COMMUNITY RISK MANAGEMENT PLAN 2021-2025

STATION RISK PROFILE 2021
KINGSLAND

(Updated October 2021)

HEREFORD & WORCESTER
HWF·R
FIRE AND RESCUE SERVICE

Station Risk Profile 2021

Contents

Foreword

The Station Risk Profiles provide local detail about fire and other risks in each of the Service's 25 fire station areas. They include information about each fire station and the types of incidents they attend, and highlight the main areas at risk of accidental dwelling fire and other life risk incidents. Each Profile provides supporting information for the Community Risk Management Plan (CRMP) 2021-2025. Where appropriate, figures used in the Profiles are rounded to the nearest 100.

The Station Risk Profiles should be read in conjunction with two other supporting documents: the CRMP Risk Review 2018, which provides a spatial analysis of life risk data across the two counties, and the CRMP Demographic Profile 2018, which provides information about the characteristics of the local population. All documents can be found on the Service website.

1   Introduction

1.1   Station Risk Profiles are reviews of potential life risks in each of the Fire and Rescue Service's 25 fire station areas. They form part of the CRMP Risk Review, which looks at the major life risk incidents across the two counties – Accidental Dwelling Fires and Road Traffic Collisions.

1.2   The Station Risk Profiles use the information presented in the CRMP Risk Review 2018 to provide a focused overview of the risks within each station area. They include a review of the types of incidents attended, and provide maps highlighting areas likely to be at greater risk of Accidental Dwelling Fires (ADFs) and Road Traffic Collisions (RTCs). Other potential risks such as outdoor fires and water incidents are also included where appropriate. Finally, there is an overview of the range of prevention and protection activity to be carried out within the station area, including a list of relevant heritage sites.

1.3   Station Commanders, crews and the Community Risk department can use the information, in conjunction with the National Fire Chiefs Council Community Risk Calendar (Appendix 1) to inform their planning for prevention and protection work within the station area over a 12 month period.

1.4   There are a number of development plans for housing across the two counties up to 2030. Around 50,000 new homes are planned to be built up to 2031, a rate of about 4,500 per year. Most of the housing development is planned for sites within and around the larger urban areas, particularly the two cities of Worcester and Hereford and the main towns. It will be important to monitor the potential impact of this growth on our services, as population and vehicle numbers will continue to increase in these areas over this period. For example, there may be an increased need for more community safety and road safety activities in these areas, and with more traffic on the roads, there may be an impact on how quickly fire engines can reach incidents. Over the next few years, incident numbers and the types of incidents occurring in newly built areas will be monitored to help to assess any potential impact.

1.5   The current version of Station Risk Profile (dated October 2021) uses 12 years of incident data (2009/10-2020/21), following data quality control carried out between May 2019 and January 2020. The Fire Risk map has also been updated to include 2019/20 incident data, which is used to help identify those local neighbourhoods at potentially higher fire risk in the station area. This is also cross-referenced against the characteristics of households in station areas using Mosaic data[1], which helps to identify those households at potentially higher fire risk.

1.6   Heat maps have also been prepared for RTCs and Water Rescues (where relevant) to highlight areas of potentially higher risk. The heat maps will be updated each year, where appropriate. A full update of the risk maps will also be prepared when new demographic data is available from the 2021 Census, and when updated Mosaic data becomes available.

---

[1] Mosaic data provides a detailed and accurate understanding of each citizen's location, their demographics, lifestyles and behaviours.

2   Kingsland Fire Station Overview

2.1   Kingsland Fire Station is located at Arbour Lane St. Owen Street just outside the centre of Kingsland. The Fire Station covers a large area of around 59 square miles, which houses 4,830 residents[2] living in 2,150 homes. The latest demographic data for Kingsland estimates that 43 per cent residential housing has a head of the household aged over 66. 16 per cent of residential households have a single elderly resident[3].

2.2   The Station has one fire engine which is used to respond to all incident types.

2.3   During 2020/21 there were 49 incidents within the Fire Station ground, approximately 1 per cent of the Service's total activity. The Station also receives and provides operational support to and from neighbouring Fire Stations as well as to locations further afield if needed.

2.4   Map 1 shows a general overview of the Fire Station ground. The shape of the Station ground is based on areas nearest to the Station as determined by the Service's Fire Control.

Map 1: Overview of Kingsland Fire Station ground

---
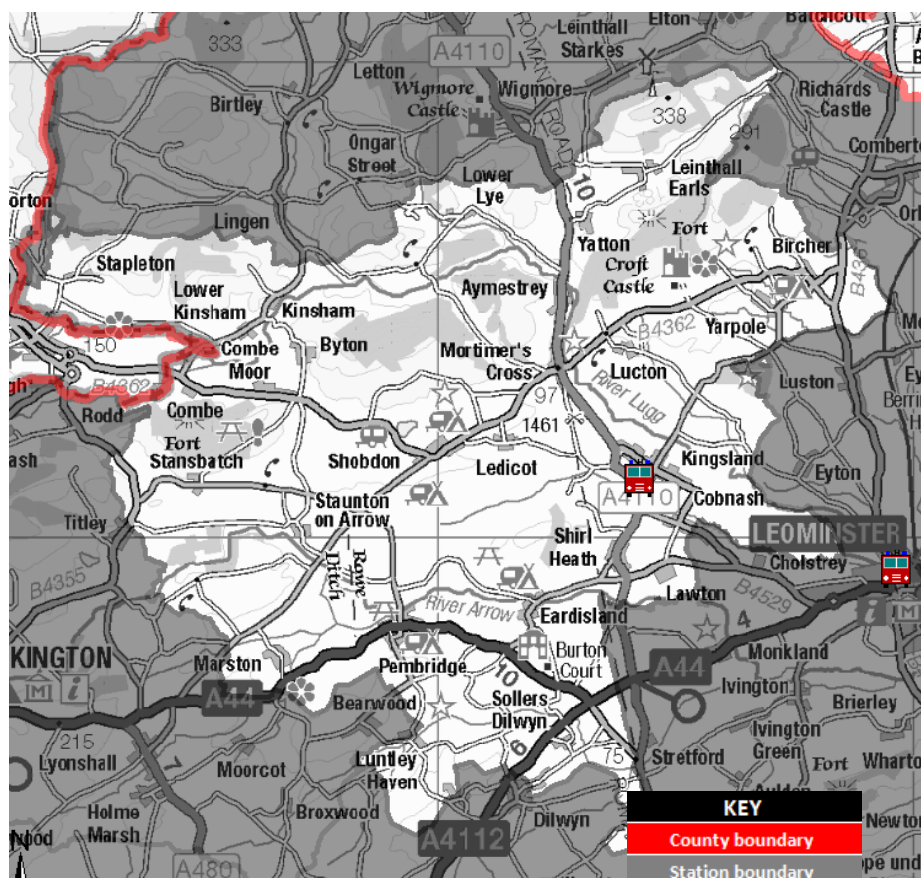
[2] Population data is a mid-2019 estimate which can be found on the nomis website.
[3] Household estimates are taken from data extracts provided by Experian's Mosaic Public Sector 2019 and demographic data from Experian's Mosaic Public Sector 2018.

Station Crewing Systems

2.5   Within Hereford & Worcester Fire and Rescue Service, there are different ways of crewing the Fire Stations. This is determined by the level of risk associated with a Station area and the needs of the local community. The busiest Fire Stations are permanently crewed 24 hours a day (known as the Wholetime Duty System). The less busy Fire Stations are crewed by On-Call firefighters, who live or work locally and can respond to emergency calls quickly when they are needed (known as the Retained Duty System or RDS). The other duty system is called Wholetime Day Duty, where either the Fire Station or a Fire Engine is permanently crewed for 12 hours during the day and by On-Call firefighters at night.

2.6   The Fire Engine at Kingsland Fire Station is crewed by a Retained Duty System crew who can usually respond within six minutes of being alerted.

3 Incident Overview

3.1 The Service attends a range of incidents that can be divided into three broad categories; Fires, Special Services and False Alarms. Each category has a range of incidents that pose different types and levels of risk to communities and to the firefighters who tackle them. The categories are shown below:

•	**Fires**	these include dwelling fires, other building fires, outdoor fires and car fires
•	**Special Services**	these incidents are those such as Road Traffic Collisions, flooding, person rescues, spills, leaks and animal rescues
•	**False Alarms**	these are when the Service responds to fire alarms or phone calls where there is no actual incident

3.2 Over the last 12 years (1 April 2009 to 31 March 2021), there were 537 incidents in Kingsland Station Area. Four out of 10 were either fires (41.15 per cent) or false alarms (21.97 per cent) and one in five was special service (36.87 per cent). Over the 12 years, there was an increase in the number of incidents recorded, with an overall rise of 2.08 per cent.

3.3 Graph 1 below provides further details.

Graph 1: Kingsland Fire Station area – Incidents attended 2009/10 to 2020/21
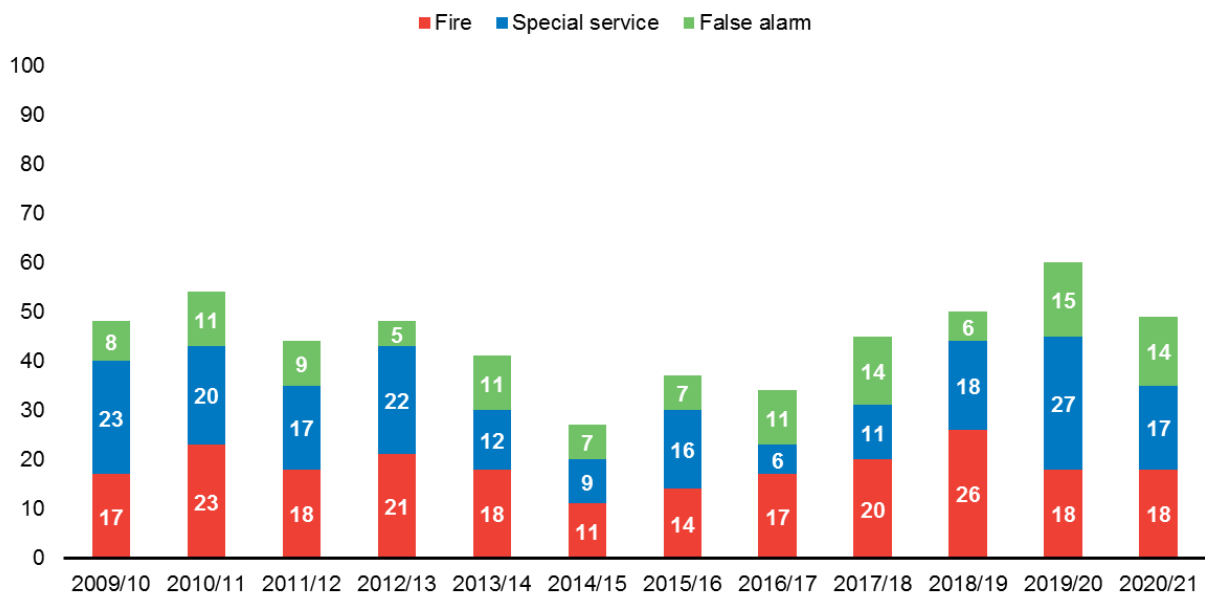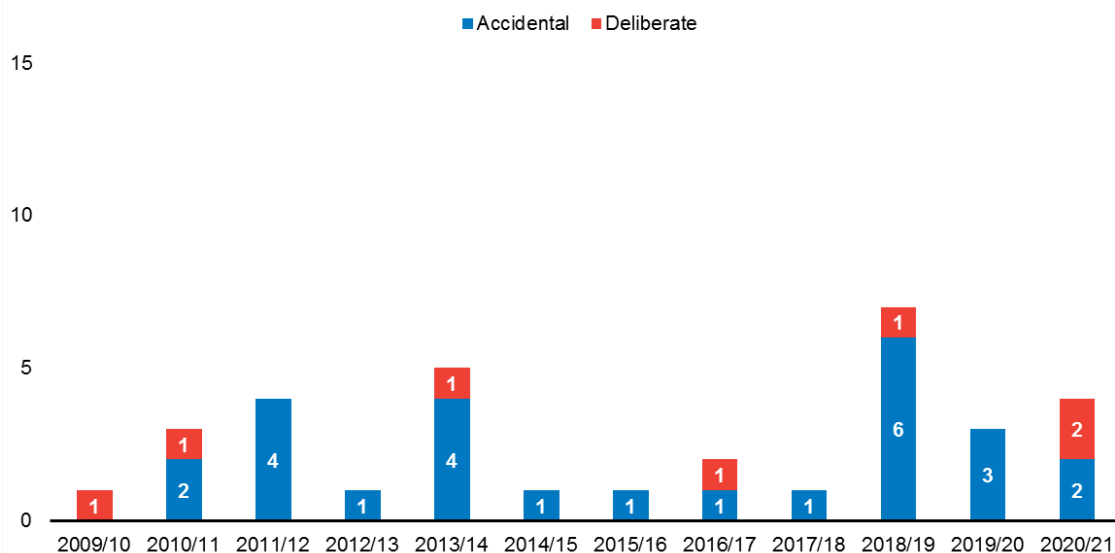
Fires

3.4 The Fires category is generally broken down into two main types; Primary Fires, which are mainly building fires and vehicle fires, and Secondary Fires, which are outdoor fires affecting areas such as grassland, woodland, crop fields and gardens. It can be seen in Graph 2 that nearly all of the Primary Fires within the last 12 years were caused accidentally. The figures fluctuated over the 12 years with 14 being the highest number recorded in a single year.

Graph 2: Kingsland Fire Station area - Primary Fires 2009/10 to 2020/21
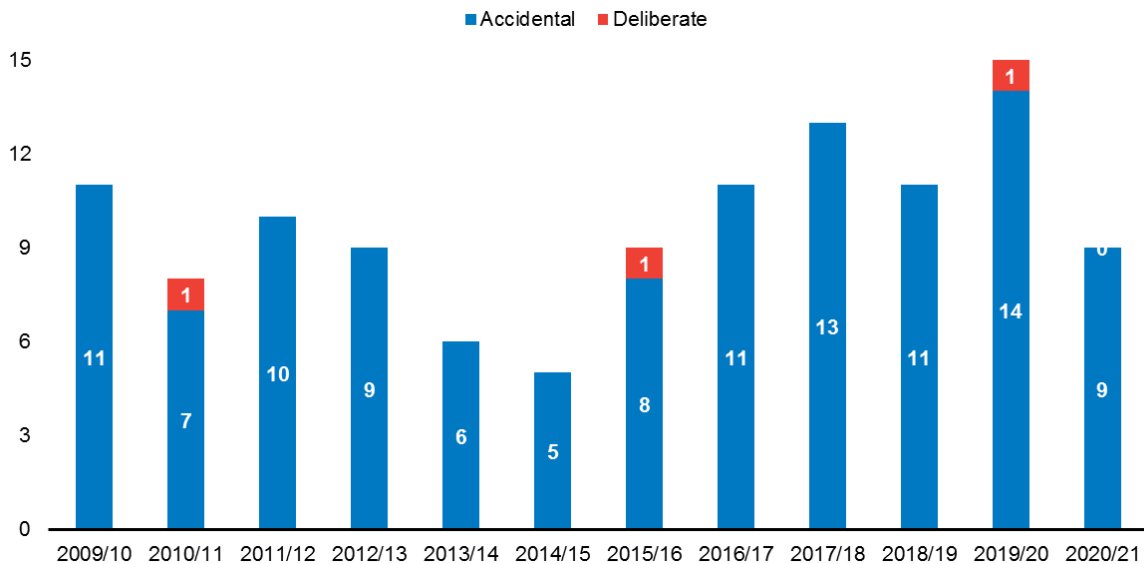
**Graph 3: Kingsland Fire Station area - Secondary Fires 2009/10 to 2020/21**

3.5 Graph 3 shows a breakdown of Secondary Fires for Kingsland Fire Station area over the last 12 years. Secondary Fires mainly involve loose refuse (typically a bin fire) and grassland fires, especially during warm summer months. The graph shows that the numbers of accidental and deliberate Secondary Fires were both very low and figures have never gone above 7 in a single year.

3.6 Accidental Dwelling Fires are a particular risk to life for both householders and firefighters. These are discussed further in Section 5 later in this report.

Special Service Incidents

3.7 In terms of Special Service incidents, the main category for Kingsland Fire Station area involving potential risk to life is Road Traffic Collisions (RTCs). Over the last 12 years, the number of RTCs attended has fallen by 23.08 per cent as shown in Graph 4 below.

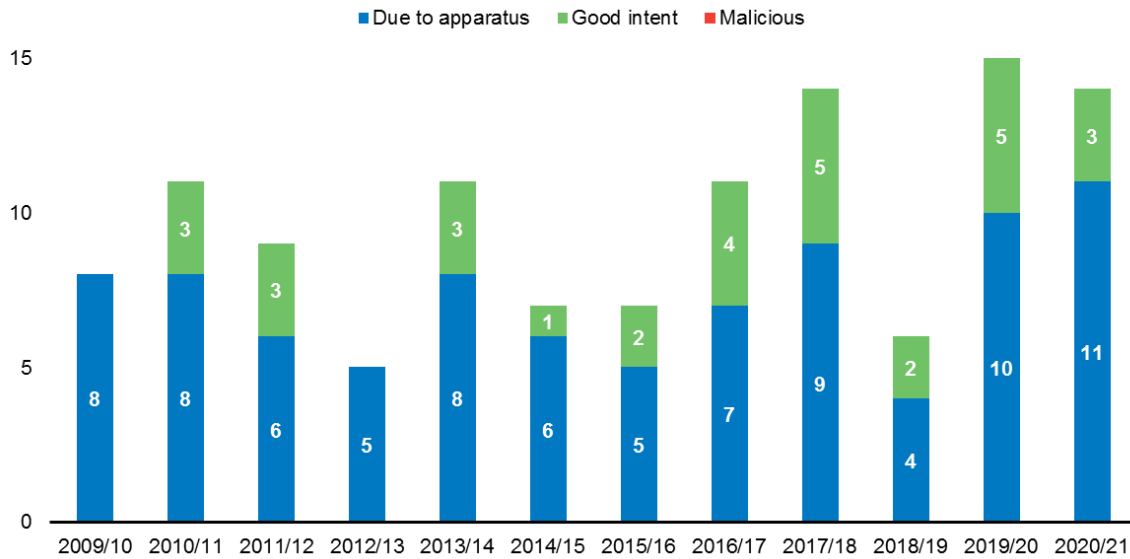**Graph 4: Kingsland Fire Station area – Road Traffic Collisions attended 2009/10 to 2020/21**
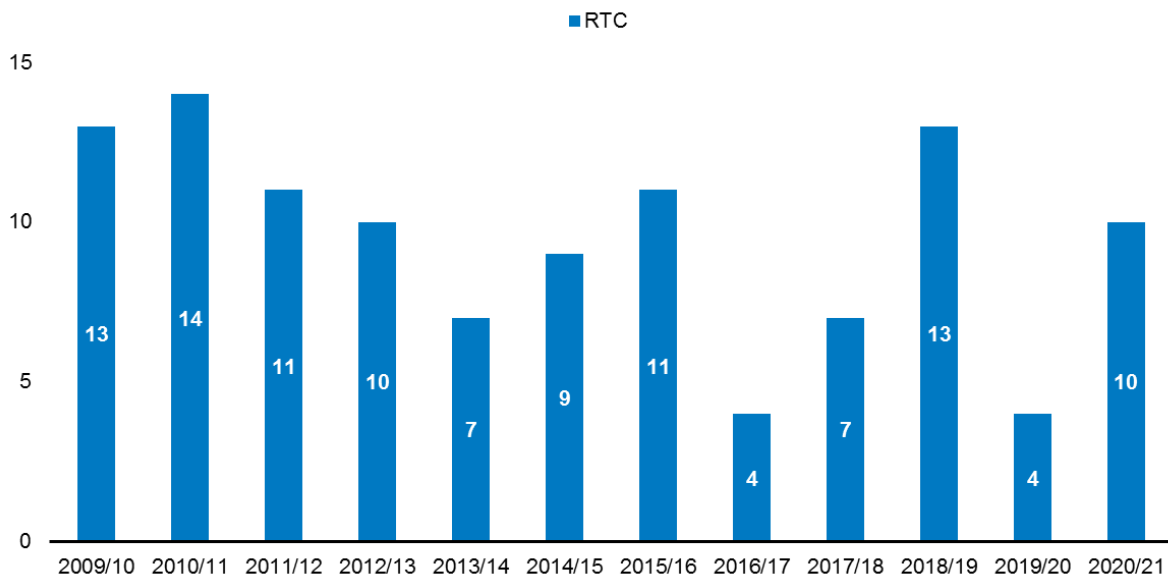
3.8 RTCs are discussed further in Sections 6 later in this report.

False Alarm Incidents

3.9   False Alarm incidents are categorised into False Alarm Malicious, False Alarm Good Intent and False Alarm due to Apparatus. Over the last 12 years, the total number of False Alarms recorded varied due to increases and decreases in both Good Intent False Alarms and False Alarms Due To Apparatus.
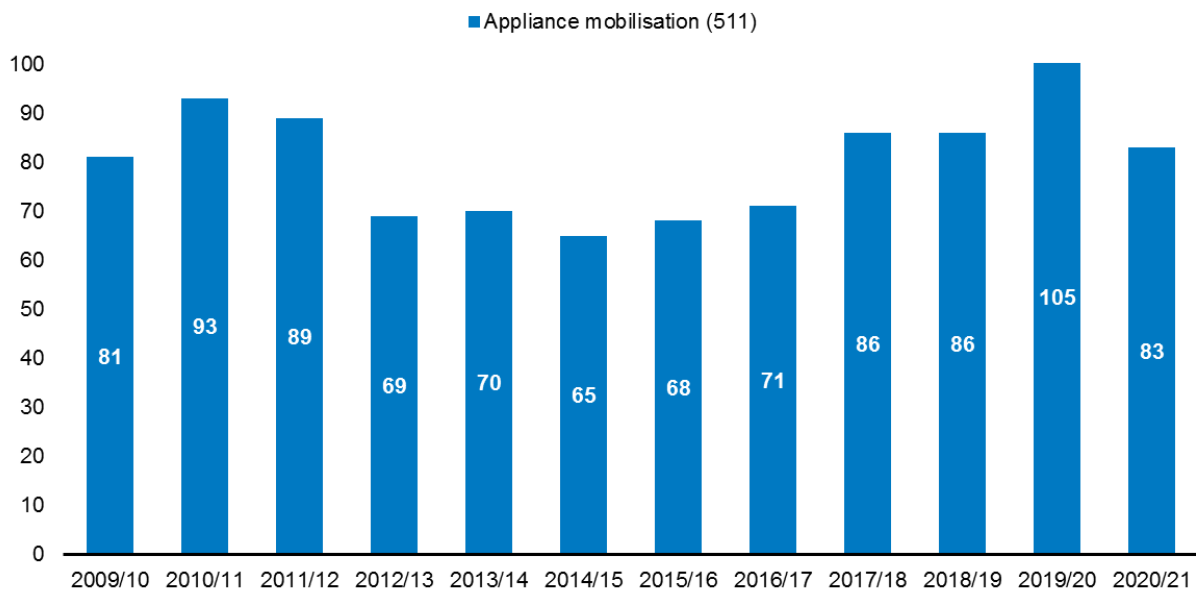
Graph 5: Kingsland Fire Station area – False Alarms 2009/10 to 2020/21

Appliance Mobilisation

3.10 Although over the last 12 years (1 April 2009 to 31 March 2021) there were 537 incidents within Kingsland station area, Kingsland's appliance has actually been mobilised 966 times.

Graph 6: Kingsland Fire Station Activity 2009/10 to 2020/21

■ Appliance mobilisation (511)

Year	Value
2009/10	81
2010/11	93
2011/12	89
2012/13	69
2013/14	70
2014/15	65
2015/16	68
2016/17	71
2017/18	86
2018/19	86
2019/20	105
2020/21	83

This has been broken down into the Service's area and 'over the border' mobilisations in table below.

Table 1: Kingsland's appliance mobilisations 2009/10 – 2020/21

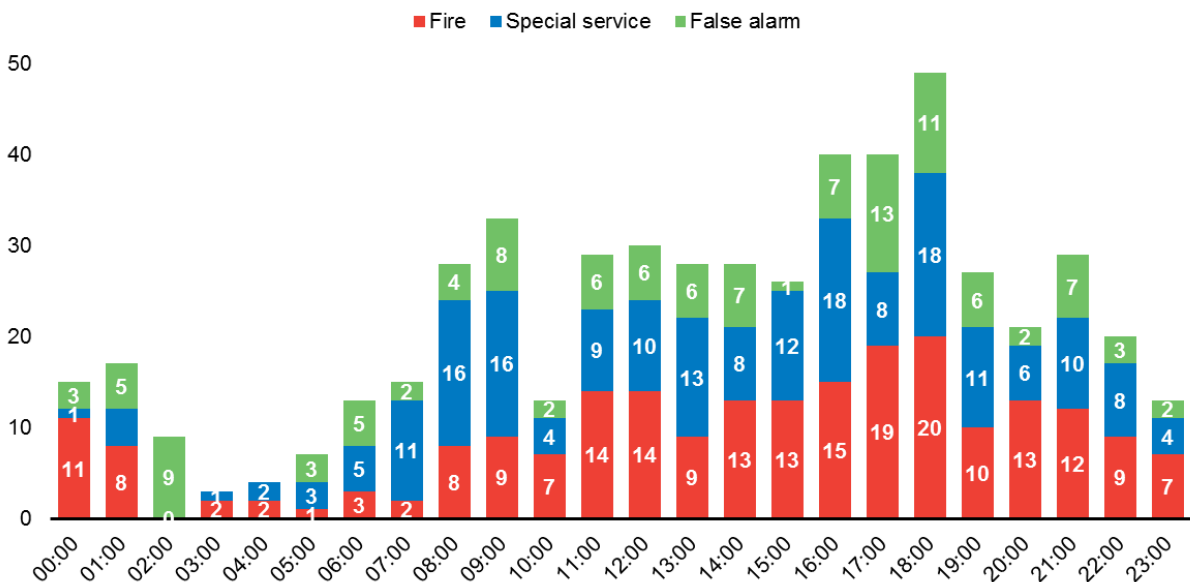| Mobilisation	2009 /10	2010 /11	2011 /12	2012 /13	2013 /14	2014 /15	2015 /16	2016 /17	2017 /18	2018 /19	2019 /20	2020/ 21
1st pump within station area	44	51	40	35	37	23	31	30	42	42	49	46
2nd pump within station area	0	0	0	4	4	1	1	0	0	1	1	1
1st pump in other station areas	9	16	22	11	7	11	8	15	14	19	16	12
2nd pump in other station areas	28	23	27	17	17	20	25	23	27	19	35	24
1st pump over the border	0	1	0	0	0	0	0	0	0	0	0	0
2nd pump over the border	0	2	0	0	0	0	0	0	0	1	0	0
NROB	-	-	-	1	4	7	3	1	0	2	0	-
NOTR	-	-	-	1	1	3	0	2	3	2	4	-
Total	81	93	89	69	70	65	68	71	86	86	105	83

* Mobilisation as second, third, …, *n* pump

Out of 966 Kingsland's appliance mobilisations, 483 were primarily located within Kingsland station area (50.00 per cent), followed by Leominster's station ground with 24.43 per cent and Leintwardine with 12.21 per cent.
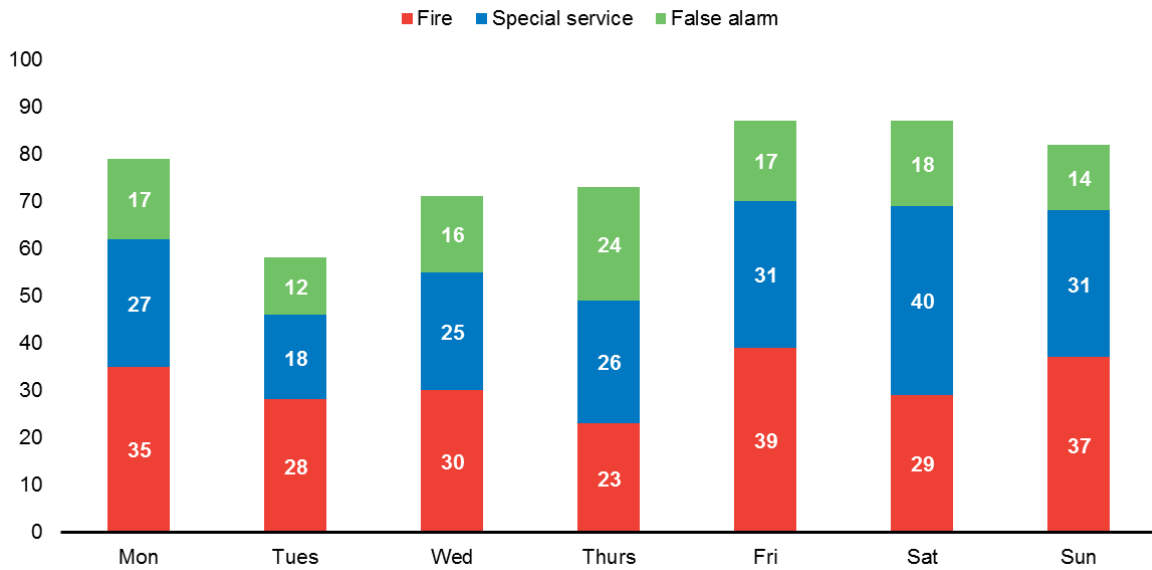
4   Kingsland Fire Station Incident Occurrence

4.1   It is important for Station Commanders at the Service's Fire Stations to understand when incidents are more likely to happen, so that the right resource can be made available at the right time.

4.2   Using the last 12 years of incident data (2009/10 to 2020/21) for Kingsland Fire Station area, incidents can be analysed in detail by time, day and month. This can help to identify particular trends, such as if most incidents are occurring during daylight hours which helps Station Commanders in ensuring enough resources are in place.

4.3   The following graphs show the specific hours, days of the week and months when incidents occurred in Kingsland Fire Station area. Station Commanders will be able to examine the information closely to help identify any trends in incident types or occurrences, so that they can plan to address them with appropriate actions.
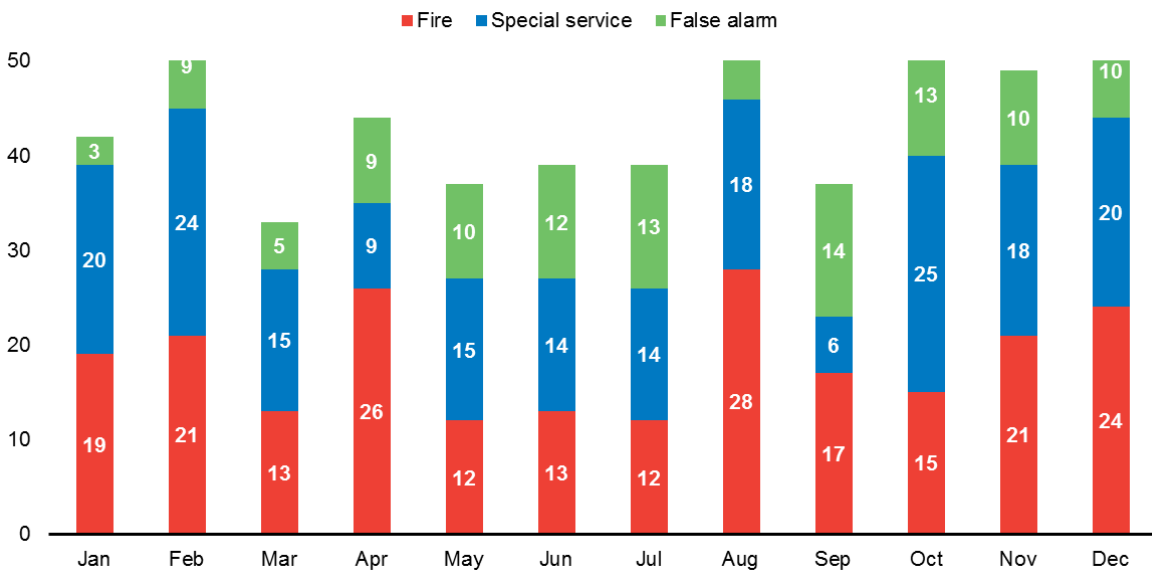
Graph 7: Kingsland Fire Station area - Hour of the Day Incidents Occurred 2009/10 to 2020/21

**Graph 8: Kingsland Fire Station area – Day of the Week Incidents Occurred 2009/10 to 2020/21**

Fire ■ Special service ■ False alarm

Day	Fire	Special service	False alarm
Mon	35	27	17
Tues	28	18	12
Wed	30	25	16
Thurs	23	26	24
Fri	39	31	17
Sat	29	40	18
Sun	37	31	14

Graph 9: Kingsland Fire Station area – Month of Year Incidents Occurred 2009/10 to 2020/21

Fire ■ Special service ■ False alarm

Month	Fire	Special service	False alarm
Jan	19	20	3
Feb	21	24	9
Mar	13	15	5
Apr	26	9	9
May	12	15	10
Jun	13	14	12
Jul	12	14	13
Aug	28	18	
Sep	17	6	14
Oct	15	25	13
Nov	21	18	10
Dec	24	20	10

5   Risks Area In Relation To Accidental Dwelling Fires

5.1   This section looks specifically at Accidental Dwelling Fires and the potential risks within Kingsland Fire Station area. While the number of Accidental Dwelling Fires fluctuated from year to year, as shown in Graph 10 below, the latest figure shows that there was on average one incident every two months in Kingsland Fire Station area. In 2020/21 these 6 incidents equates to fewer than 3 incidents per every 1,000 households which is higher than other station areas in HWFRS territory with a similar household number. Accidental Dwelling Fires have the potential to pose the risk of serious injury or death for the occupants and also for the firefighters attending the incident.

Graph 10: Kingsland Fire Station area – Accidental Dwelling Fires 2009/10 to 2020/21
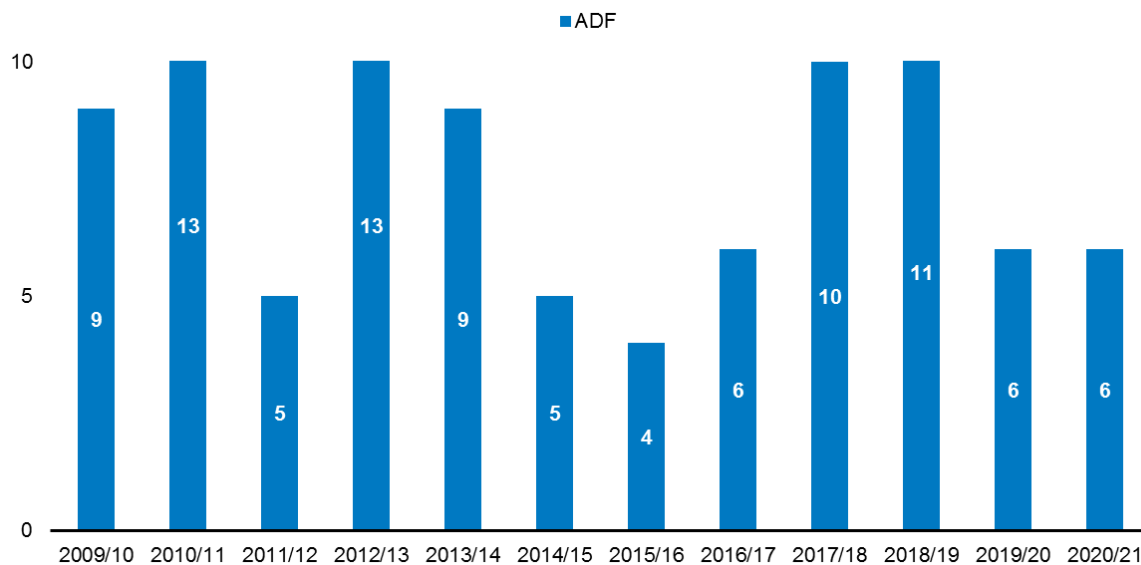
5.2   The CRMP Risk Review 2018 mapped the incidence of Accidental Dwelling Fires across the two counties and assigned risk ratings to highlight those areas that are at high, medium and low fire risk. This was worked out using a sophisticated Fire Risk Model, which is also used by Cumbria and Lancashire Fire and Rescue Services among others. Details of the calculations involved can be found in the CRMP Risk Review document.

5.3   The analysis for Kingsland Fire Station area shows that there are a number of areas that were considered to be at medium risk. This does not mean that living in a high risk area will lead to someone having an Accidental Dwelling Fire, but it does mean that high risk areas tend to have more fires than would normally be expected. The fire risk areas for 2017/18 to 2019/20 are mapped on **Error! Reference source not found.** where the medium risk areas are shown in blue. Table 2 provides a list of those areas within Kingsland Fire Station ground that have been considered to be at medium risk at some point during the last five years by the Fire Risk Model.

Table 2: Areas most at risk of fire 2015/18 – 2017/20

Local Authority	LSOA Name	Local area name	LSOA Mosaic Classification[4]	Risk Level 2015/2018	Risk Level 2016/2019	Risk Level 2017/2020
Herefordshire	Weobley	Eardishill	A Country Living	M	M	M
Herefordshire	Bircher	Luctonia	A Country Living	L	M	M
Herefordshire	Arrow	Shobbridge	A Country Living	L	M	M

5.4 The local areas Eardishill, Luctonia and Shobbridge have all been classified as medium risk areas by the Fire Risk Model. The most common household characteristic for this LSOA is shown as Country Living. Community risk activity is recommended in these particular areas to prevent the fire risk from increasing further. More detailed information on individual households to increase the accuracy of targeting can be requested.

---

[4] LSOA Mosaic classification was assigned by using the most common household characteristic seen in each LSOA using Experian Mosaic Public Sector 2019. More detail on individual postcodes for more accurate targeting can be requested.

Map 2: Kingsland Fire Station area – Risk areas 2017/18 to 2019/20
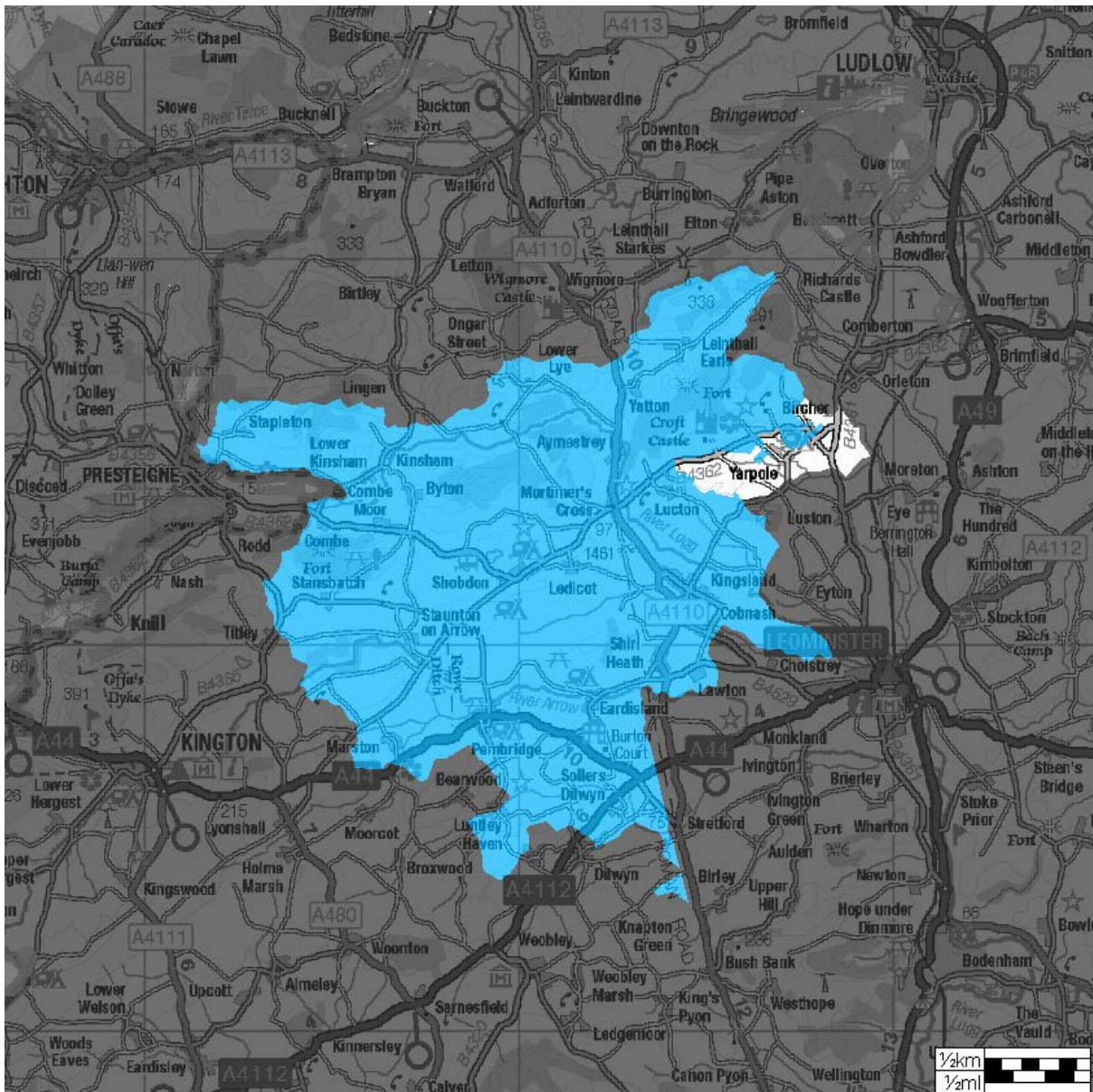
5.5 In addition to mapping areas at risk, the CRMP Risk Review also examined the characteristics of households that tend to have more Accidental Dwelling Fires than expected given the relative number of households in each group – that is, Groups A, C, G, J, M, N, and O. When examining these groups in detail, it can be seen that those households share characteristics of higher levels of dependency, disadvantage and vulnerability (Groups M, N and O), they are now being joined by households in the less populated rural areas (Groups A and G). Group C has not been mapped and further details on this can be found in the CRMP Risk Review, instead focus has been on six groups (A, G, J, M, N and O) and these are shown on Map 3. They correlate closely with the high and medium risk areas identified in Map 2
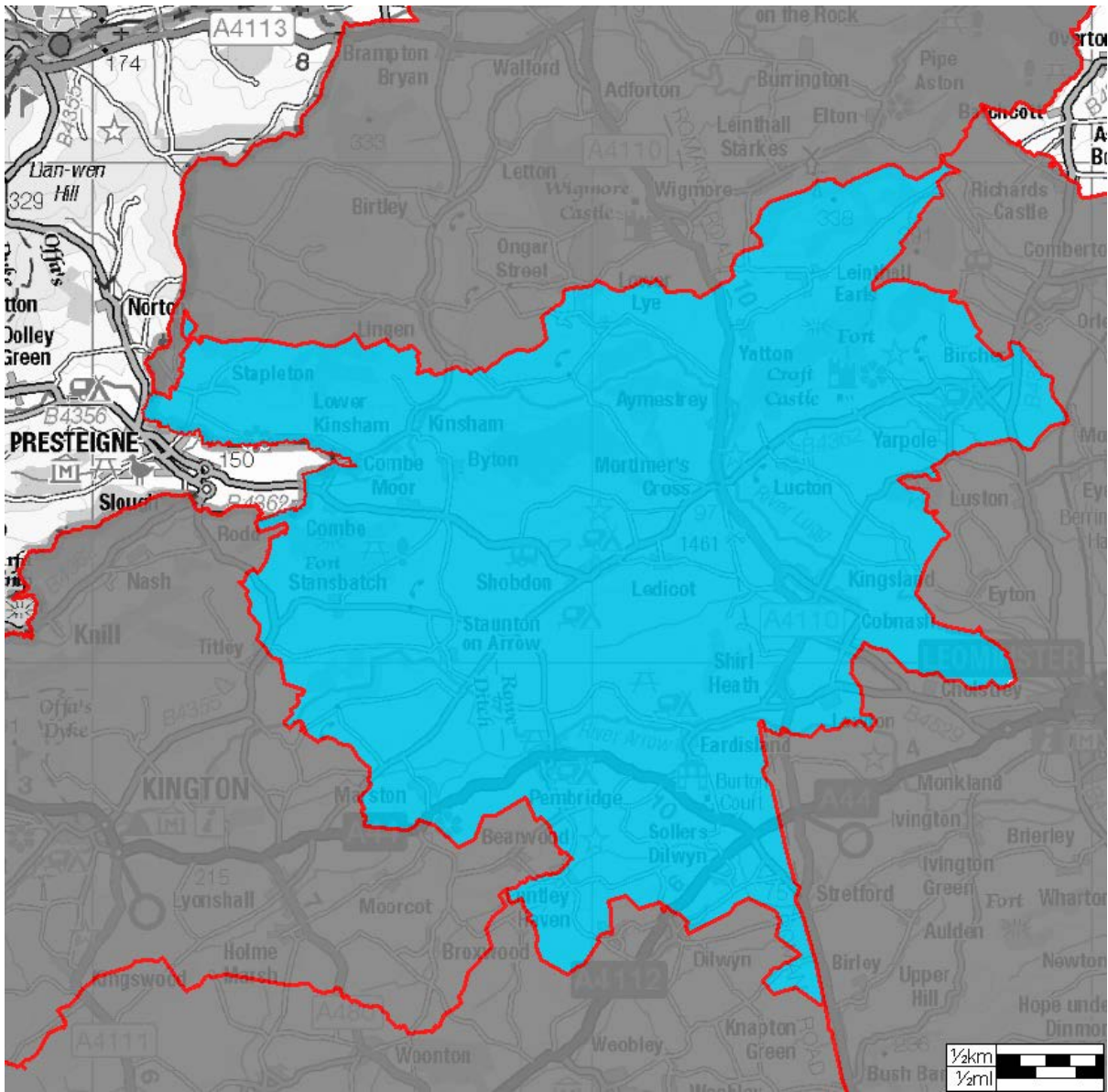
○ A – Country Living
● G – Rural Reality
○ J – Rental Hubs
○ M – Family Basics
● N – Vintage Value
○ O – Municipal Challenge

5.6   More information on these Mosaic group types can be found in the CRMP Fire Risk
        Review.

Map 4: Kingsland Fire Station area – Accidental Dwelling Fires (2009/10 to 2020/21)

Key

Low ⇐ ⇒ High
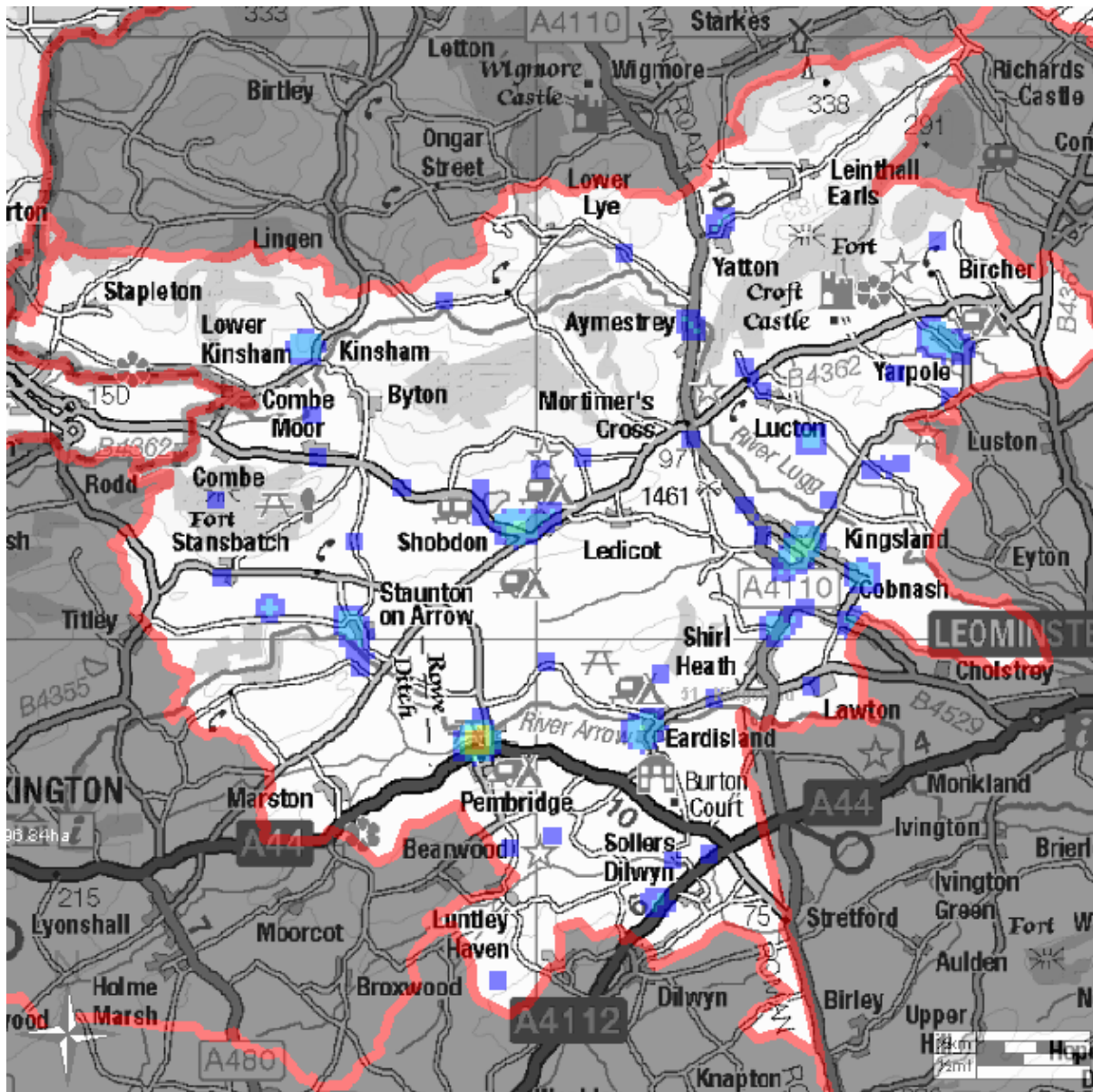
5.7   Map 4 shows the concentration of Accidental Dwelling Fires in Kingsland station ground area showing data between (2009/10 to 2020/21). This correlates with Map 5 which shows where the Community Risk department has been targeting Safe and Well Checks between 2017/18 to 2019/20.

5.8   Mapping Accidental Dwelling Fires and those households that tend to have more Accidental Fires than others provides Station Commanders and Community Risk officers with valuable information that will help to prioritise how they target their prevention and protection activities. When examining the local areas at potential risk, the maps can be expanded to show street level information about households and

risks. Additional information about how to best contact those households at potential risk will also be available through the Community Risk department.

Map 5: Community Risk Activity – Safe and Well Checks 2017/18 to 2019/20

Key

Low ⟸ ⟹ High
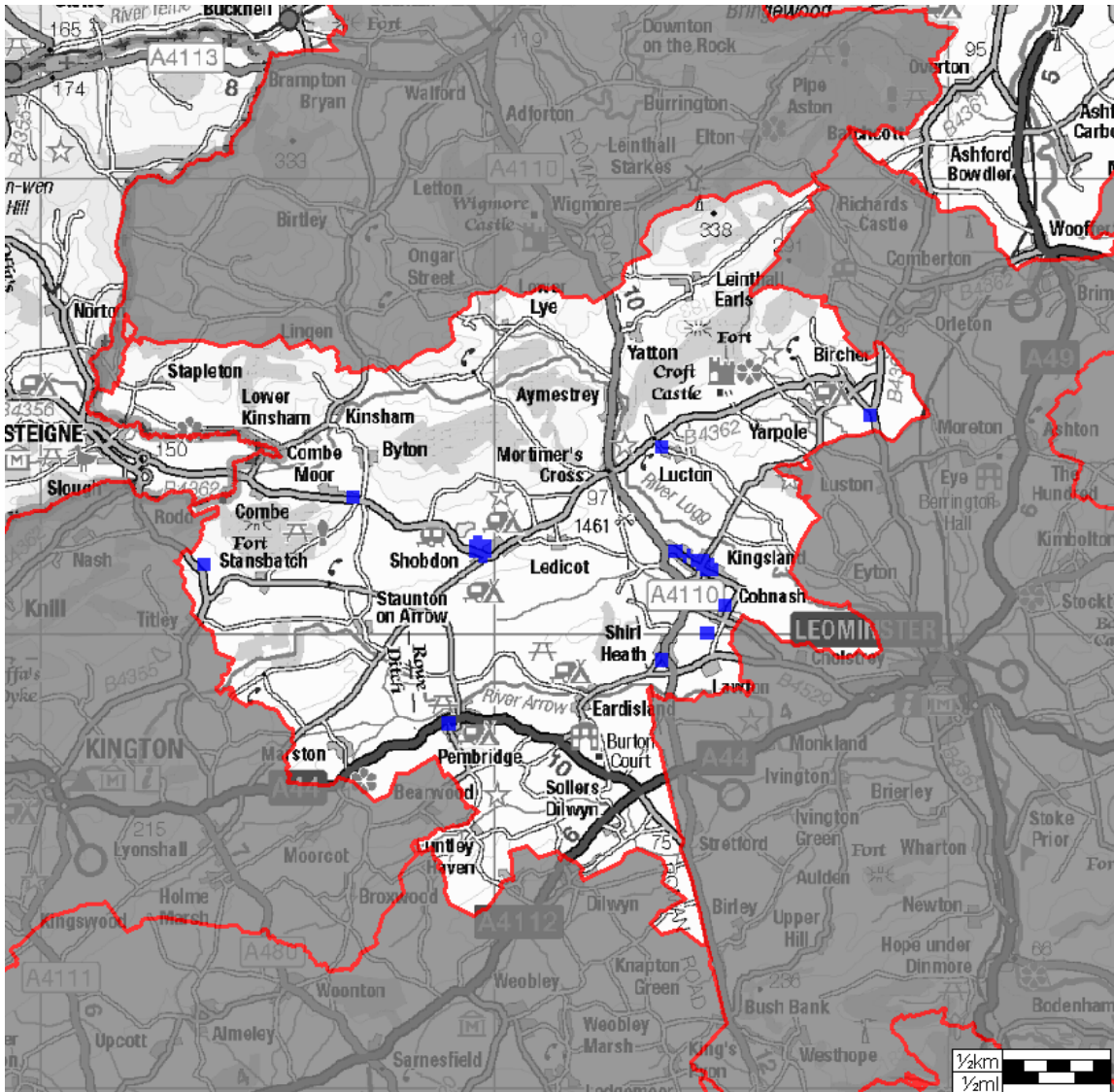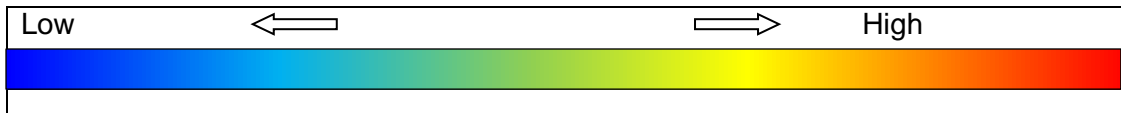
6   Road Traffic Collision Incidents

6.1   The CRMP Risk Review 2018 identified Kingsland Fire Station area as a low risk area for Road Traffic Collisions (RTCs) in 2017/18 – 2019/20. This was determined using a risk model based on the number of RTC incidents attended and the severity of those incidents in terms of injury to persons. Map 6 below shows the location of all RTCs that occurred within Kingsland Fire Station area over the last 12 years (2009/10 to 2020/21) at 100m grid cell. The hotspots tend to be concentrated around the main roads going into and out of Kingsland Fire Station Area.

Map 6: Kingsland Fire Station area – RTC Hotspots 2009/10 to 2020/21

Key
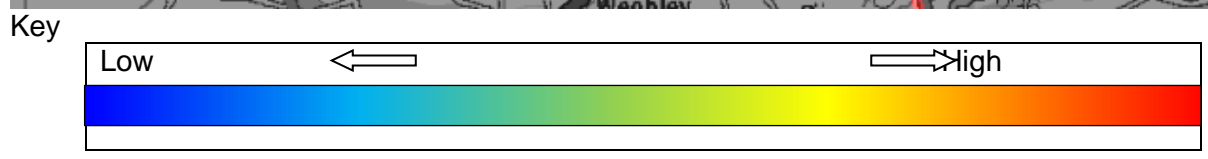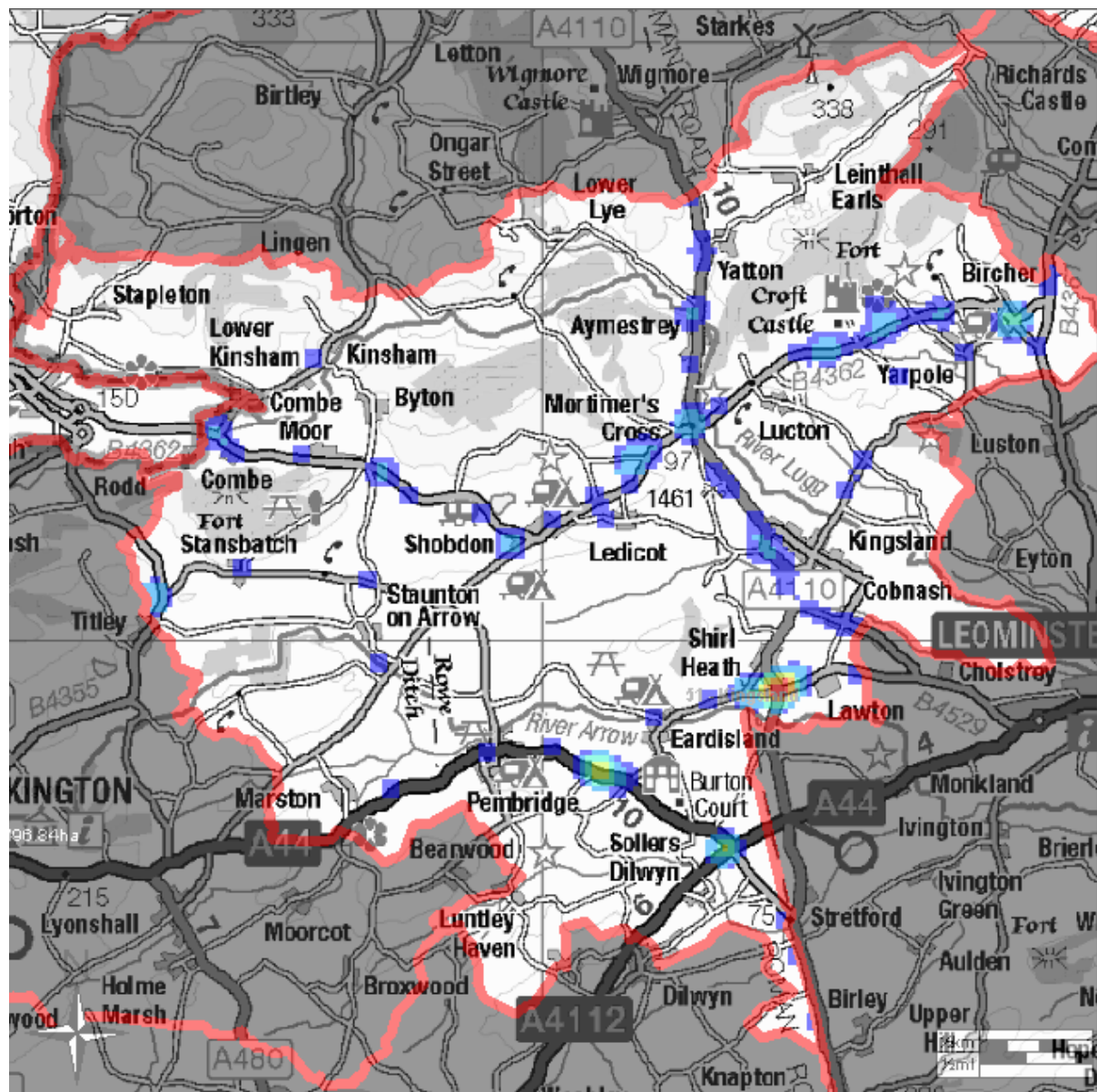
6.2 The map shows hotspots ranging from **high** (i.e. where RTCs occurred most frequently) graduating to **low** (i.e. where RTCs occurred least frequently). Where no colour is shown, this indicates that HWFRS did not attend any RTC incidents in the last 12 years.

6.3 The maps can be expanded to show individual roads and the location and type of each RTC incident attended. This will provide Station Commanders and Community Risk officers with important data when working with local authority and road safety partners.

7   Other Potential Life Risks

7.1   In addition to Accidental Dwelling Fires and Road Traffic Collisions, the Service attends a number of other incidents which have the potential to harm life and property. Among such incidents are water rescues and weather-related issues such as wide area flooding and wildfire. Heritage buildings also pose a potential risk, with many having unique features and important and irreplaceable artefacts. A significant number are also timber-framed and liable to a faster spread of fire.

7.2   Heritage issues are less likely to be a risk to life, but safeguarding the heritage environment (both built and natural) is an important part of the Service's role in helping to improve the safety of the community. Heritage issues are discussed further in Section 8 below.

Water Incidents

7.3   Water-related incidents include rescues of people from flooded properties, lakes and quarries as well as animal rescues from water. These can also be mapped to assist Station Commanders and Community Risk officers in their partnership work with water safety agencies and landowners where appropriate.

Flooding Areas

7.4   Maps prepared by the Environment Agency show areas that are likely to flood in the event of adverse weather conditions. Fire Station crews also have access to more detailed maps through their Mobile Data Terminals carried by every fire engine, as well as via the Environment Agency website.

7.5   Map 7 below shows the locations within Kingsland Station Area most likely to flood. These are primarily around the River Lugg and its tributaries.

Map 7: Kingsland Fire Station area – Flooding areas identified by the Environment Agency
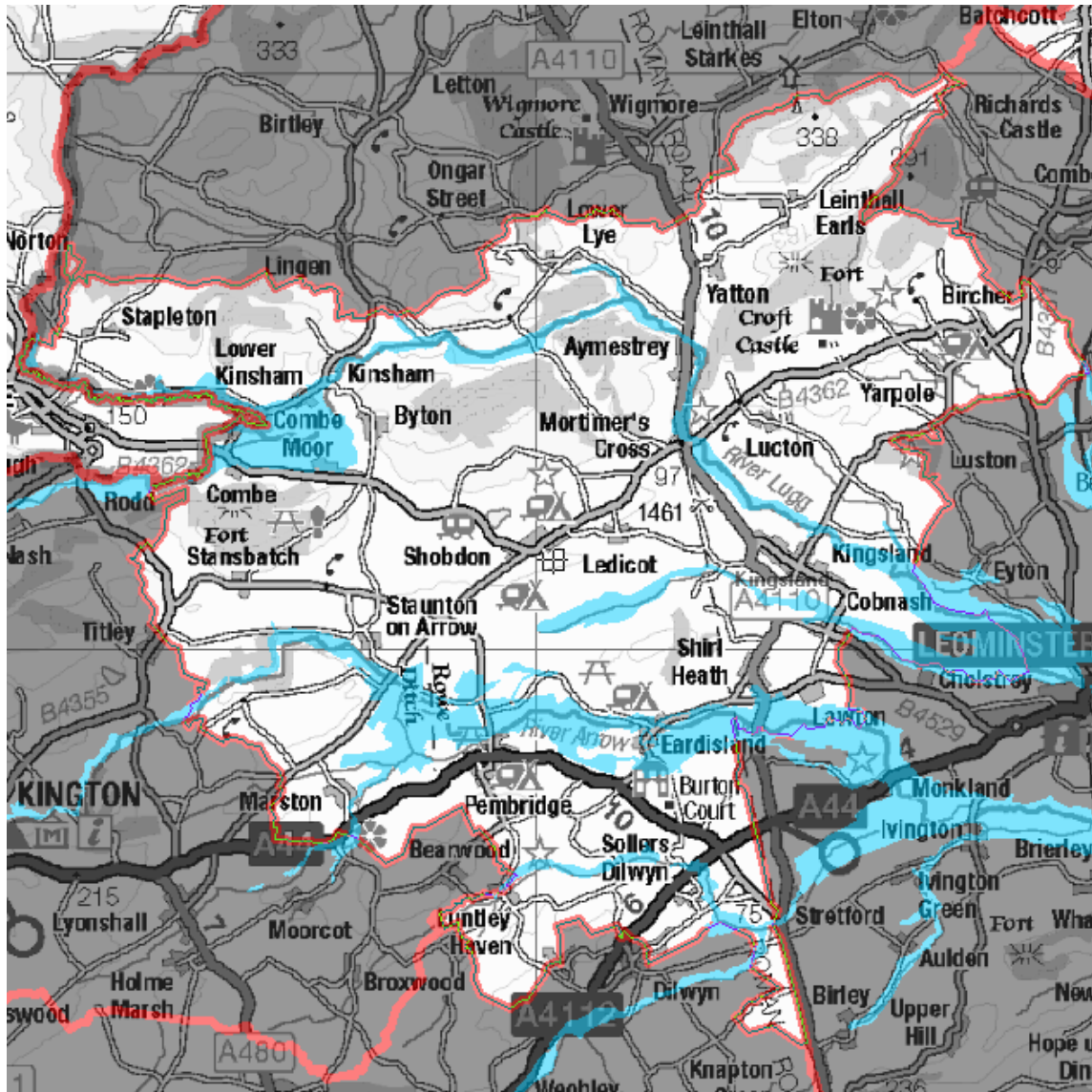
7.6   Information about areas likely to flood is used during flood planning with water safety partners and can be used as part of the Safe and Well Checks carried out with residents in these areas. This includes information on flood risk and advice on early evacuation in the event of flooding. Fire Station crews will also find more specific information about flood planning on the Service intranet.

8   Prevention and Protection Activities

8.1   All Fire Station crews and Community Risk officers have a key role to play in preventing incidents from happening and in protecting life and property in the event of emergency incidents. In helping to deliver the Community Risk Management Plan over the next few years, Kingsland Fire Station crew and the Community Risk department will be involved in a range of activities including the following:

   a) NFCC Community Risk Calendar 2021

8.2   Each year the National Fire Chiefs Council prepares a calendar of events and campaigns to help promote community safety across the country. The Service uses this to help plan local events and campaigns throughout the year, in addition to more local community safety activities, and Fire Stations are fully involved in delivering this in their local areas. The 2021 Calendar can be found in Appendix 1 of this report.

   b) Safe and Well Checks

8.3   These checks involve a visit to people's home to deliver fire safety advice and to install smoke alarms where needed. They help to identify other potential areas of concern, which may require additional input from partner agencies, in order to help people remain safe and well in their own homes. Having identified households and areas likely to be more vulnerable to Accidental Dwelling Fire as set out in Section 5 of this report, Station Commanders will be able to cross-reference the most at risk areas when working with the Community Risk department and community safety partners to introduce more targeted prevention activities.

   c) Intel Process

8.4   Every Fire Station has identified a number of specific risks in their area, which are scheduled to be visited and reviewed on a regular basis. The specific risks for Kingsland Fire Station are listed on the Mobile Data Terminals and on the Service intranet at the following link: Kingsland Fire Station Risk Premises. The Intel Process also enables crews to identify potential new risk properties and sites. In addition, each Fire Station presents their Top 5 Risks based on the specific risks to firefighters, the public, the environment, the local economy and heritage. These are reviewed by all firefighters at the Fire Station as part of their competency training.

   d) Technical Fire Safety Inspections

8.5   These involve Technical Fire Safety officers conducting risk based audit and intelligence led audit programmes looking at the potential risks in commercial premises including occupancy and management procedures. This helps to ensure the premises meet fire safety regulations[5]

---

[5] The Regulatory Reform (Fire Safety) Order 2005

e) Business Fire Safety Checks

8.6   Commercial properties regarded as low risk are visited by the Wholetime crews at Fire Stations, which involves crews checking for basic fire safety requirements. Any areas of concern are highlighted to Technical Fire Safety officers for further investigation. Additional work is being undertaken by the Community Risk department to map commercial premises and their associated risks and once complete this will be made available to support Fire Stations in their work with local businesses.

f) Heritage sites

8.7   At March 2020 there were over 12,000 'listed' buildings and sites across Herefordshire and Worcestershire. 'Listing' is a process used to grade heritage importance and interest. Grade I and II* buildings and sites are of particular importance, of which there are currently 920 in the two counties. Kingsland Fire Station area contains 8 Grade I and 20 Grade II* buildings and sites. Section 9 provides a map and list of all such buildings and sites in Kingsland Fire Station area. This will support Station Commanders in familiarising their crews with their locations, nature and value, and will help in planning emergency cover, preventative and salvage arrangements.

9 Grade I and Grade II* Listed Buildings

9.1 Grade I buildings are considered to be of exceptional interest. Grade II* buildings are considered to be of particular importance of more than Special interest.

9.2 The location of Grade I and II* listed buildings are shown on Map 8 below.

Map 8: Kingsland Fire Station – Location of Grade I and Grade II* Listed Buildings
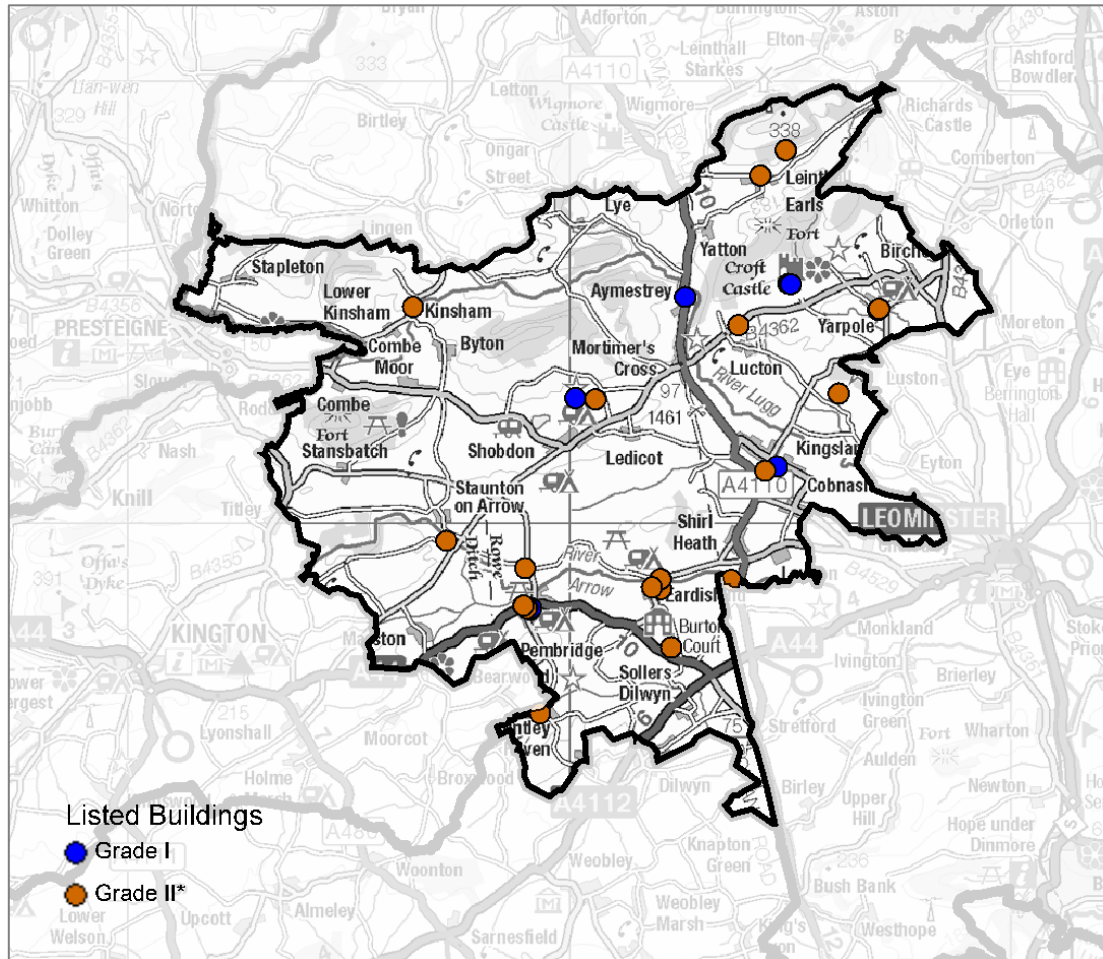
The tables on the following pages list each building by the Station area. The buildings and structures are drawn from English Heritage's Listed Buildings database[6], updated to March 2020. More information can be gained from this website by entering the list entry number into the search facility.

---

[6] Listed Buildings Database

Kingsland – Grade I Listed Buildings

List Entry Number	Grade	Building Name	Eastings	Northings
1081754	I	Church of St Mary	339095	258053
1301249	I	Belfry approximately 5 metres North-East of the church	339110	258087
1167022	I	Church of St Michael	344683	261288
1166734	I	Church of St John The Evangelist	340114	262847
1081790	I	Tower about 15 metres South of Church of St Leonard	346974	264844
1082113	I	Church of St John The Baptist and St Alkmund	342602	265130
1166506	I	Church of St Michael	344986	265427
1166451	I	Croft Castle	344943	265435

Kingsland – Grade II* Listed Buildings

List Entry Number	Grade	Building Name	Eastings	Northings
1081945	II*	Burton Court	342284	257190
1081730	II*	Pembridge Post Office and stores	339013	258084
1081729	II*	The Market Hall	339025	258101
1349914	II*	Forsythia and West Leigh	338942	258139
1301065	II*	Swan House and School View	338933	258139
1349843	II*	Church of St Mary	342048	258520
1081911	II*	Knapp House	341850	258553
1081828	II*	Arrow Mill	343646	258721
1081908	II*	Staick House	342043	258743
1081755	II*	Clear Brook	338975	258989
1349923	II*	Court of Noke	337190	259608
1081822	II*	Kingsland House	344410	261199
1349767	II*	Garden Temple about 500 metres East of Church	340570	262818
1349878	II*	Black Hall	346080	262949
1082082	II*	Lucton School	343807	264497
1296754	II*	Church of St Leonard	346986	264868
1081486	II*	Church of All Saints	336434	264910
1082117	II*	Church of St Andrew	344302	267885
1082116	II*	Gatley Park	344880	268462
1301555	II*	Luntley Court	339317	255701

Appendix 1

2021 NFCC Community Risk Calendar