Community Risk Management Plan 2025 - 2028

Community Risk Profile – Supporting Data Summary

Understanding Geographic Risk

Managing and understanding the different risks in our communities is crucial for achieving our vision of **making Staffordshire the safest place to be**.

Geographic Risk Assessment provides a valuable tool for identifying and visualising areas susceptible to specific risks, enabling more effective planning of **prevention**, **protection** and **response** strategies.

This data summary focuses on the key risks affecting Staffordshire and the methodologies and data used to map and assess these risks.

Domestic Dwelling Fires

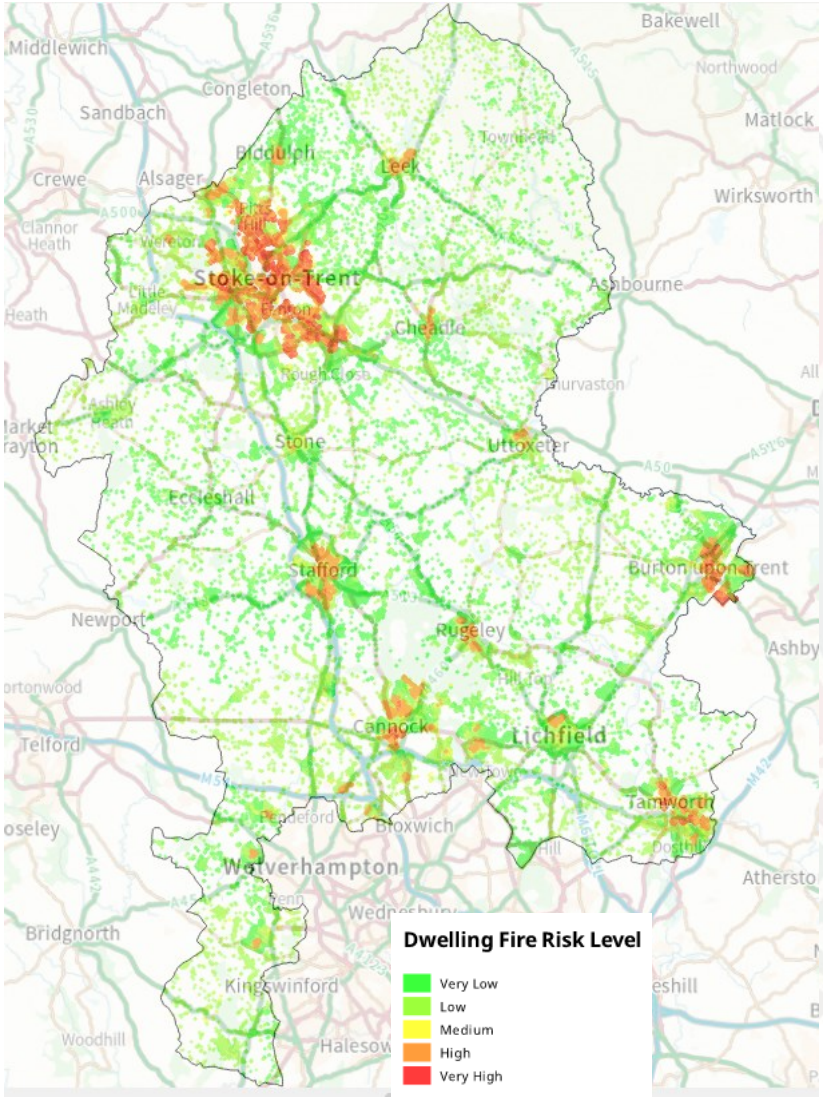
The National Fire Chiefs Council (NFCC) and Operational Research in Health(ORH) have collaboratively developed a Domestic Dwelling Fire Risk Methodology. This methodology assesses both the likelihood and potential consequence of fire incidents for every dwelling in the county.

The map on the right provides a visual representation of the dwelling fire risk across the service area,. The risk levels are categorised from Very High to Very Low based on the NFCC/ORH methodology.

Key Points:

Uneven Risk Distribution: The level of risk is not evenly distributed throughout the county. Very High and High Risk households are concentrated in the most populous and urban areas.

Very High and High Risk Concentration: The largest concentration of risk is around the Stoke-on-Trent and Newcastle areas, where the density of households and higher levels of deprivation contribute to elevated fire risk.



Other Building Fires

Alongside the Dwelling Fire Risk Model, the NFCC and ORH have developed a comprehensive model to assess the risk of fire in other types of buildings e.g. hospitals, care homes, and schools within the county.

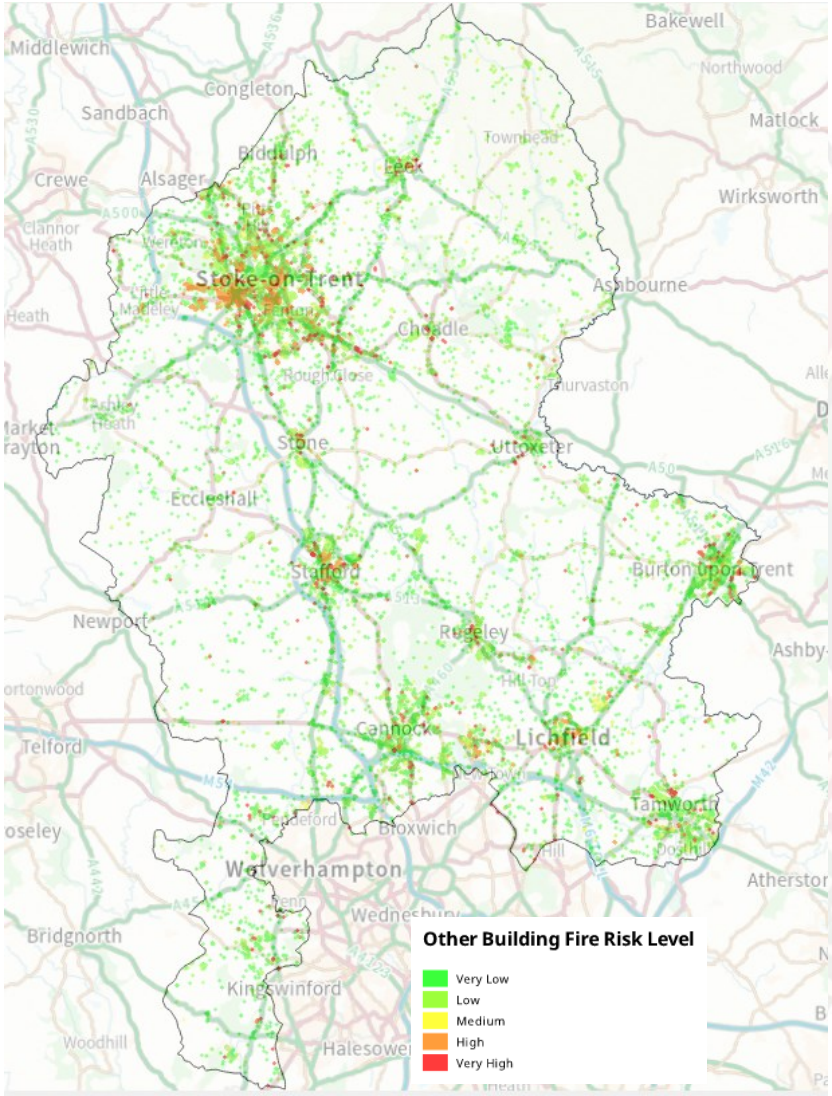
While the Dwelling model primarily focuses on socio-demographic factors, the Other Building Fire model evaluates the type and purpose of each building in relation to the likelihood of fire occurring and its potential consequences.

The map on the right provides a visual representation of the fire risk for other buildings across the service area. The risk levels are categorised from Very High to Very Low based on the NFCC/ORH methodology.

Key Points:

Very High Risk Building Types: The highest risk premises, based on the likelihood and consequences of fire, include hospitals, prisons, and care homes

Very High and High Risk Distribution: While there are significant concentrations of high and very high risk premises in the main urban areas, these high risk buildings are also dispersed throughout various parts of the county.



Road Traffic Collisions (RTC)

In addition to the Dwelling Fire Risk and Other Building Fire Risk Models, the NFCC and ORH have developed a model to assess the risk of road traffic collisions (RTCs) across the county.

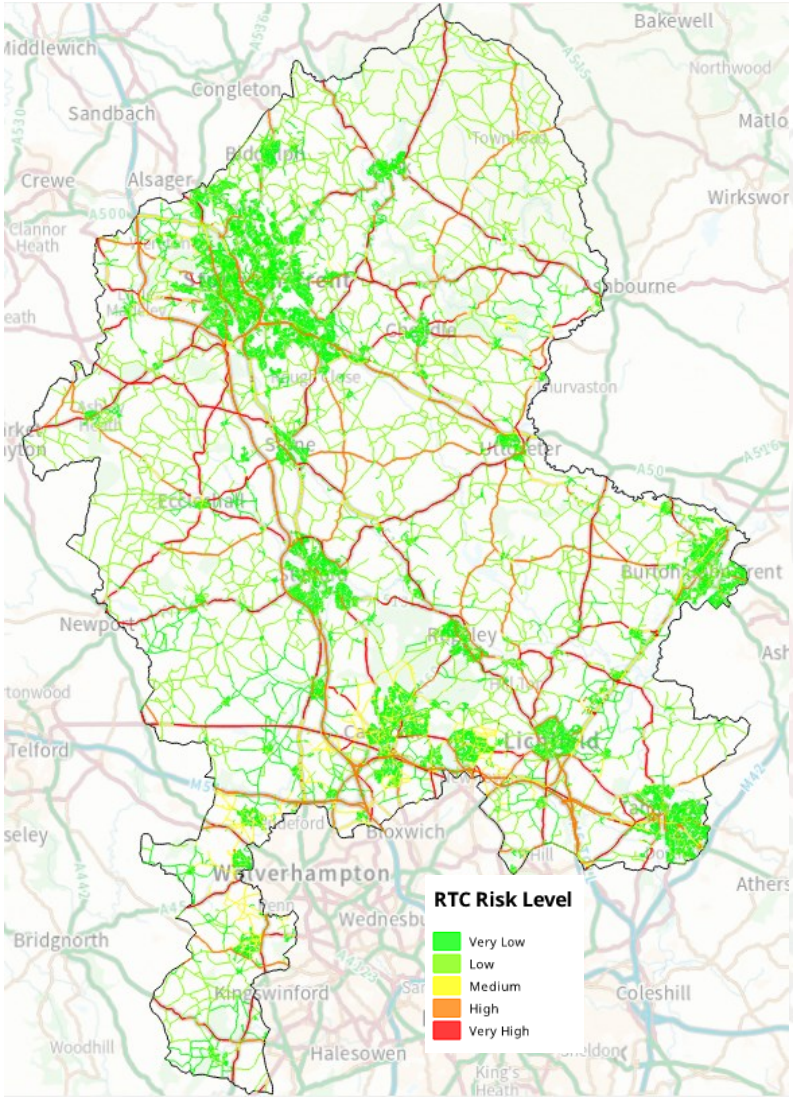
This model evaluates various factors including road class, road types, speed limits, and urban/rural classifications to determine the likelihood and potential severity of RTCs along certain roads.

The map on the right provides a visual representation of the RTC risk across the service area. The risk levels are categorised from Very High to Very Low based on the NFCC/ORH methodology.

Key Points:

Very High Risk Roads: The highest risk roads are more rural, higher speed limit and are more typically A-road classification, single carriageway.

Likelihood in comparison to consequence: While there is a higher likelihood of RTCs occurring in urban areas, the highest combined risk levels are found on more rural roads where the potential for severe collisions is greater.



Tall Building Fires

Tall buildings pose unique fire safety and firefighting challenges due to their height, evacuation procedures, and potential for rapid fire spread, as tragically demonstrated by the Grenfell Tower disaster.

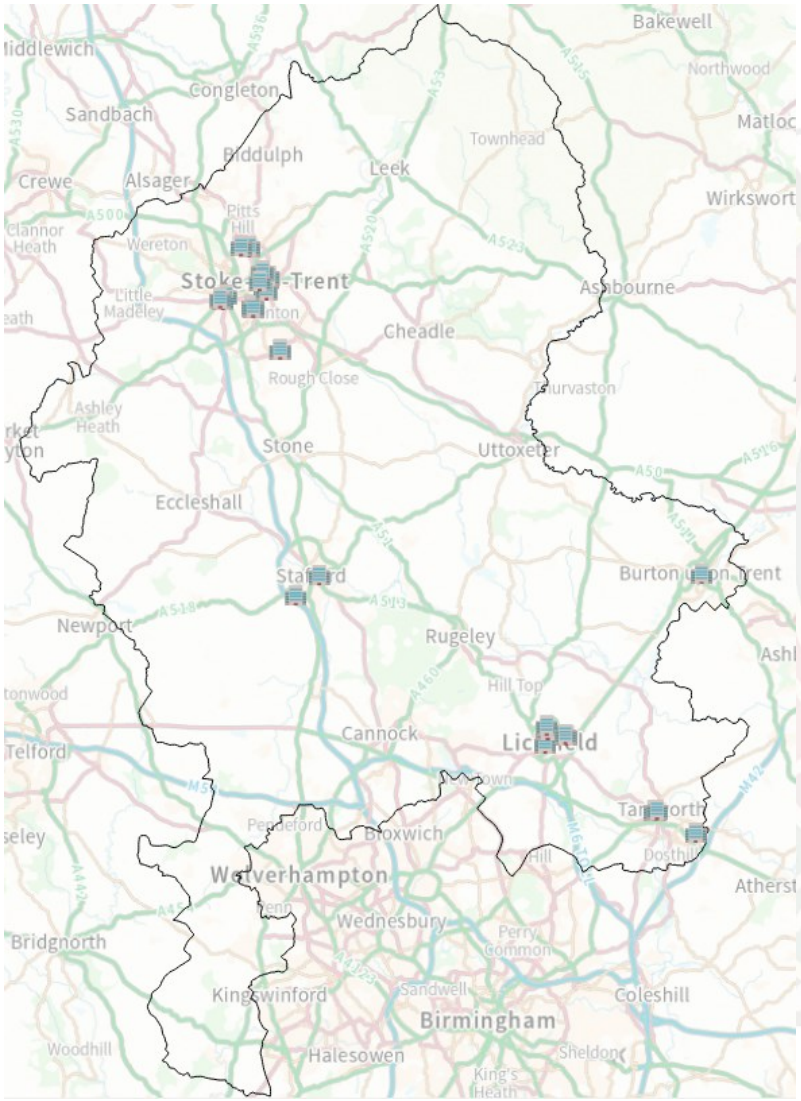
Ensuring robust fire safety and response measures in these structures is critical to prevent such catastrophic events and protect occupants.

The map on the right provides a visual representation of the location of residential buildings in the county that are 18 metres and over in height.

Key Points:

Stoke-on-Trent/Newcastle area: While each individual building presents its own risk, nearly 2/3rds of the tall buildings in Staffordshire are located in the Stoke-on-Trent and Newcastle areas.

Link to Dwelling Fire Risk Model: Some of the dwellings in these tall building, e.g. residential flat, are also categorised as Very High Risk on the NFCC/ORH Dwelling Risk model. This combination may increase the level of risk even more in these types of properties.



Flooding

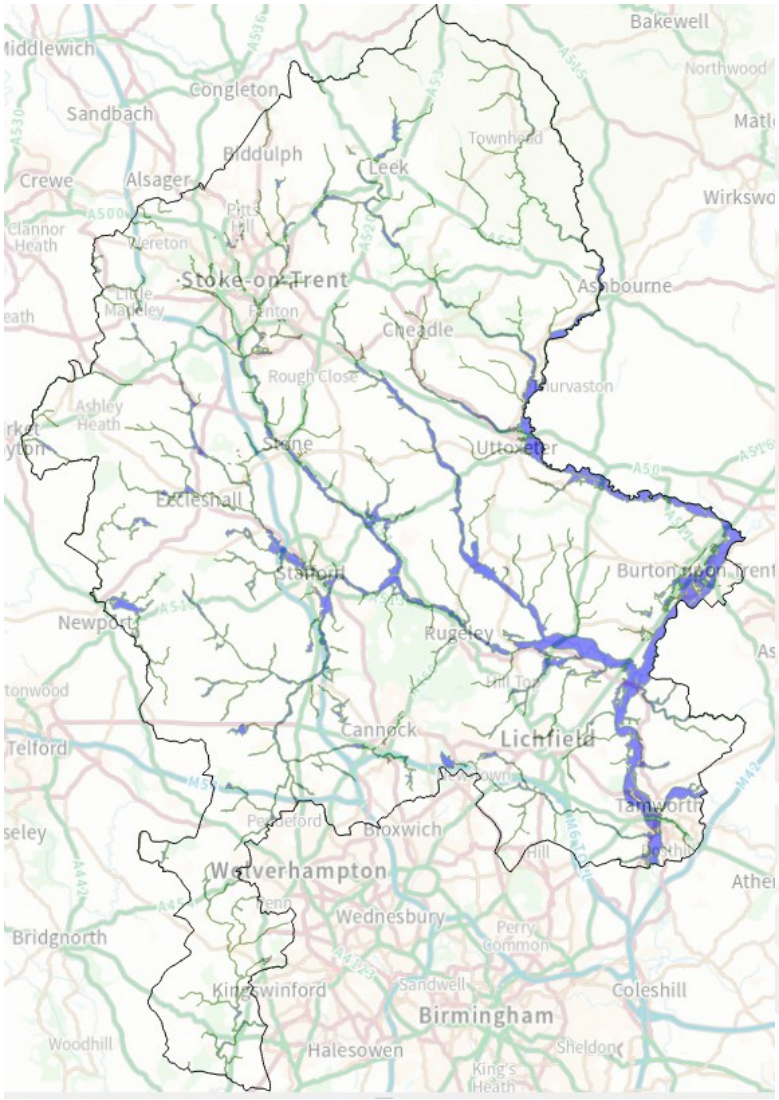
The Local Flood Risk Management Plans for both Staffordshire and Stoke-on-Trent highlight key areas at risk of flooding and are the primary source for flood risk assessment and analysis.

Click on the following links to view Staffordshire and Stoke-on-Trent Flood Action Plans

A key dataset that is used to inform these plans is the national Flood Zone data. The map on the right outlines the Flood Zone 3 data, which shows areas with a 1% or greater annual probability of flooding.

Key Points:

- **East of County Area:** Larger flood zone areas exist in the east of the county area, covering the Rivers Trent, Dove, Tame, and Anker.



Water Rescue and Drowning

Staffordshire has numerous water features across the county, which can present a risk of drowning when combined with ordinary everyday activities.

The National Water Safety Forum publishes data for fatalities annually accounting for key factors including location, activity and age.

Click here for more information.

The map on the right includes the main water features across Staffordshire including rivers, canals and reservoirs.

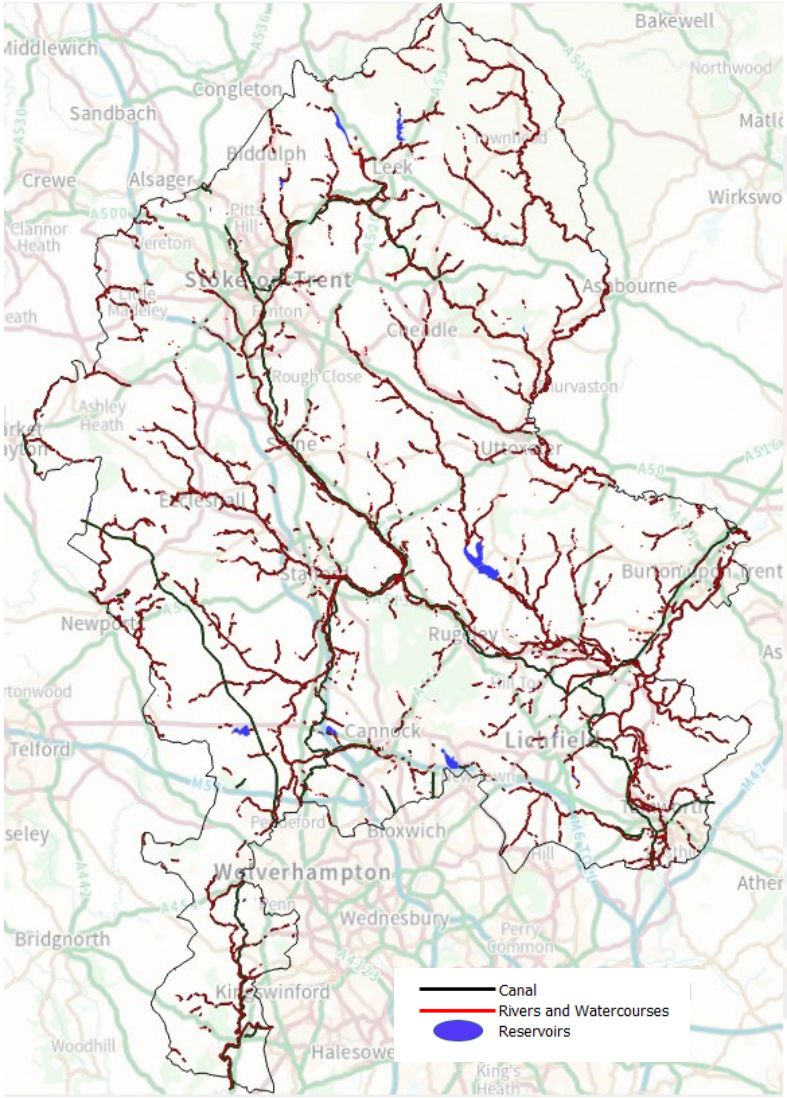
Key Points – UK data:

Rivers and canals are the locations with the highest number of drowning fatalities in the UK

Running or walking has the highest number of drowning fatalities in terms of a preceding activity. A high number of these fatalities occur in canals and rivers.

Drowning fatalities are far more likely to be male. With males aged 60-64, and 15-19 having the highest numbers.

The consumption of alcohol may increase an individuals vulnerability around water.



Wildfires

Wildfires are posing an increasing threat to both natural landscapes and nearby communities, especially in areas with high concentrations of flammable vegetation.

Understanding and mitigating wildfire risk is essential to protect the environment, property and lives.

The map on the right shows the location of the all the woodland areas in the county and the boundary of the Peak District National Park.

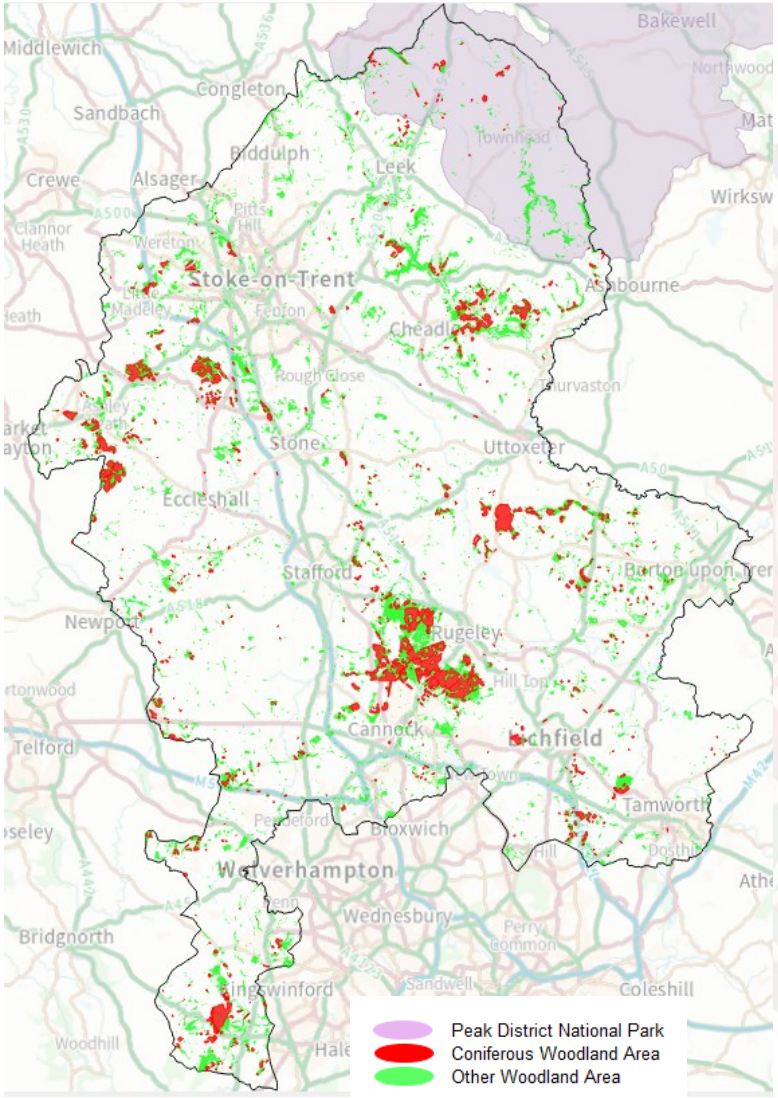
Click here for more information on the work of the Fire Operations Group (FOG) for the Peak District National Park.

Click here to view the NFCC Wildfire Prevention Toolkit which is hosted by Northumberland Fire and Rescue Service.

Key Points:

Peak District National Park: the area is highly susceptible to wildfires, especially during dry and hot weather conditions. Areas of high visitor numbers and history of past incidents further increase the risk.

Woodland Areas: Woodland areas face significant wildfire risks, especially during dry spells. Cannock Chase is particularly vulnerable due to its popularity as a recreational area, increasing the potential for fires. Coniferous woodland is also at a higher risk of fire.



Car Fires - Accidental

Accidental vehicle fires can be caused by mechanical, electrical and fuel system issues, posing significant safety risks.

The increasing use of electrical vehicles also present a different risk due to lithium-ion batteries which are likely to result in more severe fires.

Click here for the NFCC's guidance for managing the risk of fire in alternatively fuelled vehicles.

In addition, there have been significant incidents nationally in multi-storey car parks where fires have spread rapidly. Densely packed vehicles and building construction have contributed towards the size and intensity of these fires.

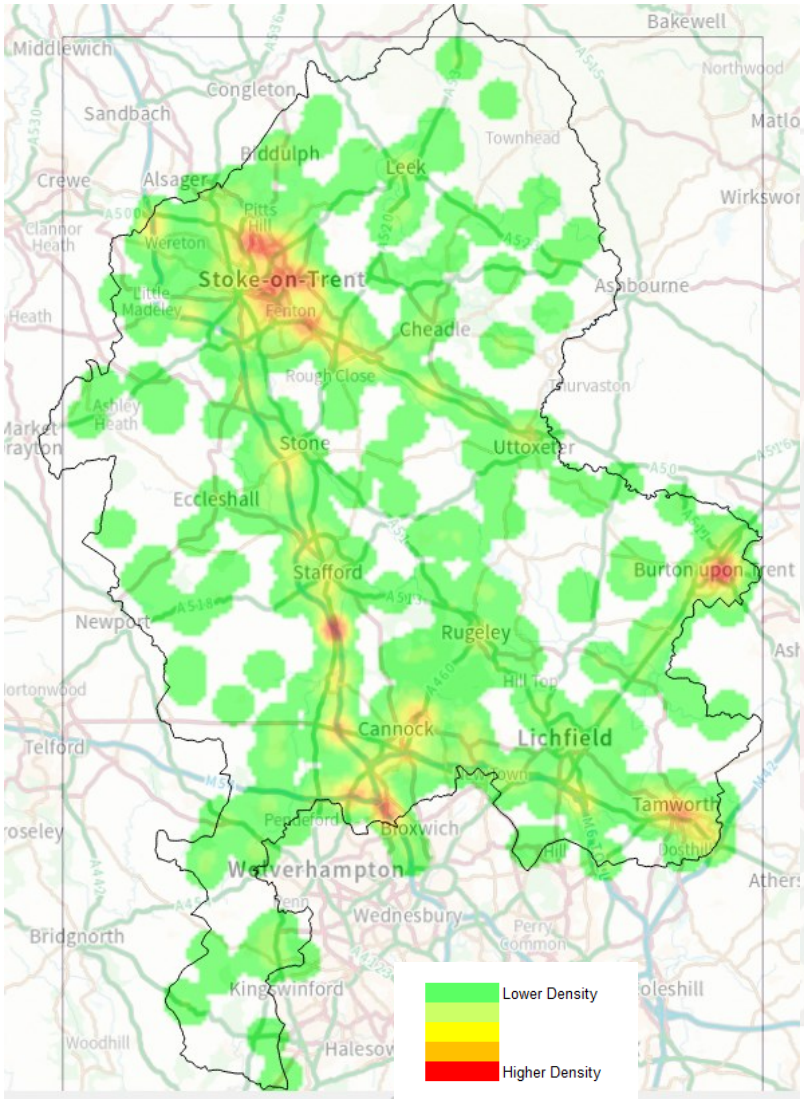
Click here to read the Kings Dock Car Park Fire Report (Merseyside Fire and Rescue Service) which talks about fire protection, fire spread, and the management of these types of buildings

The map on the right shows the hotspot locations of accidental vehicle fires in Staffordshire over the period April 2021 to March 2024.

Key Points :

Distribution: Stoke-on-Trent experiences a significant number of fires compared to the rest of the county coinciding with a larger population and greater vehicle numbers.

Major roads: Hotspot locations on major roads, including multiple locations along the M6. Due to the increased vehicle numbers on these routes.



Car Fires - Deliberate

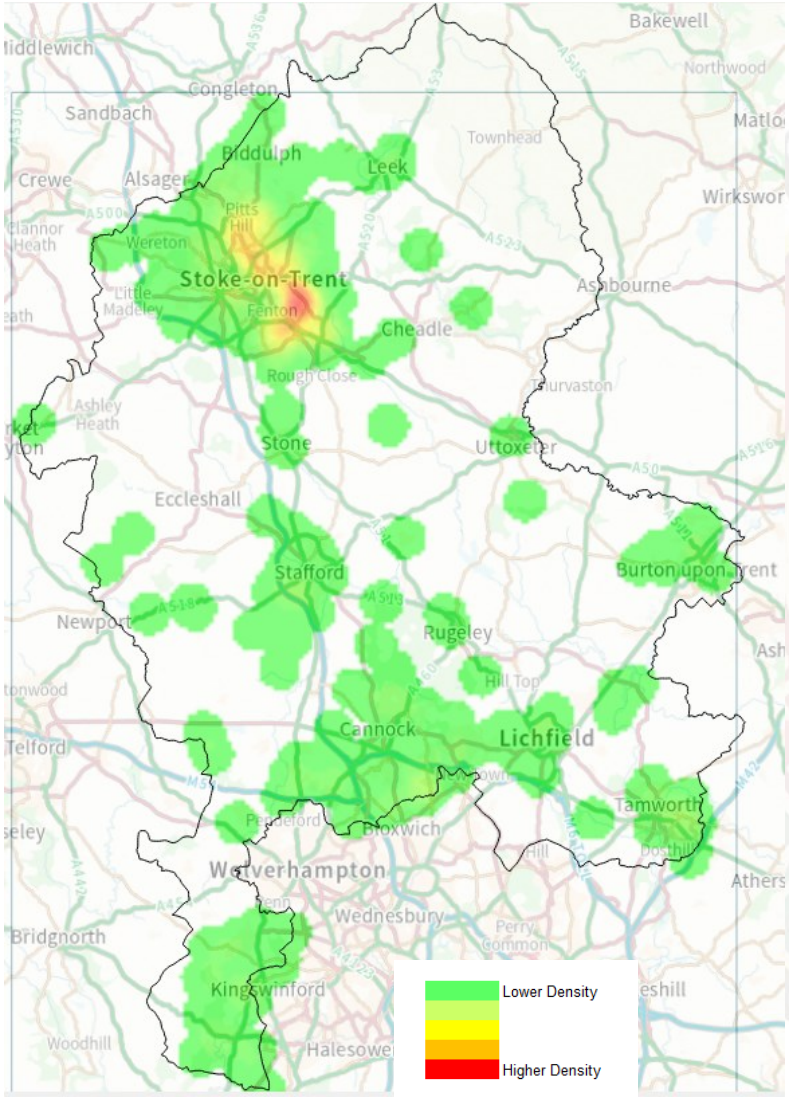
Deliberate car fires will pose similar safety risks as accidental fires, but with additional hazards if accelerants are used or if fires occur in close proximity to domestic properties which endanger life.

In contrast to accidental vehicle fires, more incidents occur in locations away from roads where the vehicle may have been abandoned. Difficulty in accessing some of these locations can hinder early firefighting interventions.

The map on the right shows the hotspot locations of accidental vehicle fires in Staffordshire over the period April 2021 to March 2024.

Key Points :

Stoke-on-Trent: The main concentration of car fires have occurred in Stoke-on-Trent, with a specific concentration around the southern part of the city area.



Outdoor Secondary Fires

Outdoor secondary fires, often involve grassy areas rubbish, and vegetation which can spread quickly, especially in dry conditions, posing threats to nearby property, wildlife and the environment.

These fires are often referred to as nuisance fires with over 69% of such fires being deliberate (period April 2021 to March 2024).

While fires occur most frequently in urban areas, they also occur in more rural areas including forest and moorland with the potential to develop in to larger wildfires.

The map shows the hotspot locations of outdoor secondary fires over the period April 2021 to March 2024.

Key Points :

Stoke-on-Trent: The main concentration of outdoor secondary fires have occurred in and around the city centre.

Peak District and Woodland areas : With the potential for outdoor secondary fires to develop in to wildfires, it's important to recognise the potential risk of fire on the Peak District National park and woodland areas around the county.