COMMUNITY RISK
MANAGEMENT PLAN 2021-2025

STATION RISK PROFILE 2021
PERSHORE

(Updated October 2021)

HEREFORD & WORCESTER
HWFR
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 other 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 Pershore Fire Station Overview

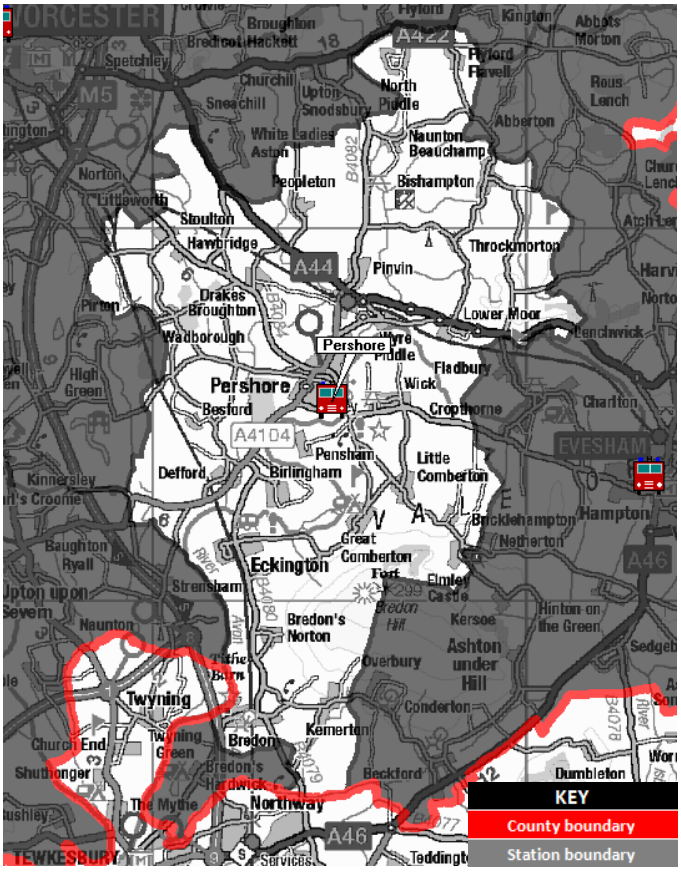
2.1 Pershore Fire Station is located at Defford Road just outside the Town centre. The Fire Station covers a large area of around 55 square miles, which houses 22,750 residents[2] living in 10,400 homes. The latest demographic data for Pershore estimates that 40 per cent residential housing has a head of the household aged over 66. 18 per cent of residential households have a single elderly resident[3].

2.2 The Station has one fire engine which responds to all types of incidents. The crew are trained as Water First Responders who will be deployed to water incidents and as an Animal Rescue team who will respond to incidents involving animals.

2.3 During 2020/21 there were 161 incidents within the Fire Station ground, approximately 2 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 Pershore 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 Pershore Fire Station is crewed by a Retained Duty System crew who can usually respond within six minutes of being alerted.

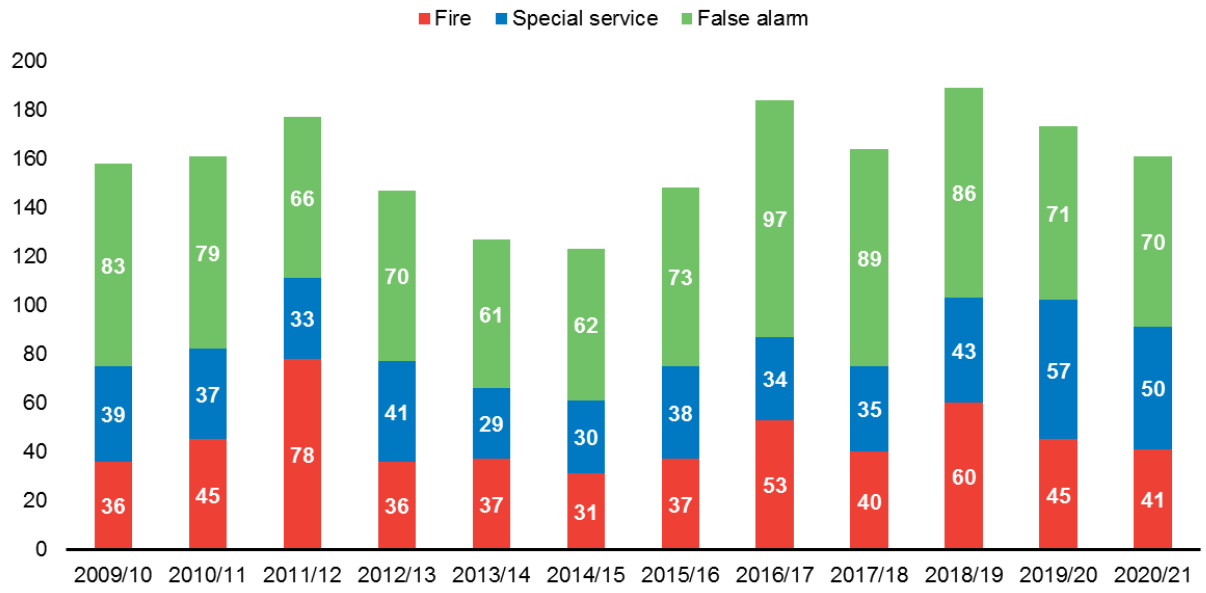
3 Incident Overview

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), crews at Pershore Fire Station attended 1,912 incidents. Just under half of these were false alarms (47.44 per cent), one in three was special service (28.19 per cent) and one in four was fire (24.37 per cent). Over the 12 years, there was a rise in the numbers of fires and special services recorded, and a decrease in false alarms, with an overall increase by 1.90 per cent. Graph 1 below provides further details.

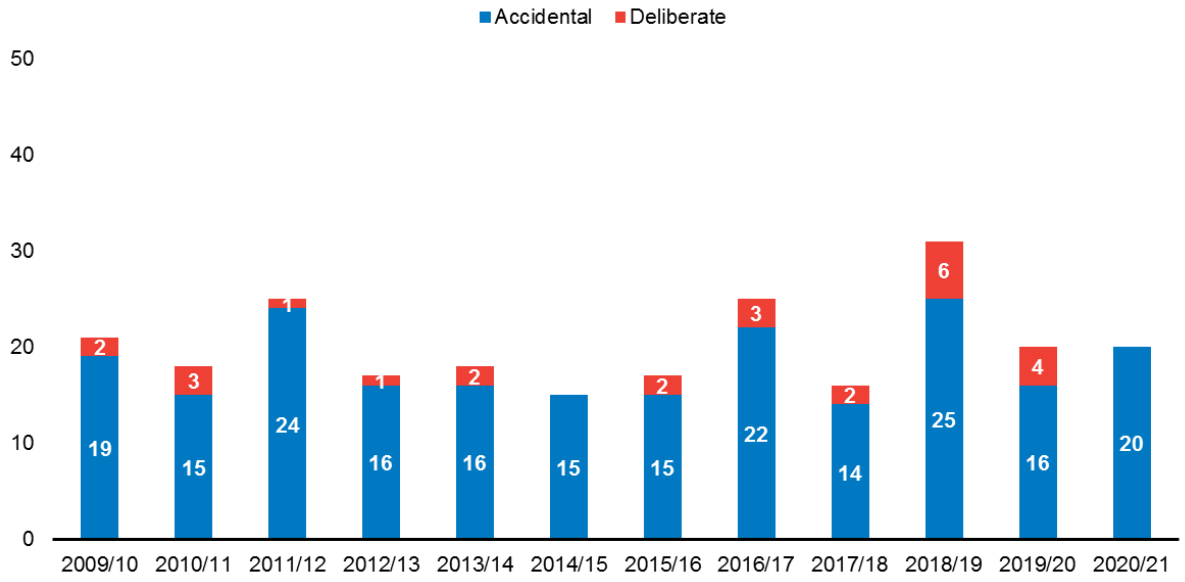
Graph 1: Pershore Fire Station area – Incidents occurred 2009/10 to 2020/21



Fires

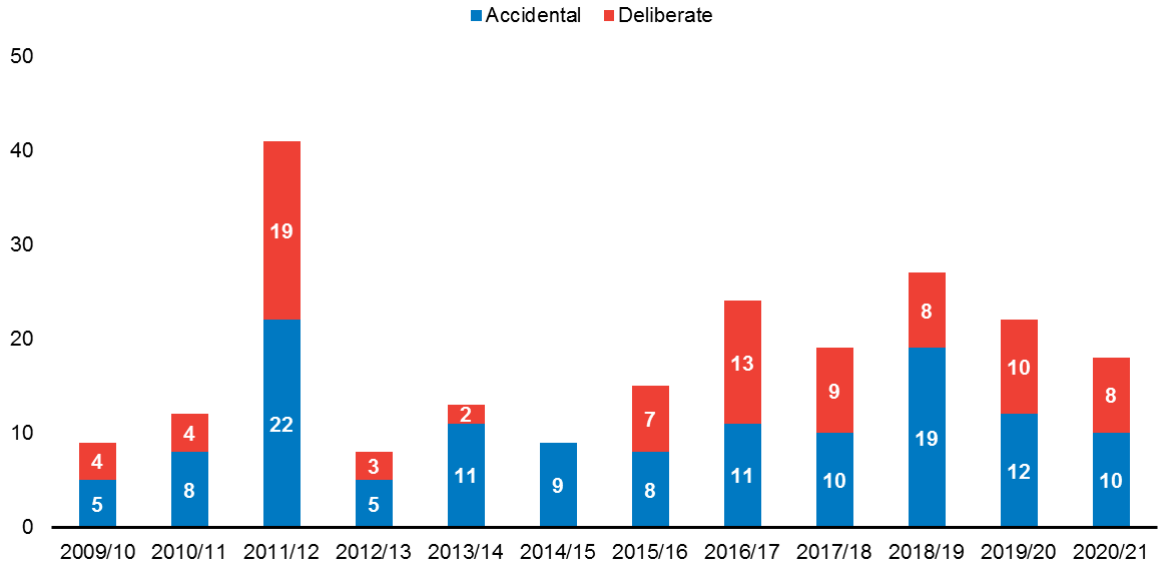
3.3 The fires category is generally broken down into two main types; Primary Fires, which are mainly building fires and vehicle fires, and Secondary Fires, which are outdoor fires affecting areas such as grassland, woodland, crop fields and gardens. Both have fluctuated in the number of incidents attended over the last 12 years but remain relatively low.

Graph 2: Pershore Fire Station area - Primary Fires 2009/10 to 2020/21



3.4 Graph 2 shows a breakdown of Primary Fires for Pershore Fire Station area over the last 12 years. The number of accidental primary fires varies from year to year, with no clear trend. There were no recorded deliberate primary fires for 2020/21 and again there seems to be no clear trend over time.

Graph 3: Pershore Fire Station area - Secondary Fires 2009/10 to 2020/21



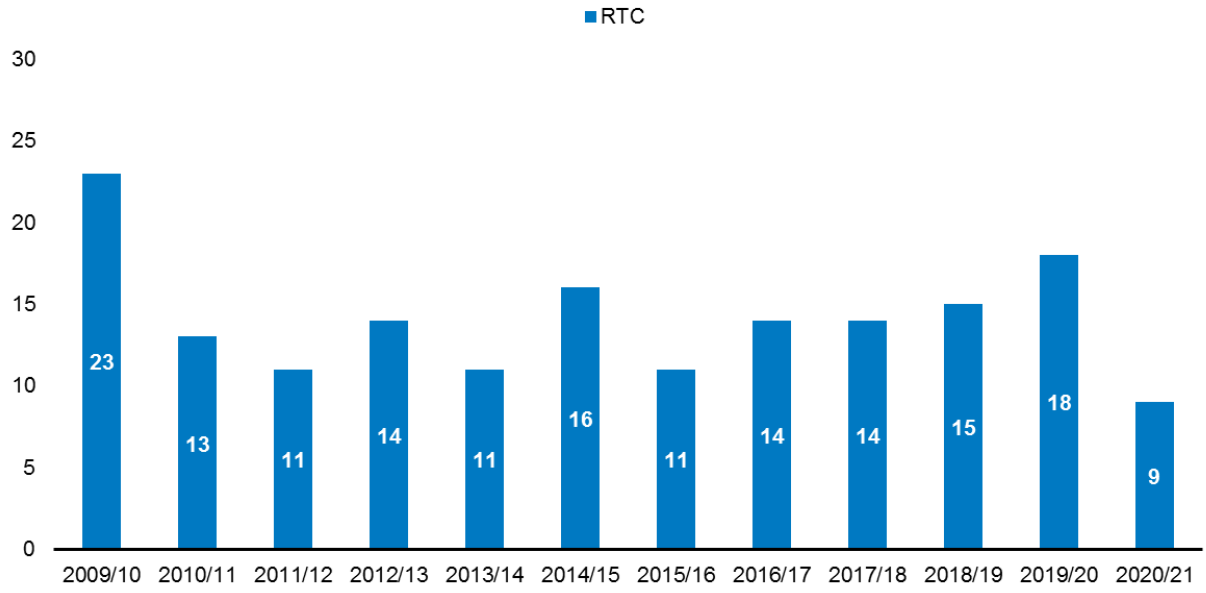
3.5 Graph 3 shows a breakdown of Secondary Fires for Pershore Fire Station area over the last 12 years. Secondary Fires mainly involve loose refuse (typically a bin fire) and grassland fires during warm summer months. The graph shows that the numbers of accidental and deliberate Secondary Fires varied from year to year. However, the deliberate secondary fires were always of a lesser figure than the accidental other than in 2016/17 when there was a spate of small fires in the open being set deliberately.

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.

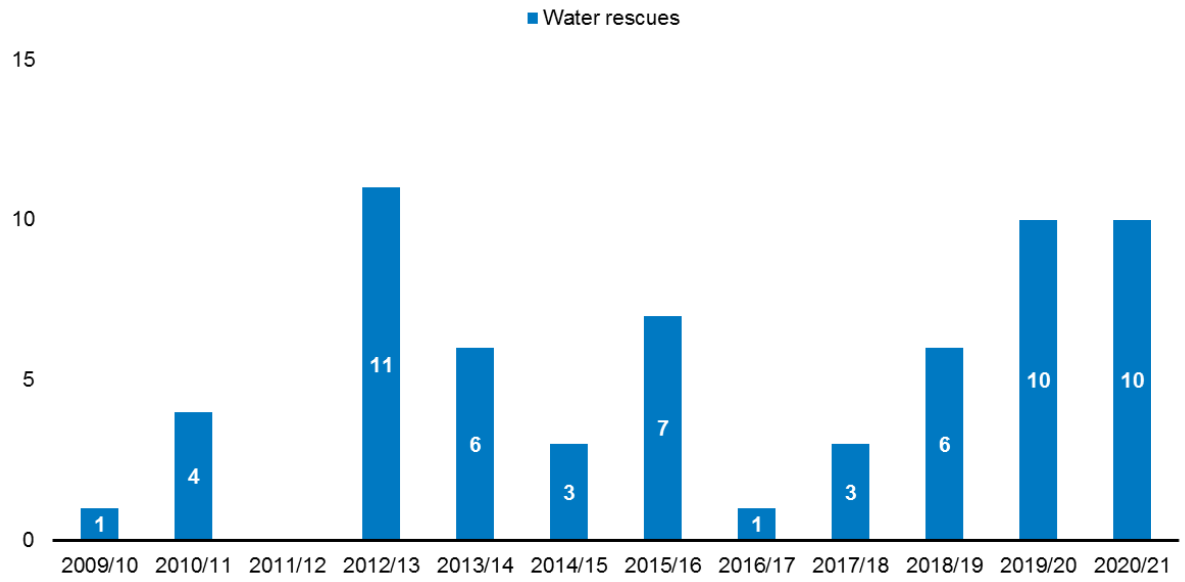
Special Service Incidents

3.7 In terms of Special Service incidents, the two main categories for Pershore Fire Station area involving potential risk to life are Road Traffic Collisions (RTCs) and Water Rescues. Over the last 12 years, the number of RTCs recorded fell by 60.87 per cent as shown in Graph 4 below. Over the same period, the number of incidents involving rescues from water fluctuated with spikes in 2012/13, 2019/20 and 2020/21 due to adverse weather conditions. This is shown in Graph 5 below.

Graph 4: Pershore Fire Station area – Road Traffic Collisions 2009/10 to 2020/21



Graph 5: Pershore Fire Station area – Water Rescues 2009/10 to 2020/21

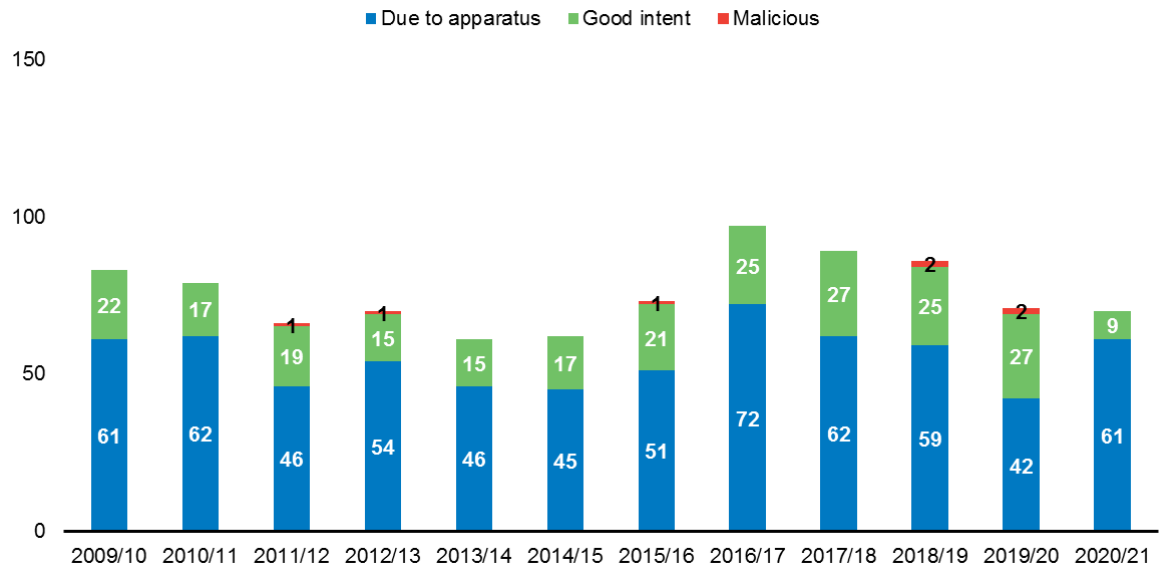


3.8 RTCs and Water Rescues are discussed further in Sections 6 and 7 respectively later in this report.

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 showed a downward trend until 2015/16, where there was a slight increase in 2016/17 and then the trend has been to decrease slowly. The vast majority of False Alarms were False Alarm Due To Apparatus (72.88 per cent).

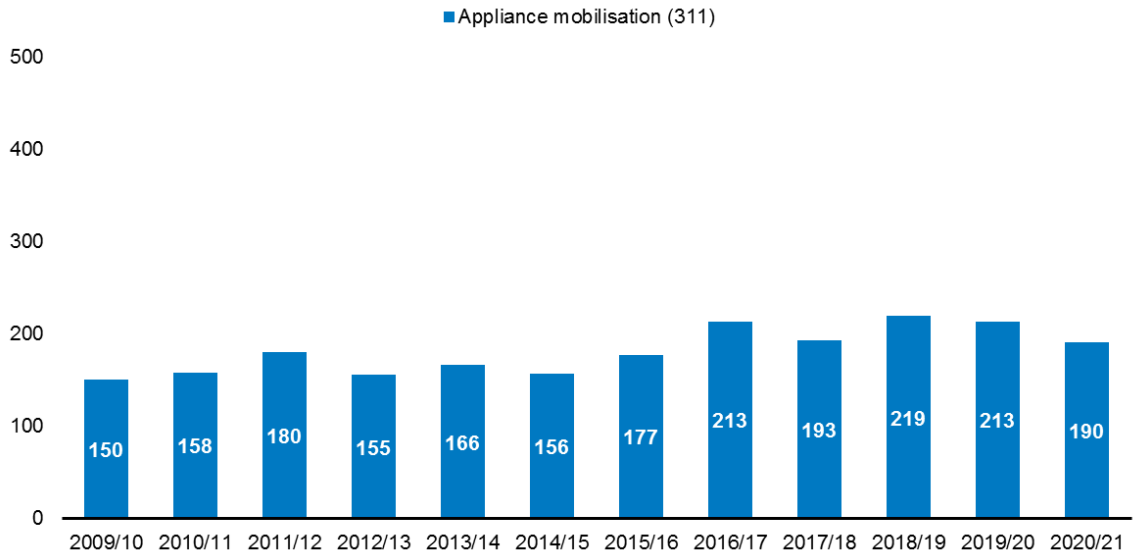
Graph 6: Pershore Fire Station area – False Alarms 2009/10 to 2020/21



Appliance Mobilisation

3.9 Although over the last 12 years (1 April 2009 to 31 March 2021) there were 1,912 incidents within Pershore station area, Pershore's appliance has actually been mobilised 2,170 times.

Graph 7: Pershore Fire Station Activity 2009/10 to 2020/21



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

Table 1: Pershore 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	102	117	133	102	91	96	121	145	134	143	128	125
2nd pump within station area	15	10	10	7	10	10	8	8	7	8	7	8
1st pump in other station areas	6	4	12	14	12	18	12	19	17	21	24	15
2nd pump in other station areas	27	26	25	24	39	17	25	32	25	39	39	38
1st pump over the border	0	1	0	0	0	0	1	0	1	0	0	3
2nd pump over the border	0	0	0	1	2	0	0	0	0	0	0	1
NROB	-	-	-	2	3	1	3	3	2	1	3	
NOTR	-	-	-	5	9	14	7	6	7	7	12	
Total	150	158	180	155	166	156	177	213	193	219	213	190

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

Out of 2,170 Pershore appliance mobilisations, 1,545 were primarily located within Pershore station area (71.20 per cent), followed by Evesham's station ground with 8.62 per cent and Worcester with 6.45 per cent.

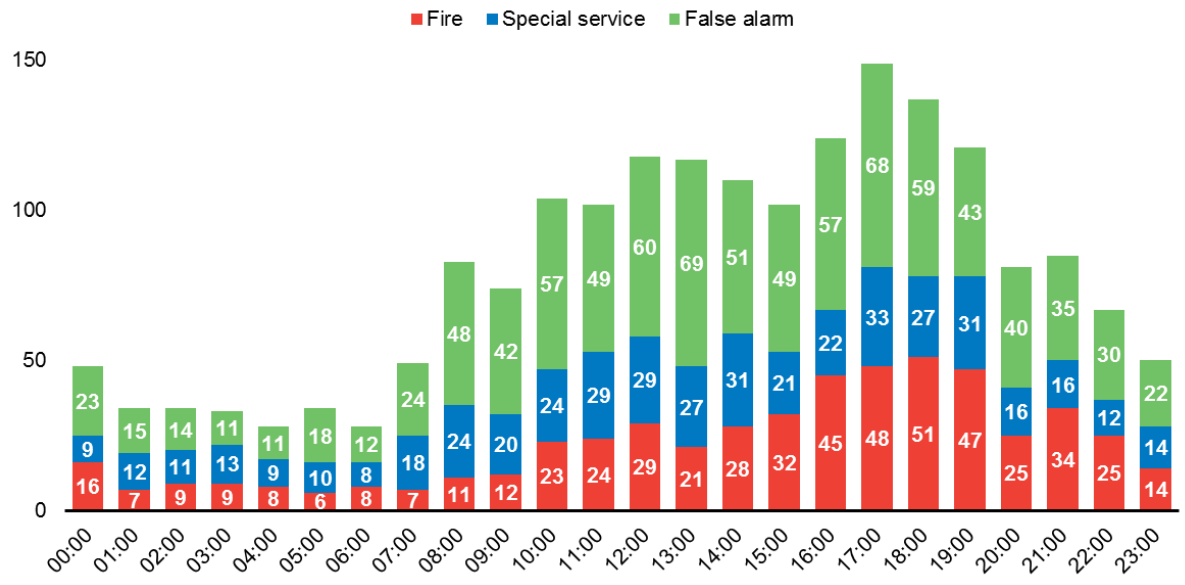
4 Pershore Fire Station Incident Occurrence

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.

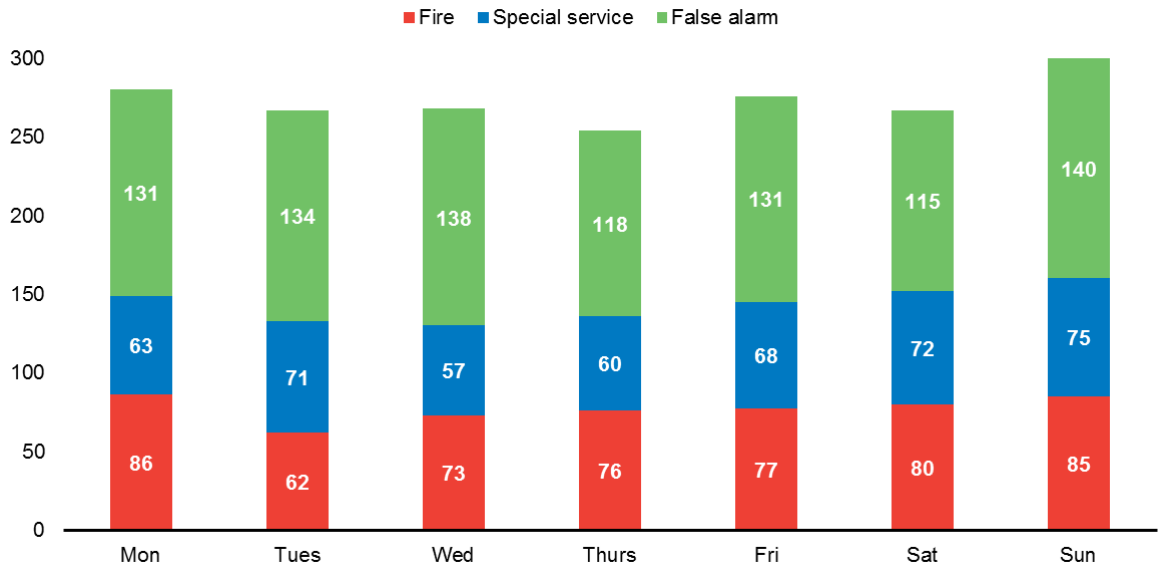
4.2 Using the last 12 years of incident data (2009/10 to 2020/21) for Pershore Fire Station area, incidents can be analysed in detail by time, day and month. This can help to identify particular trends, such as if most incidents are occurring during daylight hours which helps Station Commanders in ensuring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

4.3 The following graphs show the specific hours, days of the week and months when incidents occurred in Pershore 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.

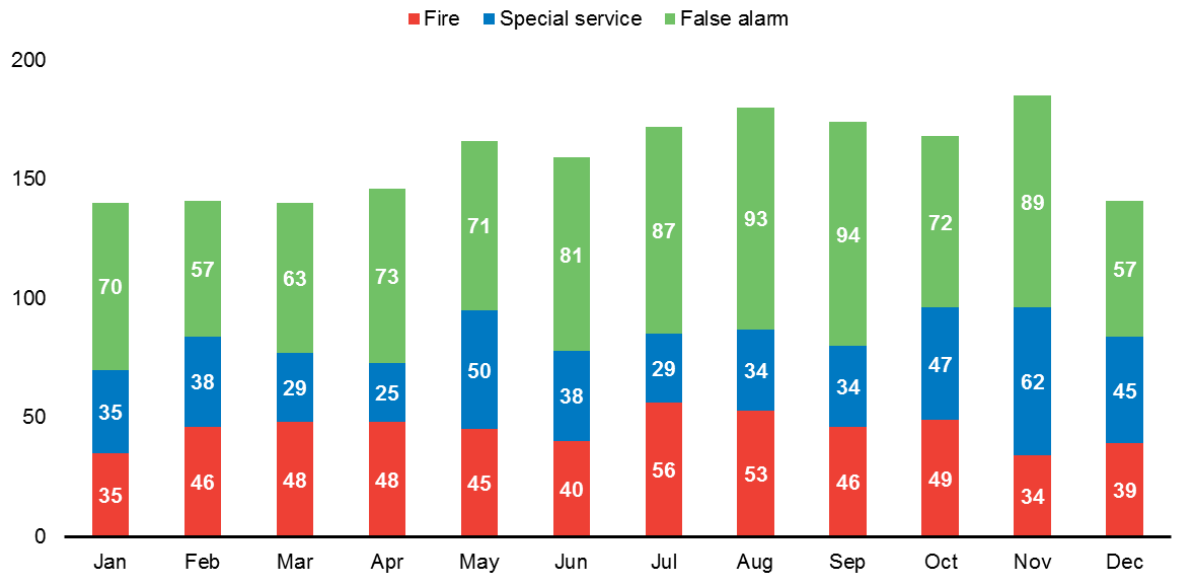
Graph 8: Pershore Fire Station area - Hour of the Day Incidents Occurred 2009/10 to 2020/21



Graph 9: Pershore Fire Station area – Day of the Week Incidents Occurred 2009/10 to 2020/21



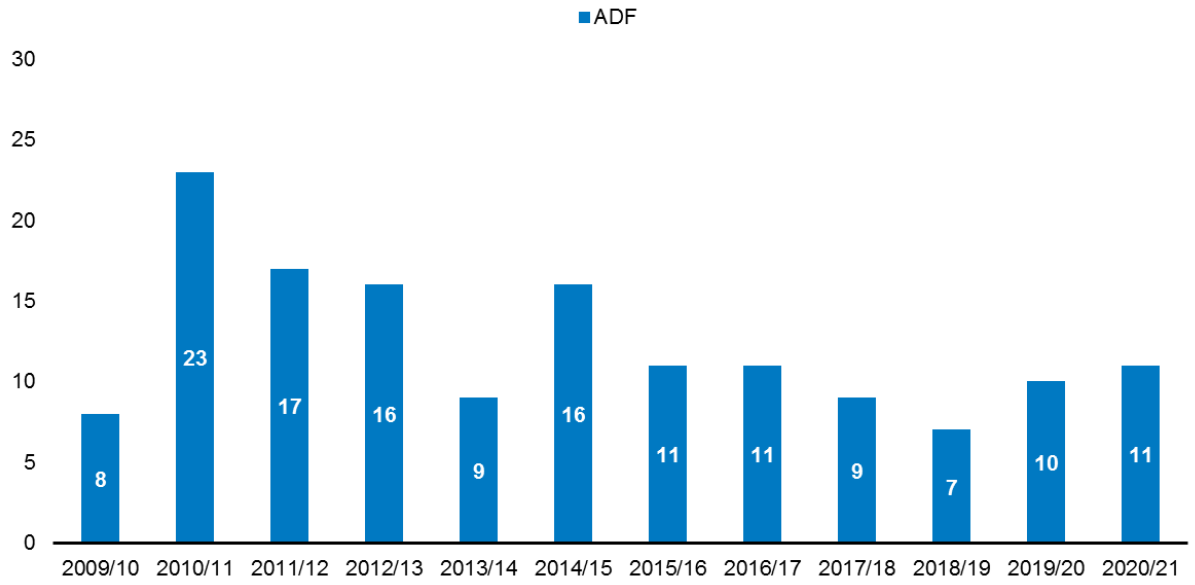
Graph 10: Pershore Fire Station area – Month of Year Incidents Occurred 2009/10 to 2020/21



5 Risks Area In Relation To Accidental Dwelling Fires

5.1 This section looks specifically at Accidental Dwelling Fires and the potential risks within Pershore Fire Station area. Over the last five years there have been, on average, nearly ten Accidental Dwelling Fires every year as shown in Graph 11 below. There were 11 Accidental Dwelling Fires in 2020/21, which equates to 1 incident per every 1,000 households. 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 11: Pershore Fire Station area – Accidental Dwelling Fires 2009/10 to 2020/21



5.1 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.

5.2 The analysis for Pershore Fire Station area shows that there are two areas that have been classified as medium risk by the Fire Risk Model; there were no high risk areas identified. 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 Map 2 where the medium risk areas are shown in blue. Table 2 provides a list of those areas within Pershore 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.

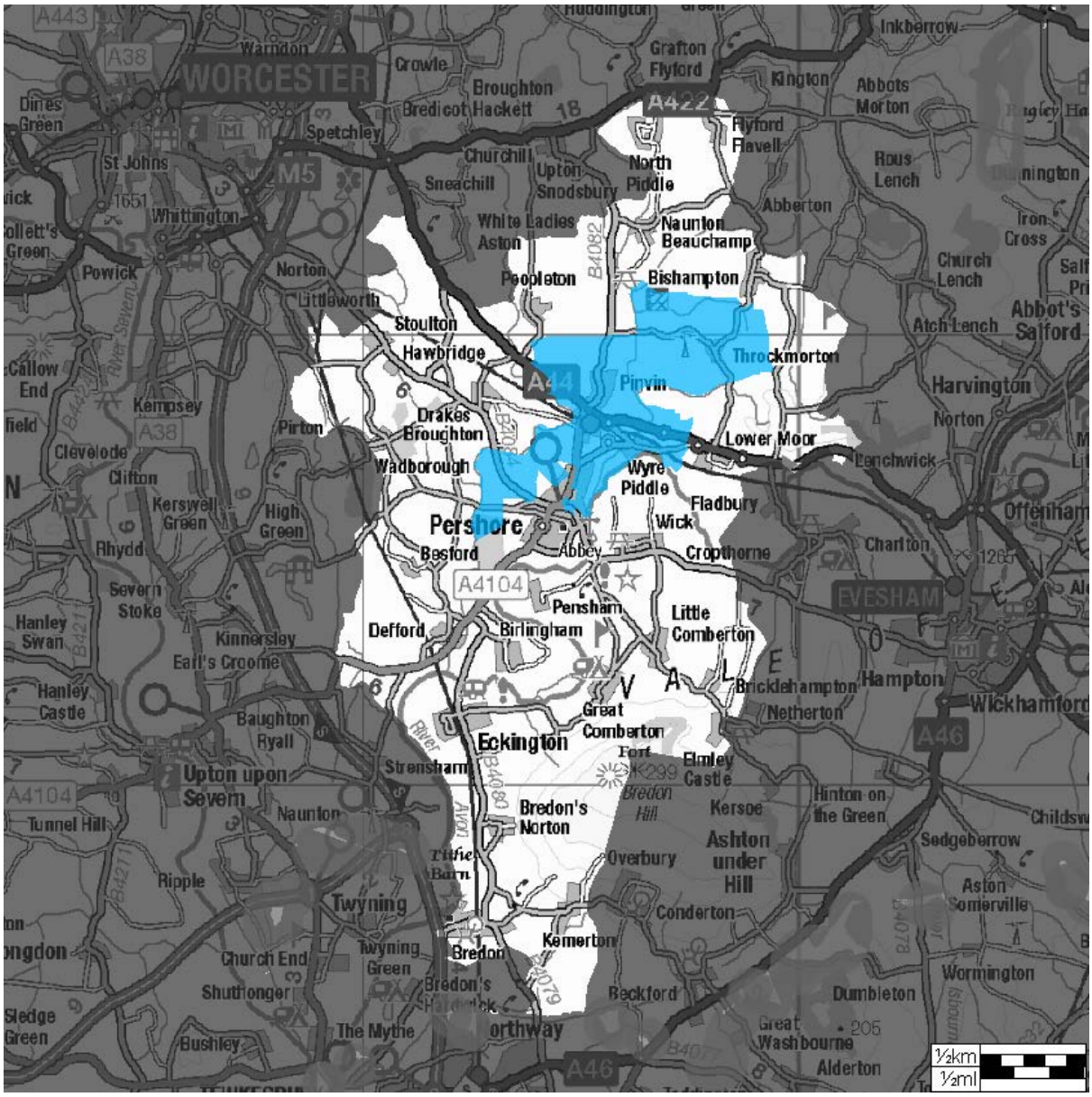
Table 2: Areas most at risk of fire 2015/2018 – 2017/20

Local Authority	LSOA Name	Local area name	LSOA Mosaic Classification[4]	Risk Level 2015/2018	Risk Level 2016/2019	Risk Level 2017/2020
Wychavon	Pershore	Wyre Wood	G Rural Reality	M	M	M
Wychavon	Pinvin	Pinvin & Throckmorton	G Rural Reality	M	M	M
Wychavon	Eckington	Besford, Upper Strensham and the east part of Eckington	A Country Living	M	L	L

5.3 The local areas Wyre Wood and Pinvin & Throckmorton have been classified as medium risk areas. The most common household characteristic for this LSOA is shown as Rural Reality. 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.

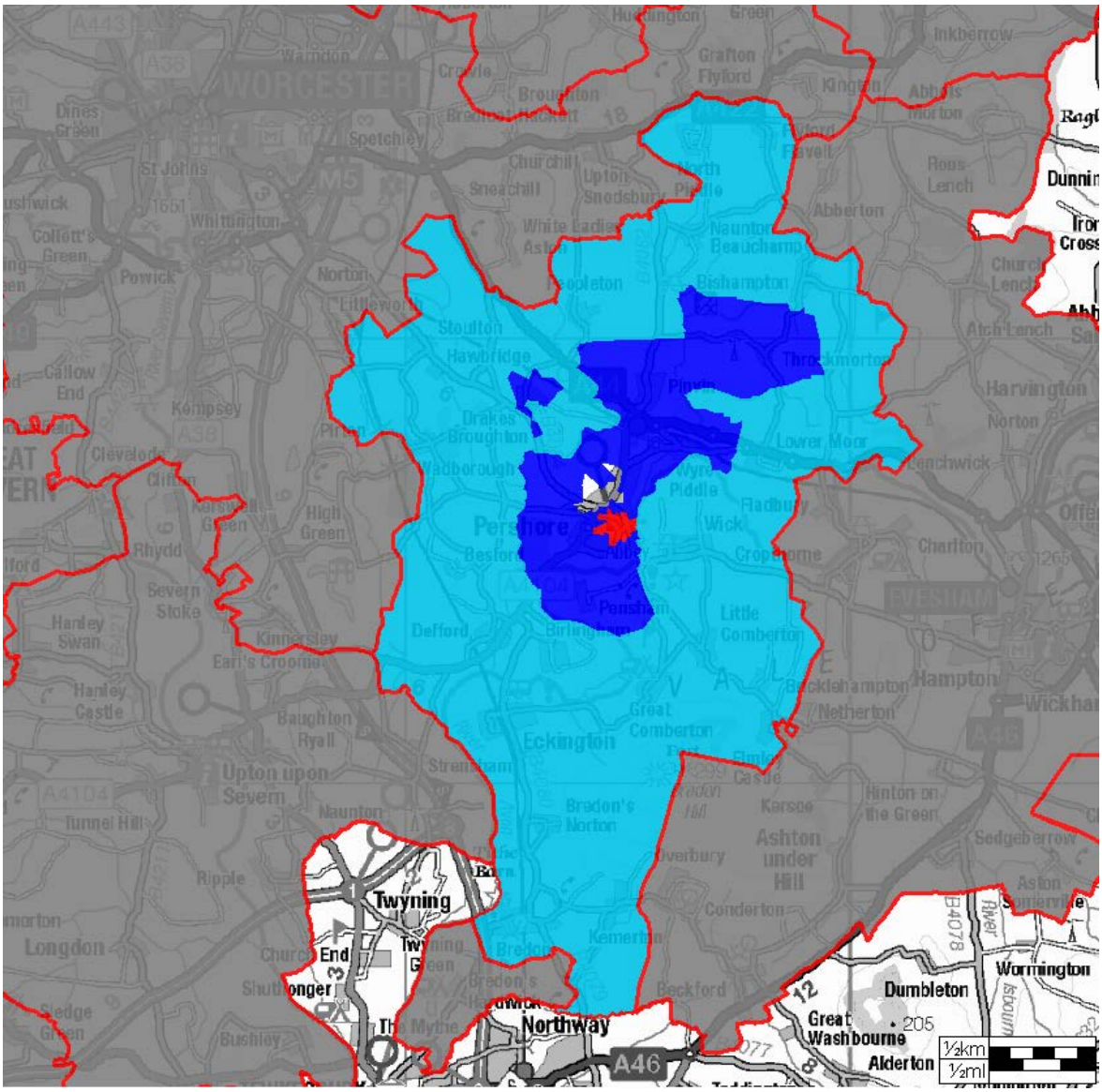
[4] LSOA Mosaic classification was assigned by using the most common household characteristic seen in each LSOA using Experian Mosaic Public Sector 2019. More detail on individual postcodes for more accurate targeting can be requested.

Map 2: Pershore Fire Station area – Risk areas 2017/18 to 2019/20



5.4 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 with the risk areas identified in Map 2.

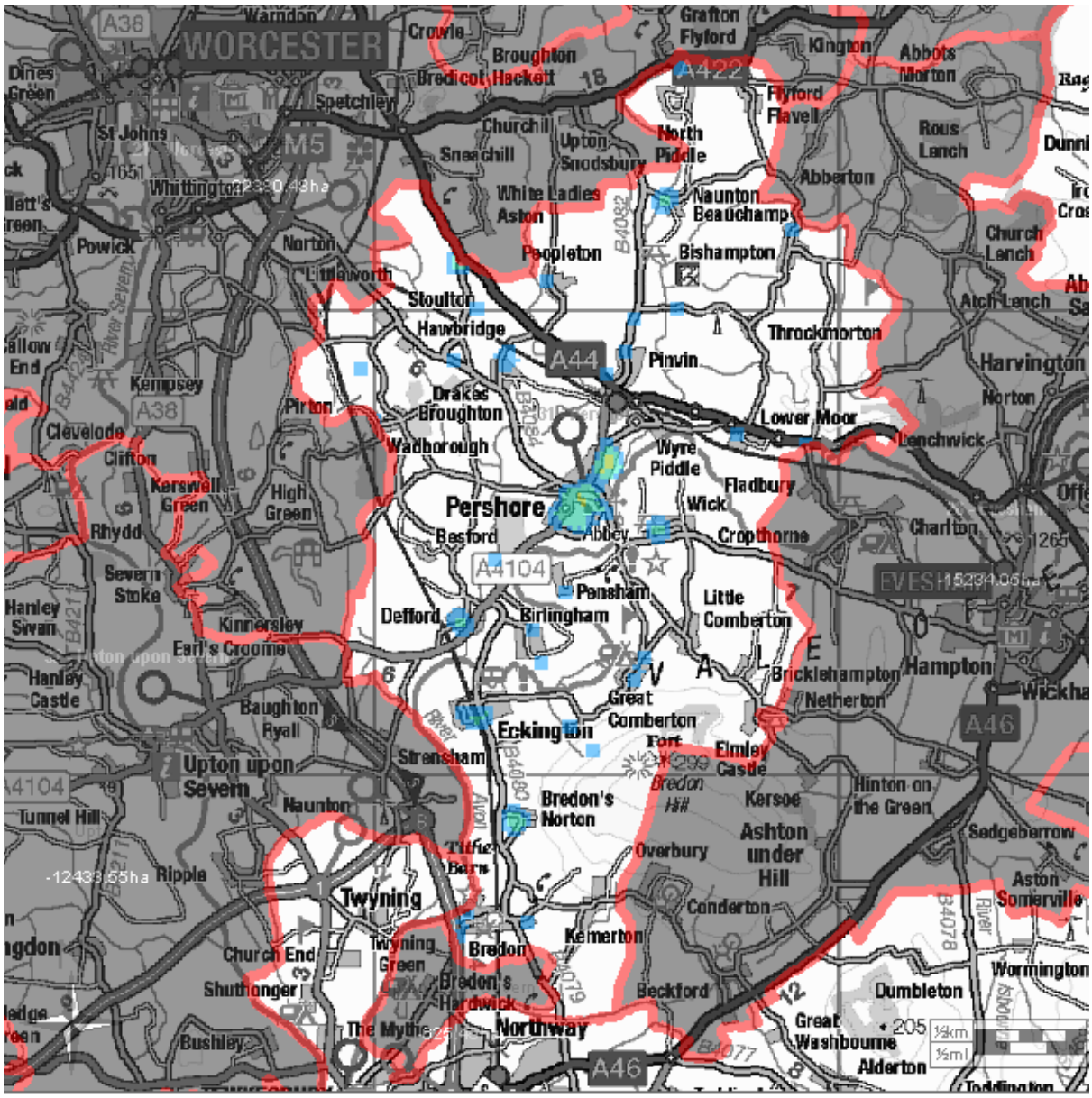
Map 3: At risk LSOA's by Mosaic Group 2017/18 to 2019/20



- A – Country Living
- G – Rural Reality
- J – Rental Hubs
- M – Family Basics
- N – Vintage Value
- O – Municipal Challenge

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

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



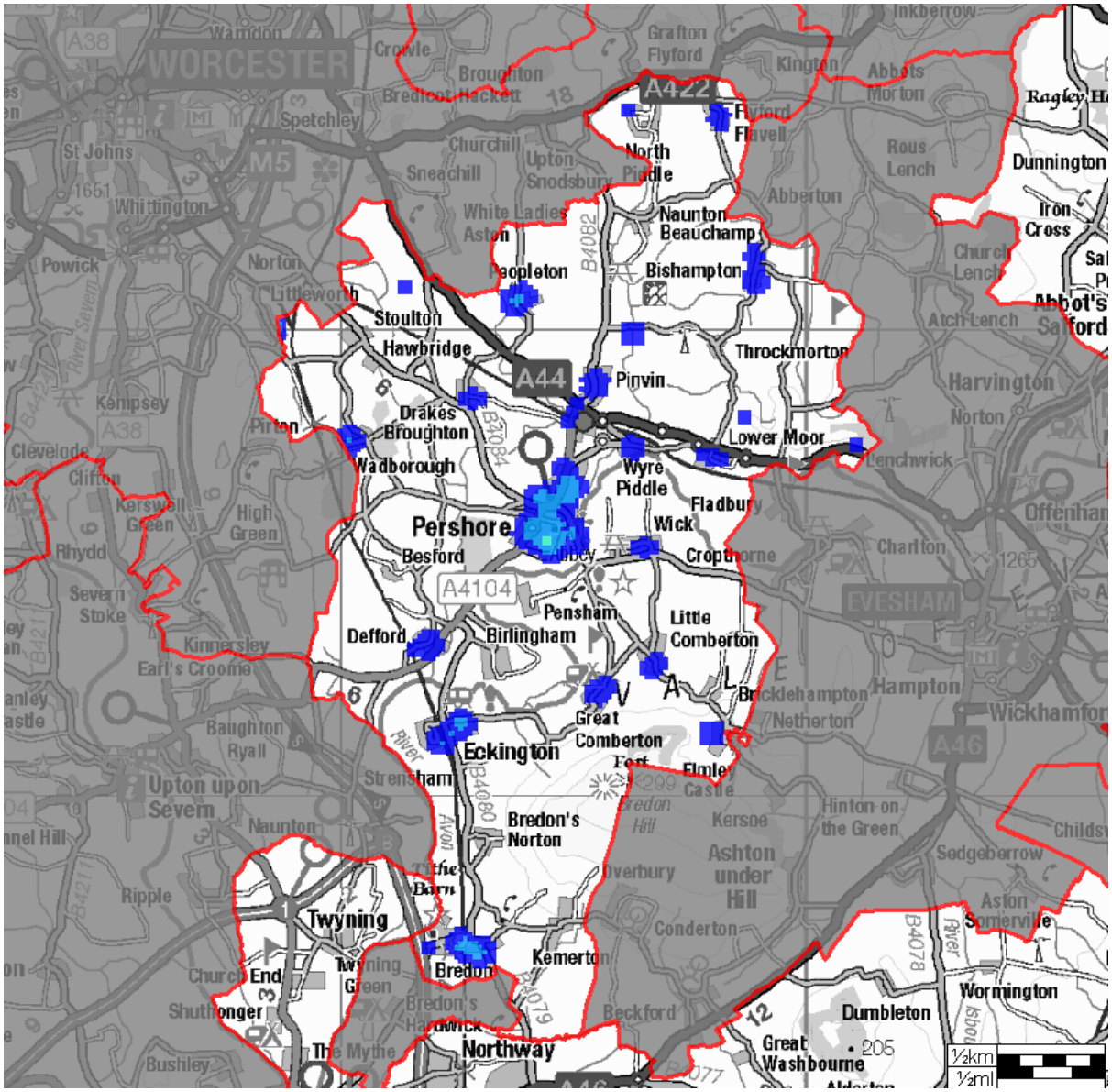
Key

5.6 Map 4 shows the concentration of Accidental Dwelling Fires in Pershore 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.

5.7 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.

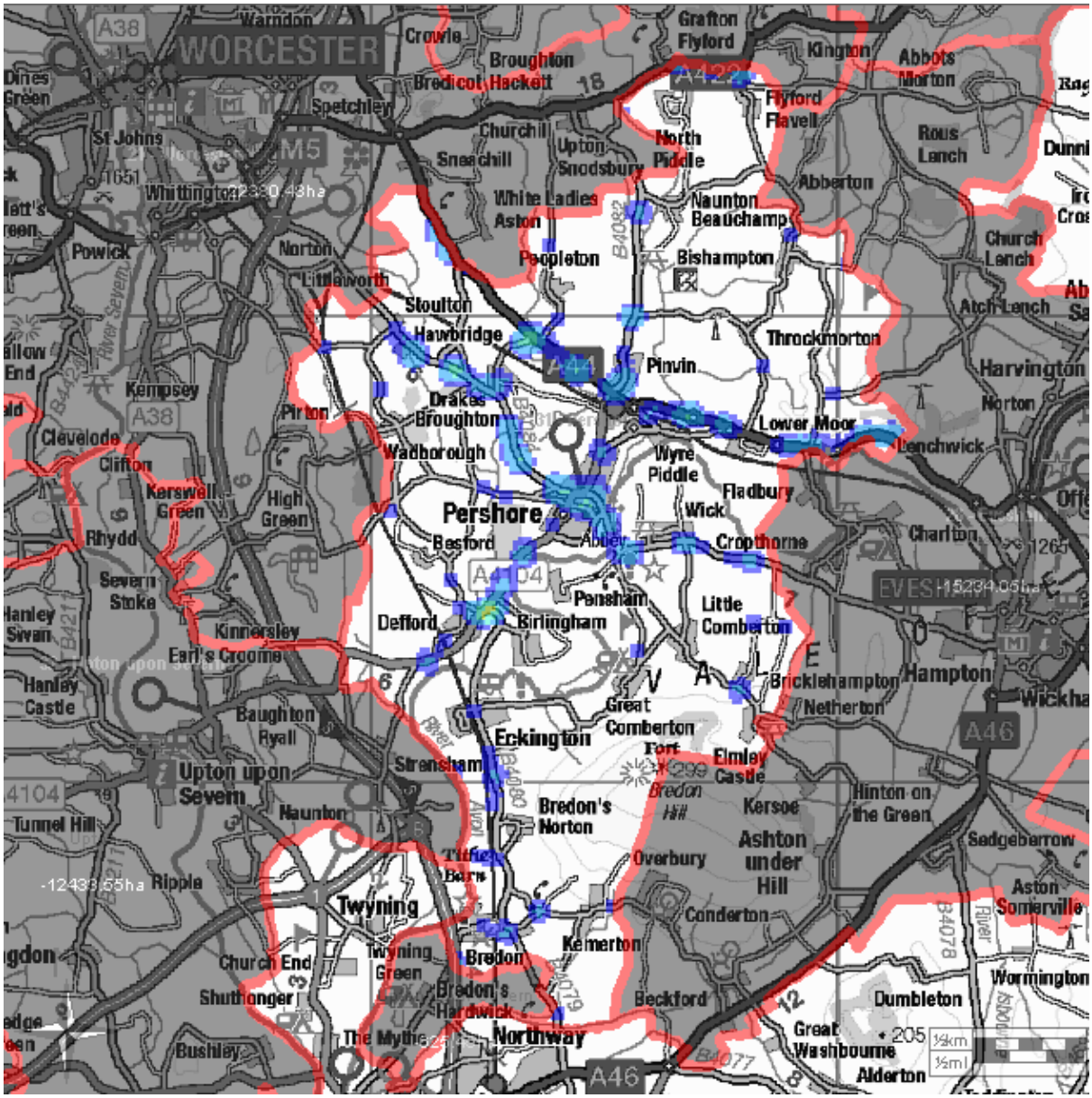
Map 5: Community Risk Activity – Safe and Well Checks 2017/18 to 2019/20



6 Road Traffic Collision Incidents

6.1 The CRMP Risk Review 2018 identified Pershore 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 Pershore Fire Station area over the last 12 years (2009/10 to 2020/21) at 100 m grid cell. The hotspots tend to be concentrated around Pershore Town centre and the main roads passing through Pershore Fire Station area.

Map 6: Pershore 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

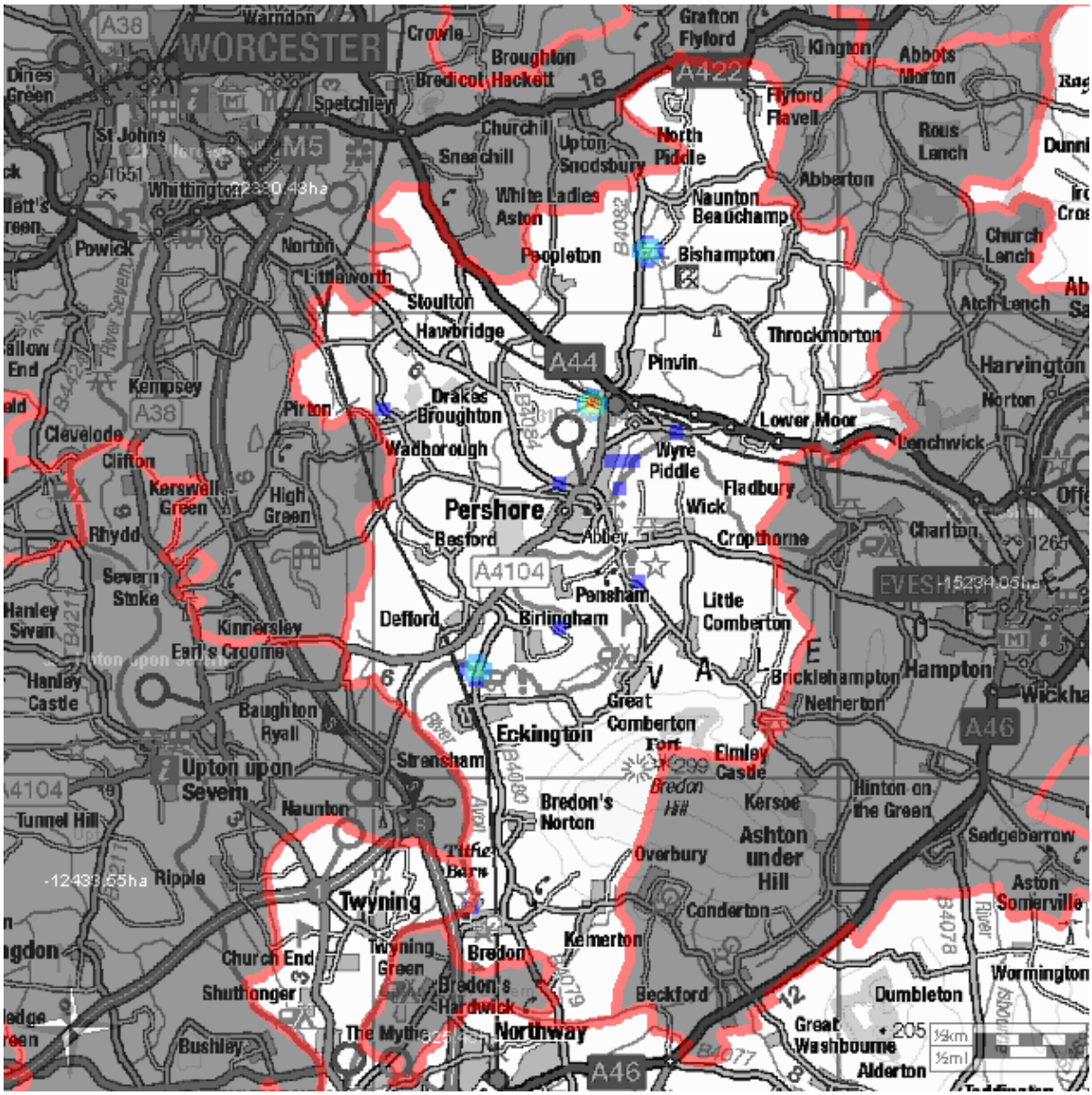
7.1 In addition to Accidental Dwelling Fires and Road Traffic Collisions, the Service attends a number of other incidents which have the potential to harm life and property. Among such incidents are water rescues and weather-related issues such as wide area flooding and wildfire. Heritage buildings also 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 In Pershore Fire Station area, the main risk relates to the River Avon within the Station area, 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 7 below shows the location of all water incidents involving life risk that have occurred within Pershore Fire Station area over the last 12 years (2009/10 to 2020/21) at 100 m grid cell.

Map 7: Pershore Fire Station area – Water-related life risk incidents 2009/10 to 2020/21



Key

7.4 The main water source within this area is the River Avon. Map 7 shows the hotspots of water rescues between 2009/10 and 2020/21, which highlights the River Avon and a ford on Walcott Lane 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.

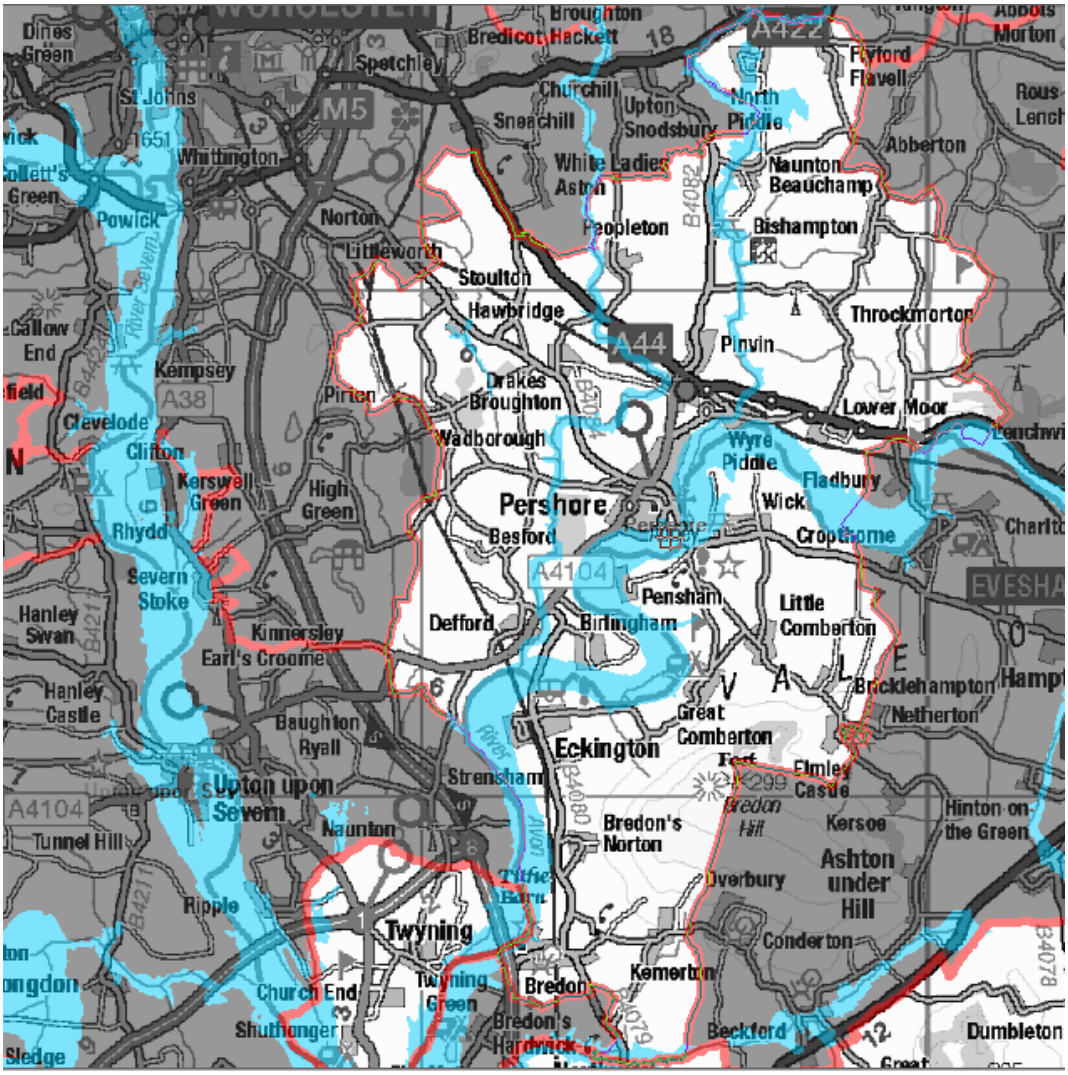
7.6 Other water-related incidents include rescues of people from flooded properties, lakes and quarries as well as animal rescues from water. These can also be mapped to assist Station Commanders and Community Risk officers in their partnership work with water safety agencies and landowners.

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 8 below shows the area most likely to flood which are primarily along the course of the Rivers Avon and its tributaries.

Map 8: Pershore 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 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, Pershore Fire Station crews 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 Pershore Fire Station are listed on the Mobile Data Terminals and on the Service intranet at the following link: Pershore 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

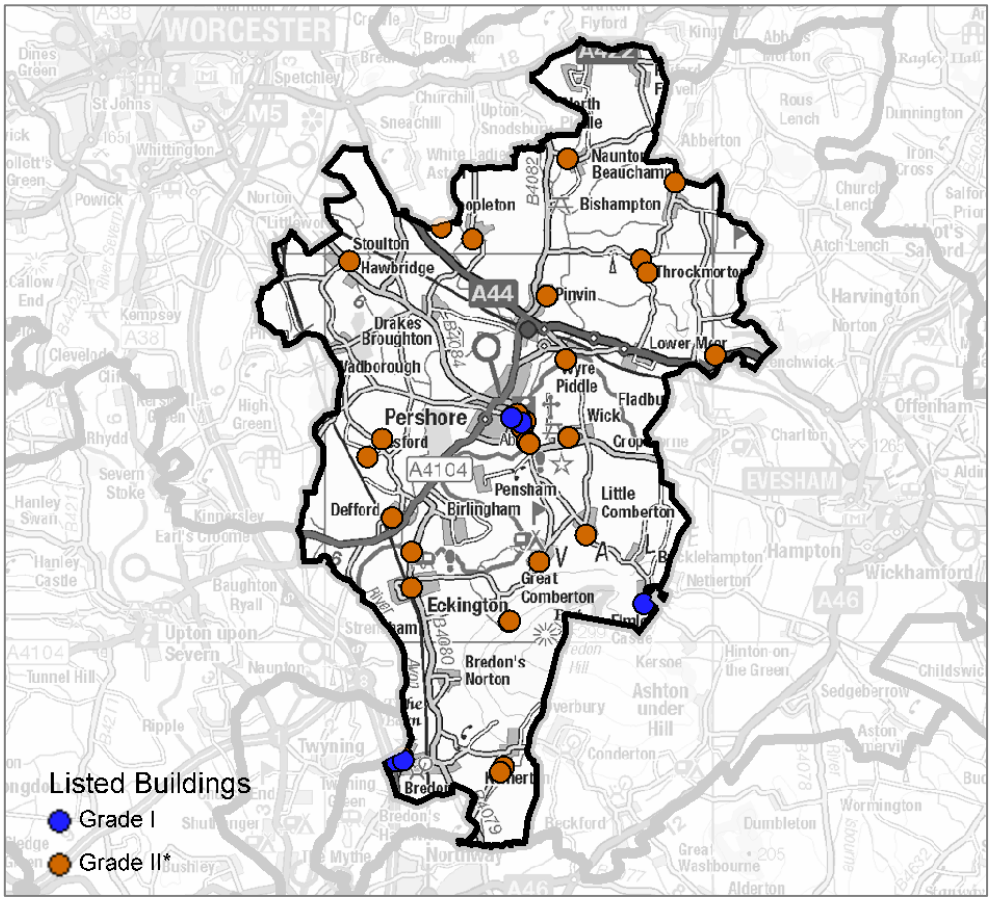
8.7 At March 2020, there were over 12,000 'listed' buildings and sites across Herefordshire and Worcestershire. 'Listing' is a process used to grade heritage importance and interest. Grade I and II* buildings and sites are of particular importance, of which there are currently 920 in the two counties. Pershore Fire Station area contains 5 Grade I and 32 Grade II* buildings and sites. Section 9 provides a map and list of all such buildings and sites in Pershore 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 9 below.

Map 9: Pershore 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

Pershore – Grade I Listed Buildings

List Entry Number	Grade	Building Name	Eastings	Northings
1319631	I	Tithe Barn	391840	236954
1117088	I	Church of St Giles	392008	236979
1116640	I	Church of St Mary	398192	241008
1386920	I	Perrott House	395046	245658
1387027	I	Abbey Church of Holy Cross with Saint Edburgha	394785	245789

Pershore – Grade II* Listed Buildings

List Entry Number	Grade	Building Name	Eastings	Northings
1387076	II*	37 High Street	394943	245876
1386967	II*	56 and 58 Bridge Street	395048	245542
1386906	II*	Bedford House	395032	245699
1259955	II*	Besford Court	391466	245237
1116684	II*	Brewhouse at Woollas Hall	394724	240540
1273334	II*	Church of St Anne	396188	247285
1259848	II*	Church of St Bartholomew	396233	252441
1258689	II*	Church of St Edmund, King and Martyr	390632	249808
1116858	II*	Church of St James	391726	243212
1259934	II*	Church of St James	398993	251840
1258672	II*	Church of St Mary	396261	245280
1242661	II*	Church of St Michael	395497	242084
1296868	II*	Church of St Nicholas	394588	236806
1258256	II*	Church of St Nicholas	395695	248918
1242862	II*	Church of St Nicholas	393792	250378
1242787	II*	Church of St Peter	396706	242764
1242557	II*	Church of St Pester	391088	244771
1116723	II*	Church of The Holy Trinity	392219	241410
1273256	II*	Court Farmhouse	398284	249513

List Entry Number	Grade	Building Name	Eastings	Northings
1039149	II*	Craycombe House	400031	247395
1116724	II*	Eckington Bridge	392222	242328
1387033	II*	Former Church of St Andrew	394832	245826
1349953	II*	Kemerton Court	394500	236676
1273302	II*	Lower Wolverton Hall	392992	250676
1258642	II*	Parish Church	398124	249841
1386992	II*	Pershore Bridge - North Bridge	395186	245171
1386991	II*	Pershore Bridge (that part in Pershore Civil Parish)	395254	245119
1386748	II*	Pershore Bridge (that part in Wick Civil Parish)	395235	245134
1386921	II*	Railings and gate approximately 100 metres to rear	395146	245689
1117042	II*	Rectory	392003	237070
1386969	II*	Stanhope House	395059	245517
1116725	II*	Woollas Hall	394740	240558

Appendix 1
2021 NFCC Community Risk Calendar