high concern to public	Malicious attacks and terrorism consistently rank as a high-concern risk , appearing as the second highest perceived threat in community workshops. However, this risk also shows the greatest variation between groups perception, indicating uneven levels of concern across communities	Different communities may require targeted communication and/or engagement regarding malicious threats. The persistence of this threat amongst higher public concerns indicates that the public will expect activity from LFB in this area, but interest will fluctuate.
Water rescue – low concern to public	Water rescue consistently appeared as the lowest perceived threat in both community workshops and YouGov polling. There was lower traffic on LFB's 'Water Safety' webpage than other topics. This low perception of risk contrasts with the high casualty and fatality rates associated with water incidents in London.	The consistent gap between perceived and measured water-related risk indicates that, although non-statutory, water safety may be a suitable target for risk communication and engagement.
Flooding and wildfires – low concern to public	Both flooding and wildfires are perceived as low-threat by community workshop participants and YouGov respondents. Flooding information also attracts relatively little engagement on LFB safety information webpages (bottom 25% website traffic). This contrasts with the assessed risk of these hazards.	The gap between perceived and assessed risk for flooding and wildfire indicates that where the assessed background threat is rising, driven by climate change, but individual exposure and personal experience remain low, the public perceive the threat to be limited. This finding has implications for risk communication and public preparedness work

Key findings Layer Two: Day-to-day Risks relating to property, place and incident type

Risk	Key Findings
Fire Risks	
Reduced likelihood of fires in houses and Bungalows - Risk remains Very High	Reductions are observed in the likelihood of fires in Houses and Bungalows based on 5 years incident data. The risk remains very high due to consequence score.
Very High Risk - Fires in Purpose Built Flats	Fires in Purpose built flats remain the highest risk fire type by location and have not followed the downward trend in numbers of fires overall or in the reduced severity scores noted in other locations.
Very High Risk - Fires in care and supported living	Increase in severity score; based on casualties and resources used in five calendar years
High Risk - Fires on other non-residential buildings	Increase in severity score; based on casualties and resources used in five calendar years
Special Service (non-fire) risks	
Very High Risk B11 and B3, collapsed behind locked door incidents and effecting entry	Remain the joint highest non-fire risk incidents from 2025 no change in likelihood or consequence score. B11 remains 5/5 for likelihood and consequence
Very High Risk Persons Trapped in Road Traffic Collisions (RTCs)	Remain the second highest non-fire risk incidents from 2025 likelihood 4/5, consequence 5/5.
Very-High Risk B12 Incidents, persons threatening to jump	Maintained the raised risk noted in 2025 indicating a sustained increase in this risk rather than a fluctuation.
Geographic disposition of risk	
Dwelling fire risk	Dwelling fire risk largely aligns with areas of most population density.
Non-dwelling building fire risk	Non-dwelling building fire risk is concentrated in areas of higher development but has a wider distribution than dwelling fire.
Road Traffic Collision Risk	Road traffic collision risk is concentrated towards the periphery, most notably around arterial and ring roads entering and circling London.

High and Very High-risk incident types		Geographic distribution >2xStandard deviation from brigade wide average
• A1: Fire - including large vehicle fires	Very High	North Kensington, Tottenham, Plumstead, Paddington Dagenham
• B11: Person Collapsed or Injured behind locked door when called by LAS or MPS	Very High	Tottenham, Paddington, Dagenham
• A1HR: Fire in High Rise Flats/Commercial Buildings - 6 flrs & above	Very High	Paddington, Poplar, Lambeth, Shoreditch
• B3: Effecting Entry - Person Locked Out/In & Person Collapsed Behind Locked Door	Very High	Stoke Newington, North Kensington, Tottenham, Holloway
• PERSONS: Persons trapped - RTC	Very High	Hayes, Orpington, Croydon, Enfield, Heathrow
• B2: Reduced Special Service - including ceiling plaster/trees/roof tiles/bldg fascia/aerials etc in precarious position & person collapsed or injured in street etc.	Very High	Paddington, Hammersmith, Soho
• MAKE: Make safe - RTC	Very High	Croydon, Ilford, Southgate, Stanmore
• B19: Assist Ambulance with Bariatric/Difficult removal of Patient	Very High	Barking, Plumstead, West Norwood, Woodside
• C1: HazMat - including cylinders/refrigerant leaking/Fuel Spill over 100 litres - inside or outside	Very High	Lambeth, Paddington, Lewisham
• B12: Person Threatening to Jump or Assisting MPS with Persons at Height	Very High	Ilford, Poplar, Lambeth, Euston
• A4: Fire Involving HazMat - including cylinders and explosions	Very High	Tottenham, Southall, Plumstead, Old Kent Road, Ilford, Dagenham, Bethnal green
• B1: Person Trapped (Not RTC)	Very High	Soho, Tooting, Stoke Newington, Erith,
• B10: Person in Precarious Position requiring immediate rescue	Very High	Soho, Tooting, Holloway,
• B1T: Person under Train/Tram or Person Struck by Train/Tram	Very High	Soho, Paddington, Lambeth, Holloway, Euston
• C3: Acid Attack on Person	Very High	Orpington, West Hampstead, Willesden, Stratford, Lambeth, Fulham
• J1: Midstream Incident on the Thames	Very High	Lambeth, Dowgate, Twickenham, Soho, Dockhead
• J3: Person/Animal in Waterway/on Foreshore	Very High	Poplar, Lambeth, Dockhead, Stratford, Millwall
• VEHICLE: Vehicle fires - Small/Large & Incidents involving vehicles	Very High	N/A

• MULTI: Multi lane make safe - RTC	High	Hayes, Enfield, Poplar, Hendon, Ilford, Mill Hill, Barking
• B93: Collapse of Building/Structure (Level 3) - Persons involved	High	N/A
• E3: Aircraft Accident/Aircraft Accident Imminent	High	Hillingdon
• FSG: 1 or more FSG calls in any premise type	High	N/A
• J8: Vehicle in Waterway accessible from land	High	Chiswick, Hillingdon
• PERSON: Person on Fire - Out in the open	High	Paddington
• A10: AFA Commercial Premises	High	Soho, Euston, Dowgate
• A11: AFA Residential Premises - for High Rise use A1HR	High	Paddington, Chelsea, Hammersmith, North Kensington, Euston, West Hampstead
• A2: Reduced Fire Attendance - including electrical junction box	High	Dagenham, Soho, Wennington, Orpington, Ilford, Plumstead
• B4: Flooding	High	Bethnal Green, Paddington, North Kensington, Lambeth, Stoke Newington, Tottenham
• C5: Natural Gas Leak - commercial or residential	High	Paddington, Stoke Newington, Tottenham
Highlighted Risks		
Lithium-ion fires including e-bikes and e-scooters	Lithium-ion battery fires, including those involving e-bikes and e-scooters, were identified in the Brigade's 2025 Assessment of Risk as an emerging risk, reflecting public and professional concerns about battery safety and the wider adoption of lithium-ion energy systems. The continued rise in incidents confirms this developing trend, although the overall number remains low relative to total fire activity in London. Where these incidents occur, they may intersect with existing vulnerability factors, particularly in domestic settings. Given the increasing use of lithium-ion powered transport and energy storage, the risk profile is expected to remain dynamic and will continue to be considered within the broader category of risks associated with new fuels and emerging technologies.	

Key findings Layer three: Extraordinary risks and risks from the London Risk Register

Risk	Key Findings
Very High Risk Increasingly complex malicious threat picture	The number of malicious act threats recorded on the London Risk Register increased notably in 2024. A further increase in likelihood and severity of individual malicious threats occurred in 2025. The five risks which have increased from the 2025 assessment to the 2026 assessment all relate to malicious acts. This prevalence of malicious threats on the 2026 London Risk Assessment (LRA), previously London Risk Register, reflects the current partnership assessment of threat level across a spectrum of attack methodologies. LFB will be required to respond directly to incidents involving malicious acts where its capabilities are required or where statutory duties exist.
Very High Risk Critical service disruption concurrent with response demand	Reasonable-worst-case scenarios from the London Risk Assessment, such as R89 High Altitude Electromagnetic Pulse, R50a National Electricity Transmission Failure and R21 Attack on UK electricity infrastructure are likely to pose business continuity challenges for LFB through critical service disruptions as well as potentially triggering concurrent need for response services.
LFB-lead, High-Risks on LRA	• Fires in purpose-built high-rise flats. Fires in purpose-built high-rise flats remain a high risk, reduced from very high, with a reasonable-worst-case scenario scale incident assessed as having between 5% and 25% likelihood of occurring in any 12 month period. On 1st March 2026 there were 949 buildings in London known to LFB over 18 meters high, (high-rise buildings) that had a simultaneous evacuation strategy. These buildings are likely to perform in such a way during a fire that a stay put strategy is untenable. • Major fire in care homes and hospitals. Fires in care homes and hospitals remain a high risk unchanged from 2025, with a reasonable-worst-case scenario scale incident assessed as having between 1% and 5% likelihood of occurring in any 12-month period. • Accident involving high consequence dangerous goods. Accidents involving high consequence dangerous goods remain a high risk, unchanged from 2025 with a reasonable-worst-case scenario scale incident assessed as having between 1% and 5% likelihood of occurring in any 12-month period. • Civil Nuclear Accident. This risk remains unlikely with a less than 0.2% chance of occurring each year. However, due to high consequence this remains a high risk on the assessment.

Highlighted Risks	• Heritage Fires. Falling within the broader category of, "Fires in large public and commercial buildings." -assessed as a medium risk in the LRA, Heritage fires are highlighted in layer three of the AoR due to the number and prominence of London's approximately 40,000 listed buildings and four UNESCO World Heritage Sites - Westminster Abbey, Palace of Westminster, Royal Botanic Gardens Kew, Maritime Greenwich and the Tower of London.
--------------------------	---

Key findings Layer four: New and Emerging Operational Risks: 2030 Horizon Scan

Risk	Key Findings
2030 Plausible Operating Environment.	In 2030 LFB is plausibly operating in an environment characterised by three inter-related themes; changing baseload demand, increased volatility, and enduring chronic risk. These themes are not separate, they interact, shaping both day-to-day activity and exposure to extreme events. It is plausible for acute risks identified in this report, such as large complex-building fires and high volumes of people in crisis, to occur within the context of more chronic risks such as extreme heat, widespread flooding, or civil disturbances caused by social and political tensions. The concurrent nature of acute and high-impact incidents with chronic environmental or societal stressors, increases demand on response functions.
2030 Operating environment contingent on deterioration in international conflicts	Contingent on a deterioration in international conflicts and geopolitical instability; It is plausible that within the planning horizon of 2030 LFB may be required to support wider civil resilience, national resilience arrangements or Home Defense, in line with established frameworks such as the Civil Contingences Act. Should these demands occur, they will occur alongside and interact with the impacts of climate, demographic and built environment change described in the plausible 2030 operating environment, not in isolation from them.
Individual Findings	• LFB has robust pumping appliance capacity. Projected increases in day-to-day demand to 2030 remain within existing pumping appliance capacity for modelled day-to-day demand, assuming current availability levels. However, short-duration extreme events, particularly large wildfires or concurrent incidents during heatwaves, could temporarily test capacity, particularly where incidents are sustained over multiple days. • Day to day demand is changing. Day-to-day demand is shifting from predominantly fire-dominated to an increasing volume of special services, particularly incidents linked to physical and mental ill-health. Scenarios indicate sustained growth and significant projected volumes of these services. Incidents involving people in crisis potentially exceed 8,000 per annum by 2030 and collapse-behind-locked-door incidents potentially exceed

Risk	Key Findings
	16,000. Fires are declining overall, however, fires in high-rise buildings and flats remain a persistent risk, associated with higher potential casualty rates and have not followed the downward trend seen in other fires. • Demand is seasonal. Both day-to-day demand and the frequency of high demand days increase between June and September. Peaks most often occur in July driven by fires outdoors and rainstorms. This effect is likely to become increasingly marked by 2030. • Outlier days. Since 2022, the number of days above historical average mobilisation levels has increased. Increased volatility and more frequent high demand days are expected to continue. Recent outlier events have been preceded by red extreme-heat and amber wind warnings. This indicates actionable warning periods for wildfire and windstorms. • Climate Change is an increasing seasonal threat with significant uncertainty about impact scale. There is a divergence between climate risk identified in PESTLE, from Met Office and Environment Agency analyses, and LFB incident data. Across both surface-water flooding and rural/vegetation fires, recorded incidents show high year-to-year variability with a seasonal peak, but no consistent trend upward or consistent increase in peak severity. However, climate projections indicate increasing frequency and intensity of heat and heavy rainfall hazards. Recorded incidents in this context should be taken as lagging indicators rather than indicative of future severity. • Periods of extreme heat are forecast to become more extreme and more common. Risks, such as wildfires, drought, piped water supply failures (referenced on national and local risk registers), large structural fires, and public disorder have a seasonal pattern with more demand in the summer. Combinations of these and similar events are plausibly magnified by extreme heat. Extreme heat also imposes physiological load on LFB staff concurrent with demanding incidents. • An increasingly complex built environment. Rapid adoption of new fuels, technologies and construction methods plausibly outpaces regulatory change and assurance. This creates long-term exposure to system failures and to novel fire behaviours in complex premises, tall buildings and the wider built environment. • There is increasing potential for fire service incidents resulting from, or concurrent with, malicious acts. Acts linked to, or inspired by, international events and geopolitical tensions may result in demand for fire

Risk	Key Findings
	service capabilities. These threats include terrorism, civil unrest, cyberattacks, and acts by malicious state and non-state actors as reflected in national and London risk registers.

Appendix Two

Detailed report: Layer One, Public
Concern and Public Risk Perception.

January 2026

Contents

1	Introduction	3
2	Approach	4
3	Limitations	4
4	Key Findings	4
5	Workshop Findings	5
6	Polling Findings	9
7	Website Traffic Analysis	12

1 Introduction

This layer identifies the risks that Londoners are most concerned about in relation to fire and rescue related emergencies. These concerns will not necessarily reflect the likelihood or severity of actual incidents but will reflect the concerns held by members of the public.

The purpose of this layer is to:

- Establish the primary concerns of the public as they relate to the fire service using communities lived experience to inform hazard identification
- Inform risk communication
- Allow public concerns to be considered when setting organisational risk priorities.

Hazard Identification

Members of the public may experience risks in their lives at a point earlier in the development of that risk than when it becomes visible in LFB incident data. This is because incident data is inherently backwards looking, measuring the impacts of risks once they have been realised. Members of the public can therefore provide intelligence about threats that they feel or experience day to day, enhancing LFBs understanding of the changing operating environment as it is experienced by the people living in it.

Risk Communication

By understanding the primary concerns of members of the public, and the way in which different hazards are perceived, the Brigade can make choices about targeting and prioritisation of risk communication work. This may include providing accessible information regarding risks about which there is a high level of public concern and targeted public education regarding hazards around which public concern is mismatched with the measured or assessed risk.

Prioritisation

Understanding which risks are perceived as most threatening to the public allows these concerns to be considered and weighed against others when setting organisational priorities, particularly with reference to discretionary or non-statutory work.

Through greater understanding of public concerns, the Brigade aims to strengthen the relationship between emergency responders and the communities served. The development of a greater shared understanding of hazards in the community informs both professional and public understanding of risk.

2 Approach

Acknowledging the limited reach of face-to-face engagement and the difficulty in providing full representation for a diverse city, LFB assesses public risk perception in three distinct ways to maximise understanding. These are:

- targeted community workshops, in person and online
- analysis of LFB website traffic to safety information pages
- YouGov polling.

This three-mode approach provides breadth and depth to the assessment with polling and website traffic having a wider reach than community workshops, and community workshops allowing risk to be explored in more depth.

3 Limitations

LFB acknowledge the limited reach of face-to-face community engagement. There is a fundamental constraint on the ability to scale face-to-face engagement to representative level. To provide a broader understanding; polling and website traffic analysis has been used.

LFB use website engagement as a proxy or indicator of public risk perception. We do not know the extent to which the public may seek safety information from other, unmeasured sources in preference to LFB safety information. This may skew our results. Data on LFB safety page traffic indicates an overall decline in user traffic from 2024 to 2025.

YouGov polling is intended to operate at a scale that is representative for London as a whole, however by presenting a pre-determined list of risks we acknowledge we are directing responses to areas of LFB concern. These risks may not reflect wider concerns of communities that are distinct from Fire Service operations.

Persistently high public concern regarding crime may lead to under measuring of other safety themes more specific to LFB if respondents and participants wish to use LFB engagement to highlight their primary crime focussed concerns.

4 Key Findings

Risk: Crime

- Key finding: Workshop participants and YouGov respondents expressed consistently high levels of concern about crime, including knife crime, attacks, theft, burglary and drug activity. Notably, in September 2025 YouGov polling, crime was rated as being of equal or greater concern than any of the pre-defined risks set by LFB.
- Implication: Because concern regarding crime may exceed concern regarding threats such as fire this may be impacting public engagement with fire and rescue safety messaging.

Risk: Fires in flats and shared living

- Key finding: Fires in flats and shared living is perceived by participants to be the most concerning risk of those presented on average in the workshops and in YouGov polling for 2026.
- Implication: Fires in purpose-built-flats are the highest risk property fire type in the measured data for 2026. This indicates public perception of risk reflects measured risk at a pan-London level, although not necessarily individual/personal risk.

Risk: Malicious threats and terrorism

- Key finding: Malicious attacks and terrorism consistently rank as a high-concern risk, appearing as the second highest perceived threat in LFB workshops. However, it also shows the greatest variation between groups, indicating uneven levels of concern across communities. In YouGov polling, malicious threats and terrorism ranked fifth in September 2025 and third across all data sets since 2024 combined. This threat has persistent but varied and fluctuating prominence in public perception.
- Implication: Different communities may require targeted communication and/or engagement regarding malicious threats. The persistence of this threat amongst higher public concerns indicates that the public will expect activity from LFB in this area, but interest will fluctuate.

Risk: Water rescue

- Key finding: Water rescue consistently appeared as the lowest perceived threat in both community workshops and YouGov polling, a finding further supported by comparably lower traffic on LFB's 'Water Safety' webpage. This low perception of risk contrasts with the high casualty and fatality rates associated with water incidents in London.
- Implication: The consistent gap between perceived and measured water-related risk indicates that, although non-statutory, water safety may be a suitable target for risk communication and engagement.

Risks: Flooding and wildfires

- Key Finding: Although both flooding and wildfires are considered as concerning risks in other sections of this report, they are perceived as low-threat by community workshop participants and YouGov respondents. Flooding information also attracts relatively little engagement on the LFB safety information webpages, sitting in the bottom 25% website traffic in 2025. Wildfire-related pages show a rising trend in usage from a relatively low base.
- Implication: The gap between perceived and assessed risk for flooding and wildfire indicates that where the assessed background threat is rising, driven by climate change, but individual exposure and personal experience remain low, the public perceive the threat to be limited. This finding has implications for risk communication and public preparedness work, particularly related to Flooding - which remains non-statutory for LFB.

5 Workshop Findings

Participants in community workshops were invited to assess and share their perceptions of threats across a range of risk categories identified by LFB. In addition to assessing pre-determined risk categories, participants were asked an open-ended question regarding any additional risks/hazards of concern. Analysis was conducted on the structured questions (0–100 perceived threat) and free text responses.

The risks perceived as most concerning by participants were fires in flats and shared living, malicious attacks and terrorism, high-rise and/or major fire, and fires involving vulnerable people. This pattern is broadly consistent with findings from the previous two years, though some variation in the ranking of these risks is evident (info-graphic 1). Water rescue remained the lowest perceived threat and reduced to its lowest point in 2026. Accidents involving hazardous materials and wildfires/grassfires are also perceived to be relatively low risk by participants. This perceived risk is lower than the assessed risk of these incident types particularly with reference to reasonable-worst-case scenario

assessments. It may be inferred that limited lived experience or direct exposure to these incident types contributes to their lower perceived risk.

Workshops indicate that risk perception is closely influenced by lived experience and local environmental context. Community workshops were conducted with targeted groups, and responses reflect individual context: (appendix n).

- Delivery riders and disabled advocacy groups rated "Cold weather, snow and disruption" as their highest-perceived threat, likely reflecting the occupational and mobility challenges posed by severe weather conditions
- Central London borough workshops identified "Malicious attacks and terrorism" as most significant, consistent with proximity to government sites and major tourist destinations, as well as historical exposure to such incidents
- Boroughs with previous experience of notable cladding-related fires, rated "Fires in flats and shared living" and "High-rise and/or major fire" as the most significant risks.

Although malicious attacks and terrorism polled as one of the highest perceived threats overall, it showed the lowest level of cross-group agreement, which reinforces the finding that risk perception is strongly shaped by personal experience, environmental context, and differing levels of exposure to specific types of incidents. Conversely, high-rise and/or major fire, saw one of the higher levels of agreement, suggesting that this risk is most concerning across wider population groups.

Several recurring themes were noted in free text responses submitted by participants, summarised in Table 2. The themes of public realm and transport safety, building safety, standards and maintenance, open flames, smoking and fireworks, Crime, anti-social behaviour and deliberate hostile acts are consistent with reported concerns from 2025 indicating a level of persistent threat/concern. New themes in 2026 that did not appear in the 2025 results are summarised below:

- Risks affecting people with specific health or cognitive needs, such as challenges accessing 999 services for those with learning difficulties
- The practicality and safety of evacuation procedures, particularly for people with disabilities. This includes uncertainty around 'stay put' policies and the ability to evacuate safely during emergencies (e.g. use of lifts)
- A perceived need for improved fire safety education, clearer public messaging, and greater transparency—such as sharing fire investigation findings more widely
- A concern regarding response delays, power-outage preparedness, and limitations on fire engine access. Participants linked these perceived concerns to wider concerns regarding public services
- Concerns about the sale of unsafe electrical goods, flammable materials (including children's clothing), and ignition sources like sparklers indoors. These concerns may be amplified by media reporting and high-profile incidents.

Infographic 1: Average concern levels for specified threats in each community workshop series

Average level of perceived threat (out of 100): All engaged groups			
Risk	Average score		
	2024	2025	2026
Fires in flats and shared living	62.18	60.18	66.78
Malicious attacks and terrorism	67.99	67.84	61.71
High rise and/or major fire	64.55	62.01	58.95
Fires involving vulnerable people	65.22	58.24	58.05
Cold weather, snow, and disruption	47.34	52.88	57.89
House fires	55.39	53.15	51.76
Car and train collisions and entrapments	49.4	62.7	44.78
Flooding	54.47	46.83	44.40
Large commercial fires	42.15	37.09	41.17
Wildfire and grass fires near buildings	40.76	34.71	36.13
Accidents with hazardous materials	41.44	40.8	32.35
Water rescue	36.53	42.64	29.18

Infographic 2. Free text responses returned in community workshops -aggregated into themes.

Concern	Summary Description	Frequency of submission
Public realm & transport safety	Distracted pedestrians; unsafe road crossing; drivers and cyclists; unsafe driving; e-bikes and scooters; overcrowded public spaces; pavement safety and falls; poorly maintained public spaces; road congestion blocking emergency services; unsafe public transport (trains); bus fires.	High
Building safety, standards & maintenance	Unsafe building modifications; unsafe housing conditions; high-rise buildings without second staircases; temporary accommodation safety; fire safety in flats; fire safety measures in buildings; unequal fire safety standards (tenants vs leaseholders); cladding; fire safety assessments by private companies.	High
Open flames, smoking & fireworks	Smoking indoors; smoking related fire and health risks; cigarette disposal risks; candle fire risks; fireworks safety; unsafe behaviours in shared housing (BBQs and balconies).	High
Crime, anti-social behaviour & deliberate hostile acts	Theft; knife crime; anti-social behaviour; arson; digital scams; violent public disorder; social instability and disruption; hostile or deliberate acts.	High
Lithium-ion batteries & charging	Charging lithium batteries indoors; lithium battery charging and fire risks.	Medium
Health, vulnerability & safeguarding	Mental-health related fire risk; suicide risk in public places; safeguarding at community events; hoarding and safeguarding barriers; post-incident community trauma; difficulty accessing 999 services for those with learning difficulties.	Medium
Accessibility & evacuation	The practicality and safety of evacuation procedures, particularly for people with disabilities; uncertainty around 'stay put' policies; the ability to evacuate safely during emergencies (e.g. lifts); security features blocking exits (grills).	Medium
Information, communication & education	Lack of battery-risk awareness; unsafe behaviours by neighbours; who to contact regarding concerns; fire safety education; misinformation regarding mobility batteries; lack of transparency regarding fire investigations.	Medium
Environmental & infrastructure hazards	Vehicle air pollution; wildfire/grassfire; flooding; internal property flooding; surface water flooding; basement flooding.	Medium
Emergency response capacity & access	Power outage preparedness; fire engine access limitations; lack of PPE for personal use; response delays due to public sector cuts; response delays.	Low
Electrical, materials & ignition safety	Overuse of extension leads; faulty appliances; flammability of clothing; sparklers use indoors; poor quality electricals on sale.	Low
Egress, clutter & hoarding	Hoarding and overcrowding; blocked escape routes and exits; unsafe behaviours in shared housing.	Low

6 Polling Findings

A series of polls were taken using the YouGov platform, sampling public concern regarding risk in March and September of 2024 and 2025. Polling provides a wider sample of respondents than achieved in community workshops and is conducted at a scale intended to be representative of London. Approximately 1,040 responses were collected in each poll. Respondents were asked the following question:

"Thinking about potential risks within your local community (e.g. fires, adverse weather conditions, natural events etc.) which ONE, if any, of the following are you MOST concerned about within your local community?"

Respondents were presented with a prepopulated list of 12 specified risks, as well as the options of "don't know," "none of these," and a free text option.

The top 6 concerns selected from the pre-defined incident-type categories were as follows:

- 1) Fires in flats and shared living
- 2) High rise/and or major fire
- 3) 'Don't know'
- 4) House fire (e.g. fires in a standard detached house).
- 5) Malicious attacks and terrorism
- 6) 'None of these'

The top six concerns remained consistent across four separate polls since 2024, with slight variations in ranking, indicating a stable pattern of concern over time. Levels of concern reflect the housing stock in London, with flats, maisonettes, and apartments being London's dominant accommodation type. (['London's housing stock 2024' report](#)). This indicates that concern may be driven by personal exposure, as respondents are likely to live in these types of housing.

'Water rescue', as with previous years' analysis, remains consistently the least concerning risk to those polled by YouGov.

The option 'None of these' received the highest proportion of responses when all polls were aggregated. Infographic 3 shows that when asked to clarify with a free text response 'Crime' (including knife crime, attacks, theft, burglary and drugs) is the leading concern at around 20% of submissions, with all others at 5% or less. Compared to the initial poll results, this suggests people may be equally—or even slightly more—concerned about crime than about more fire service focussed risks.

Infographic 3: September 2025 YouGov respondents – Concerns (grouped) submitted via Free text field

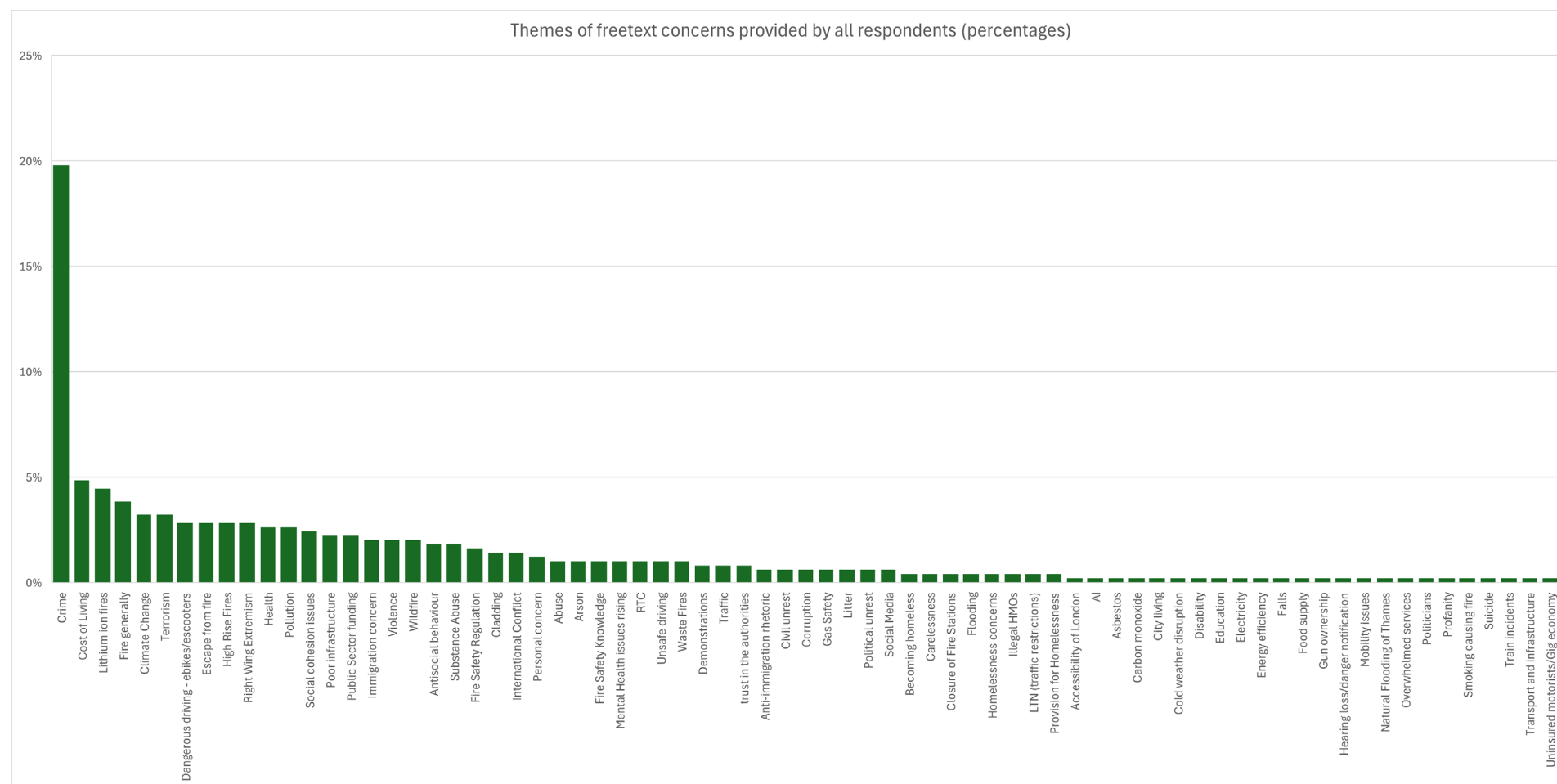
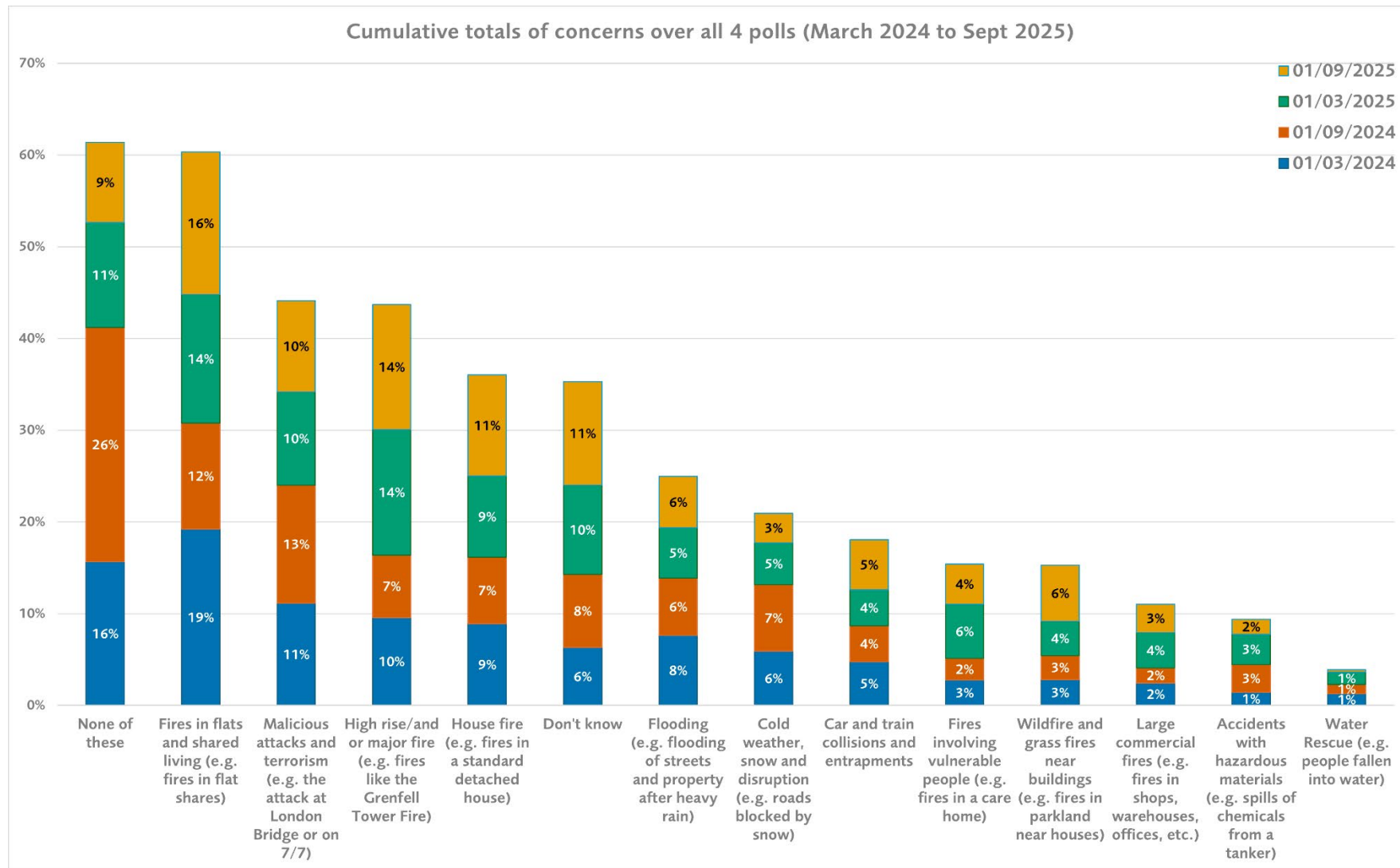


Chart 3: September 2025 YouGov poll results

Infographic 4: All YouGov poll results 2024 and 2025



7 Website Traffic Analysis

User traffic to individual [LFB safety information pages](#) is used to indicate levels of public interest and concern regarding specific risks. An assumption was made that a higher proportion of users viewing particular risk information indicated a higher level of public concern regarding that topic. Data was collected on individual users, rather than total views. Traffic was also analysed by meteorological season¹ to identify trends

Infographic 5 presents a year-on-year comparison of webpage user traffic in 2024 and 2025, focusing on webpages that attracted the highest levels of user traffic. Only webpages with a combined total of 5,000 or more users across both years are included, allowing patterns and changes in high-demand content to be assessed clearly. The most viewed pages (top 25%), shown in infographic 6, are consistent year-on-year from 2024 to 2025. The six webpages that dominate annual website traffic remain consistently highest across all meteorological seasons indicating persistent higher concern regarding these topics. It should be noted overall engagement with the safety pages as a whole has reduced.

Website traffic indicates that information regarding 'Smoke and heat alarms', 'Fire Risk Assessments: Your Responsibilities', 'Fire Safety Law Explained', 'Property Management: Fire Doors' and 'The Workplace: Your Emergency Plan' show the highest level of public concern. It could, however, also indicate that these are the subjects that LFB promote more regularly and/or successfully with their target audiences. The subject matter suggests webpage traffic may largely be driven by individuals with legal fire safety responsibilities and/or professional duties, alongside residents seeking assurance that these obligations have been met. While this cannot be confirmed without specific user-level data, the consistency of this trend across years and seasons indicates a strong professional-use bias to LFB safety pages.

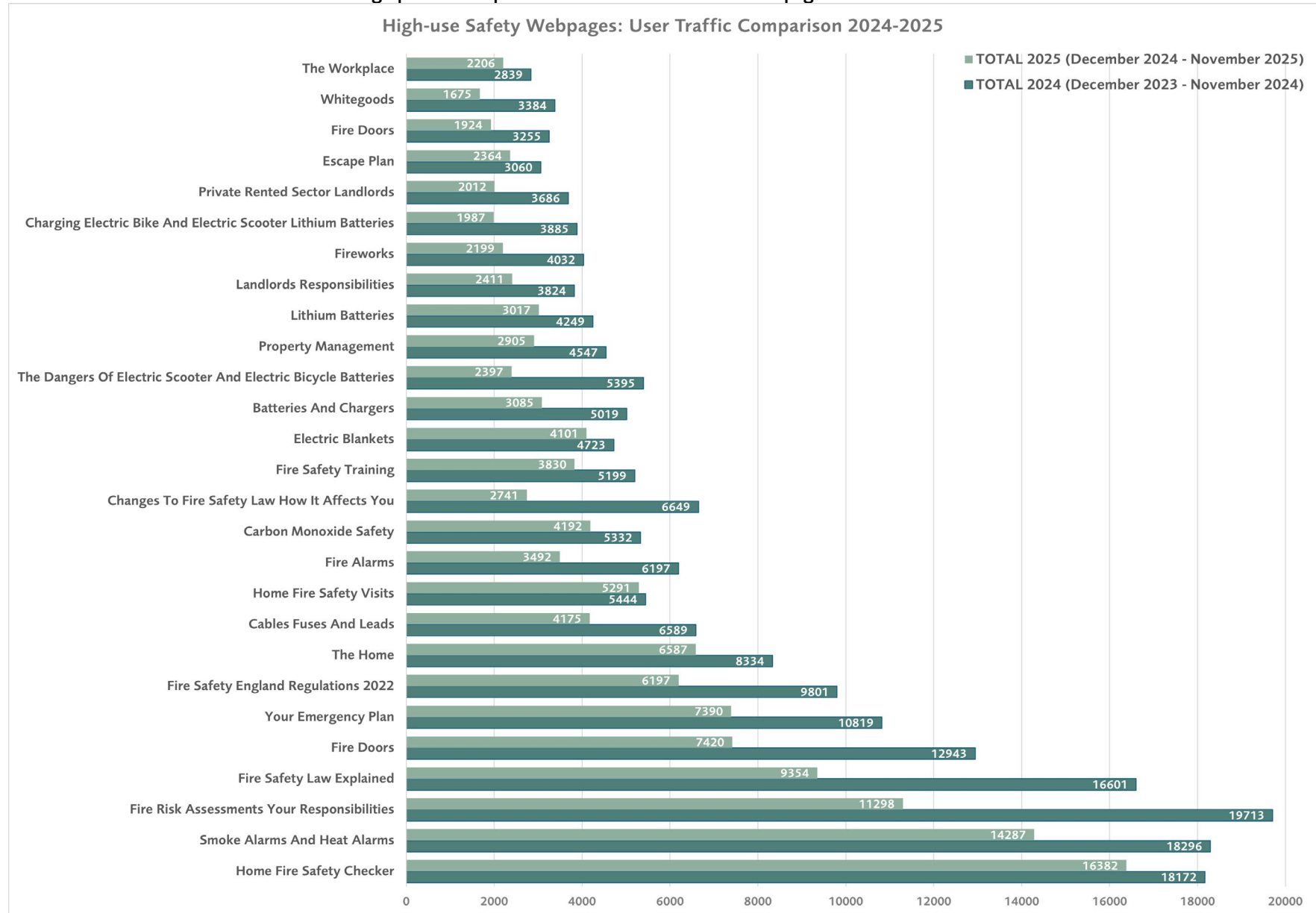
The prominence of the 'Home Fire Safety Checker' page within the data set is expected as this is a referral pathway into the primary prevention service of LFB. It can be assumed that this page will always see some of the highest traffic due to people receiving a service in return and being directed to this page as the gateway for LFB services by staff and partners.

Six webpages exhibited noticeable seasonal fluctuations (infographic 7). The seasonal fluctuations appear to align with expected behaviours: interest in grass and wildfire safety rising during summer months, accompanied by a modest increase in barbeque related content in 2024. In Autumn, fireworks safety had higher engagement, while Winter sees heightened engagement with topics such as electric blanket safety and carbon monoxide awareness. These fluctuations suggest that user behaviour is influenced by seasonal risk factors, reflecting predictable shifts in safety priorities throughout the year.

Notably safety content regarding Lithium Batteries receives a steady level of user traffic indicating persistent concern; wildfire-related topics appear to be increasing in traffic, perhaps reflecting growing public concern about wildfire risk and suggesting a potential shift from the observed discrepancy between perceived and assessed risk of this hazard. Flooding-related content is attracting low engagement, suggesting that visitors to the LFB website either seek this information from alternative sources or perceive flooding as a lower-priority concern compared to other risks/hazards. This may indicate a gap in public awareness or differing perceptions of risk severity.

¹ **Winter:** Start Dec – end Feb; **Spring:** start Mar – end May; **Summer:** start June – end Aug; **Autumn:** start Sep – end Nov

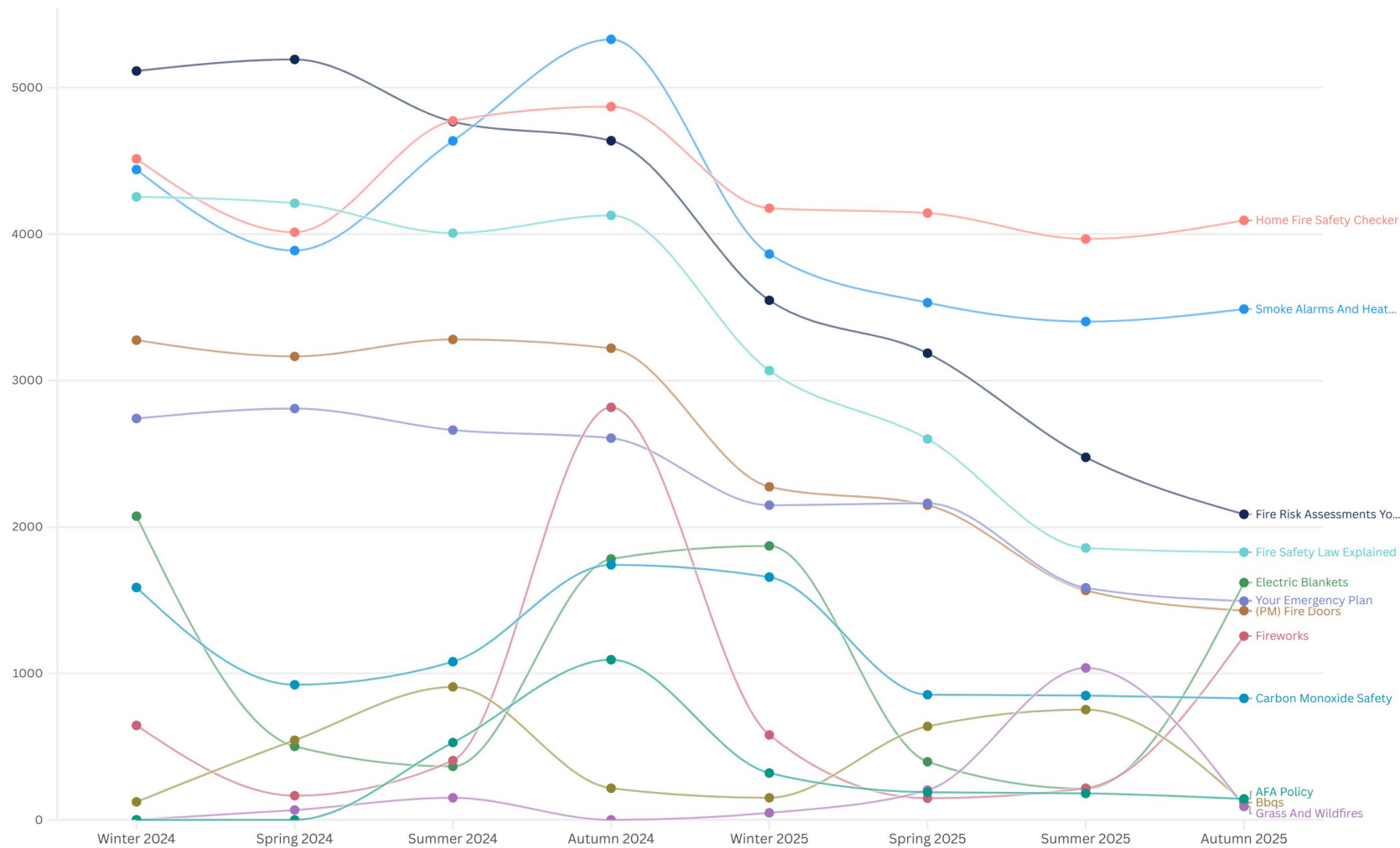
Infographic 5. Comparison of annual user traffic on webpages from 2024 to 2025



Infographic 6: Webpages featuring in the top 25% of user traffic across 2024 and 2025

Grouping	Webpage name	TOTAL 2024 (Dec 2023 - Nov 2024)	TOTAL 2025 (Dec 2024 - Nov 2025)
Home or personal safety	Home Fire Safety Checker	18172	16382
Home or personal safety	Smoke Alarms and Heat Alarms	18296	14287
The Workplace	Fire Risk Assessments Your Responsibilities	19713	11298
The Workplace	Fire Safety Law Explained	16601	9354
Property Management	Fire Doors	12943	7420
The Workplace	Your Emergency Plan	10819	7390
Property Management	Fire Safety England Regulations 2022	9801	6197
Home or personal safety	The Home	8334	6587
Home or personal safety	Cables Fuses and Leads	6589	4175
Home or personal safety	Home Fire Safety Visits	5444	5291
Property Management	Fire Alarms	6197	3492
Home or personal safety	Carbon Monoxide Safety	5332	4192
Property Management	Changes To Fire Safety Law How It Affects You	6649	2741
The Workplace	Fire Safety Training	5199	3830
Home or personal safety	Electric Blankets	4723	4101
Home or personal safety	Batteries and Chargers	5019	3085
Lithium Batteries	The Dangers of Electric Scooter and Electric Bicycle Batteries	5395	2397
Property Management	Property Management	4547	2905
Lithium Batteries	Lithium Batteries	4249	3017
Property Management	Landlords Responsibilities	3824	2411
Home or personal safety	Fireworks	4032	2199
Lithium Batteries	Charging Electric Bike and Electric Scooter Lithium Batteries	3885	1987
Property Management	Private Rented Sector Landlords	3686	2012
Home or personal safety	Escape Plan	3060	2364
Home or personal safety	Fire Doors	3255	1924
The Workplace	The Workplace	2839	2206
The Workplace	Automatic Fire Alarms	2996	1949

Infographic 7: The top 6 webpages across 2024 and 2025 in comparison to those webpages with dramatic seasonal shifts (made using Flourish).



Appendix three

**Detailed report: Layer Two, Data Lead
Assessment of Ordinary (commonly occurring)
Risks**

OFFICIAL
23 February 2026

Contents

2	Introduction, scope and approach	3
3	Objectives	4
4	Limitations	4
5	Key Findings	5
6	Risk Matrices	6
7	Geographic disposition of risk – NFCC Definition of Risk: Dwelling Fire Risk Map	9
8	Geographic disposition of Risk - Non-Dwelling Building Fire	10
9	Geographic disposition of risk – NFCC Definition of Risk: Road Traffic Collision Risk Map	11
10	Geographic disposition of risk – high and very high-risk incident types	12
11	Highlighted specific risks – Lithium-ion involved fires.	14
12	Geographic disposition of risk – high and very-high risk incident distribution by LFB station ground.....	15
13	Geographic disposition of demand and population density	16

2 Introduction, scope and approach

This is a data-led risk assessment using the most recent five calendar years of incident data on casualties, fatalities, type and location of incident and of demand on LFB resources. This layer highlights risks which are relatively common under normal requirements, with likelihood of incidents occurring forming a key metric. "Normal requirements," is a term used in the Fire and Rescue Services Act 2004 to describe the level of "personnel, services and equipment" that should be provided for firefighting and road traffic accidents. Less frequently occurring events which would cause significant harm or damage outside of normal requirements are considered in layer three.

Risk Matrices

In this layer incidents can score high for consequence on the risk matrices due to the number of resources that were deployed to an incident or because of the casualty rate of a given incident type. By having two metrics for consequence the approach captures incidents that have a relatively low resource draw but a high casualty rate, such as persons trapped in road traffic collisions, and incidents such as fires in rural areas that have a relatively low casualty rate but a high draw on resources. Both incident types present risk to the community of London in their own way.

This report includes two different risk matrices. The different presentations allow the same incident data to be viewed in different ways by different intended users. Risk is presented by location and building type in Risk Matrix 1. This is intended for users where the geography or location of a risk is important, for instance, understanding the distribution of risk between different property types or highlighting risks associated with rural areas. For users where the geography is less important, and it is the specific activity that is relevant, Risk Matrix 2 shows incident risk data by the LFB Incident Type Code (ITC). This presentation allows users to focus on incident types that have high casualty rates such as "C3 Acid attack on a person" that are less visible in the location-based data, as they are not constrained by building type or location and may occur anywhere.

Geographic disposition of risk

The Brigade uses methodology developed by the NFCC to highlight the geographic distribution of indicators for increased risk related to dwelling fires, non-dwelling building fires and road traffic collisions (RTC). Dwelling fire risk is calculated using correlation between demographic factors and fire risk to assign a geographical area with a fire risk rating. The approach uses national incident data and is developed by the NFCC. In this document the NFCC methodology using Lower Super Output Areas, (LSOAs) has been selected. This was chosen by LFB as sufficiently granular for understanding the distribution of dwelling fire risk pan-London.

A similar approach is used to map road traffic collision (RTC) risk but using features of the road network to correlate with risk rather than demographic factors.

The NFCC has developed a methodology for non-dwelling fire risk which remains unpublished. LFB has adopted the draft approach to understand the geographic distribution of non-dwelling building fire risk.

Because new census and index of multiple deprivation data sets have become available since the production of NFCC methodologies, where possible, LFB has replaced the original data sets with the most up to date available.

To aid understanding of geographic distribution of hazards other than fires and RTCs. LFB has used the highest scoring risks from risk matrix two and analyses the distribution of these pan-London at station ground resolution. This allows more granular understanding of the distribution of risks such as acid attacks, people collapsed behind locked doors and people in crisis.

Geographic disposition of demand.

LFB has developed an approach to illustrate where demand for services predominantly occur and where different types of risk proxy are concentrated. We term this approach, Neighbourhood Density Zones. These are broadly concentric zones of similar population density.

3 Objectives

The purpose of layer two is to:

- assess which property types and locations are associated with the most demand and most casualties under normal requirements.
- assess which specific incident types are associated with the most demand and most casualties under normal requirements.
- assess which property types and locations and which incident types, have the potential for the greatest local impacts and resourcing implications for LFB under normal requirements.
- inform prioritisation of resources based on current highest risks.

4 Limitations

Recent incident data does not account for rare or extreme events that have not occurred in the data capture period or may have never happened. These events are assessed in layer three.

Incident data is inherently backwards looking, it is a lagging indicator of risks that have already occurred. Horizon scanning for new and emerging risk and assessment of trends is presented in layer four.

Because incident data is a lagging indicator it may underrepresent rapidly changing risks where historic averages appear stable but key drivers have changed.

Data sources that record cause of fire and items most commonly involved in fire are not presented in this layer. These data are tracked and reported by LFB fire investigation and they are fed into layer four of this assessment where trends of increasing risk and demand are identified. This is why Lithium-ion or e-bike fires do not appear in this layer but are reflected in Layer four.

5 Key Findings

Risk likelihood and Severity

- Reduced risk from fires in houses and bungalows. Reductions are observed in the likelihood based on 5 years incident data.
- Fires in Purpose built flats remain the highest risk fire type and have not followed the downward trend in numbers of fires overall or in the reduced severity scores noted in other locations.
- The risk associated with fires in care homes have increased, driven by an increase in the severity score of the risk indicating a higher rate of casualties than in the past.
- Special service (non-fire) risks have increased across multiple location types
- B11, collapsed behind locked door incidents, and Persons Trapped RTCs remain the highest non-fire risk incidents from 2025
- B12 Incidents, persons threatening to jump has maintained the raised position noted in 2025 indicating a sustained increase in this risk.

Highlighted specific risks – Lithium-ion involved fires.

Lithium-ion battery fires, including those involving e-bikes and e-scooters, were identified in the Brigade's 2025 Assessment of Risk as an emerging risk, reflecting public and professional concerns about battery safety and the wider adoption of lithium-ion energy systems. The continued rise in incidents confirms this developing trend, although the overall number remains low relative to total fire activity in London. Where these incidents occur, they may intersect with existing vulnerability factors, particularly in domestic settings. Given the increasing use of lithium-ion powered transport and energy storage, the risk profile is expected to remain dynamic and will continue to be considered within the broader category of risks associated with new fuels and emerging technologies.

Geographic disposition of risk

The following high and very high-risk incident types are concentrated in specific areas of London;

- Dwelling Fire Risk - Dwelling fire risk largely aligns with areas of most population density and with areas that align geographically with areas of higher multiple deprivation. There is a central risk disposition with spread and outlying pockets focussed on areas of development and density and deprivation.
- Road Traffic Collision - Road traffic collision risk is concentrated towards the periphery, most notably around arterial and ring roads entering and circling London.
- Non-Dwelling Building Fire – Is distributed more widely across London
- High risk incident type clusters. Paddington, Lambeth, Soho, Ilford, Tottenham, Dagenham, North Kensington, Plumstead, Poplar and Holloway station grounds are associated with clusters of high-risk incident types. Each of these geographic areas has a cluster of four or more individual high and very high-risk incident types that occur significantly more than the brigade wide average (two standard deviation above average).
- A1HR (Fires in high rise buildings) has a large central London bias with Paddington's station ground having a rate of more than five times the brigade wide average.

- B1T incident types, involving people under trains are concentrated centrally with Soho' station ground accounting for more than nine times the brigade wide average.

Geographic disposition of demand

Overall demand for services occurs primarily in areas of higher population density.

6 Risk Matrices

Incident risk matrices and trends in incident likelihood and severity for all incident types and locations can be viewed by LFB staff using this live report;

1. link: [AoR data report](#)
2. QR code



OFFICIAL

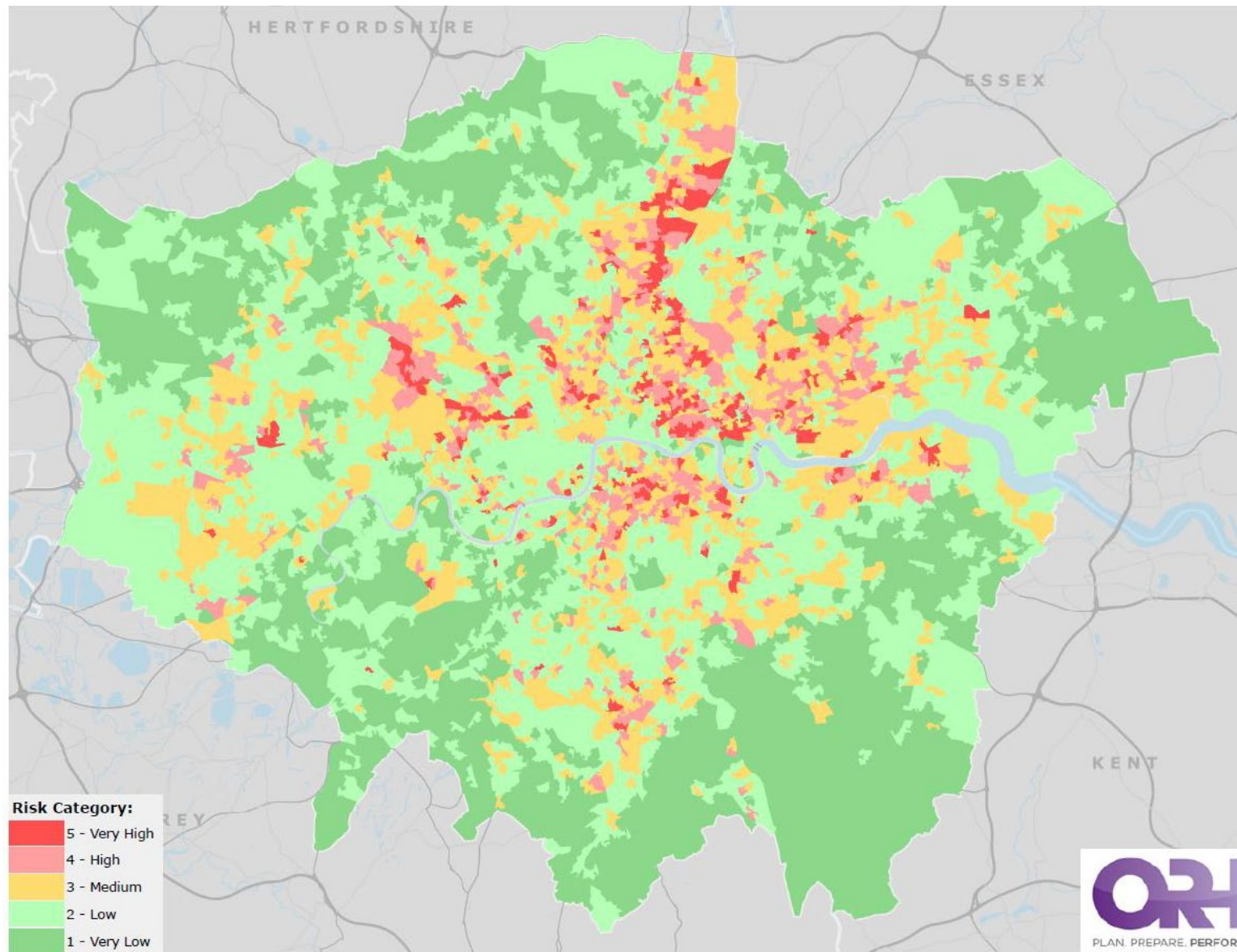
Risk Matrix One: Incident Risk by Type and Location

Severity Score	5	Fire - Other residential property Fire - Warehouses and bulk storage Non-Fire - Camping tent, shelter or marquee	Fire - Care and supported living Fire - Farming and agriculture Fire - Food and Drink Fire - Manufacturing and processing Fire - Retail Non-Fire - Boat Non-Fire - Outdoor water Non-Fire - Trains Non-Fire - Vegetation by road, track or canal	Fire - House or Bungalow Fire - Private garage, shed or outbuilding Non-Fire - Transport buildings	Fire - Purpose built flats	Non-Fire - Road Vehicle
	4	Fire - Boat Non-Fire - Static Caravan, Houseboat, towing caravan	Fire - Other non-residential property Fire - Public administration, utilities and amenities Fire - Short stay accommodation Non-Fire - Other residential property	Fire - Converted flats and HMOs Non-Fire - Rural land	Non-Fire - Urban infrastructure	Non-Fire - Converted flats and HMOs Non-Fire - House or Bungalow Non-Fire - Purpose built flats
	3	Fire - Aircraft Fire - Communal living Fire - Entertainment and culture	Fire - Hospitals and medical care Fire - Landfill or wasteland Non-Fire - Car park and transport Non-Fire - Farming and agriculture Non-Fire - Other non-residential property Non-Fire - Urban furnishings	Fire - Road Vehicle Fire - Rural land Fire - Urban infrastructure Non-Fire - Communal living Non-Fire - Entertainment and culture Non-Fire - Hospitals and medical care Non-Fire - Manufacturing and processing Non-Fire - Private garage, shed or outbuilding Non-Fire - Sports and leisure Non-Fire - Warehouses and bulk storage	Non-Fire - Education Non-Fire - Food and Drink Non-Fire - Offices and call centres Non-Fire - Retail Non-Fire - Short stay accommodation	Non-Fire - Care and supported living
	2	Fire - Camping tent, shelter or marquee Fire - Religious Fire - Sports and leisure Fire - Static Caravan, Houseboat, towing caravan	Fire - Education Fire - Offices and call centres Fire - Transport buildings Non-Fire - Aircraft	Non-Fire - Public administration, utilities and amenities	Fire - Refuse, rubbish or recycling	
	1	Fire - Barbeque Fire - Car park and transport Fire - Trains	Fire - Urban furnishings Fire - Vegetation by road, track or canal Non-Fire - Barbeque Non-Fire - False Alarm - Property not found Non-Fire - Landfill or wasteland Non-Fire - Religious	Non-Fire - Refuse, rubbish or recycling		
		1	2	3	4	5
Likelihood Score Blank Risk Matrix						

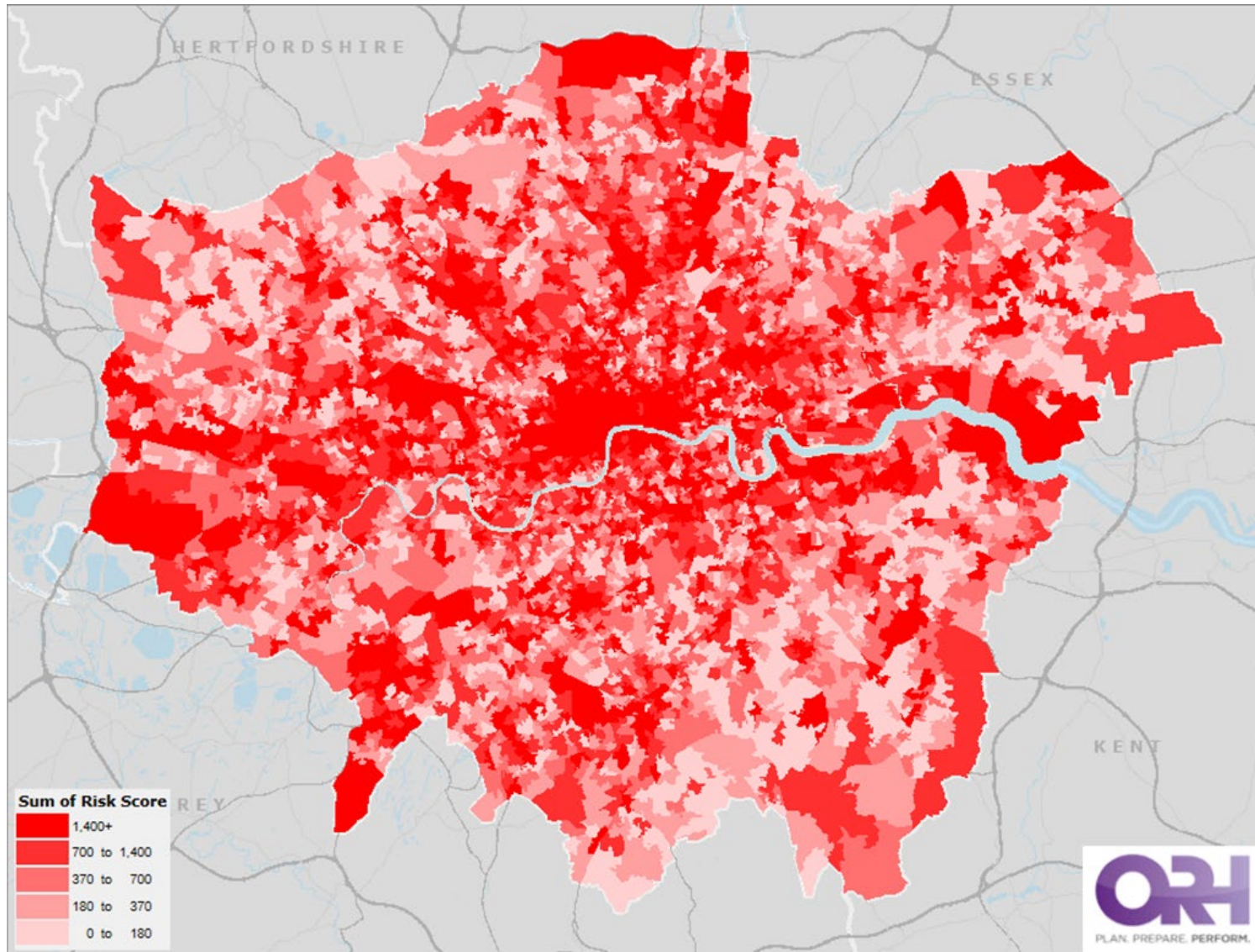
Risk Matrix Two: Incident Risk by Incident Type Code

Severity Score	5	AMB: Ambulance required for member of Brigade/staff/visitor B13: Serious Collision involving Brigade vehicle B14: Minor Collision involving Brigade vehicle B93: Collapse of Building/Structure (Level 3) - Persons involved E3: Aircraft Accident/Aircraft Accident Imminent E55: Emergency Services Channel FSG: 1 or more FSG calls in any premise type G0: Operation PLATO - Nil attendance J8: Vehicle in Waterway accessible from land PERSON: Person on Fire - Out in the open	A4: Fire Involving HazMat - including cylinders B10: Person in Precarious Position requiring immediate rescue B1: Person Trapped (Not RTC) B1T: Person under Train/Tram C3: Acid Attack on Person G11: NILO Assessment - Nil attendance J0: FBT Running Call received from MCA J1: Midstream Incident on the Thames J3: Person/Animal in Waterway/on Foreshore RTC: ROAD TRAFFIC COLLISION VEHICLE: Vehicle fires -	B19: Assist Ambulance with Bariatric/Difficult removal of Patient C1: HazMat N0: Nil Attendance	A1HR: Fire in High Rise RTC Persons trapped	A1: Fire - including large vehicle fires B11: Person Collapsed or Injured behind locked door
	4	B7: Train/Tram Crash B92: Collapse of Bldg/Structure (Level 2) - No persons involved	A0: Tests / Exercises No attendance MULTI: Multi lane make safe - RTC	B12: Person Threatening to Jump or Assisting MPS with Persons at Height	B2: Reduced Special Service MAKE: Make safe - RTC	B3: Effecting Entry - Person Locked Out/In & Person Collapsed Behind Locked Door
	3	MA: Mutual Assistance	A3: Reduced Fire Attendance involving Railway/Tram property B0: No attendance recommended refer to Supvsr J12: Person Threatening to Jump from Bridge or Structure on the River Thames	A8: Fire all Out		A10: AFA Commercial Premises A11: AFA Residential Premises - for High Rise use A1HR A2: Reduced Fire Attendance - including electrical junction box B4: Flooding C5: Natural Gas Leak
	2	C4: Mercury Spill J2: Houseboat/Vessel Sinking/Flooded Accessible from land	A12: Siege/Person Threatening to set light to themselves or property B6: Burst Water Main E1: Aircraft Full Emergency/Ground Incident	C2: Fuel Spill up to 100 litres		
	1	A7: Fire on Vessel - accessible by land AFR: Alleged Fire Risk B17: Large Animal Rescue - Including if waterway involved C11S: HazMat - British Transport Police Support CNAT0: Mass Decontamination National Initial Call D1: Fire in Road/Rail Tunnel D3: Sub Surface incident FFEM: Firefighter Emergency G6: Op Hasani/Wide Area Search J4: HazMat incident on Thames J7: Fire on Vessel on Thames	AFA: ITC as per SECH flowchart B8: Commercial Flooding		B2E: Person Shut in Lift - Emergency B2NE: Person Shut in Lift - Non Emergency	
		1	2	3	4	5
Likelihood Score Blank Risk Matrix						

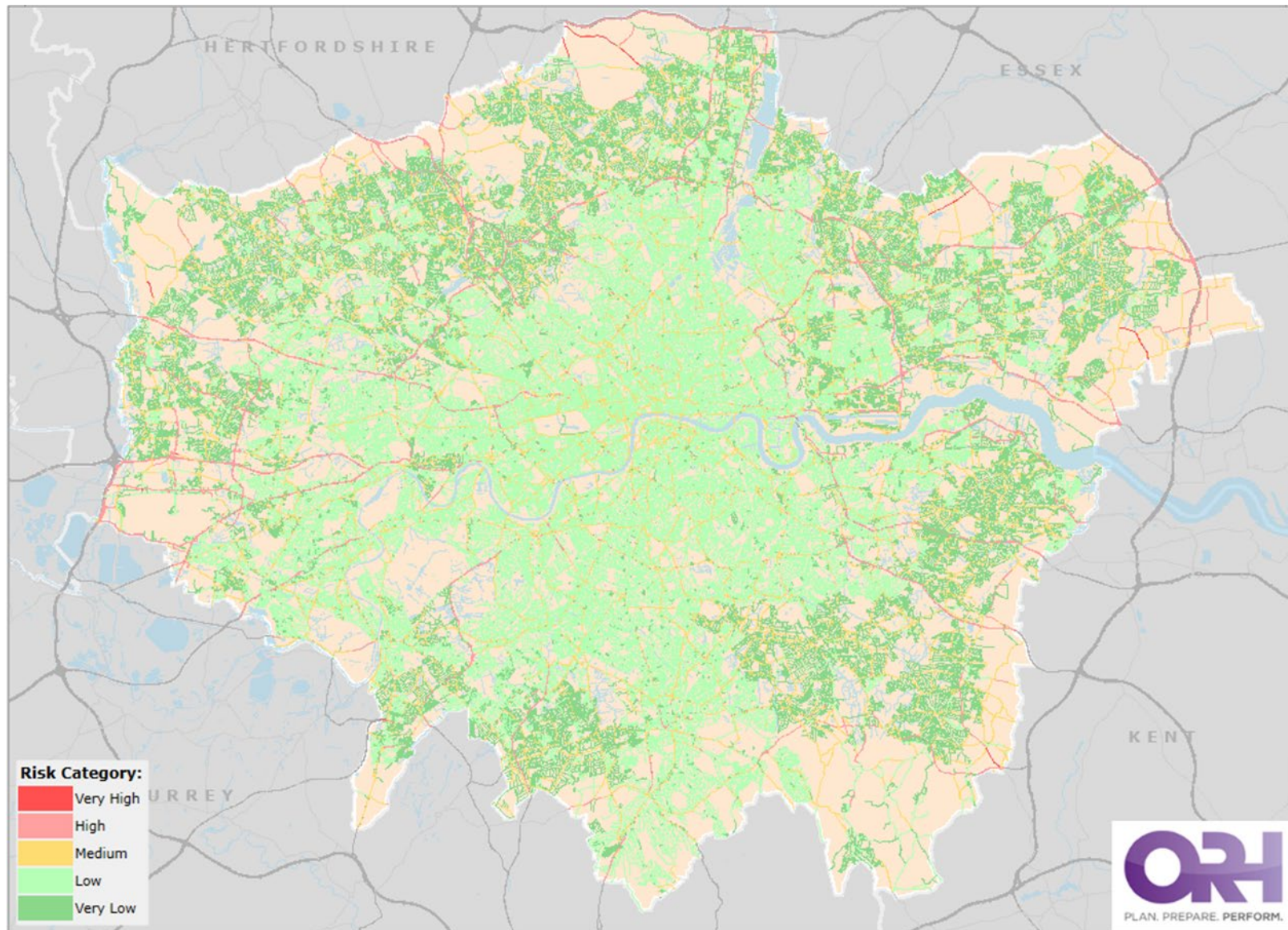
7 Geographic disposition of risk – NFCC Definition of Risk: Dwelling Fire Risk Map



8 Geographic disposition of Risk - Non-Dwelling Building Fire



9 Geographic disposition of risk – NFCC Definition of Risk: Road Traffic Collision Risk Map



10 Geographic disposition of risk – high and very high-risk incident types

High and Very High-risk incident types		Geographic distribution >2xStandard deviation from brigade wide average
• A1: Fire - including large vehicle fires	Very High	North Kensington, Tottenham, Plumstead, Paddington, Dagenham
• B11: Person Collapsed or Injured behind locked door when called by LAS or MPS	Very High	Tottenham, Paddington, Dagenham
• A1HR: Fire in High Rise Flats/Commercial Buildings - 6 flrs & above	Very High	Paddington, Poplar, Lambeth, Shoreditch
• B3: Effecting Entry - Person Locked Out/In & Person Collapsed Behind Locked Door	Very High	Stoke Newington, North Kensington, Tottenham, Holloway
• PERSONS: Persons trapped - RTC	Very High	Croydon, Enfield, Hayes, Heathrow, Orpington
• B2: Reduced Special Service - including ceiling plaster/trees/roof tiles/bldg fascia/aerials etc in precarious position & person collapsed or injured in street etc.	Very High	Paddington, Hammersmith, Soho
• MAKE: Make safe - RTC	Very High	Croydon, Ilford, Southgate, Stanmore
• B19: Assist Ambulance with Bariatric/Difficult removal of Patient	Very High	Barking, Plumstead, West Norwood, Woodside
• C1: HazMat - including cylinders/refrigerant leaking/Fuel Spill over 100 litres - inside or outside	Very High	Lambeth, Paddington, Lewisham
• B12: Person Threatening to Jump or Assisting MPS with Persons at Height	Very High	Ilford, Poplar, Lambeth, Euston
• A4: Fire Involving HazMat - including cylinders and explosions	Very High	Tottenham, Southall, Plumstead, Old Kent Road, Ilford, Dagenham, Bethnal green
• B1: Person Trapped (Not RTC)	Very High	Soho, Tooting, Stoke Newington, Erith,
• B10: Person in Precarious Position requiring immediate rescue	Very High	Soho, Tooting, Holloway,
• B1T: Person under Train/Tram or Person Struck by Train/Tram	Very High	Soho, Paddington, Lambeth, Holloway, Euston

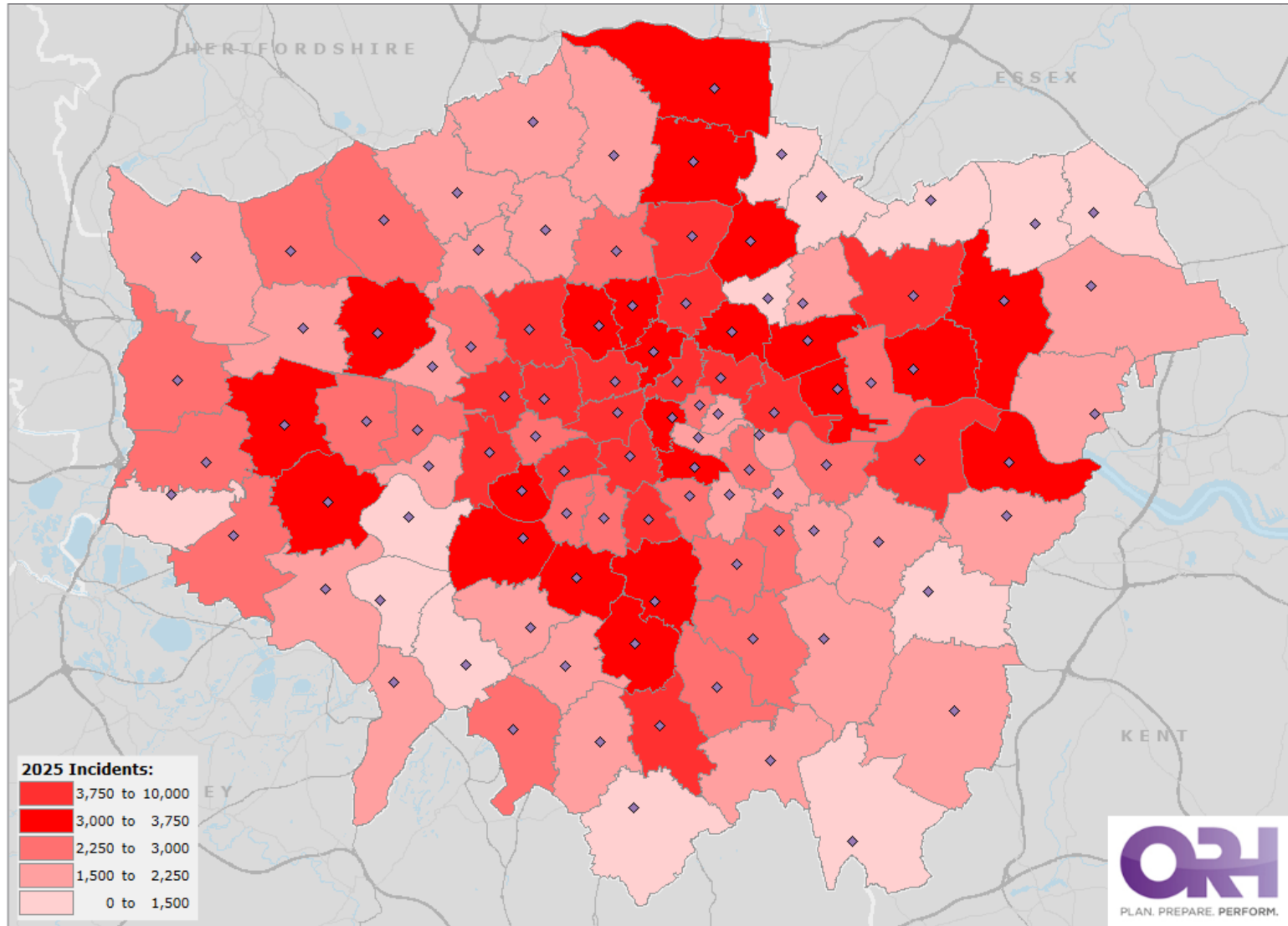
OFFICIAL

• C3: Acid Attack on Person	Very High	Orpington, West Hampstead, Willesden, Stratford, Lambeth, Fulham
• J1: Midstream Incident on the Thames	Very High	Lambeth, Dowgate, Twickenham, Soho, Dockhead
• J3: Person/Animal in Waterway/on Foreshore	Very High	Poplar, Lambeth, Dockhead, Stratford, Millwall
• VEHICLE: Vehicle fires - Small/Large & Incidents involving vehicles	Very High	N/A
• MULTI: Multi lane make safe - RTC	High	Hayes, Enfield, Poplar, Hendon, Ilford, Mill Hill, Barking
• B93: Collapse of Building/Structure (Level 3) - Persons involved	High	N/A
• E3: Aircraft Accident/Aircraft Accident Imminent	High	Hillingdon
• FSG: 1 or more FSG calls in any premise type	High	N/A
• J8: Vehicle in Waterway accessible from land	High	Chiswick, Hillingdon
• PERSON: Person on Fire - Out in the open	High	Paddington
• A10: AFA Commercial Premises	High	Soho, Euston, Dowgate
• A11: AFA Residential Premises - for High Rise use A1HR	High	Paddington, Chelsea, Hammersmith, North Kensington, Euston, West Hampstead
• A2: Reduced Fire Attendance - including electrical junction box	High	Dagenham, Soho, Wennington, Orpington, Ilford, Plumstead
• B4: Flooding	High	Bethnal Green, Paddington, North Kensington, Lambeth, Stoke Newington, Tottenham
• C5: Natural Gas Leak - commercial or residential	High	Paddington, Stoke Newington, Tottenham

11 Highlighted specific risks – Lithium-ion involved fires.

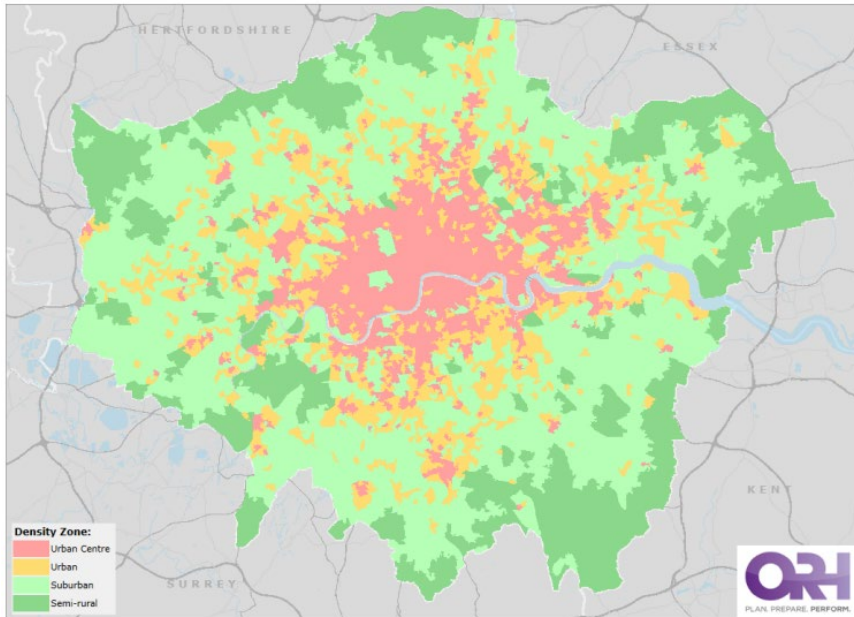
Lithium-ion battery fires, including those involving e-bikes and e-scooters, were identified in the Brigade's 2025 Assessment of Risk as an emerging risk, reflecting public and professional concerns about battery safety and the wider adoption of lithium-ion energy systems. The continued rise in incidents confirms this developing trend, although the overall number remains low relative to total fire activity in London. Where these incidents occur, they may intersect with existing vulnerability factors, particularly in domestic settings. Given the increasing use of lithium-ion powered transport and energy storage, the risk profile is expected to remain dynamic and will continue to be considered within the broader category of risks associated with new fuels and emerging technologies.

12 Geographic disposition of risk – high and very-high risk incident distribution by LFB station ground

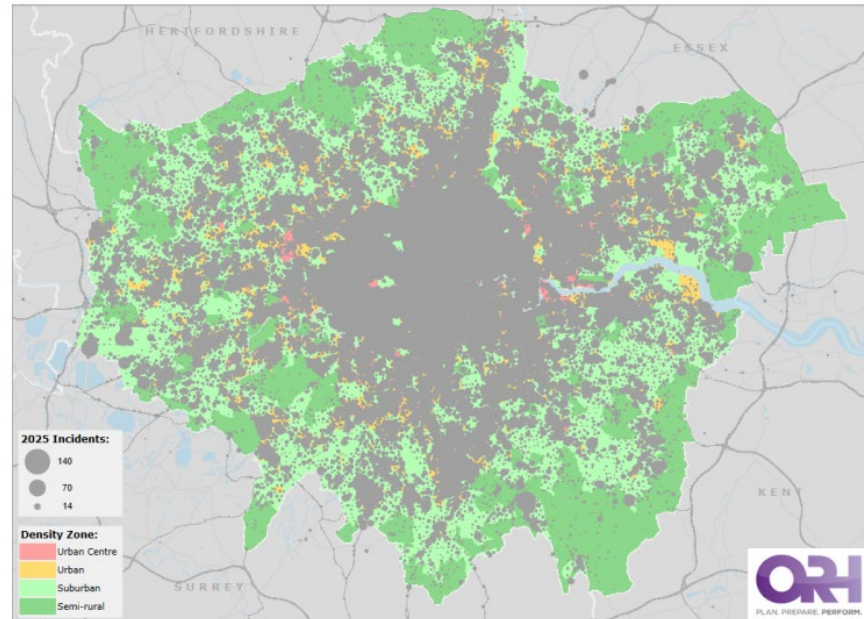


13 Geographic disposition of demand and population density

Population density by LFB, "density zone"



2025 all incidents overlay on density zone base map.



Appendix Four

Detailed report: Layer three, Extraordinary risks and reasonable- worst-case scenarios, including London Risk Register.

OFFICIAL
23 February 2026

Contents

1	Introduction, scope and approach.....	3
2	Objectives	3
3	Limitations	3
4	Key Findings.....	4
5	Extraordinary Risks – London Risk Register 2025 (with updates on public risks from LRR 2026)	6
6	Highlighted Extraordinary Risks.....	7

1 Introduction, scope and approach

Layer three of the Assessment of Risk (AoR) is an assessment of rare, extraordinary or, "reasonable worst-case," scenarios which may not occur with sufficient frequency to appear in LFB incident data or are yet to have occurred. These scenarios are plausible reasonable-worst-case scenarios rather than predictions of events that are likely to come to pass.

Reasonable worst-case scenario (RWCS) risks are assessed against a range of impacts e.g. human welfare, behavioural impact, economic, infrastructure, environmental and security. These risks are taken directly from the London Risk Assessment (LRA), formally London Risk Register, produced by the London Resilience Forum (LRF). The risks for which LFB is the lead are scored using input from LFB subject matter experts but also include input from partners. Risks on which other partners lead are scored in a similar way. This gives the Brigade and the London Resilience Forum a shared partner-wide perspective on risks. This register includes risks that LFB will not have to respond to but may be affected by and for which it may need continuity plans.

Also included but presented independently of the LRA are highlighted risks that do not appear as separate items in the LRA (although they may be aggregated into a wider category) or in recent incident data, but are highlighted through cross departmental engagement. Risks from this section may progress to the LRA as separate items through the London Resilience Forum. Input from Operational Policy and Assurance Department is a key component in identifying risks for inclusion here through Operational, National, Joint and International Learning.

2 Objectives

The purpose of Layer three is to allow the Brigade to:

- plan and prepare for response to low frequency but high impact events.
- plan for combinations of events leading to a high overall demand on LFB resources.
- develop an evidence base for prioritised testing and exercising.
- communicate effectively with stakeholders regarding resourcing for low frequency high impact events

3 Limitations

The events and scenarios in this assessment are informed by the National Security Risk Assessment and partnership planning within the London Resilience Forum as well as cross departmental engagement within LFB. However, there is inherent uncertainty associated with assessing low-likelihood, high-impact events.

This assessment does not yet include assessment of cascading risks. There is work within the wider resilience forum regarding cascading risks.

4 Key Findings

Increasingly complex malicious threat picture

- **Malicious acts.** The number of malicious act threats recorded on the London Risk Register increased notably in 2024. A further increase in likelihood and severity of individual malicious threats occurred in 2025. The five risks which have increased from the 2025 assessment to the 2026 assessment all relate to malicious acts. This prevalence of malicious threats on the 2026 London Risk Assessment (LRA), previously London Risk Register, reflects the current partnership assessment of threat level across a spectrum of attack methodologies. LFB will be required to respond directly to incidents involving malicious acts where its capabilities are required or where statutory duties exist.

Critical service disruption

- **Business continuity challenges.** Items on LRA such as R89 High Altitude Electromagnetic Pulse, R50a National Electricity Transmission Failure and R21 Attack on UK electricity Infrastructure are likely to pose business continuity challenges for LFB through critical service disruptions as well as potentially triggering concurrent need for response services.

LFB-lead, High-Risks on LRA

- **Fires in purpose-built high-rise flats.** Fires in purpose-built high-rise flats remain a high risk, reduced from very high, with a reasonable-worst-case scenario scale incident assessed as having between 5% and 25% likelihood of occurring in any 12-month period. On 1st March 2026 there were 949 buildings in London known to LFB over 18 meters high, (high-rise buildings) that had a simultaneous evacuation strategy. These buildings are likely to perform in such a way during a fire that a stay put strategy is untenable.
- **Major fire in care homes and hospitals.** Fires in care homes and hospitals remain a high risk, unchanged from 2025, with a reasonable-worst-case scenario scale incident assessed as having between 1% and 5% likelihood of occurring in any 12-month period.
- **Accident involving high consequence dangerous goods.** Accident involving high consequence dangerous goods remain a high risk, unchanged from 2025 with a reasonable-worst-case scenario scale incident assessed as having between 1% and 5% likelihood of occurring in any 12-month period.
- **Civil Nuclear Accident.** This risk remains unlikely with a less than 0.2% chance of occurring each year. However, due to high consequence this remains a high risk on the assessment.

Climate Related

- **Flooding.** Two separate red risks and one amber risk relating to different types of flooding are recorded in the London Risk Assessment. Although LFB does not hold the statutory duty for flooding, these risks, if actualised, are likely to impose a significant operational demand on LFB as a category one responder with a duty for rescue.
- **High Temperatures and Heatwaves.** Periods of extreme heat remain a very-high risk on the London Risk Assessment. The assessment also includes acute risks such as wildfire that are linked to temperature and climate.

Highlighted Risks

- **Heritage Fires.** Heritage fires are not assessed separately in the London Resilience Forum's LRA, falling within the broader category of R54b Fires in major entertainment and/or public building", assessed as a medium risk. However, they are noted separately in this assessment due to the number and prominence of London's approximately 40,000 listed buildings, buildings of special interest and four UNESCO World Heritage Sites - Westminster Abbey, Palace of Westminster, Royal Botanic Gardens Kew, Maritime Greenwich and the Tower of London.

Although the risks on this register are presented as reasonable-worst-case scenarios (RWCS), they are plausible in any given year. This is a distinction from Layer four of the AoR, where the intent is to look further ahead at risks becoming more concerning in the future. However, in 2026 – 2030 there is significant overlap between these types of assessment. Many RWCS described in the LRA are assessed as becoming increasingly likely or severe in the near future in the Brigade's horizon scan.

5 Extraordinary Risks – London Risk Register 2025 (with updates on public risks from LRR 2026)

Impact	5	R52 Civil Nuclear Accident R22a Malicious attack on civil nuclear installations – conventional	R95 Nuclear attack by a state on the UK mainland or UK overseas interests. R76 Drought. R21b Attack on UK electricity infrastructure – Cyber R12 Non-state nuclear attack – urban area R21b Attack on UK electricity infrastructure – Cyber R89 High-Electromagnetic Pulse (HEMP)	R50a Failure of National Electricity Transmission System R14 Biological attack unenclosed urban area	R78 Pandemic	
	4	R45 Aviation Crash, R53 Radiation Release from overseas nuclear site R56 Accidental Fire or explosion at an onshore major hazard (COMAH) site R57 Accidental Large Toxic Chemical Release from a COMAH site. R58 Accidental fire or explosion on an offshore oil or gas installation. R59 Accidental fire or explosion at an onshore fuel pipeline. R62 Reservoir/Dam Collapse. L66 Radioactive incident caused by mishandling of radioactive material	R48 Loss of Positioning, Navigation and Timing (PNT) Services L71a Large Aircraft incident in proximity to Airport R08 Malicious Aviation Incident R80a Major outbreak of foot and mouth disease R51 Failure of Gas Supply Infrastructure	R73 High Temperatures and heatwaves R75b Fluvial Flooding R16a Chemical attack – unenclosed urban area R16b Chemical attack – enclosed urban area R21a Attack on UK electricity infrastructure – conventional R22b Malicious attack on civil nuclear installations – Cyber R07 Malicious Rail Network Attack R23a Malicious attack on fuel supply infrastructure – Conventional R23b Malicious attack on fuel supply infrastructure – Cyber R75c Surface Water Flooding	L54a Fires in purpose-built high-rise flats R64 Food Supply Contamination R79 Outbreak of an Emerging infectious disease R71 Severe Space Weather R74 Low temperatures and snow R17 Chemical, Biological or Radiological attack on water supply infrastructure R19 Conventional attack on chemical infrastructure R40d Marauding terrorist attack - firearms	R02 Conventional attack on government R40b Land based terrorist attack - improvised explosive device.
	3	R63 Water Supply Infrastructure HL22 Building Collapse HL23 Bridge Collapse	R47 Disruption of space-based services R50b Regional Failure of the Electricity Network R60 Accidental fire or explosion at an onshore major accident hazard pipeline R65 Major Fire HL105 Complex built environments R10 Strategic hostage taking.	R40 Rail Accident R44 Accident involving high consequence dangerous goods R46 Malicious Drone Incident R49 Simultaneous loss of all fixed and mobile forms of communication R80b Major Outbreak of Animal Disease – Avian Influenza L19 Groundwater Flooding R75a Coastal Flooding R77 Poor Air Quality R20a Attack on UK gas infrastructure – conventional L54e Major fire in care homes and hospitals area R23a Malicious attack on fuel supply infrastructure – Conventional. R23b Malicious attack on fuel supply infrastructure - Cyber	R67 Volcanic eruption R72 Storms R15 Radiological attack – unenclosed urban area R09 Malicious Maritime Incident R20b Attack on UK gas infrastructure – Cyber R15 Radiological attack – unenclosed urban	R55b Technological failure at a UK critical financial market infrastructure R82 Public Disorder R84 Industrial action - firefighters R87 Reception and Integration of British Nationals Arriving from Overseas R24 Cyber-attack - health and social care system R04a Person-borne improvised explosive device R04c Marauding attack (low sophistication) R05b Maritime Terrorist Attack – Marauding Terrorist Firearms attack on a passenger ferry
	2	R61 Accidental work-related (laboratory) release of a hazardous pathogen R38 Insolvency affecting fuel supply.	R54b Fires in major entertainment and/or public building R10 Strategic hostage taking R86 Industrial Action – fuel supply.	HL10 Local accident on motorways and major trunk roads R37 Insolvency of Supplier of Critical Services to public sector L71b Small aircraft incident in proximity to airport R26 Cyber-attack - telecommunications systems R83 Industrial Action – Public Transport	R36 Major Social Care Provider Failure R39 Failure of a supplier of CNI Chemicals R55a Technological Failure at a Systemically Important Retail Bank R66 Wildfires R05a Maritime Terrorist Attack – Vehicle borne improvised explosive device (VBIED) R13 Anthrax letters R85 Industrial Action – Prison staff	R11 Assassination of a high-profile public figure L54c Fires involving landfill and waste processing sites.
	1	R54 Radiation exposure from transported, stolen or lost goods R80d Major Outbreak of Animal Disease – African Swine Fever R80c Major Outbreak of Animal Disease – African Horse Sickness R68 Earthquake	R42 Major Maritime Pollution Incident R30 Malicious Attack – UK Financial CNI	R41 Larger Passenger Vessel Accident R32 Major interference in UK democratic process HL21 Land Movement R28 Cyber-attack – government critical systems loss R29 Cyber-attack– government data breach	R25 Cyber-attack – transport sector	
		1 - Low	2 - Medium/Low	3 - Medium	4 - Medium/High	5 - High
	Likelihood					

6 Highlighted Extraordinary Risks

These are foreseeable risks which are not identified in the last five years of LFB data as being very high or high and are not currently featured as separate items in the London Resilience Forum's London Risk Assessment but are highlighted through cross departmental engagement and as such are considered appropriate to highlight separately as part of the LFB's Assessment of Risk. Risks from this section may, if appropriate, progress to the LRA as separate items through partner engagement in the London Resilience Forum.

Risk	Outcome description	Examples of recent significant incidents that have occurred in London or in other countries
Fire in major heritage buildings <i>(included in LRA wider category of, R54b Fires in major entertainment and/or public building")</i>	London has approximately 40,000 Historic listed buildings, buildings of special interest and modern buildings that store historic relics and artefacts. This includes four UNESCO World Heritage Sites - Westminster Abbey, Palace of Westminster, Royal Botanic Gardens Kew, Maritime Greenwich and the Tower of London. LFB responded to almost 7800 incidents in 2024 that involved or were within close proximity of Historic Listed Buildings. Heritage and historic buildings present unique firefighting challenges due to the various unregulated construction methods and building alterations implemented over many years and the potential for rapid fire spread and building failure. Salvage and damage control operations can be complex. A significant fire in a heritage building in London is likely to have large direct and indirect costs to the capital and country including impacts on tourism. A large fire could destroy items of international heritage value. There is likely to be significant moral pressure on firefighters to act to save national heritage in a structure not designed to resist fire spread due to its historic nature leading to significant operational risks.	Cutty Sark Fire – 2007 – Large fire occurred on the Cutty Sark, almost destroying the historic ship. Glasgow School of Art, Glasgow – 2014 – Large fire at the Glasgow School of Art. Morden Mosque fire – 2015 – Large fire damaging 50% of ground floor of Europe's largest mosque. The National Museum of Brazil was destroyed by a large fire in September 2018. Although some items were saved, it is believed that 92.5% of its archive of 20 million items were destroyed in the fire. Notre-Dame de Paris fire – 2019 – Major fire in a historical cathedral in Paris requiring over 400 firefighters to extinguish costing over €1 billion to restore. Somerset House fire, London – August 2024 - the fire damaged parts of the third floor and the roof of the west wing. Woolton Hall Fire, Liverpool - August 2025, Grade I-listed mansion suffered roof collapse and structural damaged after a fire.

Appendix Five

**Detailed report: Layer four, Horizon Scanning
for New and Emerging Risks**

OFFICIAL

23 February 2026

Contents

1	Introduction, scope and approach	2
2	Objectives	3
3	Limitations	3
4	Key Findings	4
5	PESTLE Analysis	6
6	Demand Trend Analysis and Demand Forecasting	7
7	Plausible Scenarios: 2030 Horizon	15

1 Introduction, scope and approach

Layer four of the Assessment of Risk (AoR) is a forward looking, "Horizon Scan," at emerging risk, changing operational demand, and plausible future scenarios.

This document provides an assessment of how external drivers may impact risk and demand for LFB response up to 2030. This allows for longer term planning to be undertaken and for risk controls to be identified by risk owners in the early stages of risk development.

This assessment focuses on operational risks and how these may manifest in London. Where a wider focus has been used, it is to identify drivers of increasing likelihood or consequence of risks to which LFB may have to respond or will impact response. It comprises the outcomes of three strands of work:

(i) **PESTLE analysis**; used to identify drivers of changing likelihood or severity of risk and to provide broad subjective analysis of the operating environment and context up to 2030.

Drivers identified in this section are assessed for:

- change to LFBs operating environment
- impact on LFBs service delivery up to 2030
- evidence of early signals of existing impact.

(ii) **Demand Trend Analysis and Demand Forecasting**; using historical incident data to track trends in demand and to provide forecasting of possible future demand. This approach uses statistical forecasting tools, exceedance analysis and historical incident data analysis.

Analysis in this section focusses on changes to:

- type of demand (what is happening)
- pattern of demand (when is it happening and how much/often)
- demand as a capacity risk, "exceedance analysis." (how likely are LFB to use lots of resources or to reach capacity for individual capabilities).

(iii) **Forward-looking operational scenario modelling**. Three types of scenarios have been developed:

- Probabilistic Scenarios– Where trends are modified to explore increasing or decreasing likelihood of certain outcomes in the future
- Deterministic Scenarios – Creating plausible extreme events, that have not yet happened, based on trends and PESTLE analysis
- Contingent Scenarios – Assuming the occurrence of a specific adverse condition, e.g. a deterioration in international conflict, to explore exposure.

Scenarios explore the implications of modelled outcomes for operational response under conditions of:

- Significant changes to demand
- Plausible extreme events and event combinations
- Significant adverse change in operating environment.

2 Objectives

The purpose of Layer four is to:

- Provide an understanding of the plausible future operating context up to 2030 to inform strategic decision making
- Identify risks where additional controls may be considered by risk owners within LFB's prioritisation framework
- Inform choices about future resource planning, making LFB, "future fit".

3 Limitations

The trends, forecasts and scenarios in this report are illustrative rather than exhaustive or predictive.

Trend analysis relies on drivers of demand remaining consistent for a period. It is not always possible to identify all drivers of demand or how these factors will change and interact. This means that trends identified in this report may change or reverse over time based on external factors. They should not be taken as a prediction.

The specific forecasting tools used in this report, ETS, ARIMA and SARIMAX uses historical incident volumes to project future demand. An ETS forecast assumes these patterns remain stable and does not account for external drivers. SARIMAX forecasting uses seasonal structures in incident data. It assumes consistent historical relationships and stable seasonality. ARIMA forecasting uses underlying trends in incident demand to project future volumes, assuming stable patterns, but cannot capture seasonality and loses accuracy when incident behaviour changes.

Because incident data is a lagging indicator it may underrepresent changing climate, demographic or geopolitical driven risk, even where historic averages appear stable. LFB incident data is characterised by a wide range between day-to-day activity, demand peaks and isolated high-consequence events. Very rare or very extreme events that do not appear in the data capture period may be underrepresented as risks but remain plausible. LFB has experienced multiple low-frequency high consequence events that were not linked to identified incident trends.

Scenarios presented represent credible variations of trends and plausible extreme events emerging from the PESTLE analysis and from incident data. Scenarios are intended to indicate possible magnitudes and scopes of outlier events and trend developments, rather than to provide a prediction or to indicate all potential outliers. There is inherent uncertainty associated with low-likelihood, high-impact events.

4 Key Findings

2030 Plausible Operating Environment. Based on the individual findings below, in 2030 LFB is plausibly operating in an environment characterised by three inter-related themes; changing baseload demand, increased volatility, and enduring chronic risk. These themes are not separate, they interact, shaping both day-to-day activity and exposure to extreme events. It is plausible for acute risks identified in this report, such as large complex-building fires and high volumes of people in crisis, to occur within the context of more chronic risks such as extreme heat, widespread flooding, or civil disturbances caused by social and political tensions. The concurrent nature of acute and high-impact incidents with chronic environmental or societal stressors, increases demand on response functions.

2030 Operating environment contingent on deterioration in international conflicts. Contingent on a deterioration in international conflicts and geopolitical instability; it is plausible that within the planning horizon of 2030, LFB may be required to support wider civil resilience and/or national resilience arrangements and Home Defense, in line with established frameworks such as the Civil Contingences Act and any relevant new legislation. Should these demands occur, they will occur alongside and interact with the impacts of climate, demographic and built environment change described in the plausible 2030 operating environment, not in isolation from them.

Individual Findings:

- **LFB has robust pumping appliance capacity.** Projected increases in day-to-day demand to 2030 remain within existing pumping appliance capacity for modelled day-to-day demand, assuming current availability levels. However, short-duration extreme events, particularly large wildfires or concurrent incidents during heatwaves, could temporarily test capacity, particularly where incidents are sustained over multiple days.
- **Day to day demand is changing.** Day-to-day demand is shifting from predominantly fire-dominated to an increasing volume of special services, particularly incidents linked to physical and mental ill-health. Scenarios indicate sustained growth and significant projected volumes of these services. Incidents involving people in crisis could potentially exceed 8,000 per annum by 2030 and collapse-behind-locked-door incidents could potentially exceed 16,000. Fires are declining overall, however, fires in high-rise buildings and flats remain a persistent risk, associated with higher potential casualty rates and have not followed the downward trend seen in other fires.
- **Demand is seasonal.** Both day-to-day demand and the frequency of high demand days increase between June and September. Peaks most often occur in July driven by fires outdoors and rainstorms. This effect is likely to become increasingly marked by 2030.
- **Outlier days. Since 2022, the number of days above historical average mobilisation levels has increased.** Increased volatility and more frequent high demand days are expected to continue. Recent outlier events have been preceded by red extreme-heat and amber wind warnings. This indicates actionable warning periods for wildfire and windstorms.
- **Climate Change is an increasing seasonal threat with significant uncertainty about impact scale.** There is a divergence between climate risk identified in PESTLE, from Met Office and Environment Agency analyses, and LFB incident data. Across both surface-water flooding and rural/vegetation fires, recorded incidents show high year-to-year variability with a seasonal peak, but no consistent trend upward or

consistent increase in peak severity. However, climate projections indicate increasing frequency and intensity of heat and heavy rainfall hazards. Recorded incidents in this context should be taken as lagging indicators rather than indicative of future severity.

- **Periods of extreme heat are forecast to become more extreme and more common.** Risks, such as wildfires, drought, piped water supply failures (referenced on national and local risk registers), large structural fires, and public disorder have a seasonal pattern with more demand in the summer. Combinations of these and similar events are plausibly magnified by extreme heat. Extreme heat also imposes physiological load on LFB staff concurrent with demanding incidents.
- **An increasingly complex built environment.** Rapid adoption of new fuels, technologies and construction methods plausibly outpaces regulatory change and assurance. This creates long-term exposure to system failures and to novel fire behaviors in complex premises, tall buildings and the wider built environment.
- **There is increasing potential for fire service incidents resulting from, or concurrent with, malicious acts.** Acts linked to, or inspired by, international events and geopolitical tensions may result in demand for fire service capabilities. These threats include terrorism, civil unrest, cyberattacks, and acts by malicious state and non-state actors as reflected in national and London risk registers.

5 PESTLE Analysis

PESTLE analysis has been carried out by the LFB Risk team with reference to the sources listed in appendix 1, to subject matter engagement, and professional judgement. This analysis provides an understanding of the external drivers impacting LFB's operational service delivery to 2030 and informs both demand forecasting and scenario development, presented later in this document.

PESTLE Category	Driver/Context	Impact on LFBs service delivery up to 2030	Early signals of change identified in current operating environment.
Political	Geopolitical Tension and Security Threats	Potential for fire service incidents linked to, or inspired by, international events and community tensions. Increasingly complex and volatile threat picture. Increase in incidents relating to terrorism, civil unrest, cyberattacks, and malicious state and non-state actors.	Increased operational activity within LFB in response to incidents involving foreign state activity on UK interests.
Economic	Increasing poverty and financial stress for communities in London.	Increasing deprivation puts upwards pressure on demand for LFB Services. Increase in day-to-day demand. Marked Increase in special services linked to social vulnerability.	- Upward trend in incident numbers driven by special service incidents. - LFB and national incident data broadly link demand for services with levels of deprivation.
Social	Demographic change and increased population density. Concentrated vulnerability. <i>*Due to aging population and increasing deprivation</i> Increasingly poor mental and physical health of population	Increased demand for welfare-type responses (PIC, health-related rescues e.g. bariatric rescue) and multiagency working in welfare context. Combined medical and rescue context, e.g. bariatric rescues during firefighting operations, increase complexity of rescues and evacuations.	- Upward trend in overall incident numbers. - Upward trend in special service incidents. - Upward trend in Person-in-Crisis (PIC) incidents. - Upward trend in bariatric and ambulance-assist incidents. - Upward trend in collapse behind locked door incidents.
Technological	Infrastructure fragility and vulnerability to malicious actors New fuels and technologies introducing novel or residual response risk after regulation, e.g. autonomous vehicles,	Possible disruption to internal response-critical systems e.g. mobilising and call taking. Possible disruption to external response-critical systems such as power and water supply and communications. Possible development of new risks related to new technologies with regulatory lag * See legal risk	- Evidence of increasing cyber-attacks. - Evidence of state actors undertaking below threshold malicious acts.
Legal	Innovation in the built environment and in new fuels and technologies plausibly outpaces regulatory updates.	Regulatory lag results in a balance of controls where LFB holds residual, primarily response risk. LFB must mitigate legislative and regulatory risk through response, prevention, or protection of controls that are potentially insufficient.	- Rate of High-Rise fires does not follow downward trend of A1 fires. - Increasing number of lithium-battery involved fires. 949 high-rise buildings

PESTLE Category	Driver/Context	Impact on LFBs service delivery up to 2030	Early signals of change identified in current operating environment.
			with simultaneous evacuation strategies (02-03-2026). Sources show insurers pricing up for multi-occupancy/high-rise. This pattern indicates that insurers expect elevated and persistent high-rise fire-loss potential.
Environmental	Climate change induced increases in extreme weather. <i>*Heat, Drought, Rural–Urban Interface wildfires, surface water flooding, fluvial floods, subsidence and heat effects to health.</i>	Flooding and storms Increase in operational demand (likelihood and severity) from flooding and storm related incidents. Wildfire Ignition at the rural –urban interface, spreading to building stock becomes increasingly likely. Concurrent occurrence at multi-sites becomes more likely. Extreme Heat Prolonged periods of extreme heat, exacerbated by heat island effect, impose physiological demands on staff and act as multiplier of severity and likelihood of other incident types. The likelihood of operating in partially flooded urban environments increases.	- Demand analysis indicates an increasing number of outlier days and high demand days. - Demand shows strong link to weather events. Extreme Outliers have occurred on three occasions since 2016 linked to hot weather and storms. No occurrences of similar magnitude events in the previous 10 years.

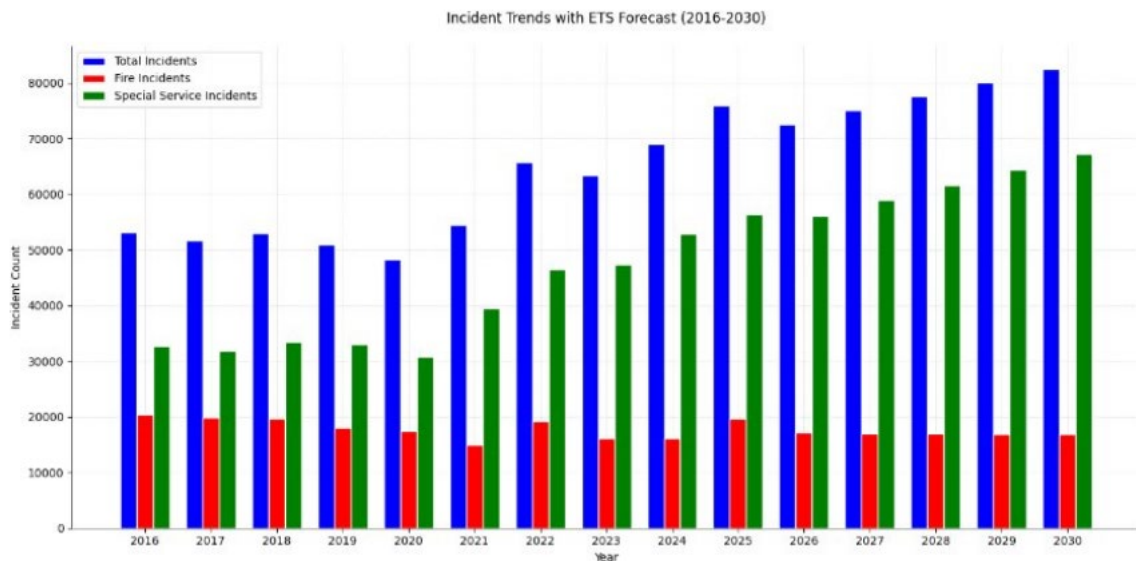
6 Demand Trend Analysis and Demand Forecasting

Type of demand (what is happening)

There is an upward trend in incident numbers. However, demand growth is not evenly distributed. Trend analysis and forecasting indicate a changed emphasis in demand profile by 2030. However, it should be noted that 2025 showed a slight year-on-year increase in fires and it is not clear if this is a minor fluctuation to a stable trend or a change in direction. Chart 1. shows trends in numbers of fire and non-fire incidents, "special services," over time along with an ETS forecast of both to 2030:

- Total incidents are forecast to continue rising, reaching around 80,000 per annum by 2030 excluding false alarms (increase of around 10,000)
- Special Service incidents are the primary driver of growth, estimated to in the region of 65,000 per annum by 2030
- Fires are projected to gradually decline, dropping to around 15,000 per annum by 2030.

Chart 1. Incident trends; Fire and Special Services ETS forecast to 2030



Pattern of Demand (When is it happening and how much)

Demand for LFB services is rising, with increases in variation. Daily incident totals show a stronger summer peak, and since 2022 the frequency of days with demand above the historical average has increased. These days are predominantly associated with extreme heat, and with storms. This is consistent with broader climate-risk signals identified in the PESTLE analysis.

There are observable indicators of higher demand. Red extreme-heat warnings are associated with substantial increases in incident volumes, primarily fires outside. Amber wind warnings indicate elevated call volumes, related to items in precarious positions. The potential upper range of demand under these conditions, particularly for red extreme-heat remains uncertain as there are limited data points to draw on.

Seasonal and weather warning-linked demand reduce the likelihood of entirely unexpected surges. However, convective storms and surface-water flooding remain less predictable, with rapid onset and high volatility in demand and increasing background risk. Chart 2 shows trends in numbers of daily mobilisations over time with outlier demand highlighted in red. Chart 3 shows peak concurrent utilisation of pumping appliances mapped to the presence of Meteorological Office weather warnings.

Chart 2. Trends and outliers in daily mobilisations 2020-2025

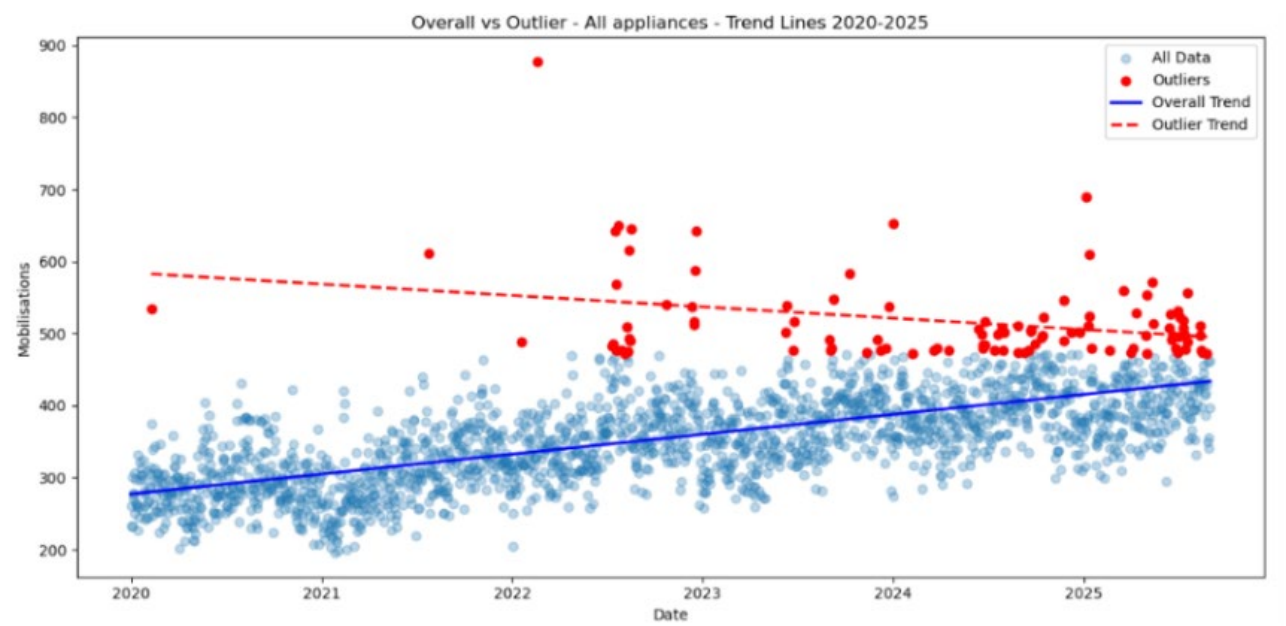
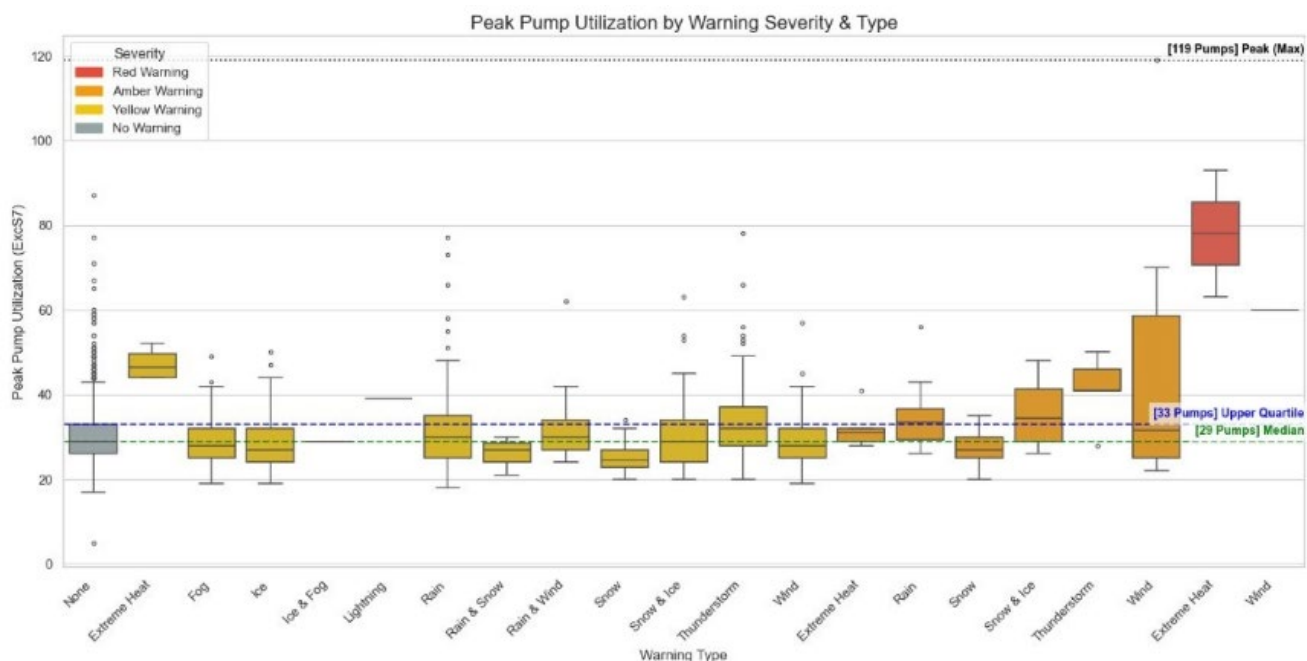


Chart 3. Utilisation of pumping appliances under weather warning conditions.

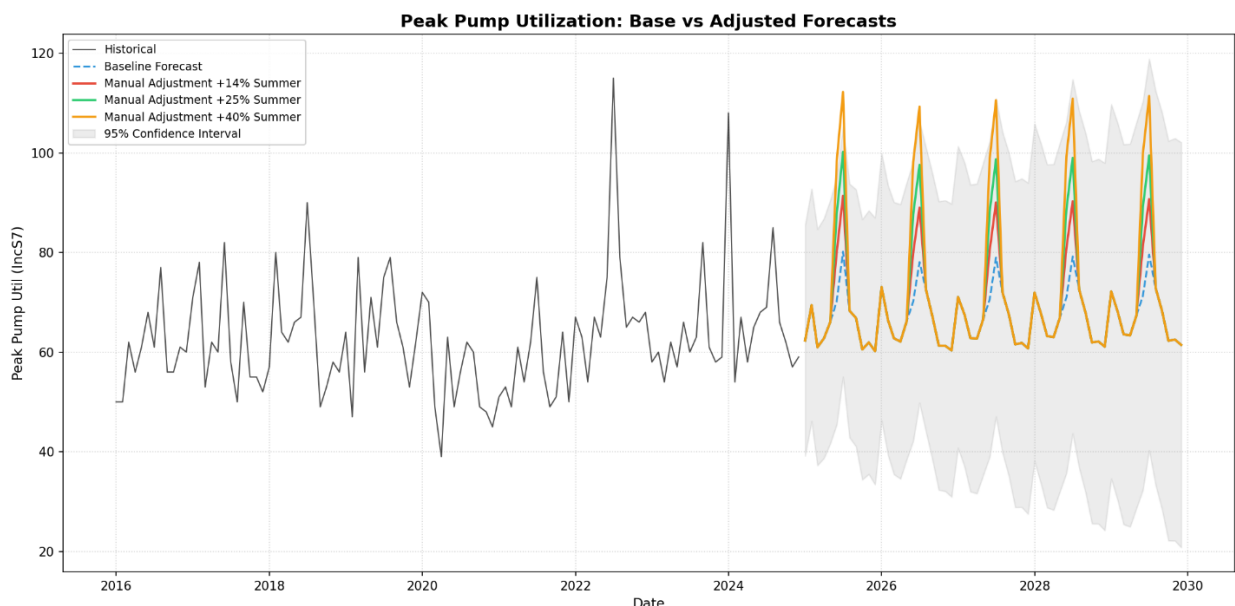


Demand as a capacity risk, "Exceedance Analysis," (how likely are LFB to use lots of resource or to run out)

LFB's combined pumping appliance fleet of 142 pumping appliances, and its deployment, acts as a frontline control measure for several risks:

- The risk of not being able to service normal day-to-day demand
- The risk of not being able to respond quickly enough to geographically dispersed risks
- The risk of insufficient capacity to respond to outlier demand and extreme events.

Maximum concurrent utilization of pumping appliances is an indicator of how much capacity is required to service demand and to control these risks. Historical data indicate that peak concurrent mobilisations rarely exceed 90 pumping appliances. However, exceedances have occurred in 2022 and in 2024 associated with hot weather and with storms. The chart below shows historical peaks in demand in black and a forecast in blue, for demand to 2030. The chart also includes an adjusted forecast in red, based on a plausible 14, 25 and 40% uplift in summer demand. This assessment represents pan-London utilisation. It does not capture localised surges, prolonged spate conditions at lower thresholds or complex multi-hazard concurrent events. However, the data indicates that LFB's pumping appliance fleet is resilient to peaks and outliers in concurrent demand under historical and modelled conditions up to a 14% uplift in seasonal demand with greater uncertainty with uplifts of 25% and 40%. It should be noted that background climate hazard may be increasing faster than measured incident data and there is high level of uncertainty around the upper bounds of demand under climate-change conditions.

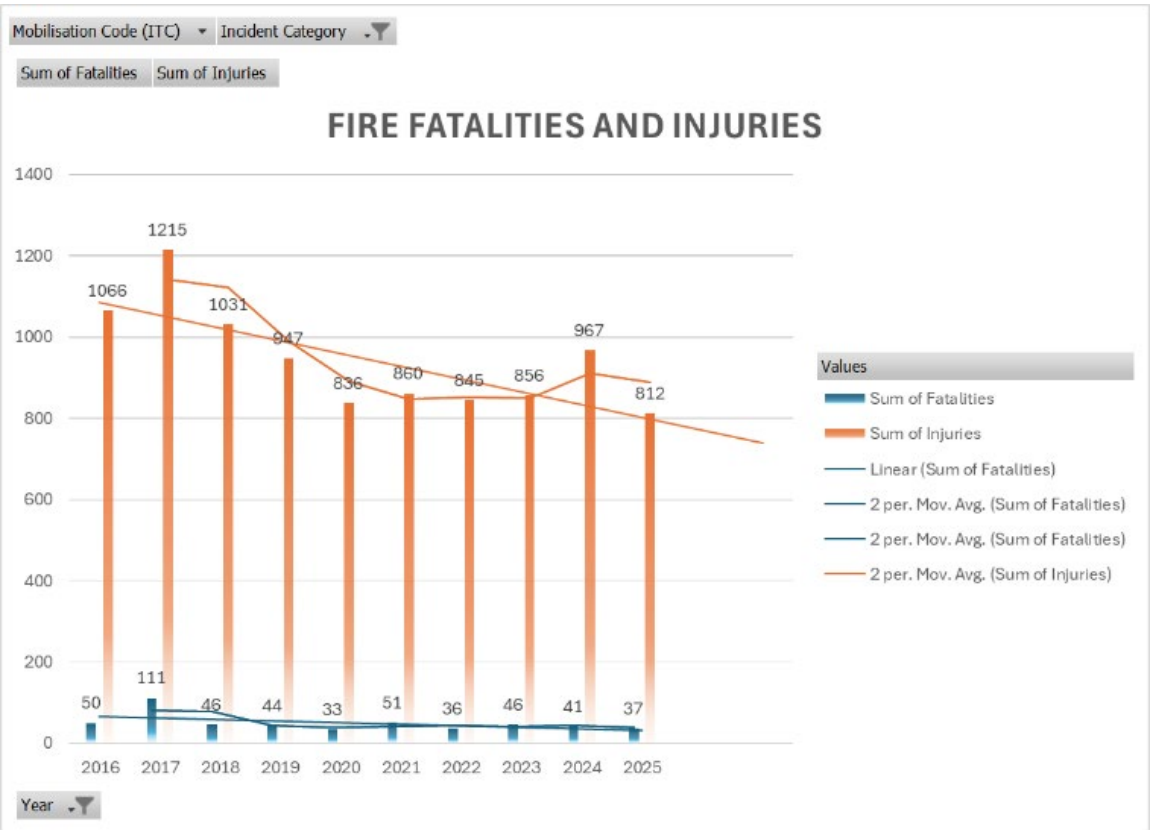
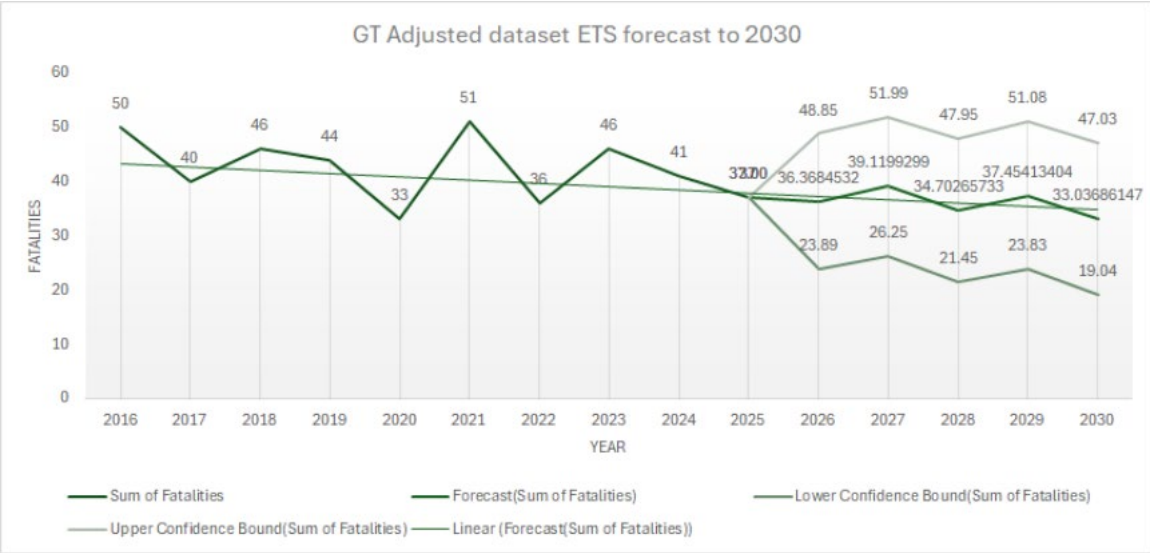


Fire Severity

There is a long-term downward trend in incidence of fire. This is not proportionally reflected in reduced fire fatalities or injuries. Fire-related fatalities in London fluctuate within a relatively narrow band, typically around 40–45 per year, with no clear downward trend.

Because fire fatalities are low-frequency events, annual totals are sensitive to random variation and single high-impact incidents. Non-fatal fire injuries demonstrate a gradual decline, but the rate of reduction is significantly shallower than the fall in total fires. Removing the extreme

outlier of the Grenfell Tower Fire from the data set – because this event leads to the appearance of a steep decline in fire deaths - and using the remaining data to forecast, retains a wide spread of annual values and high variation year to year. Consequently, future annual fatality totals are likely to fluctuate within the observed historical range. This forward projection has high uncertainty due to low event counts and sensitivity to single incidents.



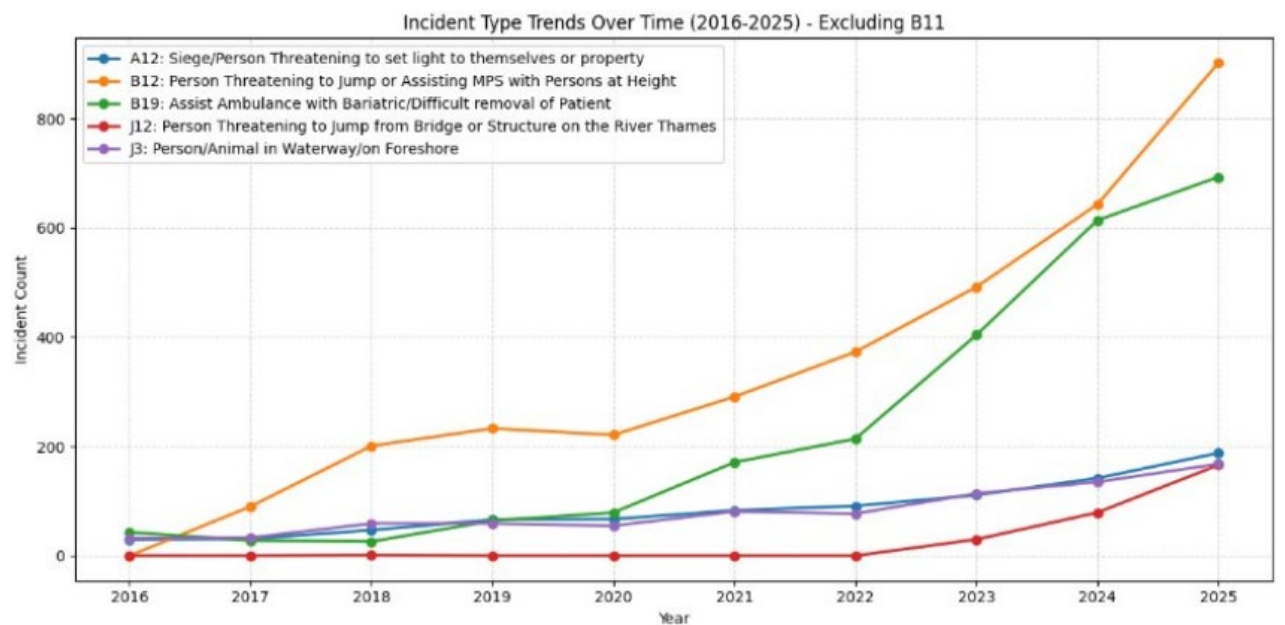
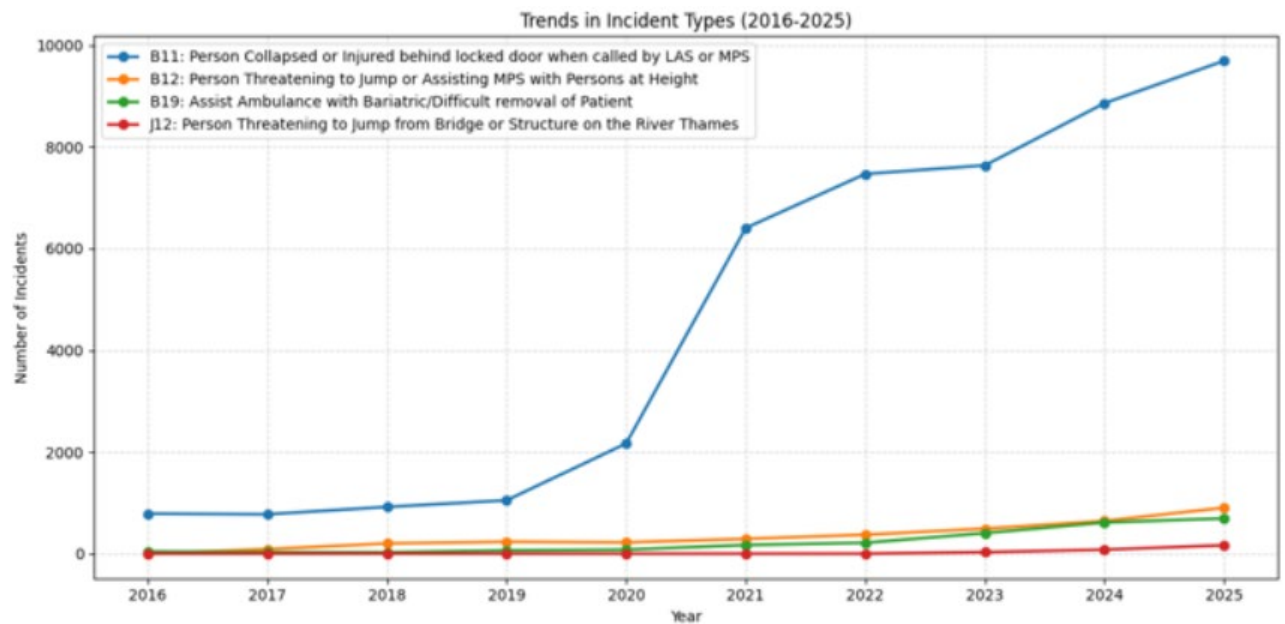
The divergence between trends in fires, injuries and fatalities suggests that while the reduction in fire incidents has been substantial, it does not always translate into proportional reductions in harm. The presence of single-incident high-harm, events in the unaltered data set indicates that these types of events remain plausible in the future despite the overall downward trend in fires.

Increasing dominance of Special Services

There is a marked rise in special service incidents. This rise is driven primarily by a growing cluster of incidents related to public health and wellbeing, such as:

- Person collapsed behind locked doors
- Person threatening to jump or to set light to self or property.
- Assistance to ambulance/bariatric rescue.

Although these incident types comprise a small number of incidents relative to the total attended by LFB, the rate of increase is marked.



Special Appliance Exceedance Risk. (How likely are LFB to reach capacity of limited or specialist capabilities under normal and peak demand)

Special Appliances (Fire Rescue Units, Command Units and Aerial Appliances) provide several capabilities that are not available on pumping appliances. Risks that these appliances control are among those increasing most quickly in the observed incident data, e.g. B12, Person threatening to jump. The graphs below explore current levels of utilisation to understand the risk of demand exceeding capacity.

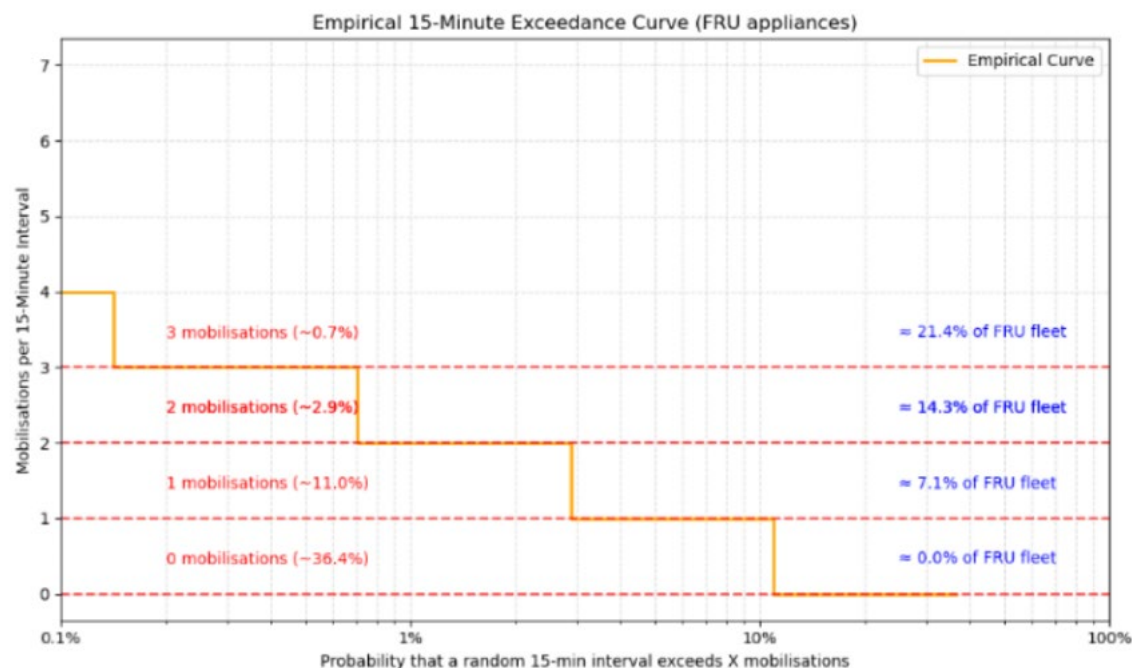
These graphs show how often different levels of simultaneous special appliance mobilisations occur within 15-minute intervals. Data has been used from 2023, 2024 and January – October 2025. This allows the probability of different levels of concurrent usage of Special Appliances to be assessed, helping to understand how the impact of the rise in special services impacts response.

The x-axis represents the probability that a random 15-minute period exceeds a given number of mobilisations, while the y-axis shows the number of appliances mobilised in those intervals.

The orange line is the exceedance curve, with red annotations marking key probability thresholds and blue labels indicating what proportion of the fleet that level represents

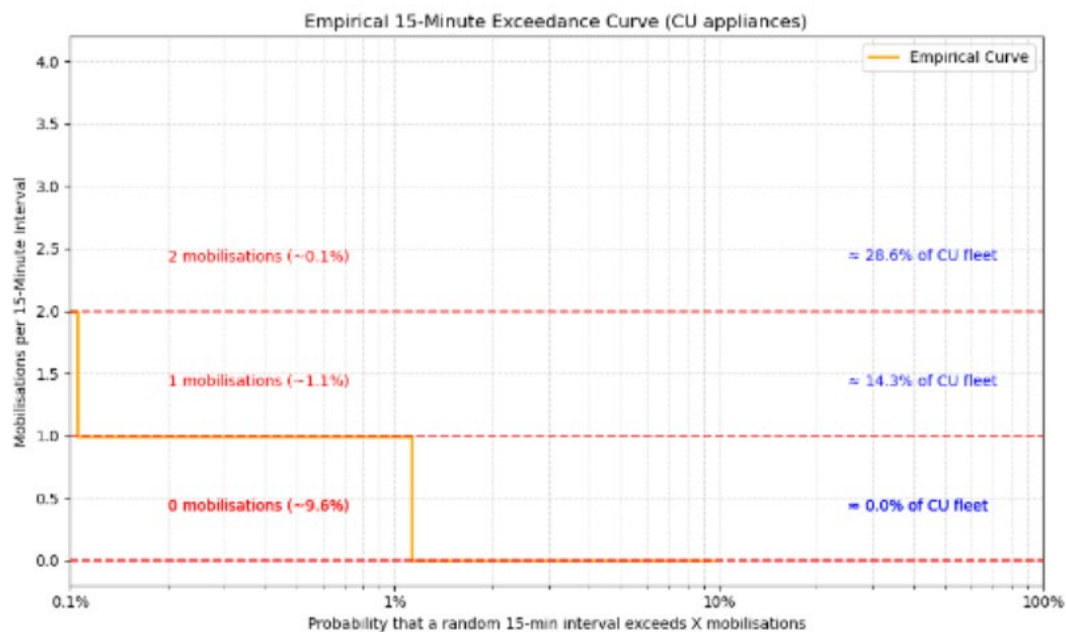
Fire Rescue Units (FRU) (used at incidents requiring technical rescue, hazardous material response, extended duration breathing apparatus and others)

This chart shows how often simultaneous FRU mobilisations occur within 15-minute intervals. 36% of intervals have at least one mobilisation, meaning that in roughly two-thirds of the time (64%) no FRUs are mobilised. Around 11% of intervals exceed one mobilisation, 3% exceed two, and less than 1% exceed three, indicating that multiple FRU mobilisations within the same 15-minute period are rare. This indicates that despite the increase in incidents requiring specialist skill sets, such as B12 person threatening to jump, the risk of being unable to deploy an FRU is low.



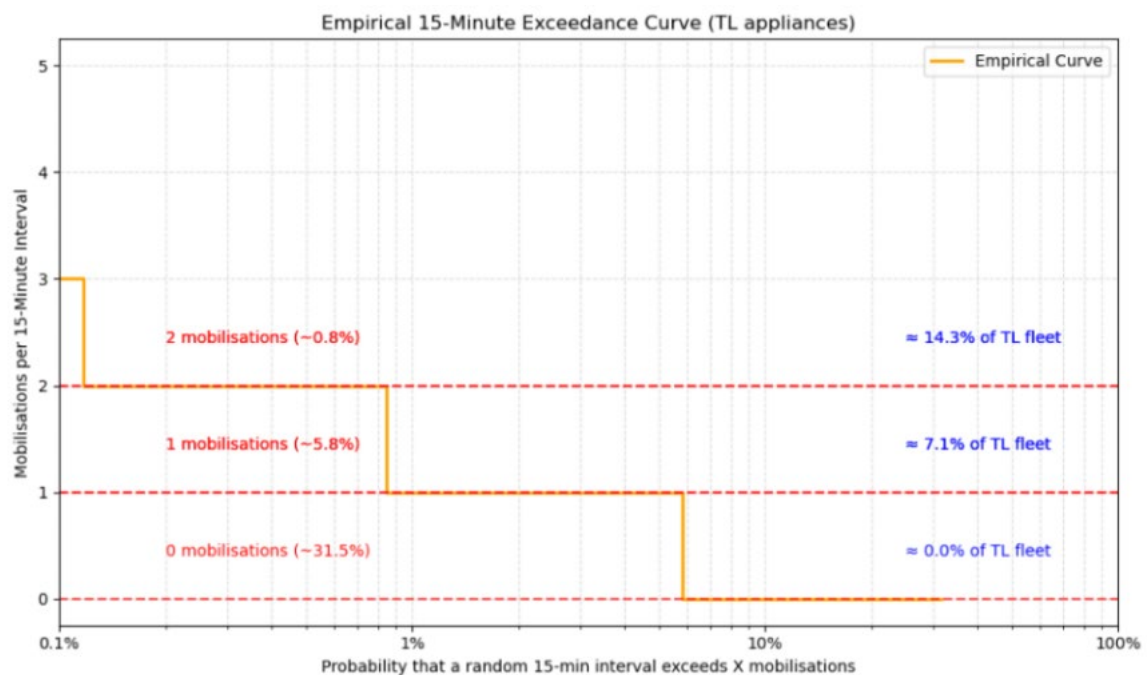
Command Units (CU) (used at incidents requiring intermediate Command Support)

This graph shows CU mobilisations occurring within 15-minute intervals. Approximately 9.6% of intervals have at least one mobilisation, meaning that approximately 90% of intervals have no mobilisations. Roughly 1.1% of intervals exceed one mobilisation, and fewer than 0.1% exceed two. Multiple CU mobilisations in the same 15-minute window are very rare.



Aerial Appliances (used for incidents requiring high or extended reach)

This graph shows Aerial appliance mobilisations occurring within 15-minute intervals. Roughly 31.5% of intervals include at least one mobilisation, 68.5% of intervals, aerals are not mobilised. Around 5.8% of intervals exceed one mobilisation, and only 0.8% exceed two, approximately 14% of the TL fleet.



7 Plausible Scenarios: 2030 Horizon

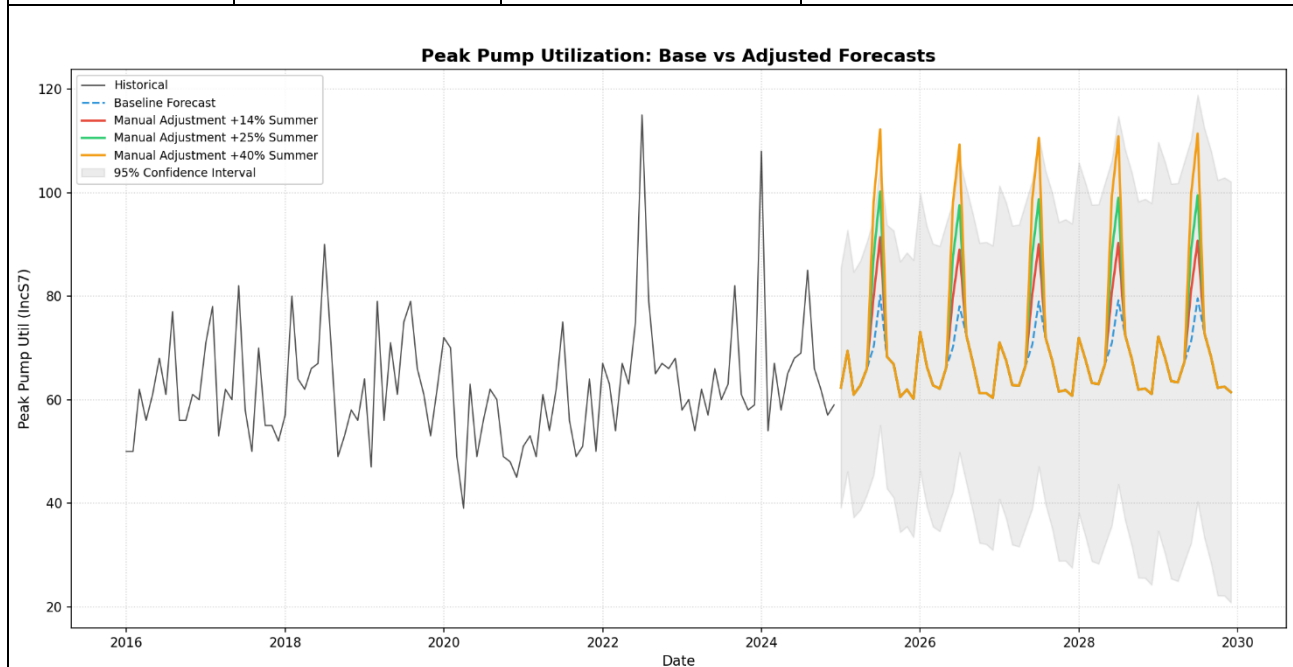
Three types of scenarios have been developed:

- Probabilistic Scenarios– Where trends are modified to explore increasing or decreasing likelihood of certain outcomes in the future
- Deterministic Scenarios – Creating plausible extreme events that do not appear in the data but are plausible based on trends and PESTLE analysis
- A Contingent Scenario– Assuming the occurrence of a specific adverse condition, in this case a deterioration in international conflict, to explore exposure.

The following scenarios are illustrative rather than exhaustive. They represent credible variations of trends and plausible extreme events emerging from the PESTLE analysis and from incident data. They are intended to indicate possible magnitudes and scopes of outlier events and developments, rather than to provide a prediction. There is inherent uncertainty associated with low-likelihood, high-impact events, and scenarios. The interaction of social, demographic, economic, and other factors that lead to emergencies occurring is complex. The scenarios presented draw on a small number of these factors to explore plausible directions in trends.

Probabilistic Scenario Model 1: Climate Impacts on Fire

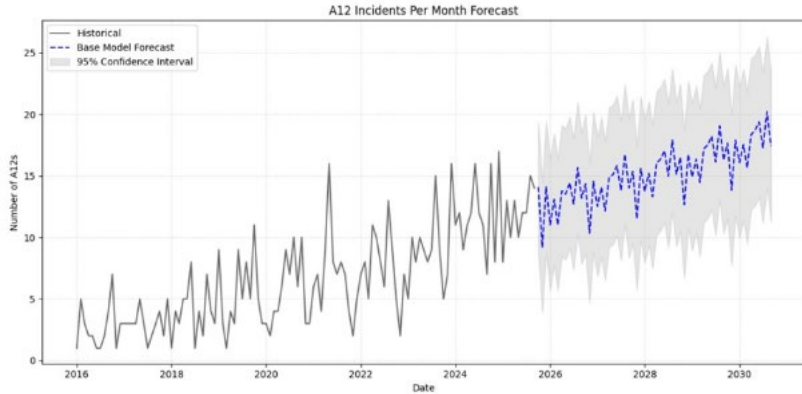
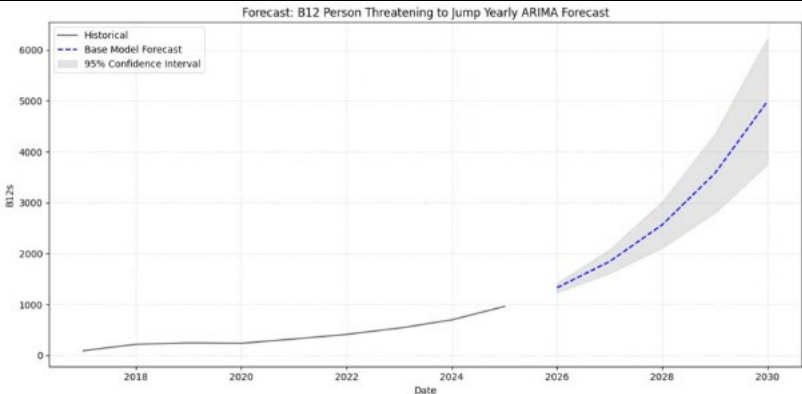
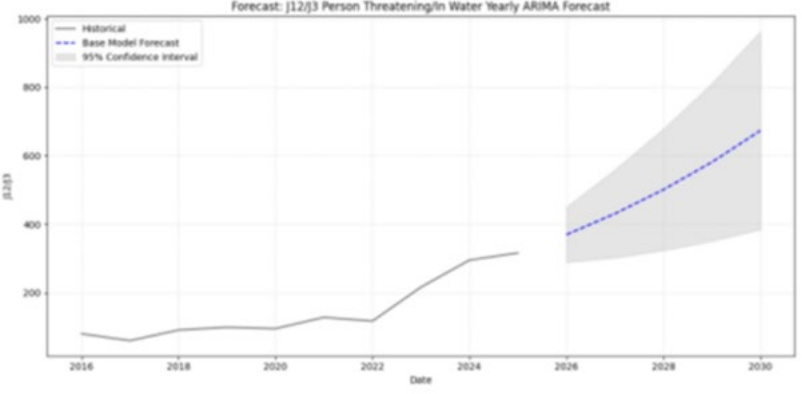
Scenario	Key drivers	LFB evidence	LFB exposure
14%, 25% and 40% Increase in Summer demand by 2030 (SIRIMAX forecast +% uplift)	14% Projected global increase in wildfires by 2030 due to climate change. <i>*UNEP Spreading like Wildfire: The Rising Threat of Extraordinary Landscape Fires.</i>	Increasing trend in Fires in Rural land and Fires in vegetation. (48% increase since 2016 *LFB incident data)	Seasonal demand peaks in May - August become more pronounced. Higher confidence band of baseline forecast approaches 85% pumping appliance capacity at peak. Model suggests that incidents of magnitude similar to and exceeding previous wildfire events are plausible. Geographic exposures is focused on areas of rural urban interface.



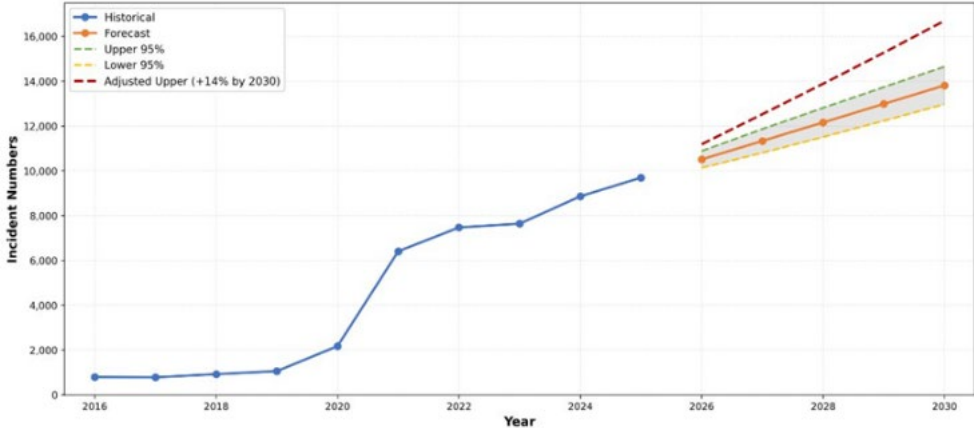
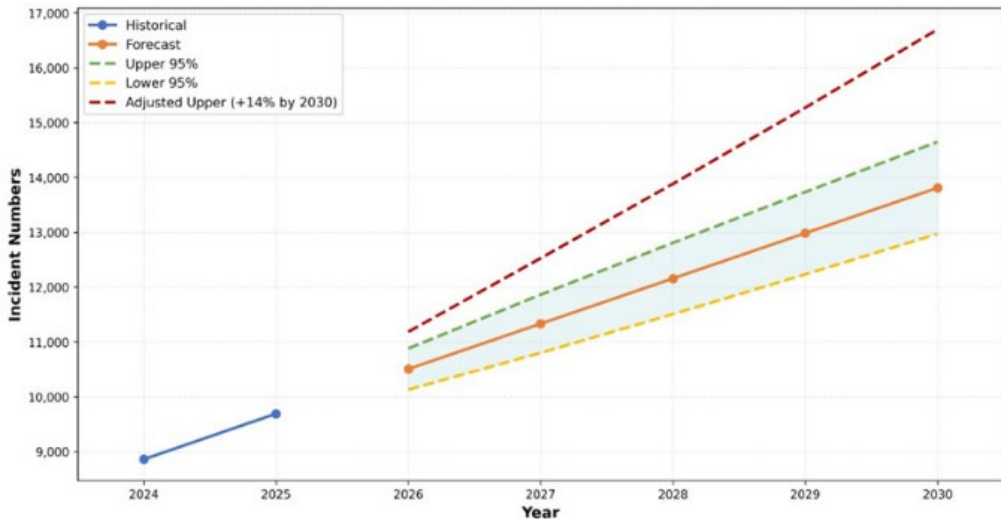
Key Insights:

- 2030 position indicates pronounced seasonal peaks
- Trend is forecast to follow seasonal pattern with slight increase in demand rather than sharp upward or downward trend
- There is wide range of uncertainty at the upper and lower ends. Forecast may be optimistic if climate change drivers become more intense.

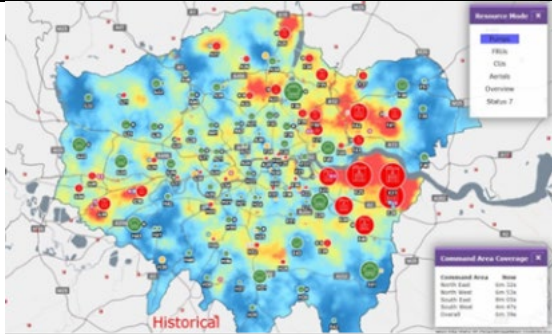
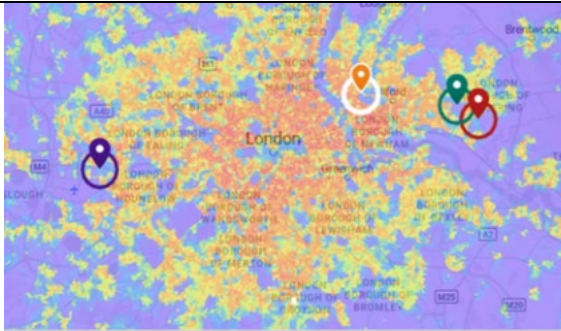
Probabilistic Scenario Model 2. Increasing Mental Ill-Health

Scenario	Key external drivers	LFB evidence	LFB exposure
Mental ill-health incidents increase at 95% confidence bound of Arima forecast.	39% increase in mental health service access. Potential for unmet demand leads to increased incidences of crises.*NHS England data	Substantial Increase in mental health incidents involving harm or threat of harm to self. *LFB Incident data	Capacity exposure is minimal at fleet level. Exposures at specialist level are marked. TAR, SERT and to a lesser extent FRU.
A12 (siege and Person Threatening to set light to self or property)	A12 Incidents Per Month Forecast 		
B12 (Person Threatening to Jump)	Forecast: B12 Person Threatening to jump Yearly ARIMA Forecast 		
J12 and J3 (person threatening to jump into Thames or person in water)	Forecast: J12/J3 Person Threatening/In Water Yearly ARIMA Forecast 		
Key Insights: - Potential 2030 position of >6000 B12 incidents per year - Potential 2030 position of >950 J12 and J3 Incidents per year - Potential 2030 position of >300 A12 Incidents per year			

Probabilistic Scenario Model 3. Aging population

Scenario	Key Drivers	LFB evidence	LFB exposure																																																																																																
Collapse-behind-locked-door (B11) increases at 95% confidence bounds of ETS forecast + 14%	Projected increase in proportion of people over 65 in London of 14% over five years. *ONS	LFB B11 incident data trends.	Pumping appliance capacity and availability.																																																																																																
Model with historical trends	Probabilistic Scenario Models - Aging Population B11: Person Collapsed or Injured Behind Locked Door - ETS Forecast (2016-2030) <table><caption>Estimated Data for B11: Person Collapsed or Injured Behind Locked Door - ETS Forecast (2016-2030)</caption><thead><tr><th>Year</th><th>Historical</th><th>Forecast</th><th>Upper 95%</th><th>Lower 95%</th><th>Adjusted Upper (+14% by 2030)</th></tr></thead><tbody><tr><td>2016</td><td>1,000</td><td></td><td></td><td></td><td></td></tr><tr><td>2017</td><td>1,000</td><td></td><td></td><td></td><td></td></tr><tr><td>2018</td><td>1,000</td><td></td><td></td><td></td><td></td></tr><tr><td>2019</td><td>1,000</td><td></td><td></td><td></td><td></td></tr><tr><td>2020</td><td>2,000</td><td></td><td></td><td></td><td></td></tr><tr><td>2021</td><td>6,500</td><td></td><td></td><td></td><td></td></tr><tr><td>2022</td><td>7,500</td><td></td><td></td><td></td><td></td></tr><tr><td>2023</td><td>7,800</td><td></td><td></td><td></td><td></td></tr><tr><td>2024</td><td>9,000</td><td></td><td></td><td></td><td></td></tr><tr><td>2025</td><td>9,800</td><td></td><td></td><td></td><td></td></tr><tr><td>2026</td><td></td><td>10,500</td><td>11,500</td><td>10,000</td><td>12,170</td></tr><tr><td>2027</td><td></td><td>11,500</td><td>12,500</td><td>10,800</td><td>13,000</td></tr><tr><td>2028</td><td></td><td>12,500</td><td>13,500</td><td>11,500</td><td>14,000</td></tr><tr><td>2029</td><td></td><td>13,500</td><td>14,500</td><td>12,200</td><td>15,170</td></tr><tr><td>2030</td><td></td><td>14,000</td><td>15,000</td><td>13,000</td><td>16,170</td></tr></tbody></table>			Year	Historical	Forecast	Upper 95%	Lower 95%	Adjusted Upper (+14% by 2030)	2016	1,000					2017	1,000					2018	1,000					2019	1,000					2020	2,000					2021	6,500					2022	7,500					2023	7,800					2024	9,000					2025	9,800					2026		10,500	11,500	10,000	12,170	2027		11,500	12,500	10,800	13,000	2028		12,500	13,500	11,500	14,000	2029		13,500	14,500	12,200	15,170	2030		14,000	15,000	13,000	16,170
Year	Historical	Forecast	Upper 95%	Lower 95%	Adjusted Upper (+14% by 2030)																																																																																														
2016	1,000																																																																																																		
2017	1,000																																																																																																		
2018	1,000																																																																																																		
2019	1,000																																																																																																		
2020	2,000																																																																																																		
2021	6,500																																																																																																		
2022	7,500																																																																																																		
2023	7,800																																																																																																		
2024	9,000																																																																																																		
2025	9,800																																																																																																		
2026		10,500	11,500	10,000	12,170																																																																																														
2027		11,500	12,500	10,800	13,000																																																																																														
2028		12,500	13,500	11,500	14,000																																																																																														
2029		13,500	14,500	12,200	15,170																																																																																														
2030		14,000	15,000	13,000	16,170																																																																																														
Focus on modelled periods 2026 0230	Probabilistic Scenario Models - Aging Population B11: Person Collapsed or Injured Behind Locked Door - ETS Forecast (2026-2030) <table><caption>Estimated Data for B11: Person Collapsed or Injured Behind Locked Door - ETS Forecast (2026-2030)</caption><thead><tr><th>Year</th><th>Historical</th><th>Forecast</th><th>Upper 95%</th><th>Lower 95%</th><th>Adjusted Upper (+14% by 2030)</th></tr></thead><tbody><tr><td>2024</td><td>9,000</td><td></td><td></td><td></td><td></td></tr><tr><td>2025</td><td>9,800</td><td></td><td></td><td></td><td></td></tr><tr><td>2026</td><td></td><td>10,500</td><td>11,500</td><td>10,000</td><td>12,170</td></tr><tr><td>2027</td><td></td><td>11,500</td><td>12,500</td><td>10,800</td><td>13,000</td></tr><tr><td>2028</td><td></td><td>12,500</td><td>13,500</td><td>11,500</td><td>14,000</td></tr><tr><td>2029</td><td></td><td>13,500</td><td>14,500</td><td>12,200</td><td>15,170</td></tr><tr><td>2030</td><td></td><td>14,000</td><td>15,000</td><td>13,000</td><td>16,170</td></tr></tbody></table>			Year	Historical	Forecast	Upper 95%	Lower 95%	Adjusted Upper (+14% by 2030)	2024	9,000					2025	9,800					2026		10,500	11,500	10,000	12,170	2027		11,500	12,500	10,800	13,000	2028		12,500	13,500	11,500	14,000	2029		13,500	14,500	12,200	15,170	2030		14,000	15,000	13,000	16,170																																																
Year	Historical	Forecast	Upper 95%	Lower 95%	Adjusted Upper (+14% by 2030)																																																																																														
2024	9,000																																																																																																		
2025	9,800																																																																																																		
2026		10,500	11,500	10,000	12,170																																																																																														
2027		11,500	12,500	10,800	13,000																																																																																														
2028		12,500	13,500	11,500	14,000																																																																																														
2029		13,500	14,500	12,200	15,170																																																																																														
2030		14,000	15,000	13,000	16,170																																																																																														
Key Insight: Potential demand in region of 16,500 incidents per year (increase in region of 7000 incidents).																																																																																																			

Deterministic Scenario Model 1. Concurrent Ignition at Rural Urban Interface.

Scenario	Key driver	LFB evidence	LFB exposure
Rural urban interface ignition at multi sites Base model of 18th July 2022 (conservative) + 3 x 15 pump fires at RUI areas of previous fires.	Met office/climate change modelling.	2022 40°C heat and RUI ignition at Wennington. 2018 multiple large grass/heath fires including 100-hectare fire at Wanstead Flats.	London has approximately 47% greenspace including; Hampstead, Wanstead and Epping fringe. LFB has exposure to ignition in areas of rural urban interface
Base model of 18th July 2022 (conservative)			
Primary locations of previous fire activity at RUI, key exposure locations.			
Scenario = Base model plus 3 x 15 pump fire at RUI key exposure locations.			
Key Insights: - Utilization close to capacity driven by ignition at the RUI in outer London. - The overall impact is similar to experience on July 19th 2022. - High utilisation at the RUI reduces the ability to respond with speed and weight to central risks where property and people risks are highest. 13/16 arrangements are likely to be limited by regional context of heat and wildfire.			

Contingent scenario: Escalation of international tensions

Scenario	Key driver (why plausible)	LFB evidence (indications)	LFB exposure (where/what)
Escalation of international tensions where harmful sub-threshold activity (cyber, espionage etc.) transitions to include open conflict including a direct attack by a foreign nation on the UK.	National Security Risk Assessment (NSRA). • R96 • R20a • R20b • R21a • R21b • R22a • R22b • R23a • R23b • R5b • R9	Increased operational activity within LFB in response to incidents involving foreign state activity on UK soil.	• Disruption to critical fuel & energy locations. • Disruption to major data centres and exchanges. • Disruption to 999/Control and mobilising. • Increase in demand – including a request for civilian aid to military authority (CAMA). • Impact on water and wastewater treatment sites. • Loss of communications. • Increased risk of harm to emergency services while responding to targeted sites. • Increase in maritime risk
Key Insight: • Should these demands occur, they will occur alongside and interact with the impacts of climate, demographic and built environment changes described in the plausible 2030 operating environment, not in isolation from them.			

Full Equality Impact Assessment (EIA) Form

When completing this form please use the [EIA guidance notes](#) and check our other resources on our dedicated [EIA Hotwire pages](#)

Part one

You will only be required to complete a full EIA assessment if:

- a) as a result of completing the initial screening form, potential adverse impacts have been identified in an area of your activity requiring adjustments

The purpose of an EIA is to meet the legal obligation required under the [Public Sector Equality Duty](#) (PSED), namely, the 'DUE REGARD' that documents that your activity will:

- a) eliminate discrimination, harassment, and victimisation;
- b) advance equality of opportunity; and,
- c) foster good relations between people who share a relevant protected characteristic and people who do not share it.

In your full EIA, you are only required to complete an assessment of any negative impacts that has been identified against any protected characteristics. Any positive impacts should be fully explained in the initial screening form. You must be able to show that your activity meets the three conditions of the due regard by providing relevant information to show how it caters for people with protected characteristics (where applicable), through eliminating potential discrimination and promoting opportunities to build equity between all groups.

A. Summary of EIA

Annual Review of Assessment of Risk 2026

To provide a robust assessment of all foreseeable risks, the AoR is structured into four layers. Each layer presents a different type of risk information for a specific purpose and audience. The layers are presented separately as individual reports for clarity. As a result, similar risks may appear with different scores and in different layers.

- Layer one (public concern) reflects the level of concern expressed by the public about different risks. This will not necessarily reflect the measured frequency or severity of incidents but may be an early indicator of change. Public concern will also be influenced by factors such as the recency and visibility of risks, such as notable fires locally or in the news.

Full Equality Impact Assessment (EIA) Form

· Layer two (commonly occurring risk) considers frequent incidents and incident locations, such as dwelling fires in purpose-built flats. These risks occur relatively regularly and can result in casualties, often affecting individuals or small numbers of people rather than large numbers in a single incident. This layer looks at which risks cause most casualties and also where these risks are most likely to manifest geographically.

· Layer three (reasonable worst-case scenarios) considers low-likelihood but high-impact events, such as a single, large residential high-rise fire causing many casualties.

· Layer four (Horizon Scanning for new and emerging risks) considers how risks may change or present differently in the future. For example, how the changing built environment may influence frequency and severity of fires in flats or how climate change may influence fire service incidents.

Public concerns and perception of risk are intentionally presented as layer one of the assessment, ensuring communities' views are highlighted.

The reason for an EIA is to review the EIA, to ensure it remains current, suitable and sufficient. It should be noted that there has been no change to the previous AoR structure. The technical approach to layer four has changed expanding the data analysis component and incorporating some objectives from "Horizon Scanning"

B. Team responsible for the activity

EIA Author(s):

Name: Thomas Ronan

Job title: Station Commander: Risk

Department: Risk Assurance and Portfolio

EIA Owner(s) - individual in charge of the overall activity:

Name: Thomas Ronan

Job title: Station Commander Risk

Department: Risk Assurance and Portfolio

Name: Daniel Ingram

Job title: Head of Risk

Department: Risk Assurance and Portfolio

C. What supporting policies/documents are relevant to this EIA? (Please hyperlink each document, policy, and guideline referenced below)

Full Equality Impact Assessment (EIA) Form

Community Risk Management Plan; Your London Fire Brigade - <https://www.london-fire.gov.uk/about-us/your-london-fire-brigade-our-plan-for-2023-29/>

Fire and Rescue National Framework for England 2018
https://assets.publishing.service.gov.uk/media/5aec5974ed915d42f7c6bf18/National_Framework_-_final_for_web.pdf

D. Equality and diversity considerations

Describe the ways your activity is anticipated to disproportionately affect any groups with a protected characteristic listed under the Equality Act 2010.

You must make sure to list any sources you have used to complete your analysis.

Do not provide databases, graphs, or tables in this section. Just key findings and the outcomes of your learning about these different groups.

The below paragraphs apply to all characteristics listed in this section

The exposure of individual members of the public to various risks will differ significantly with their location and activity, this exposure may be correlated or independent to any individual protected characteristic. The layered approach adopted to assessing risk ensures that each type of risk an individual may be exposed to, for whatever reason, is assessed allowing mitigation to be planned.

Full Equality Impact Assessment (EIA) Form

The NFCC have developed a national approach to assessing risk for dwelling fires and road traffic collisions. The AoR adopts this approach as a means of identifying geographic areas across London most likely to be associated with higher risk. The findings of the NFCC work indicate that some of the key factors linked to likelihood of dwelling fires include car or home ownership, (un)employment, deprivation, property type and tenure. Similar factors are associated with consequence; however, these differ for life and property consequences, and neither provide robust predictions as for likelihood. Individually, the correlated factors that have been identified do not necessarily contribute to higher risk, however, when considered collectively, these factors can be used to identify areas that are statistically more likely to contain people who are higher risk. Using the NFCC methodology ensures that a robust approach to dwelling fire risk is adopted. Any risks associated with protected characteristics whilst not directly addressed in the NFCC work is addressed through the including and aggregation of the identified factors that correlate with likelihood and consequence of a fire.

Key factors associated with risk on individual road segments include: Road class and type Urban/rural category (based on ONS data) Speed limit data (from Basemap Ltd) Values for Likelihood Values for Consequence RTC risk score and category (H/M/L). The AoR uses the NFCC methodology to map RTC risk onto London road maps.

Because key factors associated with dwelling fire and RTC risk are included in the NFCC definition of risk work and mapped pan London for the AoR, data sets on individual personal vulnerability are not assessed separately within the AoR document.

Specific individual personal vulnerability data sets are used by the prevention team when planning the allocation of Home Fire Safety Visits and other prevention work. This process is outlined in LFB Policy 1010.

Because individuals may experience or perceive risk uniquely as a function of their lived experience, and because this may differ from assessments made using historical incident data, The AoR includes as its first layer, Public Concerns and Public Risk Perception. This layer identifies the risks that Londoners are most concerned about in relation to fire and rescue service-related emergencies. These concerns will not necessarily reflect the likelihood or severity of actual incidents but reflect the concerns held by members of the public.

The purpose of this layer is to:

- Establish the primary concerns of the public as they relate to the fire service.
- Inform risk communication work and public engagement.
- Allow public concerns to be considered when setting organisational risk priorities.
- Use the lived experience of communities to inform Hazard Identification.

By including this layer any experience of risk that falls outside the data-based assessment can be assessed.

Layer one has a separate EIA



LONDON FIRE BRIGADE

Full Equality Impact Assessment (EIA) Form

LFB staff who support communities at incidents or during their work are trained to identify vulnerability including but not limited to; socio-economic, mental health, and physical needs. Crews are trained to identify possible safeguarding issues and take immediate actions to support vulnerable members of the community, keep them safe and refer to the appropriate agency for further support if required.

Age

The 2021 census showed that 24% of London residents are aged 19 and under, and 12% are aged 65 and over. LFB staff who support communities at incidents or during their work are trained to identify vulnerability including but not limited to; socio-economic, mental health, and physical needs. Crews are trained to identify possible safeguarding issues and take immediate actions to support vulnerable members of the community, keep them safe and refer to the appropriate agency for further support if required.

Sources used: [Census 2021](#)

Disability

The 2021 census showed that 16% of London residents identified themselves as disabled, with 5% of households having two or more disabled people/people with disabilities. LFB staff who support communities at incidents or during their work are trained to identify vulnerability including but not limited to; socio-economic, mental health, and physical needs. Crews are trained to identify possible safeguarding issues and take immediate actions to support vulnerable members of the community, keep them safe and refer to the appropriate agency for further support if required.

Sources used: [Census 2021](#)

Gender reassignment

The 2021 census showed that 1% of London residents identified with a gender different to that which they were assigned at birth.

Sources used: [Census 2021](#)



LONDON FIRE BRIGADE

Full Equality Impact Assessment (EIA) Form

Marriage or civil partnership

It is unlikely that persons in a marriage and civil partnership could be disproportionately impacted by risk assessment activity. However, in designing the engagement for layer one it must be ensured that it won't exclude this group in any way.

Sources used:

Pregnancy and maternity

Persons experiencing pregnancy and maternity may have specific perceptions of risk related to this. LFB staff who support communities at incidents or during their work are trained to identify vulnerability including but not limited to; socio-economic, mental health, and physical needs. Crews are trained to identify possible safeguarding issues and take immediate actions to support vulnerable members of the community, keep them safe and refer to the appropriate agency for further support if required.

Sources used:

Race

The 2021 census showed that 37% of London's population identifies as White British, with White groups making up a total of 54% of London's population. Of the remaining 46%, Asian groups made up 21%, Black groups 14%, Mixed groups 6%, and other ethnic groups 6%. In addition, 22% of London residents spoke a main language other than English, and for 4% of London residents they reported not being able to speak English well at all. Further, 41% of London's population was born outside of the UK.

Sources used: [Census 2021](#)

Religion or belief

The 2021 census showed that 40% of London residents are Christian, 15% Muslim, 5% Hindu, 2% Jewish, 2% Sikh, 1% Buddhist, and 1% other religion, with 27% reporting that they do not have a religion. In addition, these numbers were often concentrated in boroughs – for example, 40% of residents in Tower Hamlets are Muslim, 14% of residents in Barnet are Jewish, and 25% of residents in Harrow are Hindu.

Sources used: [Census 2021](#)

Full Equality Impact Assessment (EIA) Form

Sexual orientation

The 2021 census showed that 4.8% of London residents identified as LGB+, with a lower proportion of people identifying as heterosexual in London compared with the rest of England.

Sources used: [Census 2021](#)

Socioeconomic backgrounds

The 2021 census showed that just over half of all households in London are deprived on at least one dimension, with 13,000 households showing all aspects of deprivation (across four dimensions) – a higher proportion than any other region in England. LFB staff who support communities at incidents or during their work are trained to identify vulnerability including but not limited to; socio-economic, mental health, and physical needs. Crews are trained to identify possible safeguarding issues and take immediate actions to support vulnerable members of the community, keep them safe and refer to the appropriate agency for further support if required.

Sources used: [Census 2021](#)

Caring responsibilities

The 2021 census showed that 8% of London residents provide unpaid care to someone in their lives. LFB staff who support communities at incidents or during their work are trained to identify vulnerability including but not limited to; socio-economic, mental health, and physical needs. Crews are trained to identify possible safeguarding issues and take immediate actions to support vulnerable members of the community, keep them safe and refer to the appropriate agency for further support if required.

Sources used: [Census 2021](#)

E. Evidencing Impact: please answer the following:

E. (a) List all stakeholders and organisations (internal/external) you have consulted or contacted regarding your activity, making sure to seek feedback from groups that may be the most impacted by the activity.

External stakeholders

1. YouGov polling was undertaken with approximately 1000 members of the community representing a wide cross section of ages, ethnicities, religions.
2. Expert Review Panel (consisting of academics, members of London Resilience Group, and external members of the fire sector).
3. Community engagement sessions
Between November 2024 to December 2025 London Fire Brigade's Community Engagement team, Strategic Planning and Risk team and a number of borough teams, will held focus groups on the public perception of risk.

Full Equality Impact Assessment (EIA) Form

	Groups given the opportunity to feedback on the AoR process, include but are not limited to: • LFB Community Forum • Christian Family Concern • Board of Deputies of British Jews • London Councils Community Engagement Network • London Resilience group • Kensington and Chelsea Over 50s Forum • GLA Deaf and Disabled People's Organisations group • Pollards Hill Youth Centre • Open public session
(b) Explain the insights gained, how you have/will evaluate and whether you intend seek post-activity feedback from those stakeholders/organisations?	Feedback was sought from External academics with regards the robustness and defensibility of the methodology. A statement of support was provided for the approach. With regards to the Layer 1 process, insights were gained on the language used in the sessions, the explanations and examples given of risk types, any the additional fire safety information that people would appreciate receiving. All participants were given the opportunity to provide post-session feedback, but we only received it from some attendees.
F. Clearly record any gaps in evidence which has limited this assessment being completed in full. I.e. Was there any information or data you were unable to find/collect? Consider whether you can justify continuing the activity without this information, or if a	We did not identify any gaps limiting the EIA being completed in full. This activity is iterative, so it is completed annually but can develop based on feedback and learnings from the previous year.

Full Equality Impact Assessment (EIA) Form

mitigating action plan is required?	
G. Clearly record the following: - List any adjustments you will be putting in place for people with protected characteristics. Use each characteristic as a sub-heading, and - any activity to promote equity of access, opportunity, experience and outcomes?	Although not primarily a risk communication tool, when published the AoR will be available as a PDF with alternative text provided for charts and tables. This will make it accessible to users with automated reading software. The points below mainly refer to activities associated with Layer 1 of the AoR (a separate EIA exists for the AoR Layer 1): - Age – simple and accessible language, use of both print and digital resources, offer of both online and in-person sessions. - Disability – online and in-person sessions offered, reasonable adjustments available on request (i.e., BSL interpretation) - Race – offer of translation / interpretation on request - Religion – timing and location take into account religious holidays and times - Socioeconomic – engagement at zero cost where possible – online sessions to improve access, and offer to refund expenses
H. Clearly record how you will communicate the activity to those involved, especially if their protected characteristic may be a factor. You may need to consider diverse formats such as audio, large print, easy read, and other accessibility options in various materials? Please ensure you utilise and reference the below documentation:	The AoR is intended to be used primarily as a technical document by LFB staff to direct and prioritise work. It is available to the public, but it is acknowledged that due to it's complexity it is not intended to be a public risk communication tool. Teams involved in direct risk communication work with the public should refer to the AoR when planning and prioritising their communication but use appropriate tools for the specific audience they are communicating with. When published, the AoR will be in a PDF format with alternative text for images and charts to allow accessibility to those members of the public choosing to engage with the document.

Full Equality Impact Assessment (EIA) Form

Inclusive and Accessible Documents for Neurodivergent Individuals - Tips and Resources 2024.pdf The-LFB-key-EDI-terminology2024.pdf	The Layer 1 activity is primarily communicated directly to groups invited to take part (on the basis of the EIA, and of risks identified by LFB). This can be email, phone, or in-person, dependent on preference. The session is then communicated to members of the group on the basis of how they usually receive communications, with any adjustments already in place. For the session itself, we take advice from each group on accessibility needs of the group, and any specific communication needs there may be – such as print copies, interpretation, etc.
I. Mitigating action plan (where an adverse impact has been identified, please record the steps that are being taken to mitigate or justify it?)	
Protected characteristic	Action being taken to mitigate or justify
1. Age – the activity (Layer 1 specifically) is inaccessible for older persons or young persons	The language used will be simple and accessible, help and assistance will be available where required, and there will be multiple ways to participate in the engagement to avoid exclusion.
2. Disability – the activity (Layer 1 specifically) is inaccessible for people with disabilities	Varying methods of engagement will be considered where necessary, alternative materials for visual/hearing impairments will be available upon request, and the presentation of information will be considered for neurodiverse accessibility.
3. Race (including ethnicity and nationality) – the activity (Layer 1 specifically) is inaccessible/exclusionary for certain ethnic groups	Information may be provided in different languages if requested, the activity will be advertised in a variety of spaces catering to different groups, and engagement will be offered at varying times/places.
4. Religion – the activity (Layer 1 specifically) is inaccessible/exclusionary for people of certain religions.	The time and day of the engagement will be considered, and if in-person the location of the engagement and the facilities available (such as private spaces, prayer rooms, etc.) will be considered.
5. Socioeconomic backgrounds (Layer 1 specifically)	Varying options for engagement will be considered, taking into account time and place. The engagement will be advertised in a range of different places.
To be completed by the Inclusion Team	
Review date:	



LONDON FIRE BRIGADE

Full Equality Impact Assessment (EIA) Form

Part two: Inclusion team to complete - feedback and recommendations

J. EIA Outcomes

☐ **Recommendation 2:**

Adverse impact(s) identified - activity continues with agreed justification or mitigation in place

☐ **Recommendation 3:**

Adverse impact(s) identified - activity paused until justification or mitigation provided

☐ **Recommendation 4:**

Adverse impact(s) identified - activity paused due to potentially unlawful or adverse effects which cannot be reasonable justified/mitigated.

K. Feedback

Please specify the actions required to implement the findings of this EIA and how the programme/ activity's equality impact will be monitored in the future. It may be helpful to complete the table.

Name: [text here]
Sign-off Date:
[text here]

[text to be completed by the EIA Team]

Full Equality Impact Assessment (EIA) Form

When completing this form please use the [EIA guidance notes](#) and check our other resources on our dedicated [EIA Hotwire pages](#)

Part one

You will only be required to complete a full EIA assessment if:

- a) as a result of completing the initial screening form, potential adverse impacts have been identified in an area of your activity requiring adjustments

The purpose of an EIA is to meet the legal obligation required under the [Public Sector Equality Duty](#) (PSED), namely, the 'DUE REGARD' that documents that your activity will:

- a) eliminate discrimination, harassment, and victimisation;
- b) advance equality of opportunity; and,
- c) foster good relations between people who share a relevant protected characteristic and people who do not share it.

In your full EIA, you are only required to complete an assessment of any negative impacts that has been identified against any protected characteristics. Any positive impacts should be fully explained in the initial screening form. You must be able to show that your activity meets the three conditions of the due regard by providing relevant information to show how it caters for people with protected characteristics (where applicable), through eliminating potential discrimination and promoting opportunities to build equity between all groups.

A. Summary of EIA

Assessment of Risk – Public Engagement

Layer one of the Assessment of Risk (AoR) is intended to identify the risks and hazards that members of the public are most concerned about in relation to the fire and rescue service. These will not necessarily reflect the likelihood or severity of actual incidents (this is captured elsewhere through analysis of incident data), but reflect the concerns held by members of the public. There is a need to produce a simple and repeatable measure of public risk perception that can be used to track changes year on year and to highlight any differences in risk perception or concern between different geographies or demographics. This data is to be collected through planned engagement with the public.

Full Equality Impact Assessment (EIA) Form

The tool for data collection is Mentimeter, with additional data via a YouGov survey. This method was utilised for the 2024 and 2025 Assessments of Risk, and is to be repeated for the 2026 Assessment of Risk.

The expected outcome is the identification and measurement of the public perception of risk across London.

B. Team responsible for the activity

EIA Author(s):

Name: Ruth Walshe
Job title: Community Engagement Manager
Department: Communications and Engagement

EIA Owner(s) - individual in charge of the overall activity:

Name: Thomas Ronan
Job title: Station Commander, Strategic Planning
Department: Transformation

Name: Ruth Walshe
Job title: Community Engagement Manager
Department: Communications and Engagement

C. What supporting policies/documents are relevant to this EIA? (Please hyperlink each document, policy, and guideline referenced below)

[LFB Assessment of Risk 2024](#)
[LFB Assessment of Risk 2025](#)

Full Equality Impact Assessment (EIA) Form

D. Equality and diversity considerations

Describe the ways your activity is anticipated to disproportionately affect any groups with a protected characteristic listed under the Equality Act 2010.

You must make sure to list any sources you have used to complete your analysis.

Do not provide databases, graphs, or tables in this section. Just key findings and the outcomes of your learning about these different groups.

Sources used throughout:

[Census 2021](#)

[LFB Assessment of Risk 2024](#)

[LFB Assessment of Risk 2025](#)

Age

Both young people and older persons may have different vulnerabilities and perceptions of risk due to their age, and the engagement activity must ensure that these are captured. In the AoR 2024 & 2025 both older people and younger people were highlighted as a concern around physical vulnerability – that physical characteristics increase an individual's risk.

Age may impact the accessibility of the engagement activity – for example, digital access, ability to attend something in-person, or understanding the tool used to collect data. It must be ensured that the tool is accessible to all audiences, that help and assistance are available where required, and that there are multiple ways to participate in the engagement to avoid exclusion.

The tool used to capture public risk perception data will include an assessment on its usability for the public, to ensure it is easy to use and understand, with alternatives to digital participation available.

Disability

The 2021 census showed that 16% of London residents identified themselves as disabled, with 5% of households having two or more disabled people.

Persons with disabilities may have specific needs and vulnerabilities, impacting their perceptions of risk, so the engagement activity must ensure that these are captured, and that this reflects a range of disabilities and long-term conditions. In the AoR 2024 & 2025 health & disability and mental health were highlighted as a concern around physical vulnerability – that these characteristics increase an individual's risk. There were also concerns around behavioural vulnerability, including taking prescription drugs, and hoarders.

Full Equality Impact Assessment (EIA) Form

Disability may impact the accessibility of the engagement activity – for physical disabilities this could include access to in-person/online engagement or the need for alternative materials for visual/hearing impairments, and for developmental disabilities / neurodiversity this could include the need for information to be presented in alternative ways. It must be ensured that the engagement takes this into account and is accessible to those with varying disabilities, including listening to and implementing specific requests from disabled persons.

The tool used to capture public risk perception data will include an assessment of its accessibility for those with various disabilities, to ensure it is useable for these communities.

Gender reassignment

The 2021 census showed that 1% of London residents identified with a gender different to that which they were assigned at birth.

Trans people and/or those of marginalised genders may have specific concerns or vulnerabilities regarding personal risk, which may impact their perceptions of risk. The engagement activity must ensure that these are captured.

Any engagement activity must be inclusive of this community – for example, ensuring that persons' identities are respected, correct names and pronouns are used, and provision of facilities (such as toilets) is adequate.

Marriage or civil partnership

It is unlikely that persons in a marriage and civil partnership could be disproportionately impacted by the activity. However, in designing the engagement it must be ensured that it won't exclude this group in any way.

Pregnancy and maternity

Persons experiencing pregnancy and maternity may have specific perceptions of risk related to this, and as such the engagement activity must ensure that these are captured.

This group may also have accessibility needs when it comes to engagement, and the activity must be designed to take this into account. For example, online v's in-person engagement, the time and day of the engagement, and the location and facilities may all impact the ability of this group to engage. As such, it must be ensured that this is taken into account when designing the engagement.

Full Equality Impact Assessment (EIA) Form

Race

The 2021 census showed that 37% of London's population identifies as White British, with White groups making up a total of 54% of London's population. Of the remaining 46%, Asian groups made up 21%, Black groups 14%, Mixed groups 6%, and other ethnic groups 6%. In addition, 22% of London residents spoke a main language other than English, and for 4% of London residents they reported not being able to speak English well at all. Further, 41% of London's population was born outside of the UK.

Persons of different races, ethnicities, and nationalities may have varying perceptions of risk, depending on their communities, ways of life, and specific vulnerabilities that they experience. This must be captured, to ensure they are accurately reflected in the perception of risk data. In the AoR 2024 & 2025 there were a number of concerns that certain socioeconomic factors increase an individual's risk, including communication and language difficulties, cultural differences, immigration, and low trust levels in uniformed services.

The engagement activity must also be accessible to the many different communities across London. This may include providing information in different languages, advertising the engagement in a variety of spaces, and offering engagement at a number of times and locations. It must also be a safe and inclusive space for people of different races, ethnicities, and nationalities.

The tool used to capture public risk perception data will include an assessment of its accessibility regarding race, ethnicity, and nationality – for example, looking at the language used.

Religion or belief

The 2021 census showed that 40% of London residents are Christian, 15% Muslim, 5% Hindu, 2% Jewish, 2% Sikh, 1% Buddhist, and 1% other religion, with 27% reporting that they do not have a religion. In addition, these numbers were often concentrated in boroughs – for example, 40% of residents in Tower Hamlets are Muslim, 14% of residents in Barnet are Jewish, and 25% of residents in Harrow are Hindu.

Persons of different religions or beliefs may have varying perceptions of risk, depending on their communities, ways of life, and specific vulnerabilities that they experience. This must be captured, to ensure they are accurately reflected in the perception of risk data. In the AoR 2024 & 2025 there were a number of concerns that certain socioeconomic factors increase an individual's risk, including communication and language difficulties, and cultural differences. There were also concerns around behavioural vulnerability, including use of candles.

The engagement activity must also be accessible to the many different religious communities in London. This may include considering the time and day of the engagement, and if in-

Full Equality Impact Assessment (EIA) Form

person the location of the engagement and the facilities available (such as private spaces, prayer rooms, etc.).

Sexual orientation

The 2021 census showed that 4.8% of London residents identified as LGB+, with a lower proportion of people identifying as heterosexual in London compared with the rest of England.

People of varying sexualities may have specific concerns or vulnerabilities regarding personal risk, which may impact their perceptions of risk. The engagement activity must ensure that these are captured.

Any engagement activity must be inclusive of this community, ensuring that their identities are respected.

Socioeconomic backgrounds

The 2021 census showed that just over half of all households in London are deprived on at least one dimension, with 13,000 households showing all aspects of deprivation (across four dimensions) – a higher proportion than any other region in England.

People from differing socioeconomic backgrounds may have differing vulnerabilities and perceptions of risk, dependent on their personal situations. The engagement activity must ensure that these are captured. In the AoR 2024 & 2025 there were a number of concerns that certain socioeconomic factors increase an individual's risk, including employment, deprivation, homelessness, and overcrowding. There were also concerns around buildings and building management, including private rental properties with negligent landlords, social housing, worries about building materials (such as cladding), and derelict buildings and accumulated rubbish.

The engagement activity must also be accessible to those of different socioeconomic statuses/backgrounds. For example, online and in-person options (recognising access to the internet, cost of travel, etc.), a number of times and days (recognising varying shifts, working patterns, appointments etc.), and varying locations. It should also be advertised in a range of different places, and should be inclusive of those on lower incomes / from working class backgrounds.

Full Equality Impact Assessment (EIA) Form

Caring responsibilities

The 2021 census showed that 8% of London residents provide unpaid care to someone in their lives.

People with caring responsibilities may have specific perceptions of risk related to this, and as such the engagement activity must ensure that these are captured.

This group may also have accessibility needs when it comes to engagement, and the activity must be designed to take this into account. For example, online vs in-person engagement, the time and day of the engagement, and the location and facilities may all impact the ability of this group to engage. As such, it must be ensured that this is taken into account when designing the engagement.

E. Evidencing Impact: please answer the following:

E. (a) List all stakeholders and organisations (internal/external) you have consulted or contacted regarding your activity, making sure to seek feedback from groups that may be the most impacted by the activity.

Groups spoken to during the 2024 Assessment of Risk were:

- Board of Deputies of British Jews
- Christian Family Concern
- GLA Deaf and Disabled People's Organisations group
- Kensington and Chelsea Over 50s Forum
- LFB Community Forum
- London Councils Community Engagement Network
- London Resilience group
- Open public session
- Pollards Hill Youth Centre

Groups spoken to during the 2025 Assessment of Risk were:

- 2x open public sessions
- Action Disability Kensington & Chelsea (both Voice of Experience and Access groups)
- Age UK East London Older People's Reference Group
- Barnet Youth Board
- Deliveroo riders group
- LFB Community Forum
- London Bridge & Bankside BIDs
- Open faith session
- The Ivy Club Over 50s Women's Group

Full Equality Impact Assessment (EIA) Form

	Westminster LGBT+ Forum During and following these sessions, attendees had the opportunity to provide feedback on the assessment of risk engagement process.
(b) Explain the insights gained, how you have/will evaluate and whether you intend seek post-activity feedback from those stakeholders/organisations?	Insights were gained on the language used in the sessions, the explanations and examples given of risk types, any the additional fire safety information that people would appreciate receiving. All participants were given the opportunity to provide post-session feedback, but we only received it from some attendees.
F. Clearly record any gaps in evidence which has limited this assessment being completed in full. I.e. Was there any information or data you were unable to find/collect? Consider whether you can justify continuing the activity without this information, or if a mitigating action plan is required?	We did not identify any gaps limiting the EIA being completed in full. This activity is iterative, so it is completed annually but can develop based on feedback and learnings from the previous year.
G. Clearly record the following: a) List any adjustments you will be putting in place for people with protected characteristics. Use each characteristic as a sub-heading, and b) any activity to promote equity of access,	- Age – simple and accessible language, use of both print and digital resources, offer of both online and in-person sessions. - Disability – online and in-person sessions offered, reasonable adjustments available on request (i.e., BSL interpretation) - Race – offer of translation / interpretation on request - Religion – timing and location take into account religious holidays and times

Full Equality Impact Assessment (EIA) Form

opportunity, experience and outcomes?	Socioeconomic – engagement at zero cost where possible – online sessions to improve access, and offer to refund expenses
H. Clearly record how you will communicate the activity to those involved, especially if their protected characteristic may be a factor. You may need to consider diverse formats such as audio, large print, easy read, and other accessibility options in various materials? Please ensure you utilise and reference the below documentation: Inclusive and Accessible Documents for Neurodivergent Individuals - Tips and Resources 2024.pdf The-LFB-key-EDI-terminology2024.pdf	The activity is primarily communicated directly to groups invited to take part (on the basis of the EIA, and of risks identified by LFB). This can be email, phone, or in-person, dependent on preference. The session is then communicated to members of the group on the basis of how they usually receive communications, with any adjustments already in place. For the session itself, we take advice from each group on accessibility needs of the group, and any specific communication needs there may be – such as print copies, interpretation, etc.
I. Mitigating action plan (where an adverse impact has been identified, please record the steps that are being taken to mitigate or justify it?)	
Protected characteristic	Action being taken to mitigate or justify
1. Age – the activity is inaccessible for older persons or young persons	The language used will be simple and accessible, help and assistance will be available where required, and there will be multiple ways to participate in the engagement to avoid exclusion.
2. Disability – the activity is inaccessible for people with disabilities	Varying methods of engagement will be considered where necessary, alternative materials for visual/hearing impairments will be available upon request, and the presentation of information will be considered for neurodiverse accessibility.
3. Race (including ethnicity and nationality) – the activity is inaccessible/ exclusionary for certain ethnic groups	Information may be provided in different languages if requested, the activity will be advertised in a variety of spaces catering to different groups, and engagement will be offered at varying times/places.



LONDON FIRE BRIGADE

Full Equality Impact Assessment (EIA) Form

4. Religion – the activity is inaccessible/ exclusionary for people of certain religions.	The time and day of the engagement will be considered, and if in-person the location of the engagement and the facilities available (such as private spaces, prayer rooms, etc.) will be taken into account.
5. Socioeconomic backgrounds	Varying options for engagement will be considered, taking into account time and place. The engagement will be advertised in a range of different places.
To be completed by the Inclusion Team	
Review date:	



LONDON FIRE BRIGADE

Full Equality Impact Assessment (EIA) Form

Part two: Inclusion team to complete - feedback and recommendations

J. EIA Outcomes

☐ **Recommendation 2:**

Adverse impact(s) identified - activity continues with agreed justification or mitigation in place

☐ **Recommendation 3:**

Adverse impact(s) identified - activity paused until justification or mitigation provided

☐ **Recommendation 4:**

Adverse impact(s) identified - activity paused due to potentially unlawful or adverse effects which cannot be reasonable justified/mitigated.

K. Feedback

Please specify the actions required to implement the findings of this EIA and how the programme/ activity's equality impact will be monitored in the future. It may be helpful to complete the table.

Name: [text here]

Sign-off Date:

[text here]

[text to be completed by the EIA Team]

Appendix Eight Assessment of Risk Methodology 2026

Contents

Layer 1. Public Concerns and Public Risk Perception.....	3
Layer 2. Risks relating to property, places, and incident type	7
2.1 Risk Matrices.....	9
2.2 Calculation of likelihood	9
Table 1. Likelihood score table.....	9
2.3 Calculation of severity by casualty rate	9
Table 2. Consequence by casualty rate score table	9
2.4 Calculation of severity by wider consequence score.....	9
Table 3. Wider consequence score table.....	10
2.5 Using the Risk Matrices	10
2.6 Risk Score: Worked example.....	10
Layer 3.1 Extraordinary risks and risks from the London risk Register.	11
Layer 3.2: Extraordinary risk scenario modelling.	Error! Bookmark not defined.
Layer 4. New and Emerging Risks.....	11
Neighbourhood densities and local risk profiles	10
NFCC Definition of Risk Maps.....	11

Layer 1. Public Concerns and Public Risk Perception

LFB assess public concerns and public risk perception in three ways;

1. Community workshops
2. Analysis of website traffic
3. YouGov polling

1 Community Workshops.

LFB Strategic Planning worked in Partnership with the Brigade Engagement Team. The Strategic Planning team provided the overall objectives for the piece of work and provided risk information and risk content. The Engagement team carried out an Equalities Impact Assessment, identifying specific groups for targeted engagement who represented either seldom heard or at-risk groups. The Engagement team facilitated focus groups with the LFB Community Forum and organisations/representatives who work with communities (in particular on community risk and resilience). Contact and administration was provided by the LFB Engagement Team.

In addition to identified groups an open public workshop was held that any member of the public could attend. Groups within the demographics referenced in the EIA were approached via existing relationships, links made through previous LFB engagement, or contacts provided to the team by colleagues, partners and other organisations.

A target number of attendees was not set, as this engagement piece was designed to speak to a number of groups to understand how they might perceive risk, rather than to be a fully representative sample of London.

Workshop attendees received a presentation on the nature and purpose of the AoR followed by a discussion around what, "Risk," meant to individuals.

Workshop attendees were then asked about the level of threat perceived in their lives currently of various pre identified risks taken from the higher risks identified at the start of the engagement work based on the AoR from 2023. These categories of risk have been maintained to allow comparison between assessments and to allow changes to be tracked.

Attendees were able to either use an interactive online tool (via Mentimeter) or fill out a paper form, rating each risk category on a scale from 0-100 to represent how personally concerned they were about each one.

Attendees were then asked open-ended questions, asking them to share any underlying causes of fires and of non-fire incidents, and any other risks that they are concerned about.

This data was recorded in spreadsheet format, to be analysed by the Strategic Planning team for the public perception of risk portion of the Assessment of Risk.

The following workshops were held.

Group	Number of Attendees
Southwark Adults with Learning Difficulties	7
Age UK Older People's Reference Group - City & Hackney	9
ChargeSafe	10

Open public session	8
Action Disability Kensington & Chelsea	3
Brent borough	6
Westminster borough	3

To make risk information more accessible during focus groups AoR risk identifiers were grouped into more general categories to aid public understanding, and examples were provided for each. The table below shows the AoR item from 2023, (selected due to risk score at time engagement was initiated and maintained to provide year-on-year comparison).

AoR Risk Descriptor (highest risks)	Descriptor for Public Engagement
Fire involving warehouses and bulk storage.	Large commercial fires
Fire involving manufacturing and processing plants.	
Fire involving landfill or wasteland.	
Fires in large public and commercial buildings	
Fire involving food and drink outlets	
Fire involving offices and call centres	
Fire involving retail outlets	
Fire involving rural land (urban rural interface)	Wildfire and grass fires near buildings
Non-fire incidents involving trains and transport buildings.	Car and train collisions and entrapments
Non-fire incidents involving road vehicles and urban infrastructure.	
Non-fire incidents involving outdoor water and boats	Water rescue
Fire involving purpose-built flats.	Fires in flats and shared living
Fire involving converted flats or HMOs	
Fires in purpose built high-rise flats	High rise and/or major fire
Major Fire	
Fire involving short stay accommodation	Fires involving vulnerable people.
Fire involving care homes and specialised living	
Fire involving houses and bungalows	House fires
Fire involving private garages and sheds	
Surface Water Flooding	Flooding
Fluvial Flooding	
Groundwater Flooding	
Coastal/Tidal Flooding	
Low temperatures and heavy Snow	Cold weather, snow, and disruption
Accidental Release of a Biological Substance	Accidents with hazardous materials
High Consequence Dangerous Goods	
Attacks on Infrastructure	Malicious attacks and terrorism
Attacks on Transport	
Medium Scale CBRN Attacks	
Larger Scale CBRN Attacks	

Data Sources:

The focus groups and workshops were delivered either in person or online. Attendees were asked to score predefined risks from 0–100 (0 = "never think about the risk"; 100 = "think about the risk every day"). Participants were also asked an open-ended question to identify any additional risks of concern. Responses to this were provided in free-text form, allowing multiple answers per person.

Data was recorded by attendees using the Mentimeter application and raw data was exported as Excel files to allow for cleaning, preparation and analysis. Where attendees couldn't use the application for any reason, paper copies were provided and data was manually entered.

Tools used:

- Mentimeter application for polling
- Paper copies of Mentimeter questions
- Microsoft Excel for data processing, analysis and visualisation.

Analysis techniques

Pre-defined risk scores: Scores for predefined risks were analysed separately from the free-text submissions.

Initially, scores were analysed on a group-by-group basis. For each group, the average score for each risk was calculated and the risks were ranked from highest to lowest perceived concern. Blank responses were left blank so that they did not incorrectly lower averages; the Excel AVERAGE function was used as it automatically excludes blank answers.

Group average scores were then tabulated and compared to assess differences in how groups perceive risk. The difference between each risk's highest and lowest group average was used as a proxy for the level of agreement across groups (larger differences indicating greater divergence).

Once all group datasets were collated, overall averages were calculated for each risk across all participants. The risks were then ranked from highest perceived risk to lowest based on the overall averages. These results were compared with AoR 2024 and AoR 2025 averages to assess changes in perceived risk over time.

Free-text submissions:

Free-text responses were reviewed and assigned short, standardised topic labels to group related themes, avoiding interpretation beyond what participants explicitly stated. These topic labels were then organised into the following broader categories:

- Public realm & transport safety
- Building safety, standards & maintenance
- Open flames, smoking & fireworks
- Crime, anti-social behaviour & deliberate hostile acts
- Lithium-ion batteries & charging
- Health, vulnerability & safeguarding
- Accessibility & evacuation
- Information, communication & education
- Environmental & infrastructure hazards
- Emergency response capacity & access
- Electrical, materials and ignition safety
- Egress, clutter & hoarding (blocked exits)

This categorisation enabled basic analysis such as counting occurrences of each topic and comparing themes across focus groups.

Assumptions and constraints

The following considerations apply to this analysis:

- Sample size: 46 participants took part across seven groups. These findings reflect the perceptions of these individuals, not a wider population.
- Nature of the data: The scores are perceptions, not measured levels of risk or danger.
- Score interpretation: Minor differences of a few points were assumed to be noise. Differences of 10+ points were considered potentially meaningful patterns.

2. Analysis of website traffic

Analysis was conducted examining user traffic to LFB safety information pages over the past two years to assess whether access patterns reflect areas of public concern. Traffic was examined by meteorological season to identify recurring or emerging trends, with the intention that this approach can be replicated in future years to strengthen understanding of public information needs or emerging topics of concern.

Data sources: User data from the LFB Safety webpages was exported from Google Looker Studio, which provides downloadable access metrics over custom date ranges to support seasonal analysis.

Data was extracted using meteorological season definitions:

- Winter: 1st December to 28th/29th February
- Spring: 1st March to 31st May
- Summer: 1st June to 31st August
- Autumn: 1st September to 30th November

For this analysis, two seasonal years were compared:

- Year 2024: 01/12/2023 to 30/11/2024
- Year 2025: 01/12/2024 to 30/11/2025

The dataset contained only the webpage 'page path' (e.g. /safety/the-home/home-fire-safety/home-fire-safety-checker-hfsc/) and the total number of users who accessed each page within the defined period. A small number of webpages were excluded from the analysis as they consisted of information notices, webforms, or tools rather than content-based information pages:

- /safety/property-management/fire-safety-in-heritage-and-historical-buildings/contact-the-heritage-team/
- /safety/calling-999/live-video-streaming-of-fires/
- /safety/carers-and-support-workers/using-a-fire-risk-checklist/fire-risk-checklist/
- /safety/fireworks/fireworks-map/
- /safety/the-home/booking-a-home-fire-safety-visit/
- /safety/the-home/booking-a-home-fire-safety-visit/?code=ladder
- /safety/the-home/booking-a-home-fire-safety-visit/?code=radio
- /safety/the-home/booking-a-home-fire-safety-visit/?code=uniform
- /safety/the-home/home-fire-safety/how-was-your-home-fire-safety-visit/
- /safety/the-workplace/have-you-spotted-a-serious-fire-risk/spotted-a-serious-fire-risk/
- /safety/carers-and-support-workers/using-a-fire-risk-checklist/
- /safety/flooding/flooding-advice/my-street-is-flooding/
- /safety/property-management/fire-safety-in-heritage-and-historical-buildings/emergency-response-and-salvage-plans-for-heritage-buildings/how-to-write-a-salvage-plan/
- /safety/the-home/booking-a-home-fire-safety-visit/?status=error

· /safety/flooding/flooding-advice/flood-water-is-coming-into-my-home/

Tools used:

- Data cleaning and preparation was undertaken in Excel.
- Visualisations were produced using the webtool Flourish and Microsoft Excel.

Analysis techniques:

Data was first analysed and visualised across a full seasonal year to provide an overarching view of webpage engagement. Webpages were ranked from highest to lowest based on total unique users. Quartile ranges were calculated to understand the distribution of traffic and to identify which webpages fell within the top 25% of visits.

The data was then analysed and visualised by individual season to explore whether any seasonal patterns or trends emerged.

Specific webpages relating to risks identified by LFB as high and increasing from an operational perspective were then reviewed to assess whether user traffic patterns aligned with LFB's perception of risk.

Assumptions and constraints:

The analysis is subject to several limitations that affect interpretation, particularly in relation to traffic attribution and external influences:

- Data coverage: inability to isolate website traffic generated by LFB staff during webpage maintenance.
- Granularity: Limited access to more detailed day-by-day traffic patterns).
- External influences: potential impacts from AI-generated summaries, media coverage or other external drivers of web traffic. The effect of AI-generated summaries will need monitoring over coming years as they could impact the reliability of website traffic data for subsequent annual Assessments of Risk analyses

3. YouGov polling

Polling data from YouGov was used to broaden the reach of engagement and achieve a more representative spread of respondents. All respondents were asked the following question:

"Thinking about potential risks within your local community (e.g. fires, adverse weather conditions, natural events etc.) Which ONE, if any, of the following are you MOST concerned about within your local community".

In addition, respondents were asked an open-ended question about risks or concerns in their lives. These free-text responses were analysed for common themes using the same approach applied to the workshop data (see section 2.2).

Data Sources:

YouGov polling has been conducted in the same format across four waves to date:

- March 2024
- September 2024
- March 2025
- September 2025

Polling results were provided in Excel format, containing percentage-based and respondent counts for each answer option.

Each wave was analysed individually, before being aggregated to provide an overall picture of changes in perceived risk over the past two years.

Tools used:

- Microsoft Excel for data processing, analysis and visualisation.

Analysis techniques:

Scores for predefined risks were analysed separately from the free-text submissions.

Predefined risks:

Percentage results for each risk were visualised for the most recent wave (September 2025). Risks were sorted from highest to lowest perceived concern and then presented in a simple column chart.

Percentage results from the three earlier waves were then examined alongside the most recent wave to identify cumulative patterns across all four waves.

Free-text responses:

Free-text responses were reviewed and assigned short, standardised topic labels to group related themes while avoiding interpretation beyond what respondents explicitly stated. These topic labels were then grouped into the following broader categories:

- Crime & Social Disorder
- Fire & Safety
- Social & Political Tensions
- Urban Living & Infrastructure
- Socioeconomic Issues
- Environmental & Climate Concerns
- Health & Wellbeing
- Housing & Homelessness
- Technology & Media

This categorisation supported basic analysis such as counting occurrences of each topic and comparing themes submitted for September 2025 only. However, during analysis it was determined that visualising the standardised topic labels (rather than the broader categories) provided a clearer representation of respondent concerns. As a result, the broader categories were not included in the final report.

Assumptions and constraints

The following considerations apply to this analysis:

- Nature of the data: Results represent perceptions, not measured levels of risk or danger.
- Short timeframe and limited data points: Small fluctuations (around 5%) between individual waves may reflect typical sampling variability rather than meaningful changes in public concern. Trend assessment will become more robust once additional waves are available over a longer period

Layer 2. Risks relating to property, places, and incident type

2.1 Risk Matrices

Risk information is presented both by incident type and location and by incident type code. The calculations for likelihood and severity are the same in each matrix. LFB incident data is linked to Power BI for automated reporting. The most recent five full calendar years of incident data are analysed. Information is presented by both type and location and by Incident Type Code to allow disaggregation of specific incident types from the wider location data.

2.2 Calculation of likelihood

Likelihood score is based on frequency of incidents occurring. This is calculated by, Number of occurrences in data/ data period. The score is then taken from Table 1.

Table 1. Likelihood score table

Score	Descriptor
1	Between once a year and once a week
2	Between one a week and one a day
3	Between one and five a day
4	Between five and twenty a day
5	Twenty or more a day

2.3 Calculation of severity by casualty rate

Casualty rate is determined by calculating the number of incident type required on average to generate a casualty. This is calculated by number of incidents in data period/number of casualties for incident type in data period. Severity score is taken from Table 2.

Table 2. Consequence by casualty rate score table

Score	Life consequence
1	One casualty occurs per 100 or more incidents
2	One casualty occurs per 25 - 100 incidents
3	One casualty occurs per 10 - 25 incidents or a fatality occurs in 300 or more incidents
4	One casualty occurs per 5 – 10 incidents or a fatality occurs per 100 – 300 incidents
5	One casualty occurs per 5 or fewer incidents or a fatality occurs per 100 or fewer incidents

2.4 Calculation of severity by wider consequence score

The wider consequence of an incident is indicated by the sum of fire appliances used over the full duration of the incident including the operational and post-operational phases, initial attendance, and all required reliefs. This measure serves as a proxy for the wider impacts of an incident on the community as well as the overall scale and the impact on LFB. Where the wider impact score is higher than the life consequence score it has been used to moderate the score upwards. Below is an indicative worked example. The low threshold of frequency used to capture wider consequence allows for incidents that are occasionally very widespread or resource intensive to be measured alongside those that have more frequency but less widespread impacts.

Table 3. Wider consequence score table

Score	Wider impact consequence
1	One or more incidents of this type have needed over 4 pumps in the last five years
2	One or more incidents of this type have needed over 40 pumps in last five years
3	One or more incidents of this type have needed over 60 pumps in last five years
4	One or more incidents of this type have needed over 80 pumps in last five years
5	One or more incidents of this type have needed over 100 pumps in last five years

2.5 Using the Risk Matrices

Once incidents have been scored for likelihood and consequence they are placed on the relevant matrix and displayed either by individual incident type code or by incident type and location. Incidents displayed by type code are placed in matrix 1 and incidents displayed by type and location are placed in matrix 2. The base data is the same. The different presentation allow the same risk data to be viewed by location and by individual incident type.

Incidents with high severity but low likelihood are prioritised in this matrix over high frequency low severity incidents.

Severity	5					
	4					
	3					
	2					
	1					
		1	2	3	4	5
Likelihood						

2.6 Risk Score: Worked example

An incident of *fire* in the location *purpose built flat*, occurs in London on average 7.26 times per day giving a likelihood score of 4. On average, one casualty occurs every 7 incidents in this location type, giving a consequence score of 4. The combination of likelihood and consequence returns an overall risk score of 16 for the incident type *fire in a purpose built flat*. However, the wider consequence score of fires in purpose built flats is 5 due to the large number of resources required to resolve these incidents, indicating a higher overall impact. The score is therefore moderated up to a 5 for consequence as per the table. The overall risk score is now 20.

Neighbourhood densities and local risk profiles

Neighbourhood Density Zones highlight the areas of London with different densities of people and buildings.

The map graphic is created by a third party contractor, ORH.

Urban Centres are the areas with highest population and building density (more than 15,000 people per sq. km) and are shown in red. Urban areas have above average population and building density (between 9,000 and 15,000 people per sq. km) and are shown in amber. Suburban areas have below average population and building density (between 2,000 and 9,000 people per sq. km) and are shown in grey. Semi-Rural areas have the lowest population and building density (below 2,000 people per km) are shown in green.

NFCC Definition of Risk Maps

Maps showing dwelling fire and road traffic accident risk are produced by a third party contractor, ORH. The method published by the NFCC is used to produce maps to identify areas of risk based on demographic, geographic and socio-economic factors associated with incident frequency and outcomes.

NFCC Definition of risk methodology is used to produce risk maps for

- Dwelling Fire
- Non-dwelling-building fire (NFCC Draft methodology used)
- Road Traffic Collision

Layer 3 Extraordinary risks (risks from the London Resilience Forum - London Risk Assessment).

These risks are taken directly from the London Risk Assessment. The London Risk Assessment is produced by the London Resilience Forum (LRF). The London Risk Assessment reflects risks recorded on the National Risk Register and National Security Risk Assessment as appropriate.

These risk registers deal with low frequency, high impact events and take a subjective approach to assess the reasonable worst-case scenario for each risk identified. Due to the limited data available on rare events subject matter experts and partners use indicator tables, professional judgment and extrapolate from past events to produce risk ratings.

The risks for which LFB is the lead are scored using input from LFB subject matter experts and with input and scoring from partners. Risks on which other partners lead are scored in a similar way. This gives the Brigade and the London Resilience Forum a wider, partner perspective on risks faced in London and England. This register includes risks that LFB will not directly respond to, however the inclusion of risks on the register indicates that LFB should plan for continued delivery of core functions during an event. If there are changes to scores for any of the risks, we would seek to get the risk rescored by the LRF rather than show a different score on our own risk register for that year.

Both the London Risk Register and the National Risk Register are available publicly and include method statements with the main documents. The national security risk assessment is not published publicly but is reflected in the national risks register.

Risk of note outside of the London Risk Register are identified through cross departmental engagement and through the workshop series that leads to production of layer four. These represent risks for which there is insufficient data for them to appear in other layers but for which there is sufficient concern from stakeholders to warrant inclusion in the AoR.

Layer 4. New and Emerging Risks 2030 Horizon Scan.

Layer four of the Assessment of Risk (AoR) is a forward looking, "Horizon Scan," at emerging risk, changing operational demand, and plausible future scenarios. It is an assessment of how external drivers may impact risk and demand for LFB response up to 2030.

This assessment focuses on operational risks and how these may manifest in London. Where a wider focus has been used, it is to identify drivers of increasing likelihood or consequence of risks to which LFB may have to respond or will impact response. It comprises the outcomes of three strands of work:

(i) PESTLE analysis; used to identify drivers of changing likelihood or severity of risk and to provide broad subjective analysis of the operating environment and context up to 2030.

Drivers identified in this section are assessed for:

- change to LFBs operating environment
- impact on LFBs service delivery up to 2030
- evidence of early signals of existing impact.

PESTLE analysis has been carried out by the LFB Risk team as a desk top review, with reference to the listed sources, SME engagement, and professional judgement. This analysis provides an understanding of the external drivers impacting LFB's operational service delivery to 2030 and informs both demand forecasting and scenario development, presented later in this document.

Sources:

1. Ministry of Defence (2004). Global Strategic Trends Out to 2055.
<https://www.gov.uk/government/organisations/ministry-of-defence>
2. World Economic Forum (2025). Global Risks Report 2025.
<https://www.weforum.org/reports/>
3. Greater London Authority (2024). London Climate Resilience Review – July 2024.
<https://www.london.gov.uk>
4. Grantham Research Institute & London School of Economics (2024).
Turning up the Heat: Learning from the Summer 2022 Heatwaves in England to Inform UK Policy on Extreme Heat.
<https://www.lse.ac.uk/granthaminstitute/>
5. London Resilience Group (2025). Exercise Helios and Extreme Heat Exercise for London – Post-Exercise Report.
<https://www.london.gov.uk/programmes-strategies/community-safety/london-resilience>
6. UK Health Security Agency (2023). UKHSA Strategic Plan 2023–2026.
<https://www.gov.uk/government/organisations/uk-health-security-agency>
7. Greater London Authority (2025). State of London Report 2025.
<https://www.london.gov.uk>
8. United Nations Environment Programme (2022).
Spreading Like Wildfire: The Rising Threat of Extraordinary Landscape Fires.
<https://www.unep.org/resources/publications>
9. National Cyber Security Centre (2024). NCSC Annual Review 2024.
<https://www.ncsc.gov.uk>
10. NATO (2022). NATO Strategic Concept 2022.
<https://www.nato.int/strategic-concept/>
11. NHS England (2024). England's NHS Mental Health Services Treat Record 3.8 Million People Last Year. Press release, 10 October 2024.
<https://www.england.nhs.uk/news/>
12. Financial Conduct Authority (2023). CP23/8: Multi-Occupancy Building Insurance.
<https://www.fca.org.uk/publications>

- 13. Fire Technology (2025). Heatwaves and Firewaves: The Drivers of Urban Wildfires in London in the Summer of 2022, 61:3451–3460.
<https://link.springer.com/journal/10694>
- 14. London Fire Brigade (2023). Major Incident Review: Extreme Weather Period 2022.
<https://www.london-fire.gov.uk>
- <https://www.gov.uk/government/publications/chronic-risks-analysis>
- Internal LFB Subject matter engagement
- **LFB Emerging Trends and Future Risks workshops series 2025**

(ii) Demand Trend Analysis and Demand Forecasting: using historical incident data to track trends in demand and to provide forecasting of possible future demand. This approach uses statistical forecasting tools, exceedance analysis and historical incident data analysis.

Analysis in this section focusses on changes to:

- type of demand (what is happening)
- pattern of demand (when is it happening and how much/often)
- demand as a capacity risk, "exceedance analysis." (how likely are LFB to use lots of resources or to reach capacity for individual capabilities).

Incident data was exported from LFB data base and analysed using Microsoft Excel to identify initial trends.

Further analysis including ETS and SIRIMAX forecasts were coded in PYTHON by LFB analysts.

Code:

```
import pandas as pd
from statsmodels.tsa.statespace.sarimax import SARIMAX

# 1. Load & Clean
df = pd.read_csv('Daily Demand Data 2016-2024.csv')
df['Date'] = pd.to_datetime(df['Date'], dayfirst=True)
df = df.sort_values('Date').set_index('Date')
df['Peak_Pump_Util (Inc57)'] = pd.to_numeric(df['Peak_Pump_Util (Inc57)'].astype(str).str.replace(',', '').str.replace('$', '').str.strip(), errors='coerce')
df = df.dropna(subset=['Peak_Pump_Util (Inc57)'])

# 2. Set Frequency
# Input assumed: D
if df.index.freq is None:
    df = df.asfreq('D')
df['Peak_Pump_Util (Inc57)'] = df['Peak_Pump_Util (Inc57)'].ffill()

# 3. Resampling
# Select only the target column, then resample
df = df[['Peak_Pump_Util (Inc57)']].resample('MS').max()

# 4. Model
exog = None
mod = SARIMAX(df['Peak_Pump_Util (Inc57)'], exog=exog, order=(1, 1, 1), seasonal_order=(1, 1, 1, 12), enforce_stationarity=False, enforce_invertibility=False)
results = mod.fit(disp=False)
import matplotlib.pyplot as plt
# ... (Previous code: Load, Clean, Resample, Model fit) ...

# 5. Forecast
forecast = results.get_forecast(steps=60)
# SAVE THE ORIGINAL BEFORE MODIFYING
predicted_original = forecast.predicted_mean.copy()
# Create a separate copy for adjustments
predicted_adjusted = forecast.predicted_mean.copy()
# Manual Adjustments (Apply to predicted_adjusted only)
adj_months = [6, 7]
adj_pct = 14
for date_idx, val in predicted_adjusted.items():
    if date_idx.month in adj_months:
        predicted_adjusted[date_idx] = val * (1 + (adj_pct / 100))

# -----
# Plotting Both Forecasts
# -----
plt.figure(figsize=(12, 6))

# 1. Historical Data
plt.plot(df.index, df['Peak_Pump_Util (Inc57)'], label='Historical', color='black', alpha=0.6)

# 2. Base Forecast (Blue Dashed)
plt.plot(predicted_original.index, predicted_original, label='Base Model Forecast', color='blue', linestyle='--')

# 3. Adjusted Forecast (Red Solid)
plt.plot(predicted_adjusted.index, predicted_adjusted, label='Adjusted Forecast (+14% Summer)', color='red', linewidth=2)

# 4. Confidence Intervals
conf_int = forecast.conf_int()
plt.fill_between(conf_int.index,
                 conf_int.iloc[:, 0],
                 conf_int.iloc[:, 1],
                 color='gray', alpha=0.2, label='95% Confidence Interval')

plt.title('Peak Pump Utilization: Base vs Adjusted Forecast')
plt.ylabel('Peak Pump Util (Inc57)')
plt.xlabel('Date')
plt.legend(loc='upper left')
plt.grid(True, linestyle=':', alpha=0.6)
plt.tight_layout()
plt.show()
```

(iii) Forward-looking operational scenario modelling. Three types of scenarios have been developed:

- Probabilistic Scenarios– Where trends are modified to explore increasing or decreasing likelihood of certain outcomes in the future – PESTLE was used to identify factors to apply to the forecast and manipulate the data to reflect expected change.
- Deterministic Scenarios – Creating plausible extreme events, that have not yet happened, based on trends and PESTLE analysis - For deterministic scenario of wildfire: Historic periods of high appliance unavailability were identified by using the saved data in the Dynamic Cover Tool (DCT). By navigating back to periods of 99th percentile appliance unavailability the Risk team were able to identify periods of operational stress. Wildfires risks were then modelled using historically similar incidents, mobilising policies and subject matter expert input to build a mobilising profile - These incident profiles were then added to the DCT at the pre identified periods of demand and impacts on projected attendance time were measured.
- Contingent Scenarios – Assuming the occurrence of a specific adverse condition, e.g. a deterioration in international conflict, to explore exposure. This scenario was created with subject matter expert input.