COMMUNITY RISK
MANAGEMENT PLAN 2014-2020

Mid-Point Review 2017-18

STATION RISK PROFILE 2018
KIDDERMINSTER

Station Risk Profile 2018

Contents

The Station Risk Profiles provide local detail about fire and other risks in each of the Service's 27 fire stations 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 background information and supporting evidence for the Mid-Point Review of the Community Risk Management Plan (CRMP)2014-2020. 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, which provides a spatial analysis of life risk data across the two counties, and a Demographic Profile, which provides information about the characteristics of the local population. All documents can be found on the Service website.

2018 Station Risk Profile: Kidderminster

1. Introduction

1.1. Station Risk Profiles are reviews of potential life risks in each of the Fire and Rescue Service's 27 fire station areas. They form part of the CRMP Risk Review, which looks at the major life risk incidents across the two counties - Fires and Road Traffic Collisions. Together with a Demographic Profile of the Herefordshire and Worcestershire population, they provide support in the preparation of the Community Risk Management Plan (CRMP) Mid-point Review 2018.

1.2. The Station Risk Profiles use the information provided by the CRMP Risk Review 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 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 (Appendix 1).

1.3. Station Commanders, crews and the Community Risk Department will use the information, in conjunction with the National Fire Chiefs Council Community Risk Calendar (Appendix 2) 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 40,000 new homes are planned to be built between 2017 and 2030, a rate of about 3,000 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.

2. Kidderminster Fire Station Overview

2.1. Kidderminster's Fire Station is located at Castle Road just outside the Town Centre. The Fire Station covers a large area of around 47 square miles, which houses 73,563 residents living in 32,699 homes. The latest demographic data for the Wyre Forest shows that 24 per cent of residents are aged over 65. This is predicted to increase to 27 per cent by 2026. There is also a small Black and Minority Ethnic (BaME) population of 2702 about 3 per cent of the total. Within this, the largest group is Asian British Bangladeshi.

2.2. The Station has two fire engines (one Pump and one Heavy Rescue Pump) which will attend all types of incidents. The crews are also trained as Water First Responders who will be deployed to water incidents. In addition, Kidderminster also has the High Volume Pumping Unit and associated Prime Movers which can be used to supply or remove large amounts of water at incidents. This is a national asset and could potentially be deployed anywhere in the country.

2.3. The Station is one of the busiest in the two counties during 2016/17 there were 699 incidents within the Fire Station ground, approximately 10 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 locations further afield if needed. This includes West Midlands Fire Service, Shropshire and Staffordshire Fire and Rescue Services all of which border the Station area.

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 and is determined by the Service's Fire Control.

Map 1: Overview of Kidderminster Fire Station ground
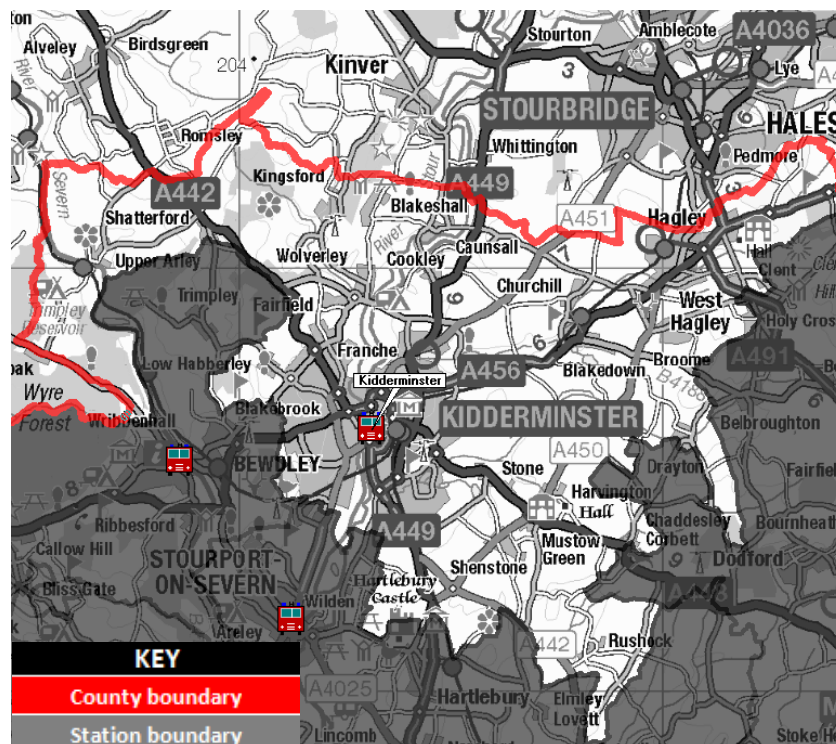
Station Crewing Systems

2.5. Within Hereford & Worcester Fire and Rescue Service, there are many 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). Other duty systems are Day Crewing, where Fire Stations are permanently crewed during the day and by On-Call firefighters at night, and Day Crewing Plus, where Fire Stations are permanently crewed during the day by firefighters, who remain available at night at the Fire Station on an On-Call basis so that they are immediately available if needed.

2.6. The two fire engines at Kidderminster Fire Station are crewed by a combination of Wholetime and Retained Duty Systems. The first fire engine is immediately available 24 hours a day, seven days a week, while the RDS crewed fire engine can usually respond within six minutes of the crew being alerted.
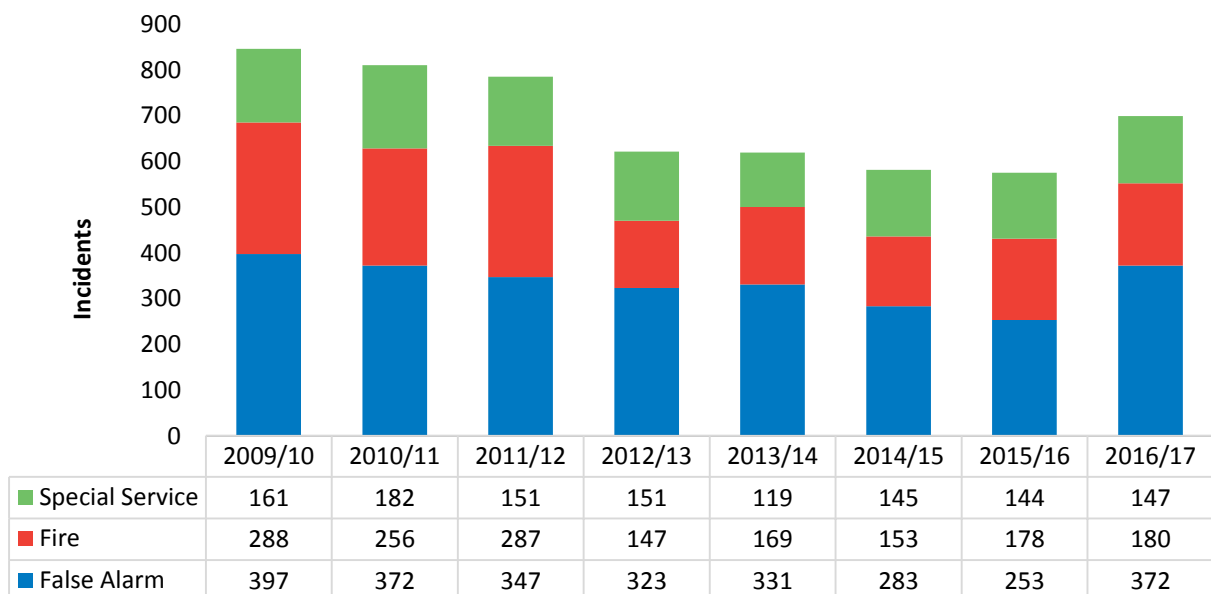
3.   Incident Overview

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 respond to fire alarms or phone calls where there is no actual incident

3.2. Over the last eight years (1 April 2009 to 31 March 2017), crews at Kidderminster Fire Station attended just over 5,500 incidents. Around half of these were False Alarms (48 per cent), one in three were Fires and one in five were Special Services. Over the eight years, there has been a gradual reduction in the number of incidents attended in each category, with an overall decrease of about 17 per cent.

3.3. Graph 1 below provides further details.

Graph 1: Kidderminster Fire Station area – Incidents attended 1 April 2009 – 31 March 2017

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
■ Special Service	161	182	151	151	119	145	144	147
■ Fire	288	256	287	147	169	153	178	180
■ False Alarm	397	372	347	323	331	283	253	372

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. Both have 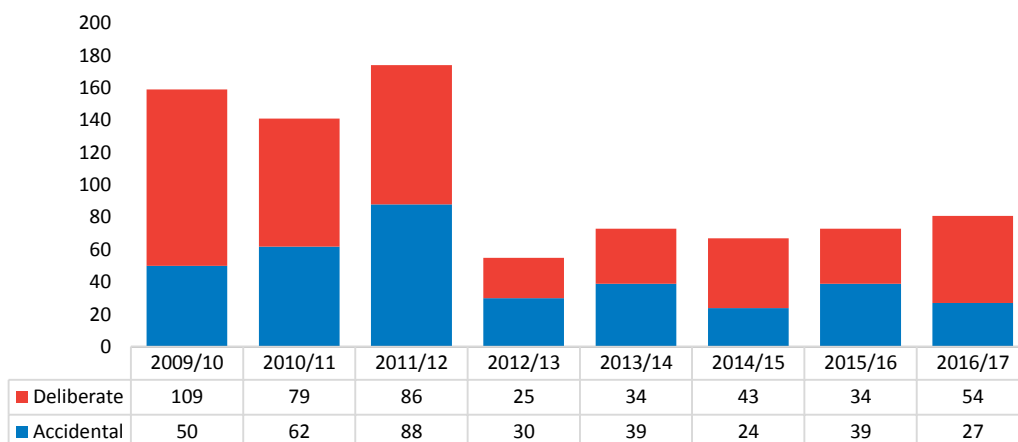seen reductions in the number of incidents attended over the last eight years. In the Kidderminster Fire Station ground the number of Primary Fires is down by about 17 per cent and Secondary Fires by 49 per cent.

Graph 2: Kidderminster Fire Station area - Primary Fires 2009/10 to 2016/17

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Deliberate	34	31	28	19	12	21	17	17
Accidental	80	74	78	55	74	56	81	77
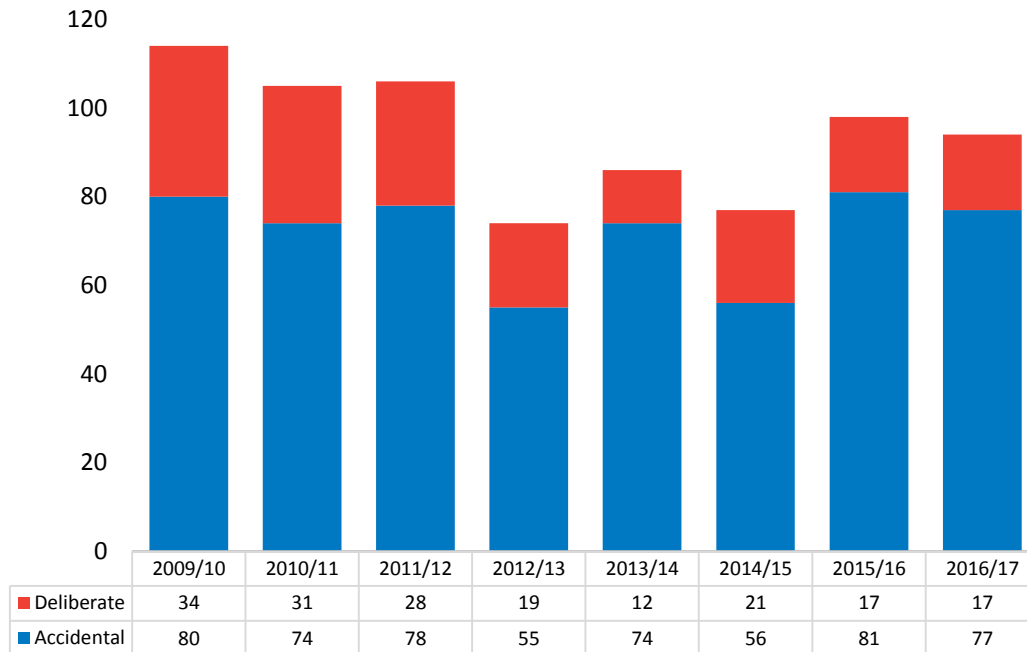
3.5. Graph 2 shows a breakdown of Primary Fires for the Kidderminster Fire Station area over the last eight years. It shows that the numbers of accidental Primary Fires is showing a downward trend but the greatest reductions can be seen in the number of deliberate Primary Fires.

Graph 3: Kidderminster Fire Station area - Secondary Fires 2009/10 to 2016/17

|	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Deliberate	109	79	86	25	34	43	34	54
Accidental	50	62	88	30	39	24	39	27

3.6. Graph 3 shows a breakdown of Secondary Fires for the Kidderminster Fire Station area over the last eight years. Secondary Fires mainly involve loose refuse (typically a bin fire) and grassland fires during warm summer months. The graph shows that the numbers of accidental and deliberate Secondary Fires are both showing a downward trend, though the number of deliberate fires has fallen by the greatest amount.

3.7. 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

3.8. In terms of Special Service incidents, the two major categories for the Kidderminster Fire Station area involving potential risk to life are Road Traffic Collisions (RTCs) and Water Rescues. Over the last eight years, the number of RTCs attended has fallen by 17 per cent as shown in Graph 4 below. Over the same period, the number of incidents involving rescues from water has fluctuated with a spike in 2015/16. This is shown in Graph 5 below.

Graph 4: Kidderminster Fire Station area – Road Traffic Collisions attended 2009/10 to 2016/17
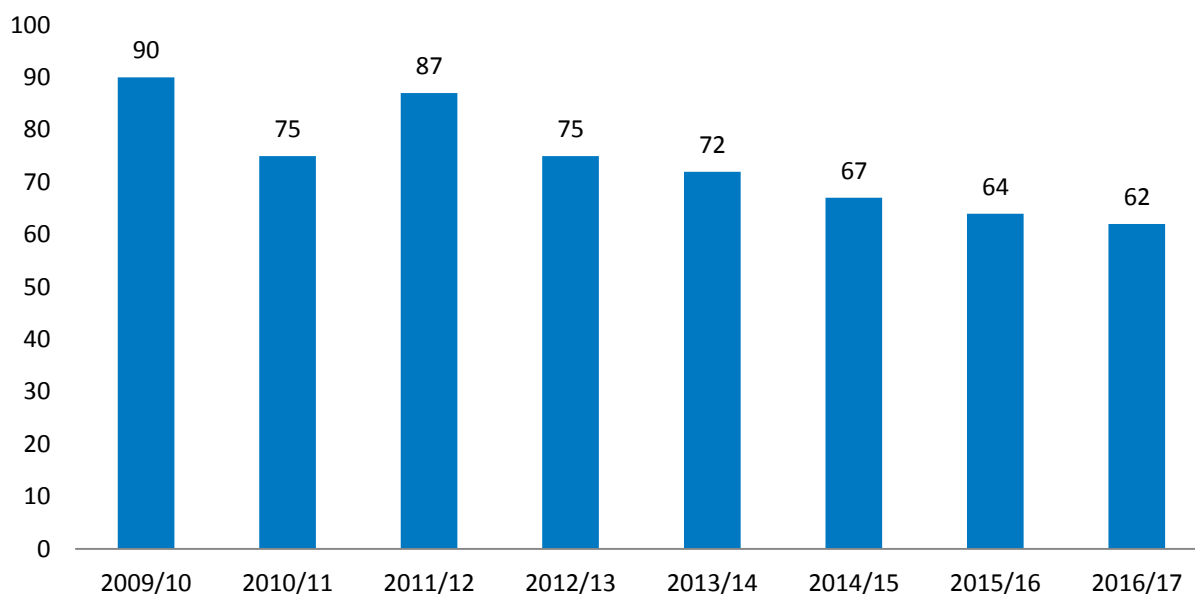
Graph 5: Kidderminster Fire Station area – Water Rescues 2009/10 to 2016/17
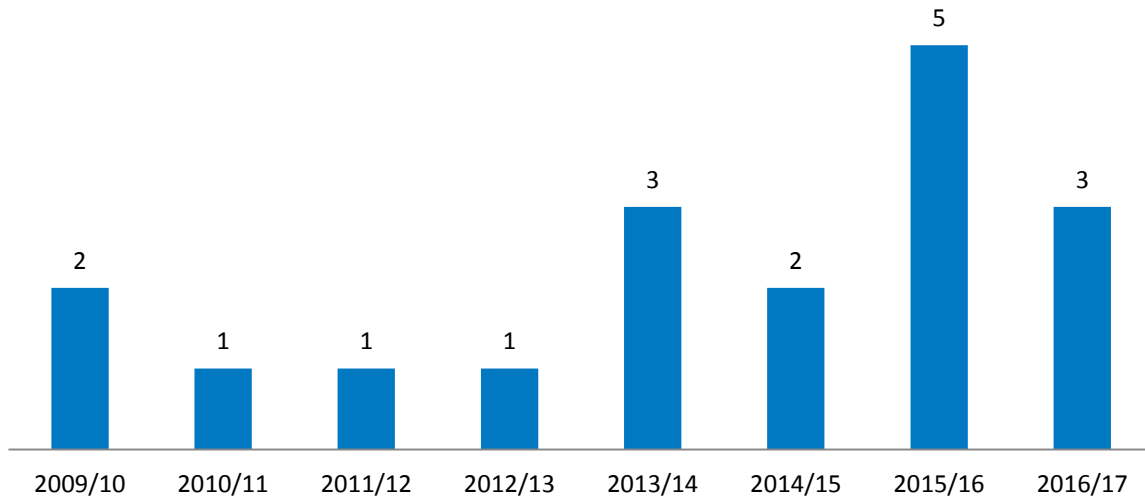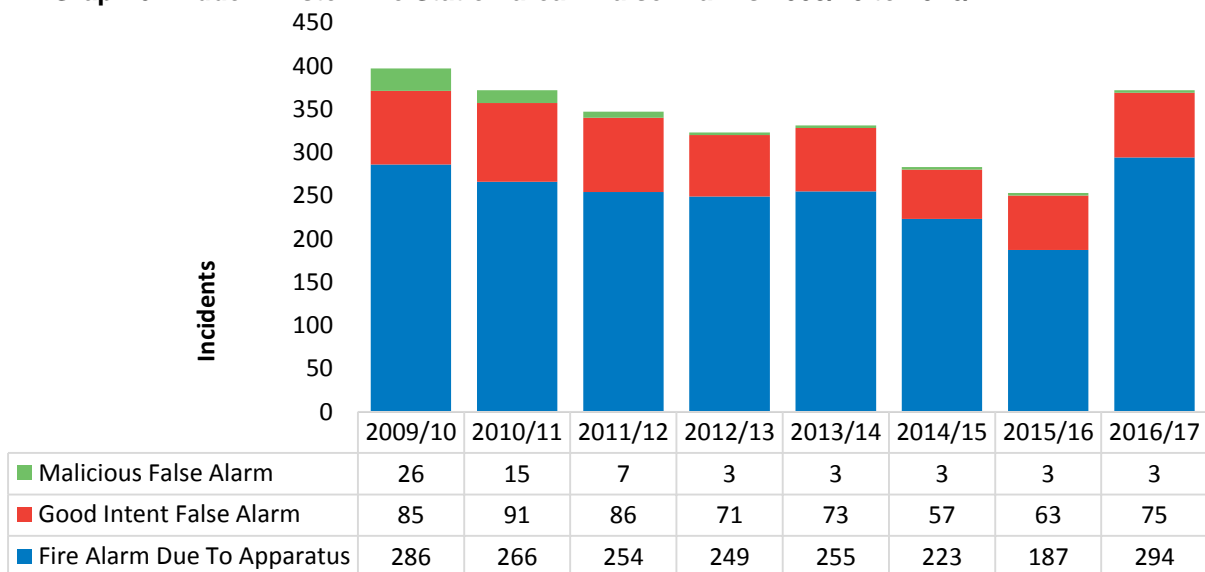

3.9. RTCs and Water Rescues are discussed further in sections 6 and 7 respectively later in this report.

False Alarm Incidents

3.10 False Alarm incidents are categorised into False Alarm Malicious, False Alarm Good Intent and False Alarm due to Apparatus. Over the last eight years, the total number of False Alarms attended has fallen by 6 per cent as shown in Graph 6 below. The biggest decrease could be seen in False Alarms due to Apparatus until 2016/17 when there was a large increase. This can be attributed to the installation of a new fire detection system fitted into three high rise buildings.

Graph 6: Kidderminster Fire Station area – False Alarms 2009/10 to 2016/17

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Malicious False Alarm	26	15	7	3	3	3	3	3
Good Intent False Alarm	85	91	86	71	73	57	63	75
Fire Alarm Due To Apparatus	286	266	254	249	255	223	187	294

4.   Kidderminster Fire Station Area Activity

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.

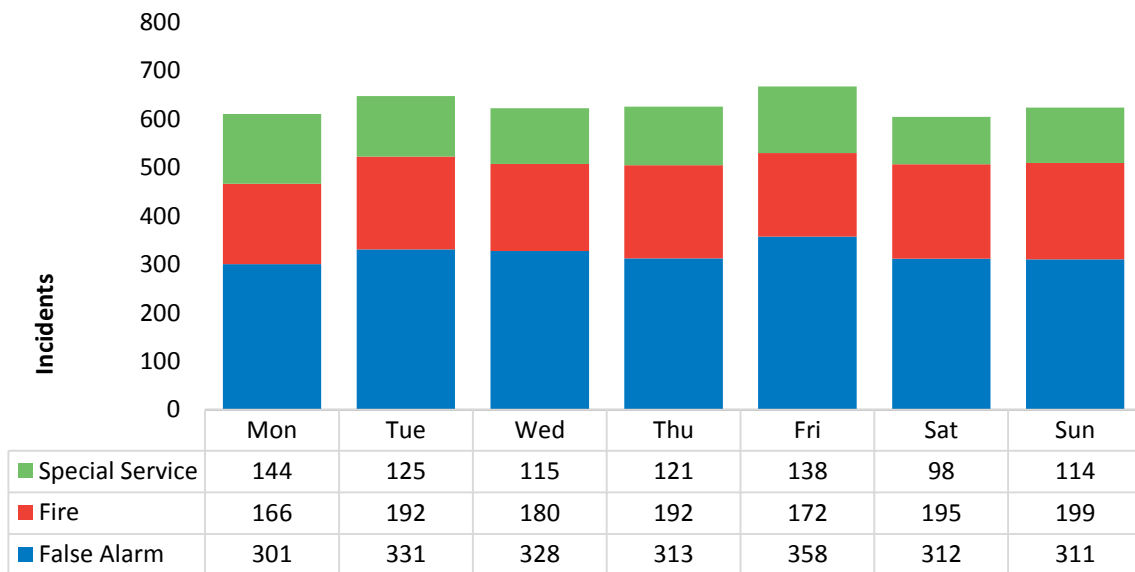4.2.   Using the last five years' worth of activity data (2012/13 to 2016/17) for Kidderminster Fire Station's area, incidents can be analysed in detail by time, day and month. This can help to identify particular trends, such as most incidents occurring during daylight hours which helps Station Commanders 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 the Kidderminster Fire Station area. Station Commanders will be able to examine the information closely to help identify any trends in activity types or occurrences, so that they can plan to address them with appropriate actions.
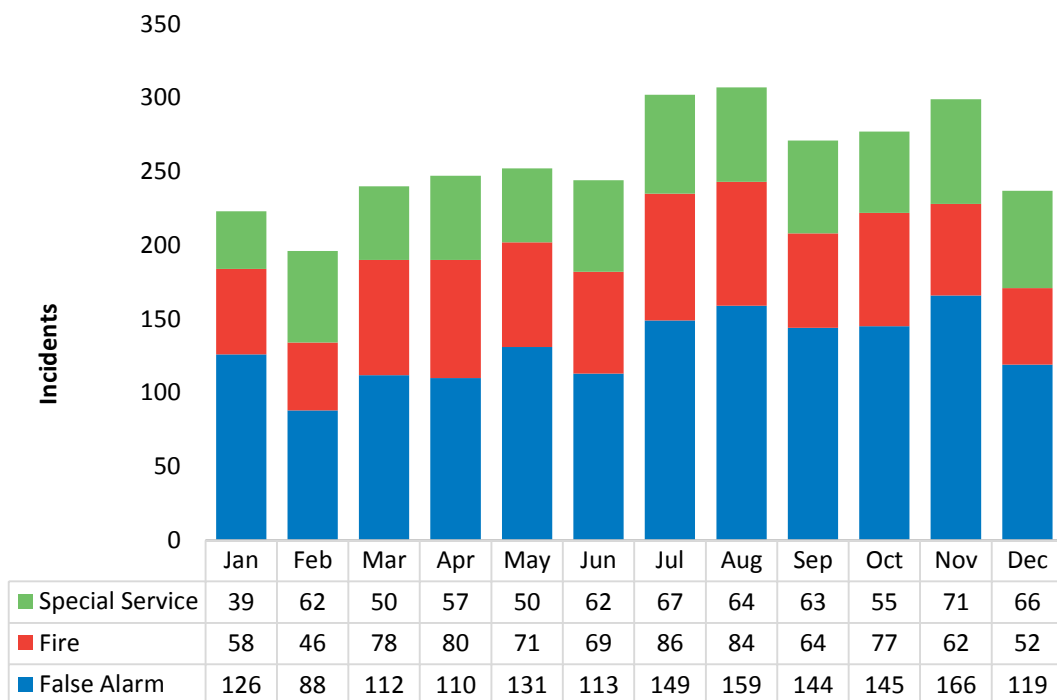
Graph 7 Kidderminster Fire Station area - Hour of the Day Incidents Occurred 2012/13 to 2016/17

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
■ Special Service	16	23	12	5	2	6	5	14	31	30	40	40	40	36	41	56	46	35	46	48	41	38	26	29
■ Fire	31	22	20	14	11	7	7	16	17	24	26	27	40	58	50	41	57	64	61	58	48	50	44	34
■ False Alarm	34	36	24	26	27	28	55	63	36	82	106	118	102	90	87	83	73	98	71	85	60	73	57	48
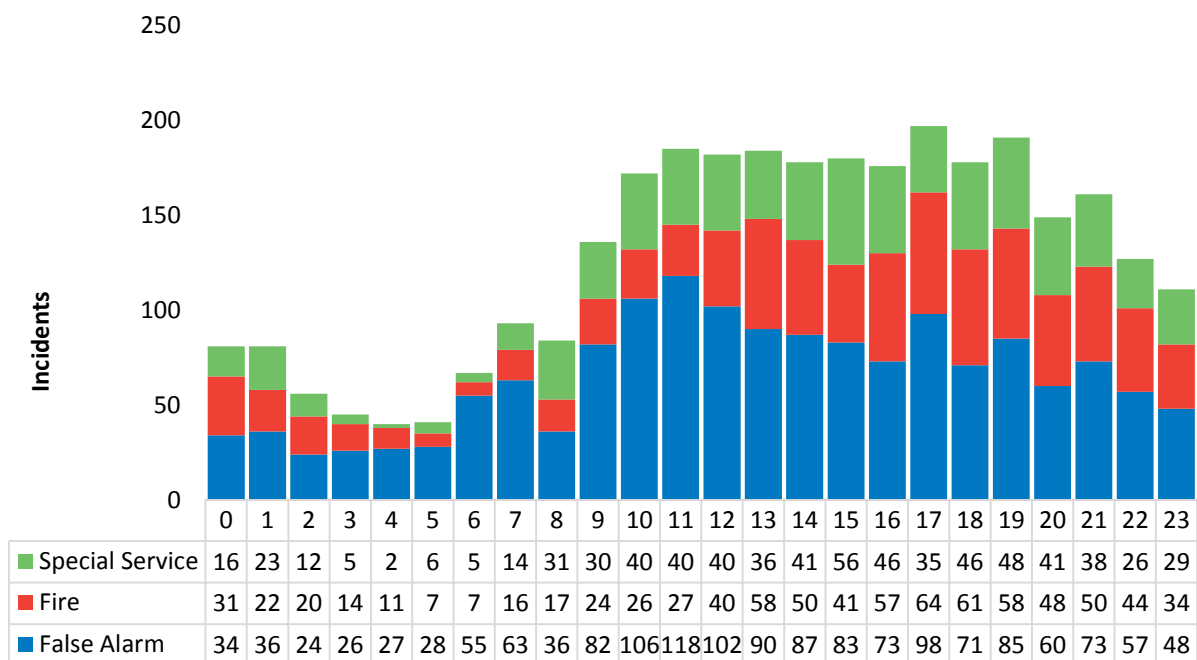
Graph 8 Kidderminster Fire Station area – Day of the Week Incidents Occurred 2012/13 to 2016/17

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
■ Special Service	144	125	115	121	138	98	114
■ Fire	166	192	180	192	172	195	199
■ False Alarm	301	331	328	313	358	312	311

Graph 9: Kidderminster Fire Station area – Month of Year Incidents Occurred 2012/13 to 2016/17

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
■ Special Service	39	62	50	57	50	62	67	64	63	55	71	66
■ Fire	58	46	78	80	71	69	86	84	64	77	62	52
■ False Alarm	126	88	112	110	131	113	149	159	144	145	166	119

5. Identifying the risk of Accidental Dwelling Fires in the Kidderminster Fire Station area

5.1. This section looks specifically at Accidental Dwelling Fires and the potential risks within the Kidderminster Fire Station area. While the number of Accidental Dwelling Fires is showing a slightly upward trend, as shown in Graph 10 below, the latest figures show that there is almost four a month in the Kidderminster Fire Station area. 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: Kidderminster Fire Station area – Accidental Dwelling Fires 2009/10 to 2016/17
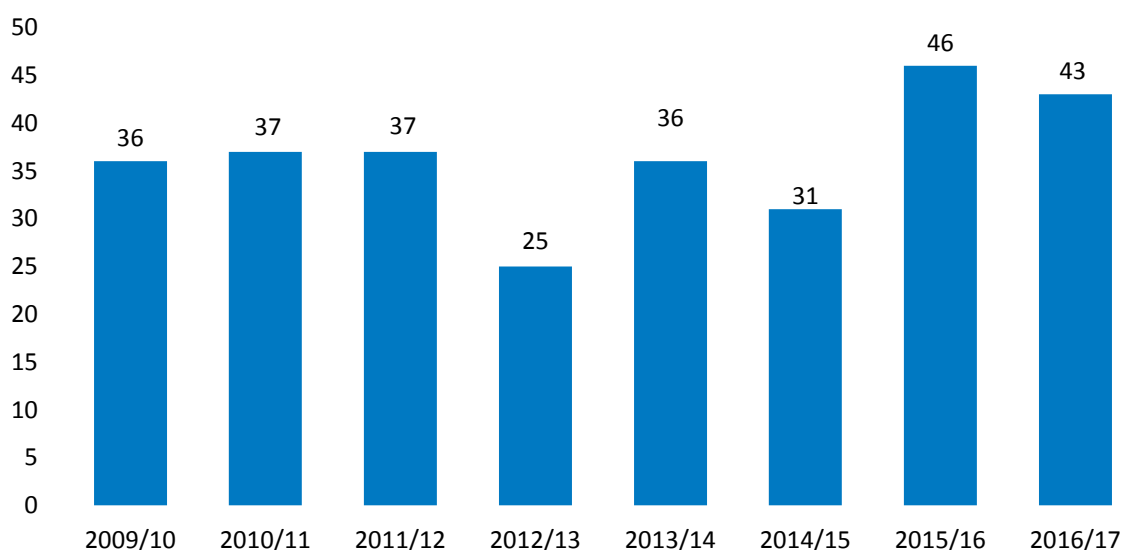
5.2. Graph 10 shows that the number of Accidental Dwelling Fires, for the Kidderminster Fire Station area has fluctuated over 8 years from 2009/10 to 2016/17. While there were 43 Accidental Dwelling Fires in 2016/17, this equates to over 1 incident per every 1,000 households.

5.3. The CRMP Risk Review 2018 has mapped the incidence of Accidental Dwelling Fires across the two counties and has assigned risk ratings to highlight those areas that are at high, medium and low risk. This is 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.

5.4. The analysis for the Kidderminster Fire Station area shows that most areas are at low risk of Accidental Dwelling Fire. However, it also shows that a small number of areas are considered to be at medium and high 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.**

5.5. Table 1 below provides a list of those areas within the Kidderminster Fire Station ground that have been considered to be at Medium and High risk at some point during the last eight years. It can be seen that on three occasions 'Franche and Habberley North' area has been considered to be at High risk.

Table 1: Areas most at risk of fire 2009/10 – 2016/17

| Local Authority	Ward	LSOA name	Risk 2009/10 - 2011/12	Risk 2010/11 - 2012/13	Risk 2011/12 - 2013/14	Risk 2012/13 - 2014/15	Risk 2013/14 - 2015/16	Risk 2014/15 - 2016/17	Overall Score
Wyre Forest	Franche & Habberley North	Part of Franche, Wolverley Road	M	M	H	M	H	H	3
Wyre Forest	Wyre Forest Rural	Churchill & Stone	M	H	H	M	L	L	2
Wyre Forest	Blakebrook & Habberley South	Park Lane & Park Street	H	M	M	M	M	M	1
Wyre Forest	Blakebrook & Habberley South	Blakebrook	M	M	M	H	M	M	1
Wyre Forest	Franche & Habberley North	Low Habberley	H	M	L	L	M	M	1
Wyre Forest	Broadwaters	Broadwaters	L	M	M	H	M	M	1
Wyre Forest	Foley Park & Hoobrook	Sutton Farm	M	M	M	M	M	M	0

5.6.   The Medium and High risk areas for 2014/15 to 2016/17 are shown on Map 2 below.

Map 2: Kidderminster Fire Station area – Medium and High Risk areas 2014/15 to 2016/17
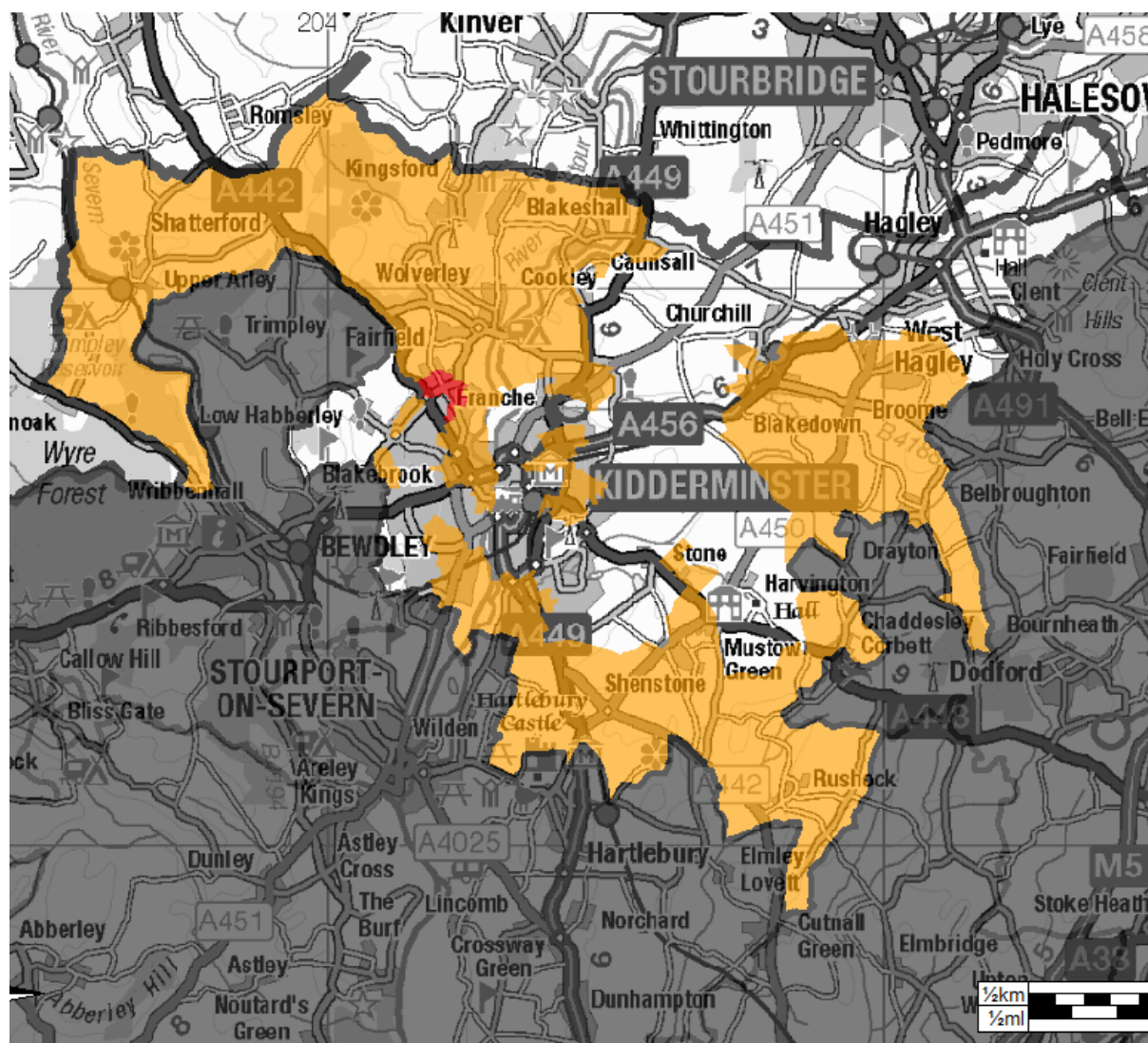
5.7.   In addition to mapping areas at risk, the CRMP Risk Review also examined the characteristics of households that tend to have more Accidental Dwelling Fires than others. Among these characteristics are families living on low incomes striving to make ends meet, elderly people with varying levels of social need and dependence, and families and single people renting low value homes and flats with a high level of need. The fire risk model includes various levels of deprivation and is able to map the areas where such households tend to live across the two counties. Map 3 below provides hotspots of locations where such households live in the Kidderminster Fire Station area. There is some correlation with the High and Medium risk areas identified in Map 2.

Map 3: Kidderminster Fire Station area – Areas for targeted Fire Prevention Activity


Key

Low ⇐ ⇒ High
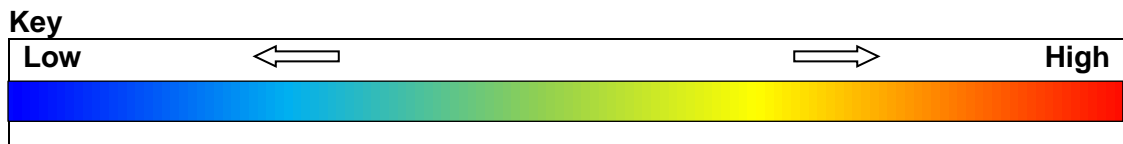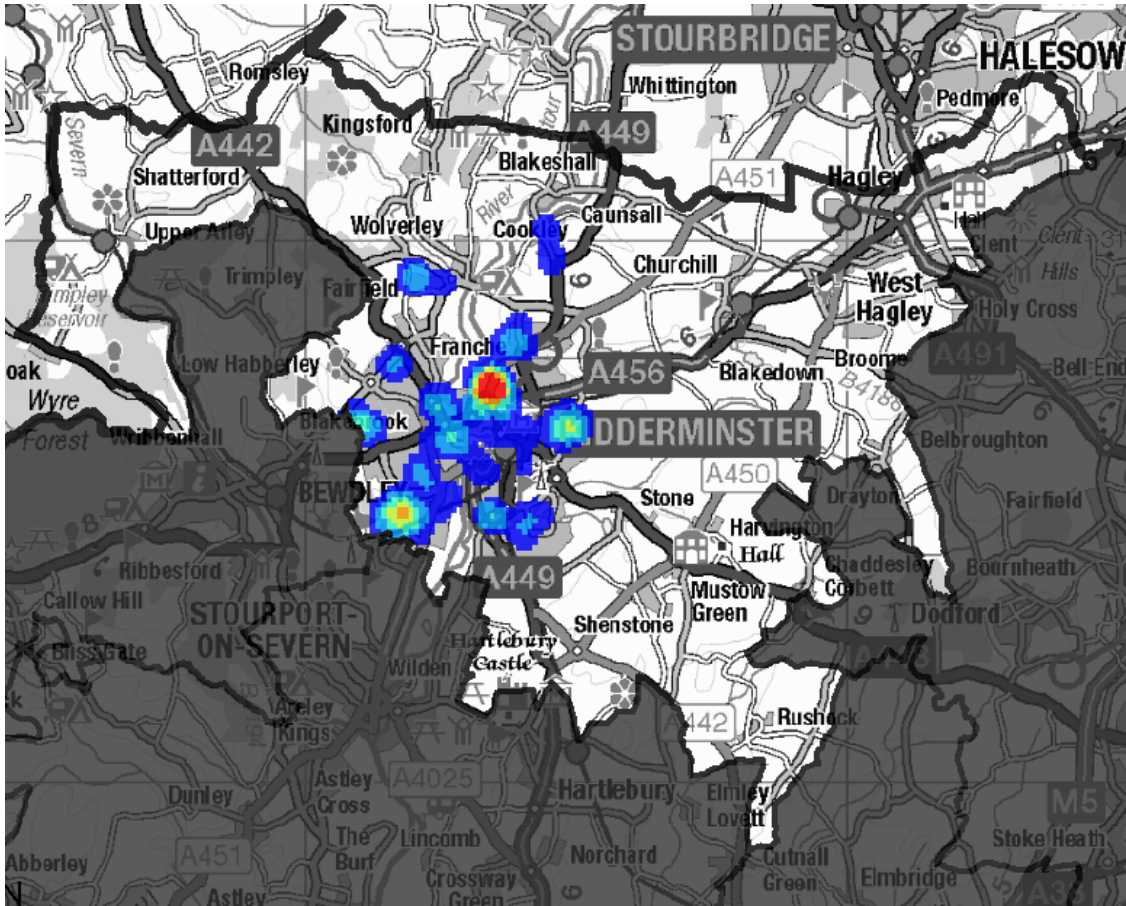
5.8. The map above shows where hotspots of areas with households that share some of the characteristics of those households which tend to have more Accidental Dwelling Fires than others. The hotspots show how concentrated the data is, graduating from **high** (i.e. where such households occur most frequently) to **low** (i.e. where such households occur least frequently). Where no colour is shown, this indicates that the area does not have households who share the at risk characteristics, though experience shows that fire can affect any household anywhere.

5.9. 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.

6. Road Traffic Collisions attended in the Kidderminster Fire Station area

6.1. The CRMP Risk Review 2018 identified the Kidderminster Fire Station area as a Low risk area for Road Traffic Collisions (RTCs) in 2014/15 – 2016/17, having reduced from being a High risk area over the previous four years. 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 4 below shows the location of all RTCs that occurred within the Kidderminster Fire Station area over the last eight years (2009/10 to 2016/17). The hotspots tend to be concentrated in Kidderminster Town centre, along the main routes into and out of Kidderminster.

Map 4: Kidderminster Fire Station area – RTC Hotspots 2009/10 to 2016/17

Key

Low	⟸	⟹	High
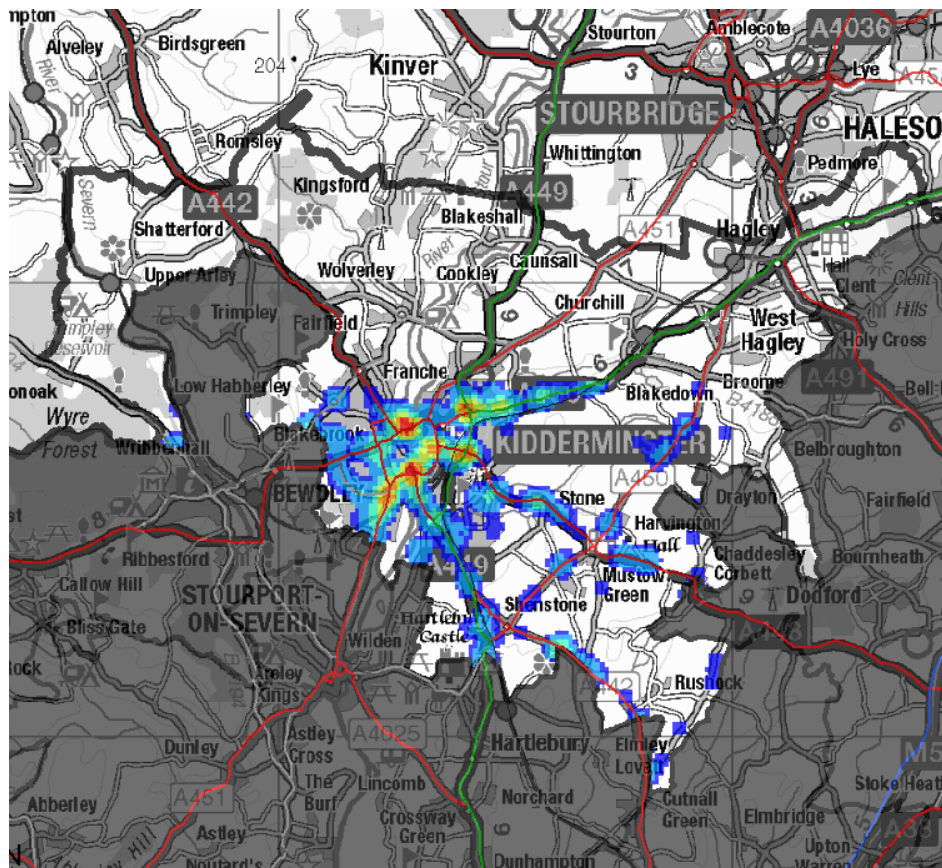
6.2. The map shows hotspots ranging from **high** (i.e. where RTCs occurred most frequently) graduating to **low** (i.e. where RTCs occurred least frequently). Where no colour is shown, this indicates that the area did not have RTCs incidents in the last eight years.

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 Risk Incidents

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, wildfire and heritage buildings.

7.2. In the Kidderminster Fire Station area, the main risks relate to the river and canal within the Station Area, as well areas road ways prone to flooding, while wildfire tends to be less prevalent. 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. Map 5 below shows the location of all water incidents involving life risk that have occurred within the Kidderminster Fire Station area over the last eight years.

Map 5: Kidderminster Fire Station area – Water-related life risk incidents 2009/10 to 2016/17


Key

Low	⇐	⇒	High
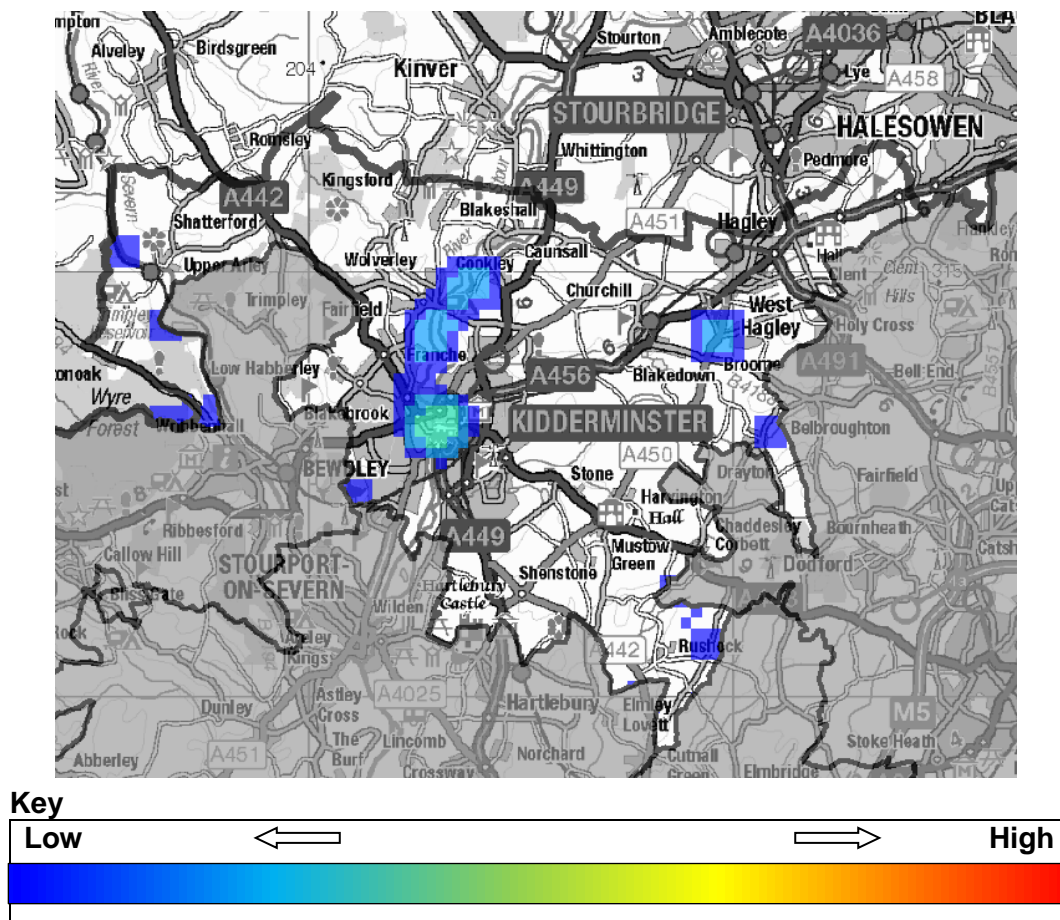
7.4. The main water sources within this area are the River Stour and the Staffordshire and Worcestershire Canal. Map 5 shows the hotspots of water rescues between 2009/10 and 2016/17, which highlights the River Stour where multiple rescues have occurred.

7.5.   As with the maps of Accidental Fires and RTCs, the maps of water rescues can be expanded to show incidents in more detail, which will assist Station Commanders in familiarising crews with areas of concern and in working with the Community Risk department and partner agencies to carry out preparatory and preventative work and raise awareness within the local community.

7.6.   Other water-related incidents include rescues of people from flooded properties, fords, 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.

Flooding Areas

7.7.   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.

7.8.   Map 6 below shows the area most likely to flood, which are primarily along the course of the Rivers Stour and its tributaries.

Map 6: Kidderminster Fire Station area – Flooding areas identified by the Environment Agency
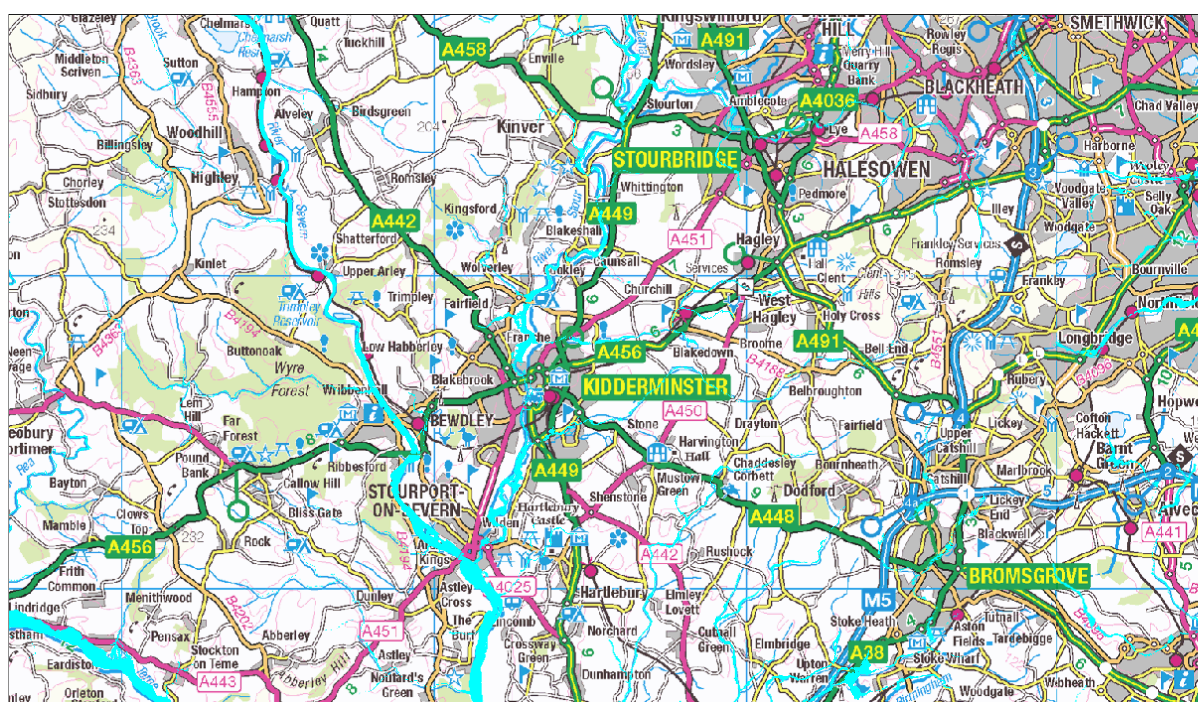
7.9.   Information about areas likely to flood is used during flood planning with water safety partners and can be used as part of the Home Fire Safety Checks (Safe and Well Checks) carried out with residents in these areas. This would include information on flood risk and advice on early evacuation 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, Kiddermister Fire Station crews and the Community Risk department will be involved in a range of activities including the following:

a) NFCC Community Risk Calendar 2018

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 2018 Calendar can be found in Appendix 2 of this report.

b) Home Fire Safety Checks (Safe and Well Checks)

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

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 Kidderminster Fire Station are listed on the Mobile Data Terminals and on the Service intranet at the following link: Kidderminster 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

These involve Technical Fire Safety officers conducting risk based 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[1]

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

e) <u>Business Fire Safety Checks</u>

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) <u>Heritage sites</u>

At December 2017, 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 896 in the two counties.

The Kidderminster Fire Station area contains 5 Grade I and 15 Grade II* buildings and sites. Appendix 1 provides a map and list of all such buildings and sites in the Kidderminster 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 and preventative arrangements.

Appendix 1

Grade I and Grade II* Listed Buildings in the Kidderminster Fire Station area

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.

The location of Grade I and II* listed buildings are shown on Map 7 below.

Map 7: Kidderminster Fire Station – Location of Grade I and Grade II* Listed Buildings
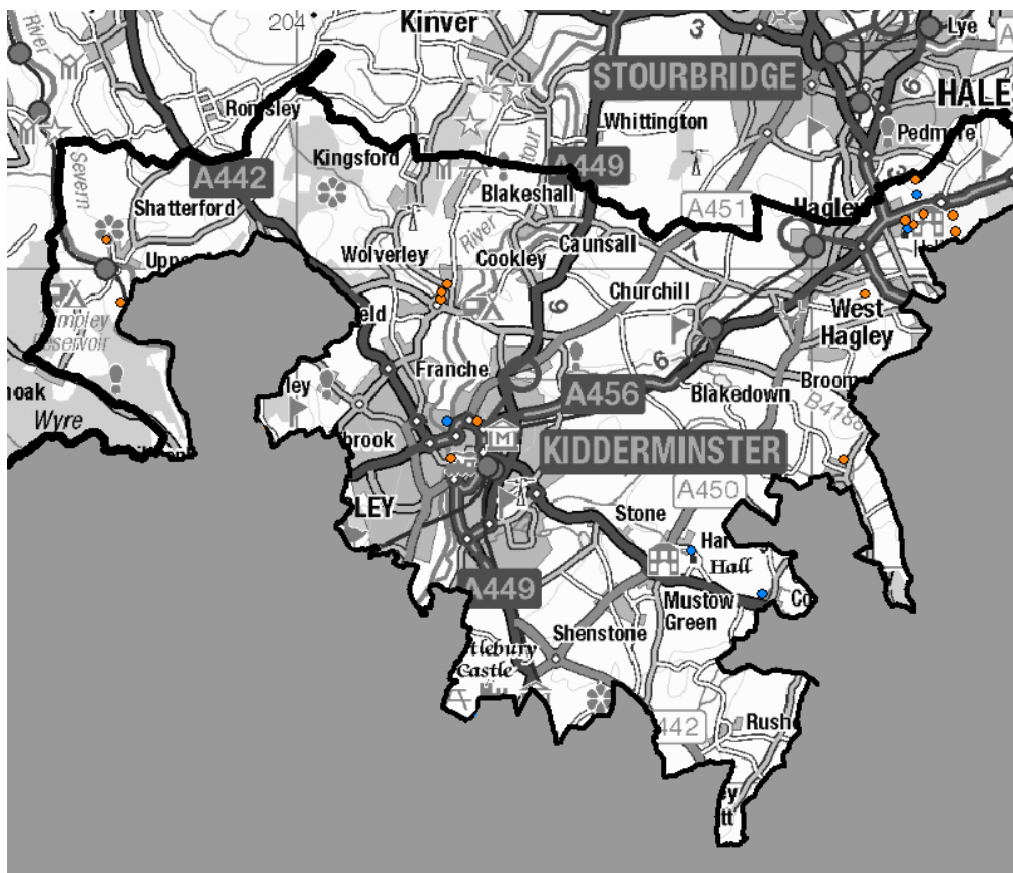
Key

Grade I	🔵	5 buildings
Grade II*	🟠	15 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[2], updated to December 2017. More information can be gained from this website by entering the list entry number into the search facility.

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[2] Listed Buildings Database

Kidderminster – Grade I Listed Buildings

List Entry Number	Grade	Building Name	Eastings	Northings
1100682	1	Church Of St Cassian	389034	273670
1348331	1	Harvington Hall And Attached East Bridge	387656	274510
1100050	1	The Parish Church Of St Mary And All Saints	382918	277022
1296865	1	Hagley Hall	391862	280765
1348599	1	Temple Of Theseus About 1/2 Mile North Of Hagley Hall	392035	281426

Kidderminster – Grade II* Listed Buildings

List Entry Number	Grade	Building Name	Eastings	Northings
1167066	2*	Drayton House	390625	276277
1179037	2*	Caldwall Hall	382989	276302
1100088	2*	Church Of St George	383497	277021
1100657	2*	Victoria Bridge	376569	279329
1348319	2*	Church Of St John The Baptist	382791	279392
1166943	2*	Field House	391040	279499
1172811	2*	Oak House, The Court House And The Old School House	382808	279537
1172767	2*	Wolverley House	382920	279694
1100637	2*	Church Of St Peter	376290	280548
1348597	2*	The Castle About 3/4 Mile East Of Hagley Hall	392799	280709
1100106	2*	Church Of St John The Baptist	391978	280844
1167568	2*	The Old Dairy About 120 Yards North Of Hagley Hall	391814	280929
1348598	2*	The Rotunda About 1/2 Mile North-East Of Hagley Hall	392736	281028
1167574	2*	Prince Of Wales Column	392170	281051
1167587	2*	Obelisk About 3/4 Mile North Of Hagley Hall	392004	281721

Appendix 2

2018 NFCC Community Risk Calendar