Warwickshire Fire & Rescue Service

Risk Profile 2020

Disclaimer

Copyright Statement

Risk Profile 2020

The following report is based on an in-depth research and analysis of incidents attended by WFRS over the three year period of 1st January 2017 to 31st December 2019. It is one document in a suite of products designed to inform the Integrated Risk Management Plan (IRMP) and assist with the development of the plan in 2020.

The report also aims to identify emerging risks and issues for WFRS and concludes with a 'Future Risks and Opportunities' section which follows the PESTELO framework and highlights the various challenges, threats and opportunities presented by the environment in which WFRS operates.

Documents that sit alongside this risk profile are:

- Station Risk Profiles
- Warwickshire Insights web platform – data and reports

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1.0 Introduction

The Warwickshire Risk Profile provides the evidence base for the Integrated Risk Management Plan (IRMP) which is a statutory requirement for all Fire and Rescue services. A new version of the IRMP is currently being developed and is scheduled to be published later this year. This Risk Profile aims to aid the decision making of the Integrated Risk Management Board and to form the plans for managing the risks across Warwickshire.

This profile offers an insight into current risks within Warwickshire. It includes an analysis of WFRS data, identifying key trends and proposing actions where appropriate as a result of consultation with officers and practitioners. Exploring both long and short term trends, it enables a better understanding of risk and the targeting of resources. This enables the Service to respond to both opportunities and challenges effectively and proactively. The conclusions drawn will also assist in planning and policy setting at an operational and strategic level.

This profile should be read in conjunction with a wider context of documents which inform the community safety landscape and the health and wellbeing needs of the Warwickshire population:
- Community Safety Partnership Strategic Assessments 2020/21 (four reports – by CSP area)
- Joint Strategic Needs Assessment Place Based Profiles 2019/20 – 20 Needs Assessment documents covering the 22 Warwickshire JSNA areas.

WFRS play a key role in achieving community health and safety outcomes and it is important to consider the findings from the JSNA place based profiles when researching this risk profile. These documents are designed to enable better joined up working between partner agencies in Warwickshire and all have been produced by the Business Intelligence team.

1.1 Current Vision and Priorities

WFRS work with colleagues and partners to ensure the safety and wellbeing of the residents of Warwickshire through prevention, protection and response. The priority outcomes for the Service are:

> **Ensure we can identify the most vulnerable in our community and work together to drive down risk and prevent incidents occurring. Our safe and well work is our primary method to best deliver our services to vulnerable people or to signpost and refer their needs to our partners.**
>
> **Support our businesses and our residents to feel and be safer in their places of work and homes. Using our Protection: Fire Safety skills to help businesses be more resilient, therefore supporting a more sustainable and secure economy.**
>
> **Reduce demand on public services and improve our overall efficiency and effectiveness, through making the best use of our niche skills, resources, digital, data and technology.**

As the overall number of fires has reduced steadily over the past decade, the WFRS approach to protecting the community has evolved to include more and more preventative work alongside delivering its statutory duties. WFRS are part of a wider network of agencies that provides resilience in the face of a multitude of issues, one example being severe weather conditions. It is becoming more innovative in the way it uses technology and deploys its resources to meet new and emerging risks. WFRS also works with partner agencies to tackle anti-social behaviour and to reach the most vulnerable and hard to reach groups in the community. Continuing to build effective partnerships, particularly with partner agencies and other emergency services, is key to the development of the Service going forward.

The Hospital to Home service is a great example of a new service introduced by WFRS to help take the pressure off hospitals and keep patients safe, along with enabling Warwickshire Fire and Rescue Service to play a pivotal role in the community.

1.1.1 COVID-19 Pandemic

At the time of writing the report WFRS were dealing with a response to COVID-19 and a change in the risk profile, albeit perhaps temporary, to deal with the pandemic. This is considered further in this risk profile as the response to COVID-19 may have future implications for WFRS and may lead to permanent changes in the risk profiles for certain incident types that WFRS respond to.

In March 2020, Coronavirus disease (COVID-19) was declared a pandemic in the UK and the country went into lockdown to avoid further spread of the virus. COVID-19 is an infectious disease caused by a newly discovered coronavirus. The World Health Organisation advises that most people infected with the virus will experience mild to moderate respiratory illness and recover without requiring special treatment. Older people and those with underlying health conditions are more likely to develop serious illness.

The effect of the lockdown is already been seeing locally in Warwickshire, with an impact already being experienced in relation to increases and reductions in particular types of incidents. The picture is changing daily and it is difficult to assess at this early stage the impact it could have to WFRS in the next few months and longer term. Senior Fire Officers are monitoring the situation daily and are informed by a number of different Business Intelligence reports providing them with the latest information. The pandemic has already had a huge impact on the risk profile for WFRS and it is expected to continue to change over the coming months. Senior Fire Officers are very much aware of this and the IRMP team will be responsive and reactive to future changes in the national and local position. It is expected that the Risk Profile for Warwickshire will look very different over the next twelve months and beyond.

1.2 Warwickshire Overview

Warwickshire is located to the south east of the Birmingham and Wolverhampton metropolitan area. Strategically located, the county benefits from well-established national transport links to major cities in the West Midlands as well as to London and the South-East. The county has an extensive road network spanning 4,130 kilometres, including 140km of motorways.
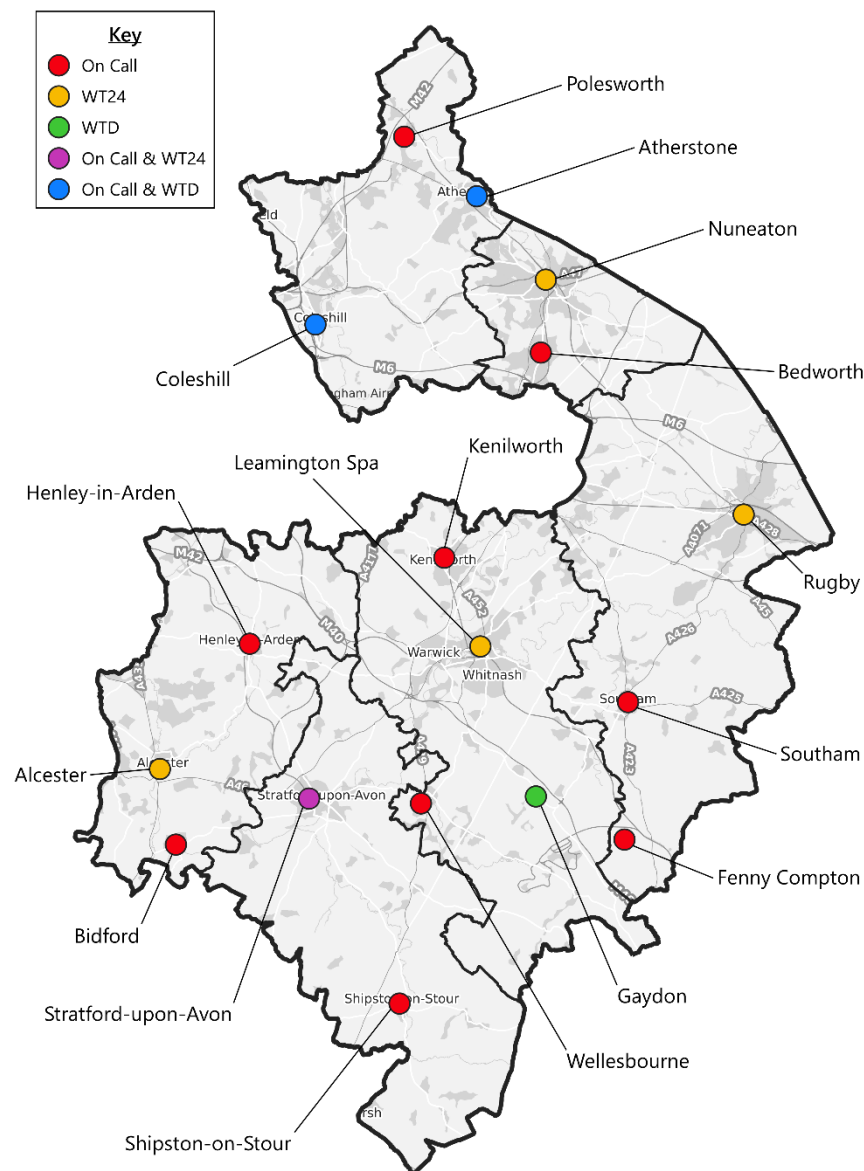
The 2019 mid-year population estimate reveals the Warwickshire population to be 577,933[1], of which 20.8% of the population are aged 65 plus (120,273). The majority of Warwickshire residents live in the major towns, with one third of the County classed as 'rural.' Warwick District consistently reports the highest population level (143,753), with North Warwickshire Borough reporting the lowest (65,264).

With regards to population density, Nuneaton and Bedworth Borough is the most densely populated area of the county, with roughly 1,600 persons inhabiting each square kilometre, significantly higher than the national average of 413 people per square km and Warwickshire average of 278. It is important to note that demographic and geographic variables impact on WFRS pressures and demands and with an increasing population, the future demands are likely to be significant.

Fire Stations are organised into six Station Clusters, positioned strategically within each district and borough to ensure an effective response of ten minutes to 75% of incidents where life is at risk. The map illustrates the distribution of stations at March 2020, complemented by greater detail in the adjacent table.

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[1] *Office for National Statistics, 2019 Mid-Year Population Statistics*

Station Locations and Station Type

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Station	Description	Station Location
On Call Station	Fire engine crew not on station. Staff are on call to respond from home or their place of primary employment. They have up to 5 mins to turn up to a Fire Station.	x 1 Atherstone x 1 Bedworth x 1 Bidford x 1 Coleshill x 1 Fenny Compton x 1 Henley x 1 Kenilworth x 1 Polesworth x 1 Shipston x 1 Southam x 1 Stratford x 1 Wellesbourne
WT24 Station Whole-Time 24 hours	Fire engine crew are on station and are available for immediate response 24/7.	x 1 Alcester x 2 Leamington x 2 Nuneaton x 2 Rugby x 1 Stratford
WTD Station Whole-Time Day	Fire engine crew are on station and are available for immediate response – day time only.	x 1 Atherstone x 1 Coleshill (WTD/On call night) x 1 Gaydon

1.3 Overview of Incidents

Incidents attended by WFRS can be categorised into five main types. The table defines each of these types.

Fire Type	Description
Primary Fires	Includes home fires, business (non domestic) fires, vehicle fires and other fires. They involve properties or vehicles where casualties or rescues have occurred. They also include incidents where five or more fire engines are in attendance.
Secondary Fires	Also called small fires – do not involve life risk and are mostly outdoor fires such as refuse and grassland fires. Fires in derelict properties and vehicles are also counted as secondary/small fires, in addition to chimney fires which are confined to the chimney structure of a building.
False Alarms	False alarms are incidents where WFRS are called to a location and discover on arrival that there is no emergency situation requiring their services.
Special Services	Comprises a range of incidents from water rescue and flooding to animal rescue.
Road Traffic Collisions	Occurs when a vehicle collides with another vehicle, pedestrian, animal, road debris or other stationary obstruction, such as a tree or utility pole.

1.3.1 Long Term Trends

Nationally, levels of attended incidents by WFRS are significantly lower than a decade ago. Warwickshire follows this trend with 38.4% fewer incidents attended in the period April 2018 to March 2019 compared to the same period of 2008/9. All incident types reported a significant reduction.

Long Term Trends – 2009 vs 2019 Incident Figures

Incident Type	April 2008 to March 2009	April 2018 to March 2019	Percentage Change
Primary Fires	1,118	678	- 39.4%
Secondary Fires*	1,349	752	- 44.3%
False Alarms	2,603	1,559	- 40.1%
Special Services	736	572	- 22.3%
Road Traffic Collisions	551	353	- 35.9%
Total Incidents	6,357	3,914	- 38.4%

* includes chimney fires

Consistent reductions in attended incidents are often attributed to changes in Fire Service policies, technological advancement and lifestyle choices. For example, changes in lifestyle habits and safer electrical appliances are cited as an explanation for reductions in accidental home fires. Similarly, improvements and advancements in the motoring industry, such as safer motor vehicle features, have contributed to the reduction in road traffic collisions, assisted by changes to local mobilisation policies. Also, the use of a targeted approach towards prevention activity has helped reduce the number of incidents that the Service attend.

National legislation changes have also impacted on WFRS, as have financial challenges over recent years.

1.3.2 Short Term Trends

The chart below shows the breakdown of incidents reported to WFRS for the period January to December 2019.

False Alarms incidents continue to form the largest proportion of attended incidents (41%) and by comparison, Road Traffic Collisions constitute the smallest proportion of attended incidents (9%). This breakdown is consistent with the previous IRMP report.

January to December 2019 - Incident Breakdown
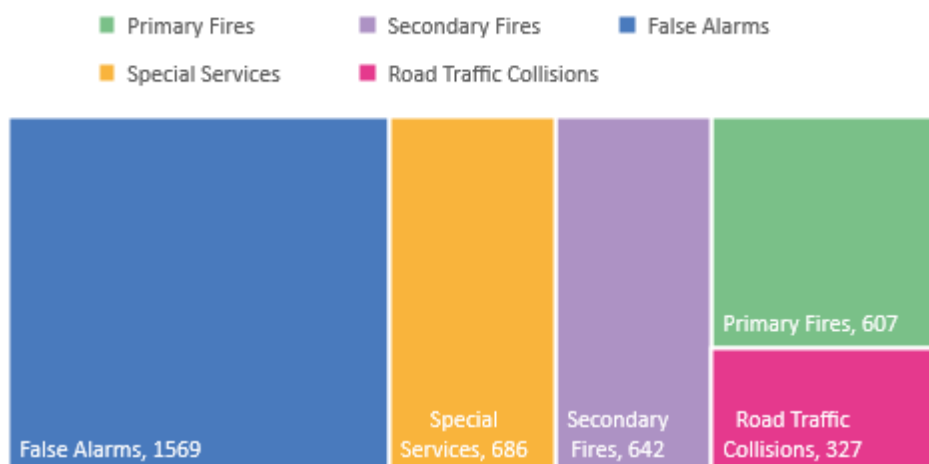
1.3.3 Benchmarking

It is important to benchmark our performance against other Fire and Rescue Services to help with service improvement. An annual benchmarking exercise is undertaken to compare Warwickshire performance against the other 45 English Fire and Rescue Services (using Home Office data tables).

Benchmarking – WFRS & National Rates 2018/19 vs 2017/18 (1st is Best Performing)

Category	Warks 2017/18 Rate Per 10,000 Population	Warks 2018/19 Rate Per 10,000 Population	England 2018/19 Rate Per 10,000 Population	Ranking (out of 45 Fire Services)
Total Incidents Attended	63.36	**69.37**	102.91	3rd (1st)
Primary Fires	12.41	**11.96**	13.08	14th (14th)
Secondary Fires	10.04	**13.33**	18.09	14th (18th)
Accidental Dwelling Fires	6.00	**6.41**	11.00	2nd (2nd)
Fire Related Injuries	0.65	**0.54**	1.28	5th
Deliberate Fires	8.82	**8.16**	14.87	14th (19th)
Special Services	10.13	**16.51**	27.67	7th (5th)
Road Traffic Collisions	6.23	**6.39**	5.68	33rd (31st)

Source: OSC Committee Report 2018/19

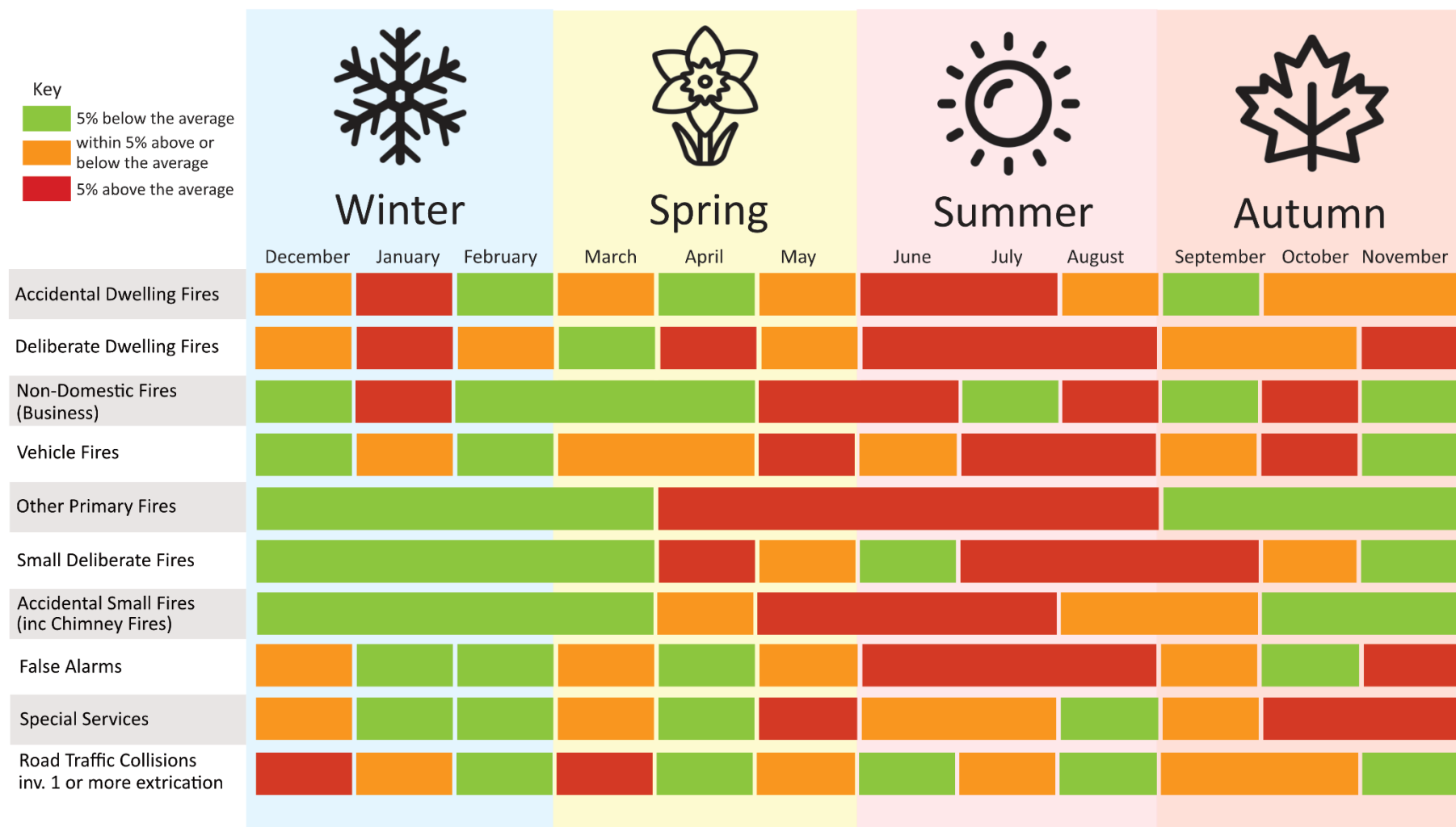*Note: Incident data reported nationally is no longer audited and therefore exact like for like recording may not be possible.*

Overall performance by WFRS remains consistently good in several key areas, specifically levels of incidents, accidental dwelling fires and fire related injuries. Despite improved benchmarking performance, improvements need to be made on deliberate fire setting and road traffic collisions.

1.3.4 Seasonality

The weather and other seasonal attributes are a common theme within the analysis of Fire and Rescue attended incidents. Both affect the likelihood and severity of incidents, particularly for road traffic collisions and deliberate small fire setting.

Key
- 5% below the average
- within 5% above or below the average
- 5% above the average

	Winter			Spring			Summer			Autumn		
	December	January	February	March	April	May	June	July	August	September	October	November
Accidental Dwelling Fires	orange	red	green	orange	green	orange	red	red	orange	green	orange	orange
Deliberate Dwelling Fires	orange	red	orange	green	red	orange	red	red	red	orange	orange	red
Non-Domestic Fires (Business)	green	red	green	green	green	green	red	red	green	red	green	red	green
Vehicle Fires	green	orange	green	orange	orange	red	orange	red	red	orange	red	green
Other Primary Fires	green	green	green	green	green	red	red	red	red	red	green	green	green
Small Deliberate Fires	green	green	green	red	orange	green	red	red	red	orange	green
Accidental Small Fires (inc Chimney Fires)	green	green	green	orange	red	red	red	orange	orange	green	green	green
False Alarms	orange	green	green	orange	green	orange	red	red	red	orange	green	red
Special Services	orange	green	green	orange	green	red	orange	orange	green	red	red	red
Road Traffic Collisions inv. 1 or more extrication	red	orange	green	red	green	orange	green	orange	green	orange	orange	green

2.0 Primary Fires

Primary fires are fires that involve property or vehicles or are where casualties or rescues have occurred. They also include incidents where five or more fire engines are in attendance. This category of fires includes home fires, business (non-domestic) fires, vehicle fires and other fires. Both deliberate and accidental primary fires are discussed in this section and deliberate fires are also discussed further in the 'Deliberate Fire Setting' section.

The table below provides the breakdown of primary fires incidents and the categorisation between accidental and deliberate for the past three years. Overall there has been an 8.5% reduction in primary fire incidents.

The largest increase has been seen in the number of accidental home fires (8.9%) and accidental other fires (11.1%).

Primary Fires - Three Year Overview – 2017 to 2019

Incident Type		Proportion of Total Primary Fires	Jan to Dec 17	Jan to Dec 18	Jan to Dec 19	Number Change 2019 vs 2017*
Home Fires	Accidental	23.0%	135	170	147	+ 12
	Deliberate	2.4%	19	17	11	- 8
Non-Domestic (Business Fires)	Accidental	9.4%	66	66	54	- 12
	Deliberate	2.9%	19	19	19	0
Vehicle Fires	Accidental	28.4%	186	199	174	- 12
	Deliberate	12.1%	91	71	77	- 14
Other Fires	Accidental	13.4%	72	111	80	+ 8
	Deliberate	8.4%	74	48	44	- 30
Warwickshire Total		**100%**	**662**	**701**	**606**	**- 56**

RAG based on percentage change: red an increase above 5%, green a reduction greater than 5%, amber increases or reductions within 5%

2.1 Home Fires

Home fires include both accidental and deliberate incidents and cover various types of domestic residences including houses, flats, bungalows, care homes as well as caravans and houseboats used as permanent dwellings.

2.6%	**8.9%**	**- 42%**
(3 incidents)	**(12 incidents)**	**(8 incidents)**
The percentage increase seen for fires in the home over the three year period of January 2017 to December 2019	The percentage increase seen for accidental home fires over the three year period of January 2017 to December 2019	The percentage reduction seen for deliberate home fires over the three year period of January 2017 to December 2019

2.1.1 Accidental Home Fires

Accidental Home Fires are of great concern to WFRS as nationally they are responsible for the highest number of fire fatalities.

Why increase in Warwick and why so high in 2018?

29%	**12**	**- 12**
(131 incidents)		
The proportion of accidental home fires over the 3 year period were reported in the Nuneaton & Bedworth Station Cluster	The increased number of accidental home fires that the Warwick Station Cluster has reported when comparing 2019 (41) to 2017 (29)	The reduction in the number of accidental home fires that the Rugby Station Cluster has reported when comparing 2019 (21) to 2017 (33)

Accidental Home Fires by Station Cluster - Three Year Overview – 2017 to 2019

Station Cluster	Jan to Dec 17	Jan to Dec 18	Jan to Dec 19	Number Change 2019 vs 2017*
Alcester	10	9	13	+ 3
North Warwickshire	12	17	18	+ 6
Nuneaton & Bedworth	41	52	38	- 3
Rugby	33	41	21	- 12
Stratford	10	14	16	+ 6
Warwick	29	37	41	+ 12
Total	**135**	**170**	**147**	**+ 12**

RAG based on percentage change: red an increase above 5%, green a reduction greater than 5%, amber increases or reductions within 5%

An analysis of accidental home fires over the three year period:

- One of the main causes of accidental home fires is cooking, in the three year period 27.7% (125) incidents were of this type and 34.3% (155) started in the kitchen.
- Of the kitchen fires, 49% (76) were caused by the cooker/oven and 7.7% (12) by the grill/toaster.
- Fires also commonly started in the bedroom (8.6%, 39). Of these fires, over one fifth (23%, 9) were given an ignition cause of fault in electricity supply (wiring, cable or plugs) and a further 15.4% (6) were due to candles.

37.4%
(169 incidents)
The number of incidents where the person involved was aged 18-64 years old
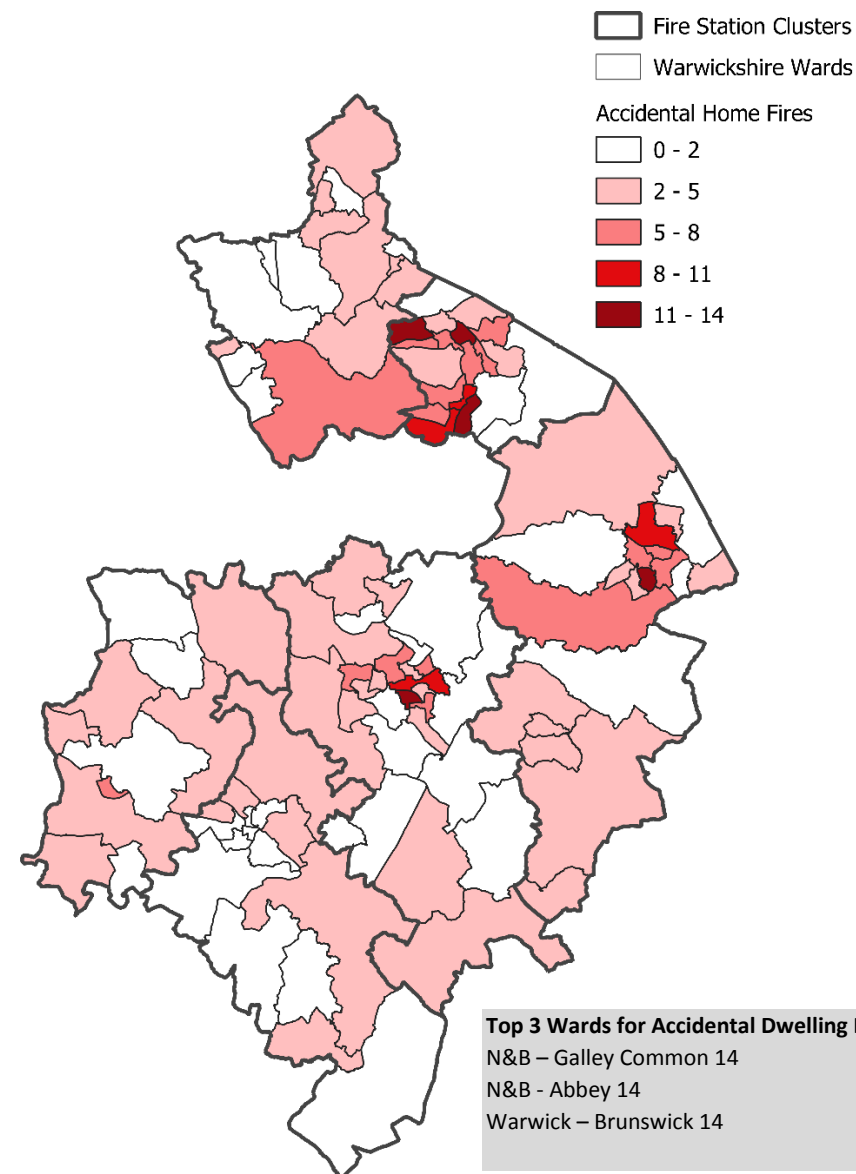
7.5%
(34 incidents)
The number of incidents suspected to be linked to alcohol as a contributory factor

64%
(290 incidents)
The number of incidents where an alarm system was present

Fire Station Clusters
Warwickshire Wards

Accidental Home Fires
- 0 - 2
- 2 - 5
- 5 - 8
- 8 - 11
- 11 - 14

Top 3 Wards for Accidental Dwelling Fires
N&B – Galley Common 14
N&B - Abbey 14
Warwick – Brunswick 14

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2.1.2 Multi-Occupancy and High-Rise Homes

Two types of residences of particular interest to WFRS are Homes in Multiple Occupation (HIMO) and high-rise homes. HIMOs are rental properties shared by multiple tenants that are not family members and high-rise homes are defined as residential buildings with four or more stories.

The numbers of accidental home fires at these types of properties have been reducing. Over the three year period of January 2017 to December 2019 there have been only 11 fires of this type with two fires in 2017, four in 2018 and five in 2019, which are all lower than the 14 reported in 2015. Both Nuneaton & Bedworth Station Cluster (4 fires) and Warwick Station Cluster (4 fires) reported the highest volume of fires in this period.

Accidental Home Fires at high rise properties have also been reducing. There have been 7 recorded over the three year period, three in 2017, three in 2018 and only one in 2019.

- 64.3%	**4**	**5**
(9 incidents) Less accidental home fires in homes of multiple occupation when comparing 2015 (14) to 2019 (5)	Accidental home fires were recorded at a licensed HIMO over the three year period – 7 of the 11 fires were either at unlicensed premises or it is unknown if they are licensed	Accidental fires in high rise properties were located in Warwick Station Cluster over the three year period (out of a total of 7)

Many high-rise buildings (particularly social housing blocks) were built between 1950 and 1970 and were built to lower housing fire safety standards. For example current building regulations require buildings to over 18m high to have certain firefighting measures installed (e.g. firefighting lifts) but retrospective

applications of such measures is not required, meaning that some older buildings are lacking in these provisions.

Fire in high-rise buildings present firefighters with a number of challenges. It may be hard to establish where the fire is coming from in a high rise building and additionally, the way in which fire and smoke spreads during a fire is more difficult to predict in these types of buildings. The weather can also impact on these incidents, with high winds impacting on the spread of a fire and the increased danger to firefighters.

There is a current preference for office conversions to flats within towns across the county, this leads to more densely population towns with HIMOs providing the highest density.

Some sheltered housing accommodation has also been raised as a concern as it can have insufficient fire compartmentation where breaches to escape routes has allowed for rapid and unseen fire spread. One focus to check for potential breaches into escape routes is via Safe and Well Checks.

Due to the risk of harm to victims, risk to firefighters and the potential devastation to life/lives that a fire in either a HIMO or higher rise can cause, they will continue to remain a priority area for WFRS.

2.1.3 Safe and Well Visits / Checks

WFRS continuously educate residents on the risk of house fires, how to reduce them and keep both themselves and their families safe. The free visit helps to protect the most vulnerable people within our communities. During the visit WFRS provide fire safety advice, check that any smoke alarms are working and replace and install new ones if necessary. They also provide advice to residents on preventing trips/falls, giving up smoking, winter warmth, home security and hydration and healthy eating. They also include advice on other areas of health and well-being which impact on the NHS and social care services.

During the period 1st April 2018 to 31st March 2020 there were 11,107 safe and well checks made to vulnerable people. Through a variety of methods of targeting, fire safety advice, smoke alarms and specialist equipment were used to assist in keeping the public safe.

Prevention activity forms a significant part of WFRS' risk management strategy and is crucial to driving down incident levels and saving lives. This section describes two elements of prevention of home fires: home fire safety checks and smoke alarms.

Previously, Mosaic data used to be used in order to determine where vulnerable people were living in order to conduct a Home Fire Safety Check, however in recent years Exeter data (NHS patient registration system from GP surgeries) has been published and has been used in conjunction with other datasets to assist with targeting vulnerable groups. In addition to the Exeter data the methodology also includes:

- Response time data – how far away people live from a fire station.

- Mosaic data which highlights Mosaic Groups and Types in the community which may be at a higher risk of experiencing a fire in the home based on historical incident data.
- Falls and trips data, highlighting where people aged over 55 have experienced a higher rate of admissions to hospital with falls and slip related problems.

The data advises three categories: Gold, Silver and Bronze, which show the urgency of where the fire checks need to be conducted.

Gold: targets over 75 year olds who live over 5 minutes away from a fire station.
Silver: targets over 75 years olds who lives between 5 and 10 minutes away from a fire station.
Bronze: targets over 65 year olds who live over 5 minutes away.
All three categories are being targeted in the various catchment areas.

Going forward this methodology is being reviewed as new data is being released as part of the effort to tackle COVID-19, with more information being made available to local authorities.

2.1.4 Smoke Alarms

The time in between when a fire in the home starts and when it is discovered by the home occupants has a vital bearing on the outcome of the fire. Shorter discovery times lead to a quicker response on part of the occupants and WFRS which ultimately leads to a lower likelihood of the fire resulting in any fatalities. Smoke alarms play a crucial role in shortening the discovery time.

Fire safety features in the homes of the elderly and disabled must be adjusted to meet their needs. For example, for people suffering from hearing difficulties special smoke alarms can be fitted in their homes with strobe lights and vibrator pads so that they are alerted if a fire happens in their home. This is taken into account by WFRS during Home Fire Safety Checks.

The proportion of dwellings with a smoke alarm increased greatly in the 1990s and has continued to increase since then. This is considered to be one of the number of causes of the reduction in fatalities that occurred in the 1990s and 2000s. Positively, the number of dwelling fires where a smoke alarm has been activated has been increasing, evidencing that more residents are aware of fire safety. For the period 1st April 2017 to 31st March 2018 41% of fires saw a smoke alarm activated and this increased to 48% in the period 1st April 2019 to 29th February 2020.

In Warwickshire, the smoke alarm ownership figures are closely aligned with those of England and Great Britain as a whole. Across the three year period of 1st April 2017 to 31st December 2019, 61.3% of dwelling fires had a smoke alarm present in the home.

Also, following years of home safety campaigns by WFRS the number of dwellings where a smoke alarm was not fitted has been reducing. For the period 1st April 2017 to 31st March 2018, 36% of dwelling fires were at homes where a smoke alarm was not fitted. For the period 1st April 2019 to 29th February 2020 this had reduced to 30%.

An area of concern is where smoke alarms have not activated in homes. For the period 1st April 2019 to 29th February 2020, 27% of dwelling fires did not have a smoke alarm activate which is an increase from 23% in 2017/18. One of the main

reasons is due to missing or faulty batteries. Therefore it is advised that residents have multiple alarms around the home. Another reason that battery powered smoke alarms failed to operate in dwelling fires is that the fire products did not reach the alarm/detector.

61%	**30%**	**27%**
Of dwelling fires in the three year period of 2017 to 2019 had a smoke alarm in the home	Of dwelling fires for the period 1st April 2019 to 29th February 2020 were at homes where a smoke alarm was not fitted	Almost one third of dwelling fires for the period 1st April 2019 to 29th February 2020 did not have a smoke alarm activate

Focusing on areas of the county where smoke alarms were not present in dwelling fires, Nuneaton & Bedworth Station Cluster reported the highest proportion. Of the total dwelling fires recorded across the county for the period 1st April 2019 to 29th February 2020, 30% were in the Nuneaton & Bedworth Station Cluster followed by Rugby Station Cluster with 25%. Almost two thirds of dwelling fires (67%) where a smoke alarm were not present were in the north of the county (includes North Warwickshire Station Cluster area). **Why is this?**

Over one third (35.6%, 37) were in residential dwellings and 31.7% (33) were in garden sheds or garages where no smoke alarms were present.

2.1.5 Deliberate Home Fires

Deliberate home fires are fires in the home where ignition is suspected to be intentional or malicious.

45%	5	- 8
(21 incidents) The proportion of deliberate home fires over the 3 year period reported in the Nuneaton & Bedworth Station Cluster	The increased number of deliberate home fires that the Nuneaton & Bedworth Station Cluster has reported when comparing 2019 (8) to 2017 (3)	The reduction in the number of deliberate home fires that the Warwick Station Cluster has reported when comparing 2019 (0) to 2017 (8)

Deliberate Home Fires by Station Cluster - Three Year Overview – 2017 to 2019

Station Cluster	Jan to Dec 17	Jan to Dec 18	Jan to Dec 19	Number Change 2019 vs 2017*
Alcester	1	1	0	- 1
North Warwickshire	3	0	2	- 1
Nuneaton & Bedworth	3	10	8	+ 5
Rugby	4	1	0	- 4
Stratford	0	2	1	+ 1
Warwick	8	3	0	- 8
Total	**19**	**17**	**11**	**- 8**

RAG based on percentage change: red an increase above 5%, green a reduction greater than 5%, amber increases or reductions within 5%

An analysis of deliberate home fires over the three year period:

- Nuneaton & Bedworth Station Cluster recorded the highest proportion of deliberate home fires (45%, 21) when compared to the other station clusters.
- Across all areas, adults aged 18-64 years (where details were known) started 21.3% (10) of the deliberate home fires.
- Young people (youths aged 10 to 17 years – where details were known) were responsible for only two of the fires (4.3%).
- 10.6% (5) of the deliberate fires were linked to alcohol and/or drugs.

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Risks and Issues

- Kitchen fires and cooking continue to be the leading cause of accidental home fires. Faulty electrical wiring/cables and plugs are also a concern, particularly for those fires that start in the bedroom.
- HIMOs and high rise building accidental home fires are reducing but the risk factors mean that this is a key area that WFRS need to maintain as a priority.
- Over one third of fires in the home reported either not having a smoke alarm system in place or it was not known if they had one. Mosaic analysis to be completed focusing on the at risk groups of accidental home fires which will assist with targeting preventative work and Home Fire Safety Checks.
- The north of the county reports a higher proportion of fires in the home where smoke alarms are not present. Further work is recommended to investigate the reasons why.
- An area of concern is where smoke alarms have not activated in homes and levels have been increasing in Warwickshire.

- Fires in the home have a very high life risk and it is important that WFRS continue to work with vulnerable groups, particularly the elderly and those with health conditions, in particular ensuring Safe and Well Checks are targeted at the groups that need them the most.
- Across the county, the increasing older population and the risk of social isolation for vulnerable people is a risk area for WFRS and will impact on services in the future.
- To develop a new targeting methodology for the safe and well checks conducted by WFRS, including new data which is being released as part of the COV-19 effort.

22%	**- 9**	**6%**
(40 incidents) The proportion of accidental business fires over the 3 year period reported in the Rugby Station Cluster	The reduction in the number of accidental business fires that the Nuneaton & Bedworth Station Cluster has reported when comparing 2019 (6) to 2017 (15)	**(12 incidents)** The Alcester Station Cluster reports the lowest proportion of accidental business fires over the 3 year period

2.2 Business Fires (Non-Domestic)

Business (non-domestic) fires include both accidental and deliberate incidents at commercial properties.

19	**- 18%**	**- 14%**
The average number of deliberate business fires recorded each year (over the three year period of January 2017 to December 2019)	**(12 incidents)** The reduction in accidental business fires when comparing 2017 (66) to 2019 (54)	**(12 incidents)** The reduction in total business fires when comparing 2017 (85) to 2019 (73)

2.2.1 Accidental Business Fires

Accidental business fires (non-domestic) are fires at a commercial premises. The period of focus is over the three year period of 1st January 2017 to 31st December 2019.

Accidental Business Fires by Station Cluster - Three Year Overview – 2017 to 2019

Station Cluster	Jan to Dec 17	Jan to Dec 18	Jan to Dec 19	Number Change 2019 vs 2017*
Alcester	3	5	4	+ 1
North Warwickshire	8	11	7	- 1
Nuneaton & Bedworth	15	17	6	- 9
Rugby	16	9	15	- 1
Stratford	8	5	6	- 2
Warwick	16	19	16	0
Total	**66**	**66**	**54**	- 12

RAG based on percentage change: red an increase above 5%, green a reduction greater than 5%, amber increases or reductions within 5%

An analysis of accidental business fires over the three year period:

- Industrial manufacturing properties were the location for the highest number of reported accidental business fires (12%, 23), followed by food and drink premises (11.8%, 22).
- Where recorded, factories (8.6%) and warehouses (6.5%) were the types of buildings where the highest proportion of fires occurred.

- One of the main causes of accidental business fires was a faulty fuel supply (electricity) (18.3%, 34) followed by a fault in equipment or an appliance (17.7%, 33).
- The ignition source for accidental business fires was most likely to be the electricity supply (23%, 43) or a cooking related appliance (14%, 26).

23%	**23%**	**14%**
(42 incidents)	**(43 incidents)**	**(26 incidents)**
Of fires were caused by a person aged 18-64 years old (where age known)	Of fires had an ignition source of the electricity supply	Of fires were caused by a cooking related appliance

2.2.2 Deliberate Business Fires

Deliberate business fires (non-domestic) are cases of deliberate fire setting at a commercial premises. The period of focus is over the three year period of 1st January 2017 to 31st December 2019.

32%	**2**	**- 2**
(18 incidents)		
The proportion of deliberate business fires over the 3 year period reported in the Nuneaton & Bedworth Station Cluster	The increased number of deliberate business fires that the Rugby Station Cluster has reported when comparing 2019 (4) to 2017 (2)	The reduction in the number of deliberate business fires that the Alcester Station Cluster has reported when comparing 2019 (1) to 2017 (3)

Deliberate Business Fires by Station Cluster - Three Year Overview – 2017 to 2019

Station Cluster	Jan to Dec 17	Jan to Dec 18	Jan to Dec 19	Number Change 2019 vs 2017*
Alcester	3	0	1	- 2
North Warwickshire	4	5	4	0
Nuneaton & Bedworth	7	3	8	+ 1
Rugby	2	3	4	+ 2
Stratford	1	3	1	0
Warwick	2	5	1	- 1
Total	**19**	**19**	**19**	0

*RAG based on percentage change: red an increase above 5%, green a reduction greater than 5%, amber increases or reductions within 5%

An analysis of deliberate business fires over the three year period:
- Youths aged 10 to 17 years started 8 of the deliberate fires (14%).
- The highest proportion of deliberate business fires were reported at permanent agricultural locations (21.1%, 12).
- Barns were a popular location for deliberate fires (17.5%, 10).
- Almost one third (29.8%, 17) of the deliberate fires were started by a naked flame (included lighted card or paper).
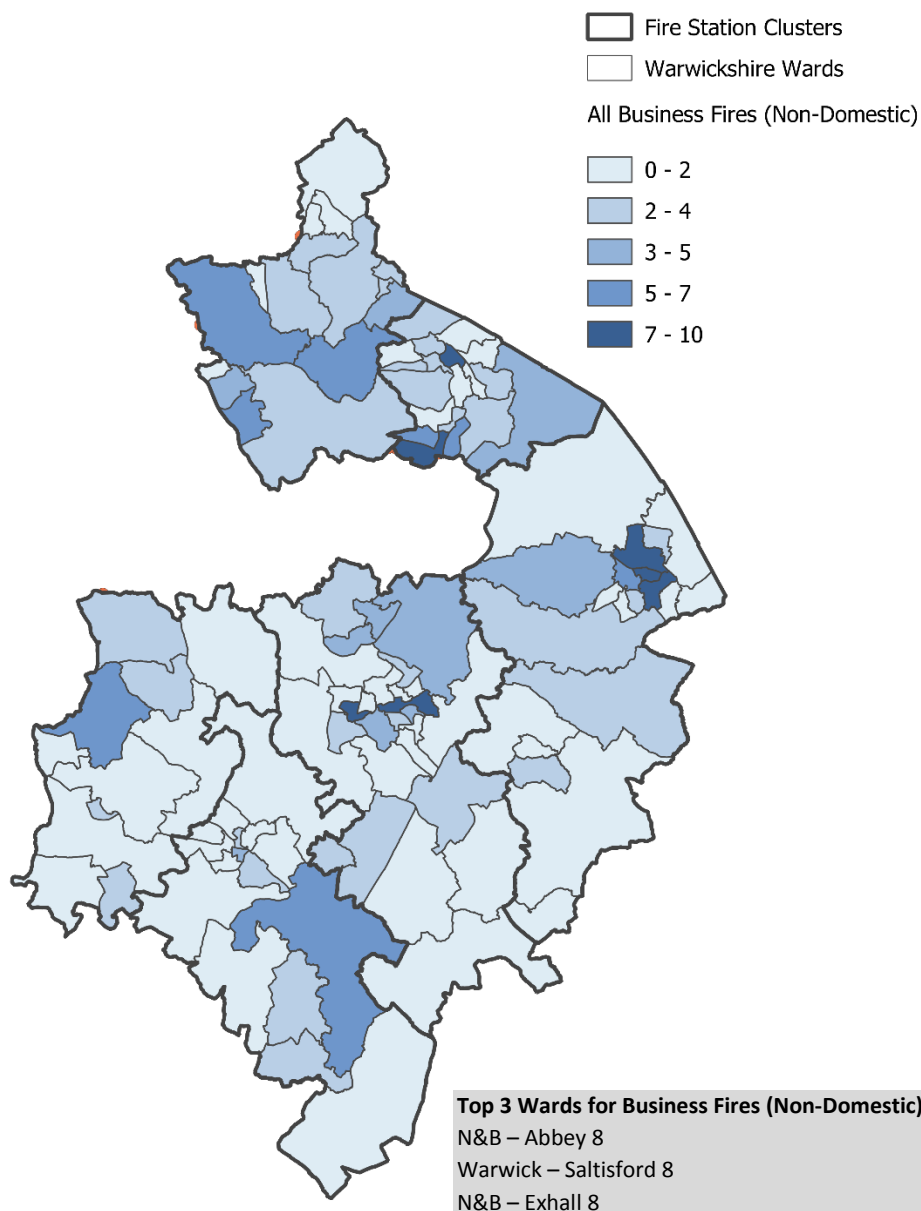
2.2.3 Fire Safety Audits

Fire safety legislation is enforced by the Fire Protection Team that works to promote fire protection and safe practices in the workplace. Under the Fire Services Act 2004, WFRS firefighters conduct visits to business premises to inspect them and make sure that they adhere to Fire and Safety rules and regulations.

In the two year period of 1st April 2017 to 31st March 2019 there were a total of 759 fire safety audits carried out over 2,655.91 hours. Of these audits, 375 premises were deemed unsatisfactory in terms of compliance with fire safety law and 53 buildings were given prohibition and enforcement notices. These figures have been increasing year on year and continue an upward trend showing the increased enforcement WFRS have been undertaking.

Fire Safety Audits & Outcomes 1st April 2017 – 31st March 2019 (2 Years)

	Audits & Outcomes	No. of Fire Safety Audits & Outcomes	No. of Hours
✔	Audits with Satisfactory Outcome	384	1,164.42
✖	Audits with Unsatisfactory Outcome	375	1,491.49
⚠	Enforcement Notices	30	-
⚠	Prohibition Notices	23	-
📋	Outcomes from Enforcement (Satisfactory)	33	-

Fire Station Clusters

Warwickshire Wards

All Business Fires (Non-Domestic)

- 0 - 2
- 2 - 4
- 3 - 5
- 5 - 7
- 7 - 10

Top 3 Wards for Business Fires (Non-Domestic)
N&B – Abbey 8
Warwick – Saltisford 8
N&B – Exhall 8

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Across the county, there are a number of premises which pose a higher risk to the public and WFRS in case of an emergency. At these premises, a more detailed inspection is carried out to ensure that WFRS comprehensively understands the risks associated with each building so that they are better equipped to effectively deal with any incidents that happen. The cost of business fires is particularly high for warehouses where there is a loss of inventory involved along with property loss and the costs incurred by the disruption to business activities caused.

2.2.4 Legislation

Primary Authority Scheme

All businesses, charities and other organisations must comply with fire safety regulations as defined by the 2005 Fire Safety Order. The Primary Authority Scheme (PAS) concerns businesses operating in more than one local authority fire enforcement area. It allows these businesses to form a partnership with a Fire and Rescue Service of their choosing (a 'lead authority') for fire safety advice and enforcement. The Fire and Rescue Service chosen as a lead authority need not necessarily be the closest one to the business or the one in the County in which the business has most of its offices or outlets - i.e. it is at the discretion of the organisation to choose a FRS to partner with.

By working closely with a business, the lead authority is able to offer consistent fire safety advice for application across all of the business's locations. A national inspection plan can also be created by the lead authority to improve the effectiveness of inspection, avoid repeated checks and enable better sharing of information. The aim of this scheme is to offer clear advice on compliance with fire safety and to provide consistent enforcement of fire safety legislation, to the mutual benefit of organisations and Fire and Rescue Services, and ultimately the

community. WFRS are currently entering its third year of the PAS which is with the mid counties Co-op.

Risk Based Inspections

The area of fire protection will see much change both the immediate and longer term future. Much of this change will be driven by the outcomes from Grenfell and following some subsequent fires which have been less widely reported. Changes will be seen in the form of legislation, a more robust inspection process, Fire Risk Assessors, Approved Inspectors and through audits and other relation building safety work.

Robust enforcement will be key to supporting the change that will be seen in the actions of both large and small building owners in relation to responsibility. The new Risk Based Inspection process will see WFRS targeting the highest risk premises in the county and more enforcement will be issued. After previously not prosecuting owners this will now change, and where serious failings are discovered, prosecutions will be issued. In Warwickshire there is one significant case running which has been running for almost two years.

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Risks and Issues

- Levels of fire safety audits and risk based inspections are expected to increase and more enforcement will be issued to premises.
- There are issues with the Farynor reporting system and reporting from the system is extremely difficult. As part of the HMIC inspection this system is being reviewed and better ways of reporting investigated. It is believed that the system is not providing accurate reports and as such attempting to do this manually is taking up a significant amount of resource.
- In today's uncertain economic climate, it is possible that businesses may invest less into meeting fire safety standards which will result in the decline of standards - putting both employees and firefighters at risk.

2.3 Vehicle Fires

Vehicle fires are a category within primary fires and include both accidental and deliberate fires. A distinction needs to be made here between these vehicle fires and those included in the 'Secondary Fire' category which are fires in derelict vehicles. Vehicle fires remain the largest proportion of primary fires attended.

- 9%	**- 6.5%**	**- 15%**
(26 incidents)	**(12 incidents)**	**(14 incidents)**
The percentage reduction seen for all vehicle fires over the three year period of January 2017 to December 2019	The percentage reduction seen for accidental vehicle fires over the three year period of January 2017 to December 2019	The percentage reduction seen for deliberate vehicle fires over the three year period of January 2017 to December 2019

2.3.1 Accidental Vehicle Fires

25%	**7**	**- 16**
(140 incidents)		
The proportion of accidental vehicle fires over the 3 year period reported in the Warwick Station Cluster	The increased number of accidental vehicle fires that the Alcester Station Cluster has reported when comparing 2019 (16) to 2017 (9)	The reduction in the number of accidental vehicle fires that the North Warwickshire Station Cluster has reported when comparing 2019 (38) to 2017 (54)

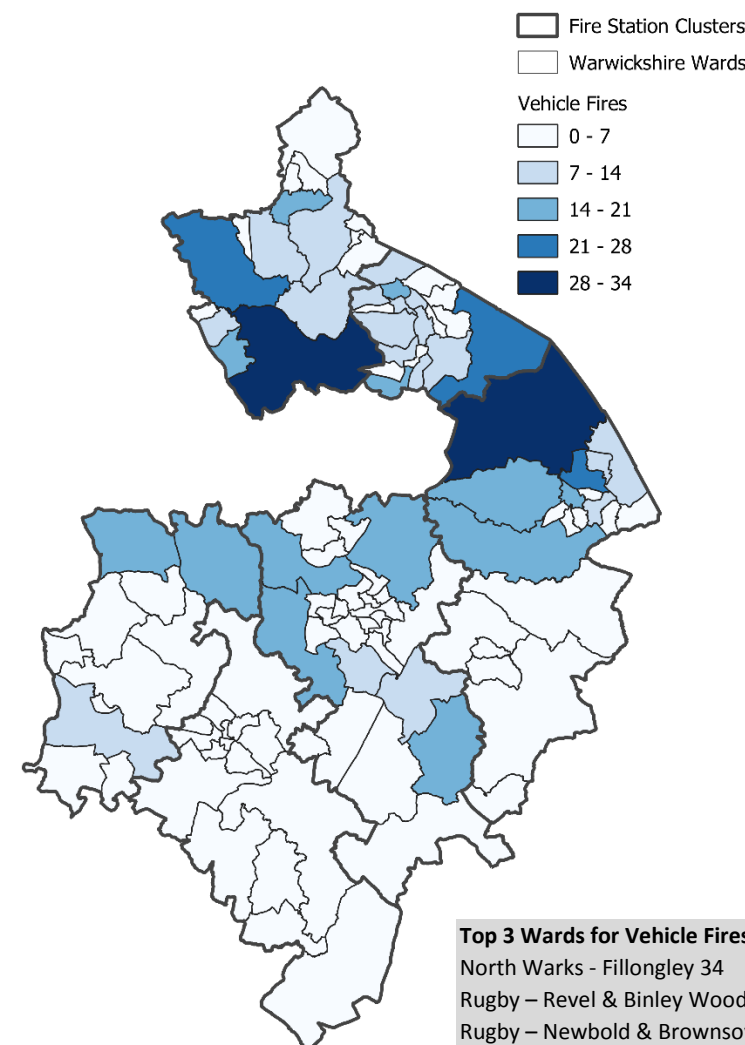**Accidental Vehicle Fires by Station Cluster - Three Year Overview – 2017 to 2019**

Station Cluster	Jan to Dec 17	Jan to Dec 18	Jan to Dec 19	Number Change 2019 vs 2017*
Alcester	9	24	16	+ 7
North Warwickshire	54	27	38	- 16
Nuneaton & Bedworth	35	34	32	- 3
Rugby	32	52	36	+ 4
Stratford	12	10	6	- 6
Warwick	42	52	46	+ 4
Total	**184**	**199**	**174**	- 10

*RAG based on percentage change: red an increase above 5%, green a reduction greater than 5%, amber increases or reductions within 5%

An analysis of accidental vehicle fires over the three year period:

- Warwick Station Cluster reported the highest proportion of accidental vehicle fires (25%) but levels across the rest of south Warwickshire are low.
- The north of the county reported 60.9% of the total accidental vehicle fires.
- Cars (59.4%) were the most common vehicle type to be in an accidental vehicle fire, followed by vans (11.8%) and HGVs/lorries (11%).
- Where known, 'engine or fuel line or pump' was the largest cause given for the ignition source (14.4%) followed by 'electrical fault' (14%). For many incidents it was unknown what the ignition source was or how the fire was caused.

2.3.2 Deliberate Vehicle Fires

37%

(89 incidents)
One third of deliberate vehicle fires over the 3 year period were reported in the Nuneaton & Bedworth Station Cluster

6

The increased number of deliberate vehicle fires that the Nuneaton & Bedworth Station Cluster has reported when comparing 2019 (32) to 2017 (26)

- 9

The reduction in the number of deliberate vehicle fires that the Warwick Station Cluster has reported when comparing 2019 (4) to 2017 (13)

- Cars (57.7%) were the most common vehicle type to be in a deliberate vehicle fire, followed by motorcycles (18.7%).
- Where known, 'naked flame' was the largest cause given for the ignition source (14.9%) followed by 'fuel/chemical related' (12%). For many incidents it was unknown what the ignition source was or how the fire was caused.

Deliberate Vehicle Fires by Station Cluster - Three Year Overview – 2017 to 2019

Station Cluster	Jan to Dec 17	Jan to Dec 18	Jan to Dec 19	Number Change 2019 vs 2017*
Alcester	5	1	5	0
North Warwickshire	21	8	17	- 4
Nuneaton & Bedworth	26	31	32	+ 6
Rugby	24	22	17	- 7
Stratford	4	2	2	- 2
Warwick	13	7	4	- 9
Total	**93**	**71**	**77**	**- 16**

RAG based on percentage change: red an increase above 5%, green a reduction greater than 5%, amber increases or reductions within 5%

An analysis of deliberate vehicle fires over the three year period:

- Almost every area of the county saw a reduction in deliberate vehicle fires except for Nuneaton & Bedworth Station Cluster, which saw an increase of 6 incidents (23%).
- The north of the county reported 82.2% of the total deliberate vehicle fires.

Fire Station Clusters
Warwickshire Wards

Vehicle Fires
- 0 - 7
- 7 - 14
- 14 - 21
- 21 - 28
- 28 - 34

Top 3 Wards for Vehicle Fires
North Warks - Fillongley 34
Rugby – Revel & Binley Woods 30
Rugby – Newbold & Brownsover 26

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Risks and Issues

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2.4 Other Primary Fires

'Other' primary fires are primary fires that do not fall under the other primary fire categories and include fires to various other valuable assets.

15%	**11%**	**- 41%**
(22 incidents) The percentage reduction seen for all 'other' primary fires over the three year period of January 2017 to December 2019	**(8 incidents)** The percentage increase seen for accidental 'other' primary fires over the three year period of January 2017 to December 2019	**(30 incidents)** The percentage reduction seen for deliberate 'other' primary fires over the three year period of January 2017 to December 2019

2.4.1 Accidental Other Primary Fires

23%	**6**	**- 33%**
(61 incidents) The proportion of accidental other primary fires over the 3 year period reported in the Nuneaton & Bedworth Station Cluster	The increased number of accidental other primary fires that the North Warwickshire Station Cluster has reported when comparing 2019 (12) to 2017 (6)	The reduction in the number of primary other fires that the Stratford Station Cluster has reported when comparing 2019 (6) to 2017 (9)

Accidental Other Primary Fires by Station Cluster - Three Year Overview – 2017 to 2019

Station Cluster	Jan to Dec 17	Jan to Dec 18	Jan to Dec 19	Number Change 2019 vs 2017*
Alcester	10	10	9	- 1
North Warwickshire	6	26	12	+ 6
Nuneaton & Bedworth	20	24	17	- 3
Rugby	11	23	14	+ 3
Stratford	9	9	6	- 3
Warwick	17	19	20	+ 3
Total	**73**	**111**	**78**	+ 5

RAG based on percentage change: red an increase above 5%, green a reduction greater than 5%, amber increases or reductions within 5%

An analysis of accidental other primary fires over the three year period:

- Grassland, woodland and crops (includes forest, conifers and wood) were the property type most likely to be accidentally set fire to (30.5%, 80) followed by outdoor structures (includes tents, storage facilities and recycling points) at 26.7% (70).
- The main cause of the fire, where known, was most likely to be overheating (17.6%, 46) or a bonfire getting out of control (7.6%, 20).
- The ignition source for fires, where known, was most likely to be the electricity supply (8.8%, 23) followed by 'naked flame' on either lighted card or paper (6.9%, 18).
- Where details were collected, adults aged 18 to 64 years were the most likely cause of the accidental fire (27.5%, 72).

2.4.2 Deliberate Other Primary Fires

39%

(65 incidents)
The proportion of deliberate other primary fires over the 3 year period reported in the Nuneaton & Bedworth Station Cluster

- 13

The reduction in the number of deliberate other primary fires that the Nuneaton & Bedworth Station Cluster has reported when comparing 2019 (18) to 2017 (31)

NO CHANGE

Only the North Warwickshire Station Cluster has seen no change in the number of deliberate other primary fires when comparing 2019 (7) to 2017 (7)

Deliberate Other Primary Fires by Station Cluster - Three Year Overview 2017 to 2019

Station Cluster	Jan to Dec 17	Jan to Dec 18	Jan to Dec 19	Number Change 2019 vs 2017*
Alcester	7	4	3	- 4
North Warwickshire	7	8	7	0
Nuneaton & Bedworth	31	16	18	- 13
Rugby	13	5	12	- 1
Stratford	3	6	1	- 2
Warwick	12	9	6	- 6
Total	**73**	**48**	**47**	- 26

RAG based on percentage change: red an increase above 5%, green a reduction greater than 5%, amber increases or reductions within 5%

An analysis of deliberate other primary fires over the three year period:

- Grassland, woodland and crops (includes forest, conifers and wood) were the property type most likely to be deliberately set fire to (42.9%, 72) followed by outdoor structures (includes tents, storage facilities and recycling points) at 27.4% (46).

- Within these categories, stacked bale crops (19.6%, 33) were the property type most likely to be deliberately set fire to, followed by woodland forest (18.5%, 31) and private garages (10.1%, 17).
- The main cause of the deliberate fires, where known, was most likely to be caused by a 'naked flame – lighted card or paper' (20.2%, 34) or matches and candles (19.6%, 33).
- For most of the incidents it is not known who caused the fire but where this information is recorded, 14.3% (24) of these fires were caused by youths aged 10 to 17 years and 6.6% (10) were caused by adults aged 18 to 64 years.

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Risks and Issues

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3.0 Road Traffic Collisions

3.1 Road Traffic Collisions attended by WFRS

Nationally, Road Traffic Collisions (RTCs) are the most frequently attended non-fire incident. There can be a high risk to life associated with these incidents. English Fire and Rescue Services attended 31,090 RTCs in 2018/19, which is an increase of three per cent compared to 2017/18.

In the last risk profile, Extrications formed the largest proportion of attended RTC incidents at 62%. This has now shifted considerably and Services Rendered are now the most attended incidents by officers (51%) where Extrications have reduced to 33% of the attended incidents. This is reassuring that the most serious RTC incidents have reduced over the past three years, therefore victims are not needing to be extricated.

RTC incidents attended by WFRS have reduced over the three year period for both Extrications (30.4%) and for No Services Rendered (21.2%). Services Rendered RTC incidents have seen an increase of 25.7% (37) where there are now less extrications but there is still a requirement for officers to attend the scene of an RTC to provide other services in their emergency response.

| **26%**	**- 30%**	**51%**
(37 incidents) The percentage increase seen for 'Services Rendered' RTC incidents over the three year period of January 2017 to December 2019	**(41 incidents)** The percentage reduction seen for 'Extrications' over the three year period of January 2017 to December 2019	**(529 incidents)** The proportion of the total RTC incidents which are 'Services Rendered'

RTC Incidents - Three Year Overview – 2017 to 2019

Incident Type	Jan to Dec 17	Jan to Dec 18	Jan to Dec 19	Number Change 2019 vs 2017*
Extrications	135	114	94	- 41
Services Rendered	144	204	181	+ 37
No Services Rendered	66	49	52	- 14
Total RTCs Attended	**345**	**367**	**327**	- 18

RAG based on percentage change: red an increase above 5%, green a reduction greater than 5%, amber increases or reductions within 5%

RTC Incidents by Station Cluster - Three Year Overview 2017 to 2019

Station Cluster	Jan to Dec 17	Jan to Dec 18	Jan to Dec 19	Number Change 2019 vs 2017*
Extrications Total	**135**	**114**	**94**	- 41
Alcester	12	16	11	- 1
North Warwickshire	45	23	20	- 25
Nuneaton & Bedworth	25	14	13	- 12
Rugby	23	21	25	+ 2
Stratford	10	16	3	- 7
Warwick	20	24	22	+ 2
Services Rendered Total	**144**	**204**	**181**	+ 37
Alcester	19	17	23	+ 4
North Warwickshire	43	60	44	+ 1
Nuneaton & Bedworth	28	30	31	+ 3
Rugby	23	35	38	+ 15
Stratford	9	7	14	+ 5
Warwick	22	55	31	+ 9

RAG based on percentage change: red an increase above 5%, green a reduction greater than 5%, amber increases or reductions within 5%

An analysis of all RTC attended incidents over the three year period:

- The largest volume of Services Rendered RTC incidents are attended in the North Warwickshire Station Cluster. Almost one third of the total incidents over the three year period (27.8%) are reported in this cluster, which is not unexpected given the largely rural nature of the area, and the volume of traffic passing through the main roads to the M42 motorway.
- Rugby Station Cluster has seen the largest increase in attended incidents, with an increase of 15 incidents (65.2%) when comparing 2019 (38) to 2017 (23). Warwick Station Cluster has also seen an increase in attended incidents, with an increase of 9 incidents (41%) when comparing 2019 (31) to 2017 (22).
- Extrication incidents have seen a big reduction over the past three years, where the number of incidents have reduced by over half. The largest reduction has been seen in the North Warwickshire Cluster but this is not surprising as this is where the largest volume of incidents are reported. The cluster reported a reduction of 25 incidents (55.6%) when comparing 2019 (20) to 2017 (45).
- The Nuneaton & Bedworth Station Cluster also saw levels reduce by half (48%) where incidents reduced from 25 reported in 2017 to 13 in 2019.
- Two thirds of the incidents (77.8%, 808) involved a car and 4.4% (46) involved a lorry/HGV.
- There were multiple vehicles involved in 10.8% (112) of the incidents attended.

Fire Station Clusters

Warwickshire Wards

All Attended RTCs

	0 - 11
	11 - 21
	21 - 30
	31 - 41
	41 - 60

Top 3 Wards for Attended RTC Incidents
North Warwickshire – Curdworth 56
North Warwickshire – Fillongley 49
Stratford-on-Avon – Tanworth in Arden 43

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3.2 Killed or Seriously Injured (KSI) – Road Traffic Collisions

The Traffic and Road Safety Team at Warwickshire County Council collect data on those killed or seriously injured as the result of a road traffic collision. Levels saw an increasing trend after the lowest number of KSI were recorded in a year in 2013 (288). At 2017 there were 352 KSI recorded and by 2019 this had reduced to 309.

KSI Incidents - Three Year Overview – 2017 to 2019

Incident Type	Jan to Dec 17	Jan to Dec 18	Jan to Dec 19	Number Change 2019 vs 2017*
Fatal	38	35	32	- 6
Serious (injury)	314	317	277	- 37
Total KSI	**352**	**352**	**309**	- 43

*RAG based on percentage change: red an increase above 5%, green a reduction greater than 5%, amber increases or reductions within 5%

Fatal incidents accounted for 11.6% of the total incidents in 2019 and incidents with a serious injury 89.6%. The proportion of fatal incidents has increased slightly over the three year period.

Levels of KSI are on the decline and the long-term trend is very positive. There were 639 people KSI on Warwickshire roads in 2000 and this has reduced to 309 in 2019, a reduction of 51.6%. Reductions can be attributed to improvements in technology, improvements in vehicle engineering, reductions in speed limits and improvements in trauma care.

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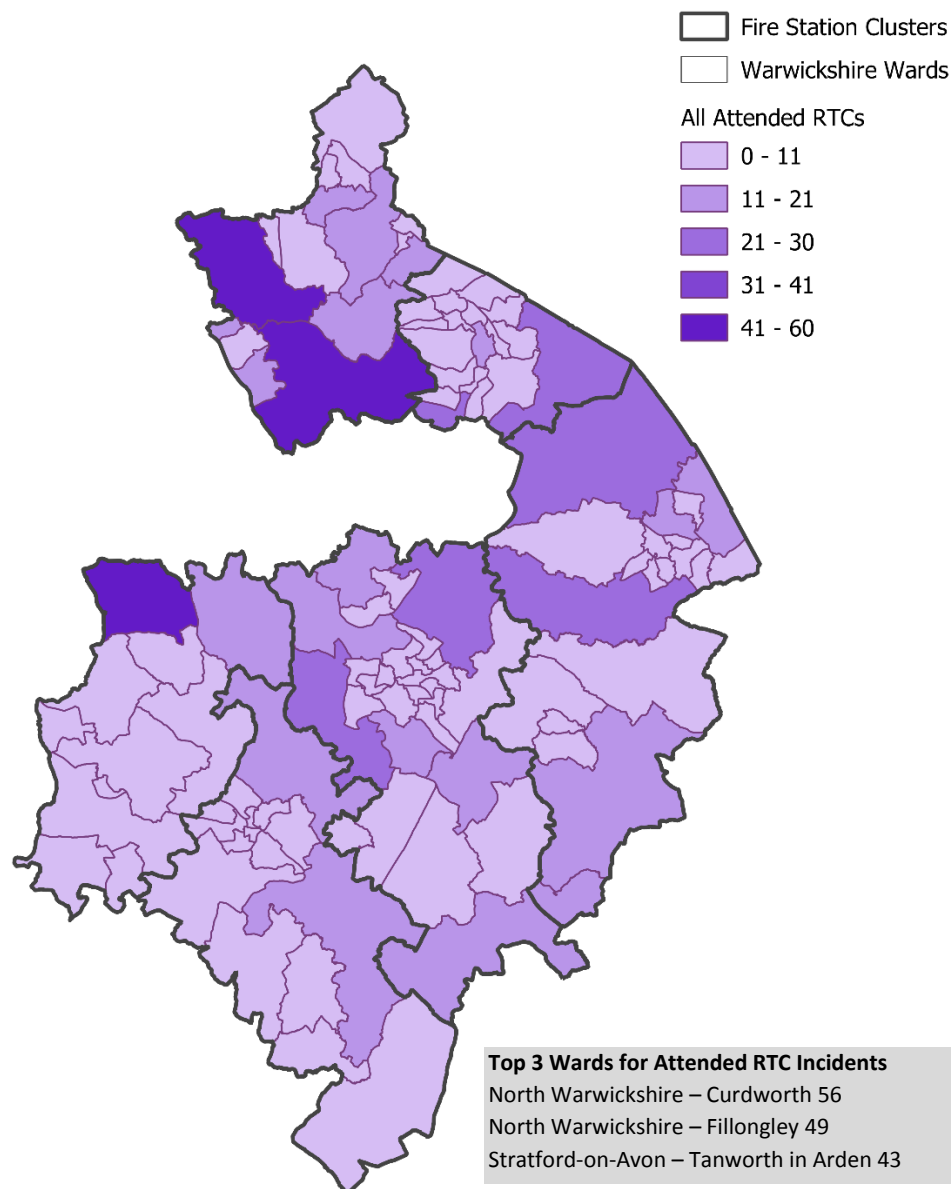
Risks and Issues

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4.0 Secondary Fires

Secondary fires are all fires with no casualties, rescues or property loss and are not attended by five or more fire engines. They include outdoor fires, derelict property and also include chimney fires.

After a period of reductions, in recent years secondary fires have started to increase again. Accidental secondary fires have seen the largest increase over the past three years with an increase of 18.6% (45) when comparing 1st January to 31st December 2019 (287) to the same period of 2017 (242). Both deliberate secondary fires and chimney fires have seen a reduction.

All Secondary Fires - Three Year Overview – 2017 to 2019

Incident Type	Jan to Dec 17	Jan to Dec 18	Jan to Dec 19	Number Change 2019 vs 2017*
Accidental Secondary	242	397	287	+ 45
Deliberate Secondary	316	274	309	- 7
Chimney Fires	54	50	46	- 8
Total Secondary Fires	**612**	**721**	**642**	+ 30

RAG based on percentage change: red an increase above 5%, green a reduction greater than 5%, amber increases or reductions within 5%

47%	**19%**	**- 8**
(926 incidents) The proportion of secondary fires which are classed as 'accidental' over the 3 year period	**(45 incidents)** The percentage increase seen for 'accidental' secondary fires over the three year period	The reduction in Chimney fires reported when comparing 2019 (46) to 2017 (54)

4.1 Accidental Secondary Fires

26%	22	- 4
(243 incidents) The proportion of accidental secondary fires over the 3 year period reported in the Warwick Station Cluster	The increased number of accidental secondary fires that the Nuneaton & Bedworth Station Cluster has reported when comparing 2019 (83) to 2017 (61)	The reduction in the number of accidental secondary fires that the North Warwickshire Station Cluster has reported when comparing 2019 (34) to 2017 (38)

Accidental Secondary Fires by Station Cluster - Three Year Overview 2017 to 2019

Station Cluster	Jan to Dec 17	Jan to Dec 18	Jan to Dec 19	Number Change 2019 vs 2017*
Alcester	19	31	18	- 1
North Warwickshire	38	53	34	- 4
Nuneaton & Bedworth	61	99	83	+ 22
Rugby	39	67	51	+ 12
Stratford	23	37	25	+ 2
Warwick	62	110	76	+ 14
Total	**242**	**397**	**287**	**+ 45**

RAG based on percentage change: red an increase above 5%, green a reduction greater than 5%, amber increases or reductions within 5%

An analysis of accidental secondary fires over the three year period:

- Just over half of the accidental secondary fires occur in the north of the county (56.7%) and 46.3% (243) of these are reported in the Nuneaton & Bedworth Station Cluster.

- A large proportion (40.9%) of the fires occurred at 'grassland, woodland and crops' locations and tree scrubs were accidentally set fire to in 11.7% (108) of the incidents.
- Almost one third of the fires (30.1%) occurred at 'other outdoors – land' where loose refuse was a popular property type to set fire to (23.4%).
- Fires also occurred at 'outdoor structures' (25.6%) and 14.5% (135) of the total accidental fires saw either a small or large refuse container set fire to.

4.2 Deliberate Secondary Fires

41%	35	- 24
(368 incidents) Over one third of deliberate secondary fires over the 3 year period were reported in the Nuneaton & Bedworth Station Cluster	The increased number of deliberate secondary fires that the North Warwickshire Station Cluster has reported when comparing 2019 (82) to 2017 (47)	The reduction in the number of deliberate secondary fires that the Nuneaton & Bedworth Station Cluster has reported when comparing 2019 (111) to 2017 (135)

Deliberate Secondary Fires by Station Cluster - Three Year Overview 2017 to 2019

Station Cluster	Jan to Dec 17	Jan to Dec 18	Jan to Dec 19	Number Change 2019 vs 2017*
Alcester	8	9	2	- 6
North Warwickshire	47	47	82	+ 35
Nuneaton & Bedworth	135	122	111	- 24
Rugby	51	50	63	+ 12
Stratford	19	8	6	- 13
Warwick	56	38	45	- 11
Total	**316**	**274**	**309**	**- 7**

RAG based on percentage change: red an increase above 5%, green a reduction greater than 5%, amber increases or reductions within 5%

An analysis of deliberate secondary fires over the three year period:

- The north of the county by far reports the highest number of deliberate secondary fires. Over two thirds (78.8%) of fires were reported here, with half of the incidents (52%, 368) being reported in the Nuneaton & Bedworth Station Cluster.
- A large proportion (40%) of the fires occurred at an 'other outdoors – land' location of which almost one third (32.5%) of all deliberate secondary fires saw loose refuse being set fire to (292 incidents).
- Over one third of fires were in 'grassland, woodland and crops' locations (36.6%) and tree scrubs were deliberately set fire to in 14.1% (127) of the incidents.
- Small or large refuse containers were also popular items to be deliberately set fire to (10.2%, 92).

Top 4 Wards for Deliberate Secondary Fires
Nun & Bed – Camp Hill 79
Nun & Bed – Wembrook 29
Rugby – Newbold & Brownsover 29
Rugby – Eastlands 29

Fire Station Clusters
Warwickshire Wards

Deliberate Secondary Fires
0 - 15
15 - 31
31 - 47
47 - 63
63 - 79
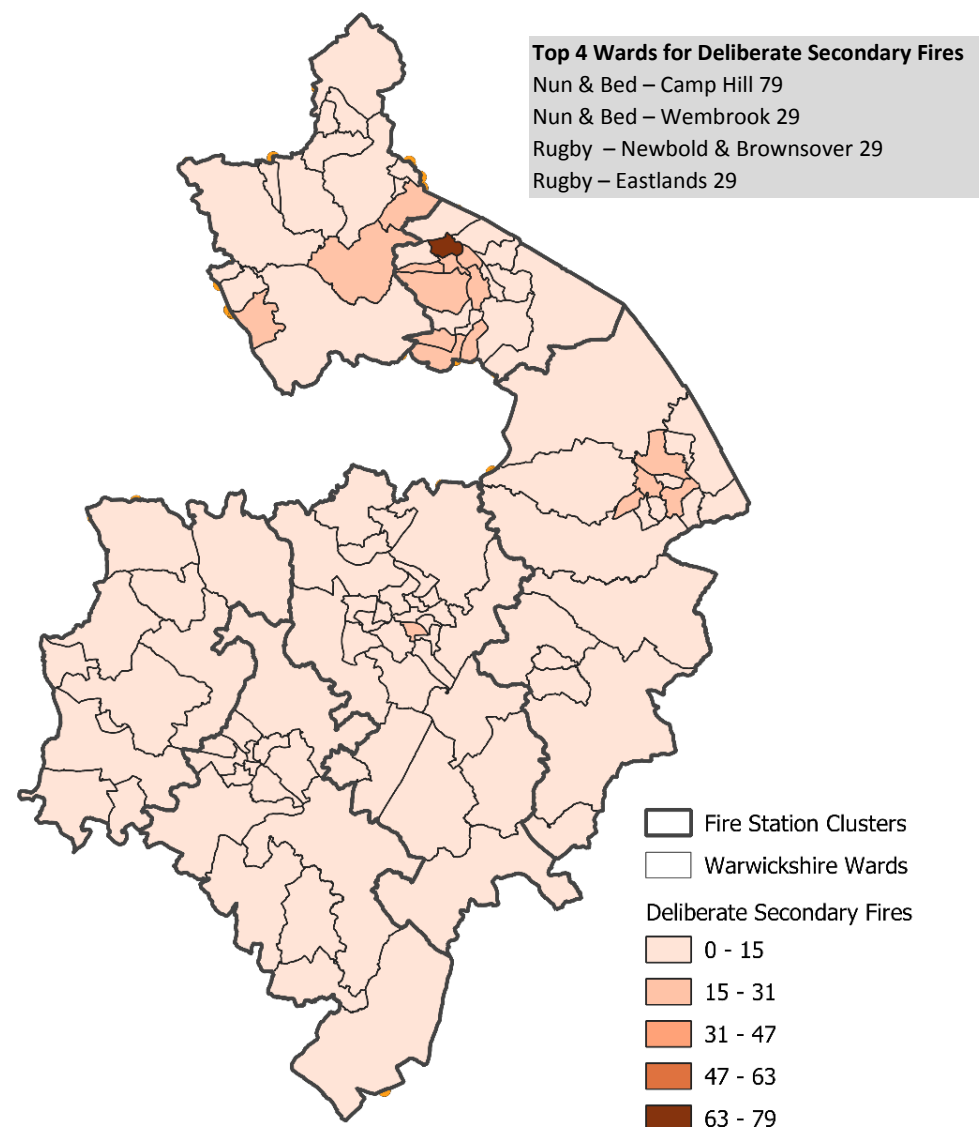
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Risks and Issues

- The north of the county remains the highest risk area for both accidental and deliberate secondary fires. Nuneaton & Bedworth Station Cluster area is the most affected area for deliberate secondary fires.
- **ASBIT team**
- **Preventative work**
- Awaiting input from Rebecca

5.0 Deliberate Fire Setting

Deliberate fire setting incidents are where the source of the ignition is believed to be malicious or deliberate. The incidents include both primary and secondary fires but are mostly comprised of secondary fires.

All Deliberate Fires - Three Year Overview – 2017 to 2019

Incident Type	Jan to Dec 17	Jan to Dec 18	Jan to Dec 19	Number Change 2019 vs 2017*
Deliberate Primary Fires	203	155	151	- 52
Deliberate Secondary Fires	317	274	309	- 8
Total Deliberate Fires	**520**	**429**	**460**	- 60

Deliberate Primary Fires - Three Year Overview – 2017 to 2019
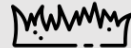
Incident Type	Jan to Dec 17	Jan to Dec 18	Jan to Dec 19	Number Change 2019 vs 2017*
Deliberate Home Fires	19	17	11	- 8
Deliberate Business Fires	19	19	19	0
Deliberate Vehicle Fires	91	71	77	- 14
Deliberate Other Fires	74	48	44	- 30
Total Deliberate Primary Fires	**203**	**155**	**151**	- 52

RAG based on percentage change: red an increase above 5%, green a reduction greater than 5%, amber increases or reductions within 5%

Deliberate primary fires are of particular concern to WFRS due to the greater risk they pose to human life and these types of fires can also involve property of high value. In 2018 and 2019, Nuneaton and Bedworth Borough has had the most primary fires reported, with deliberate fires in the Nuneaton & Bedworth Station Cluster accounting for 41% of all deliberate fires in the county. The Nuneaton & Bedworth Station Cluster also accounted for 30.9% of all secondary fires in the county.

In 2018 and 2019, of the deliberate primary fires reported in Nuneaton and Bedworth Station Cluster, the majority were deliberate car fires which accounted for 50.4% of the total deliberate fires. Of the deliberate secondary fires reported in Nuneaton and Bedworth Station Cluster, setting fire to refuse was the main ignition type, accounting for over one third (39%) of the fires in the cluster. This is also a similar picture for the county, with 37.2% of the deliberate secondary fires seeing refuse set fire to. This is a five percentage points increase in this type of fire setting. The table below shows the top deliberate fire setting methods within the county.

Deliberate Secondary Fires by Cause (Proportion of Total Fires) – 2015 vs 2019

	2019	2015	Direction of Travel
Loose Refuse / rubbish tip	34%	44%	↓
Tree Scrub / scrubland	26%	7%	↑
Wheelie Bin / refuse container / recycle container	15%	10%	↑
Grassland / pasture	7%	21%	↓

Explanations for this include various socioeconomic, these include the relatively high levels of unemployment, poverty and (perhaps subsequently) high levels of

crime and anti-social behaviour (ASB) incidents in the Nuneaton and Bedworth Borough as compared to other districts and boroughs within Warwickshire.

The maps show the hotspots for deliberate small fires alongside anti-social behaviour (ASB) incidents reported to Warwickshire Police. There is a strong link between ASB and incidents of deliberate small fires, as ASB incidents can include deliberate fire setting. The Nuneaton and Bedworth Borough area has the highest proportion of ASB incidents with 30% of the total incidents reported in this area. This is a slight reduction on the 32% reported in the last IRMP risk profile in 2016.

Camp Hill Ward in the Nuneaton & Bedworth Station Cluster reported the third highest level of anti-social behaviour incidents over the three year period and is the primary hotspot for deliberate small fires in the cluster. The ward sees 8.8% of the total deliberate small fires occurring here and 5% of the total anti-social behaviour incidents reported in the county.

As advised in the previous report the Nuneaton & Bedworth Station Cluster, particularly Camp Hill ward, remains the area reporting the greatest deliberate fire setting activity and is a continued focus area for WFRS.

Police Reported ASB Incidents in N&B Station Cluster

Deliberate Small Fire Incidents in N&B Station Cluster

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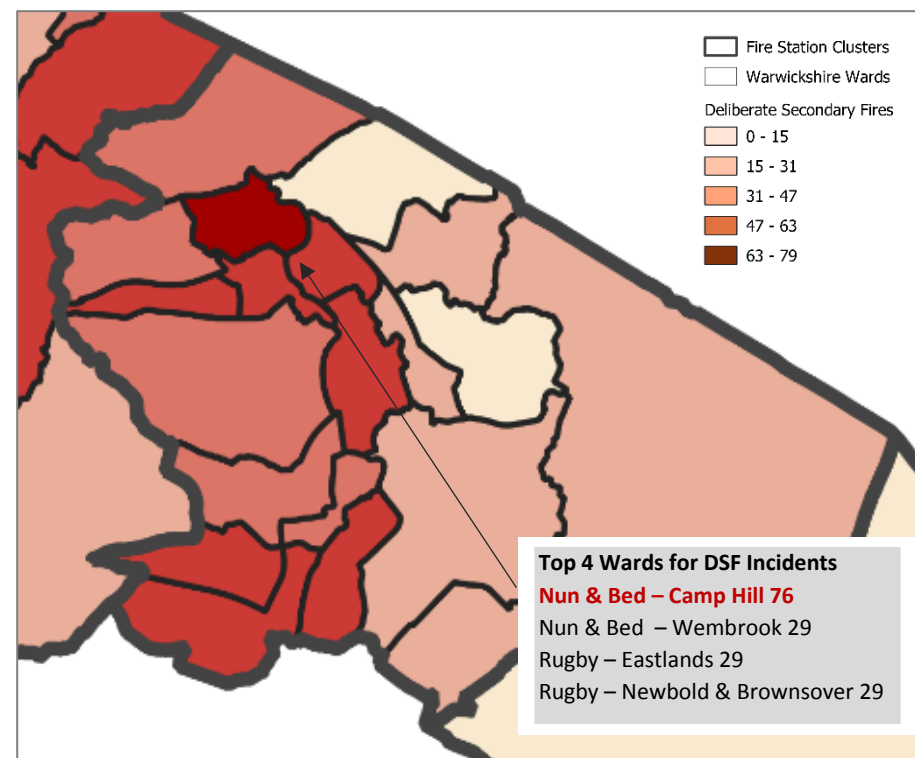
Intelligence – SFU – Moreno?

Any risks and issues for the future?

Initiatives in place – SFU – Moreno?
Don't duplicate from previous section

6.0 False Alarms

False Alarms are incidents where WFRS attend a location only to discover that there is/was no actual fire incident. There are three categories within this:

- Automatic False Alarms (AFAs)
- False Alarms with Good Intent
- False Alarms – Malicious

False alarm incidents consistently account for the largest proportion of incidents attended by WFRS and levels have increased over the past three years. Over the three year period, the largest proportion of incidents attended were False Alarms with Good Intent (56%), which is a reduction compared to the last report where they accounted for 69% of all false alarm incidents.

The number of Automatic False Alarms has been increasing and for the three year period account for 42% of all false alarm incidents. This in an increase from 27% reported in the last report, which is an increase of 15 percentage points.

All False Alarm Incidents - Three Year Overview – 2017 to 2019

Incident Type	Jan to Dec 17	Jan to Dec 18	Jan to Dec 19
Automatic False Alarms	448	632	753
False Alarms with Good Intent	742	894	789
False Alarms - Malicious	24	35	27
Total False Alarms	**1,214**	**1,561**	**1,569**

The most common reasons for false alarms are the accidental triggering by a human or animal, system issues or contaminants such as dust or steam. Good intent false alarms are calls made in good faith, such as when people see s or smell smoke and malicious calls usually involve a hoax call or the deliberate activation of an alarm[2].

An analysis of false alarm incidents over the three year period:

- Overall, levels have been increasing over the three year period and continue an upward trend.
- Automatic False Alarms in particular have seen a large increase, from 246 incidents reported in 2014 to 753 in 2019.
- Increases can be viewed positively as more properties are likely to contain fire alarms and are being set off by smoke.
- False Alarm Good Intent incidents remain the highest reported type of false alarm (56%).
- False Alarm Malicious incidents have reduced slightly and now account for 2% of the total reported incidents.

2017 - 2019 False Alarm Incidents

- False Alarms Good Intent
- False Alarms Malicious
- Automatic False Alarms

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[2] *Activities, spending and productivity in the F&R Services since 2009 (ONS)*

6.1 Automatic False Alarms

Automatic Fire Alarms are defined as calls received from non-domestic automatic fire alarm systems.

34%	**86**	**- 1**
(627 incidents) The proportion of AFAs over the 3 year period reported in the Warwick Station Cluster	The increased number of AFAs that the Nuneaton & Bedworth Station Cluster has reported when comparing 2019 (156) to 2017 (70)	The reduction in the number of AFAs that the North Warwickshire Station Cluster has reported when comparing 2019 (28) to 2017 (29)

Automatic False Alarm Incidents by Station Cluster - 3 Year Overview – 2017 to 2019

Station Cluster	Jan to Dec 17	Jan to Dec 18	Jan to Dec 19	Number Change 2019 vs 2017*
Alcester	41	56	67	+ 26
North Warwickshire	29	33	28	- 1
Nuneaton & Bedworth	70	119	156	+ 86
Rugby	74	130	154	+ 80
Stratford	64	90	93	+ 29
Warwick	170	202	255	+ 85
Total	**448**	**630**	**753**	**+ 305**

RAG based on percentage change: red an increase above 5%, green a reduction greater than 5%, amber increases or reductions within 5%

An analysis of AFAs over the three year period:

- Overall, AFAs increased by 68% (305) which follows an increase reported in the last risk profile of a 180% increase between 2013 and 2015.
- Warwick Station cluster reported by far the highest proportion of AFAs over the three year period (34.2%) followed by Rugby Station cluster (19.6%).
- Only North Warwickshire Station cluster saw a reduction in incidents over the three year period (by one incident), all of the other clusters saw an increase. **Why is this?**
- The largest increase in incidents has been seen in the Nuneaton & Bedworth Station cluster (86 incidents) followed by the Warwick Station cluster (85 incidents).

A new AFA policy was introduced in 2016 and WFRS have now adopted a risk based approach to calls from fire alarm monitoring organisations. It focuses on the most vulnerable people in our communities. Fire control operators apply a robust and effective call challenge to all requests for a fire engine and they seek information to establish if the building falls into one of the identified groups for vulnerable people.

Since 2016, when WFRS receive an AFA call and is no further sign of a fire, they will not respond to commercial/business premises and non-sleeping premises unless there is an emergency call confirming there is a fire, or signs of a fire can be seen.

Adopting a more appropriate response to risk allows WFRS to focus efforts on preventative measures and on engaging with communities and vulnerable groups to assist with education prevention activity.

6.2 False Alarms with Good Intent (FAGI)

False Alarms with Good Intent incidents represent the largest proportion of incidents to WFRS.

28%	**35**	**- 6**
(685 incidents) The proportion of FAGI incidents over the 3 year period reported in the Warwick Station Cluster	The increased number of FAGI incidents that the Rugby Station Cluster has reported when comparing 2019 (166) to 2017 (131)	The reduction in the number of FAGI incidents that the Nuneaton & Bedworth Station Cluster has reported when comparing 2019 (185) to 2017 (191)

An analysis of FAGI incidents over the three year period:

- Overall, FAGI incidents increased by 6.3% (47) which follows a reduction reported in the last risk profile.
- Warwick Station cluster reported the highest proportion of incidents over the three year period (28.3%) followed by Nuneaton & Bedworth Station Cluster (23.4%).
- The Nuneaton & Bedworth Station cluster saw the largest reduction in incidents (6 incidents) followed by the Warwick Station cluster (5 incidents).
- The largest increase in incidents has been seen in the Rugby Station cluster (35 incidents).

FAGI incidents still represent a large proportion of false alarm calls and are challenging to reduce as they are usually made by well intended residents.

False Alarms with Good Intent by Station Cluster - Three Year Overview – 2017 to 2019

Station Cluster	Jan to Dec 17	Jan to Dec 18	Jan to Dec 19	Number Change 2019 vs 2017*
Alcester	46	81	54	+ 8
North Warwickshire	94	113	111	+ 17
Nuneaton & Bedworth	191	189	185	- 6
Rugby	131	182	166	+ 35
Stratford	56	79	54	- 2
Warwick	224	242	219	- 5
Total	**742**	**886**	**789**	**+ 47**

RAG based on percentage change: red an increase above 5%, green a reduction greater than 5%, amber increases or reductions within 5%

6.3 False Alarms Malicious

False Alarms Malicious (FAM) are calls made to WFRS where there is no actual emergency, but in contrast to False Alarms with Good Intent, here the caller is aware of this. They are calls made to WFRS with the aim of misleading the emergency services into thinking there is an actual emergency when there is not.

34%	**3**	**- 4**
(29 incidents) The proportion of FAM incidents over the 3 year period reported in the Nuneaton & Bedworth Station Cluster	The increased number of FAM incidents that the Nuneaton & Bedworth Station Cluster has reported when comparing 2019 (8) to 2017 (5)	The reduction in the number of FAM incidents that the Warwick Station Cluster has reported when comparing 2019 (2) to 2017 (6)

An analysis of FAM incidents over the three year period:

- Overall, FAM incidents increased by 12.5% (3) which follows a reduction reported in the last risk profile.
- Nuneaton & Bedworth Station cluster reported the highest proportion of incidents over the three year period (33.7%) followed by the Warwick Station Cluster (23.3%).
- The Warwick Station cluster was the only area to see a reduction in incidents (4 incidents), all other areas saw a slight increase.
- The largest increase in incidents has been seen in the Nuneaton & Bedworth Station cluster (3 incidents).

Levels have remained fairly steady over the three years and are considered to be low.

False Alarms Malicious by Station Cluster - Three Year Overview – 2017 to 2019

Station Cluster	Jan to Dec 17	Jan to Dec 18	Jan to Dec 19	Number Change 2019 vs 2017*
Alcester	2	4	3	+ 1
North Warwickshire	4	1	5	+ 1
Nuneaton & Bedworth	5	16	8	+ 3
Rugby	6	0	7	+ 1
Stratford	1	2	2	+ 1
Warwick	6	12	2	- 4
Total	**24**	**35**	**27**	**+ 3**

*RAG based on percentage change: red an increase above 5%, green a reduction greater than 5%, amber increases or reductions within 5%

Fire Station Clusters

Warwickshire Wards

All False Alarm Incidents

- 0 - 20
- 21 - 40
- 41 - 60
- 61 - 100
- 101 - 215
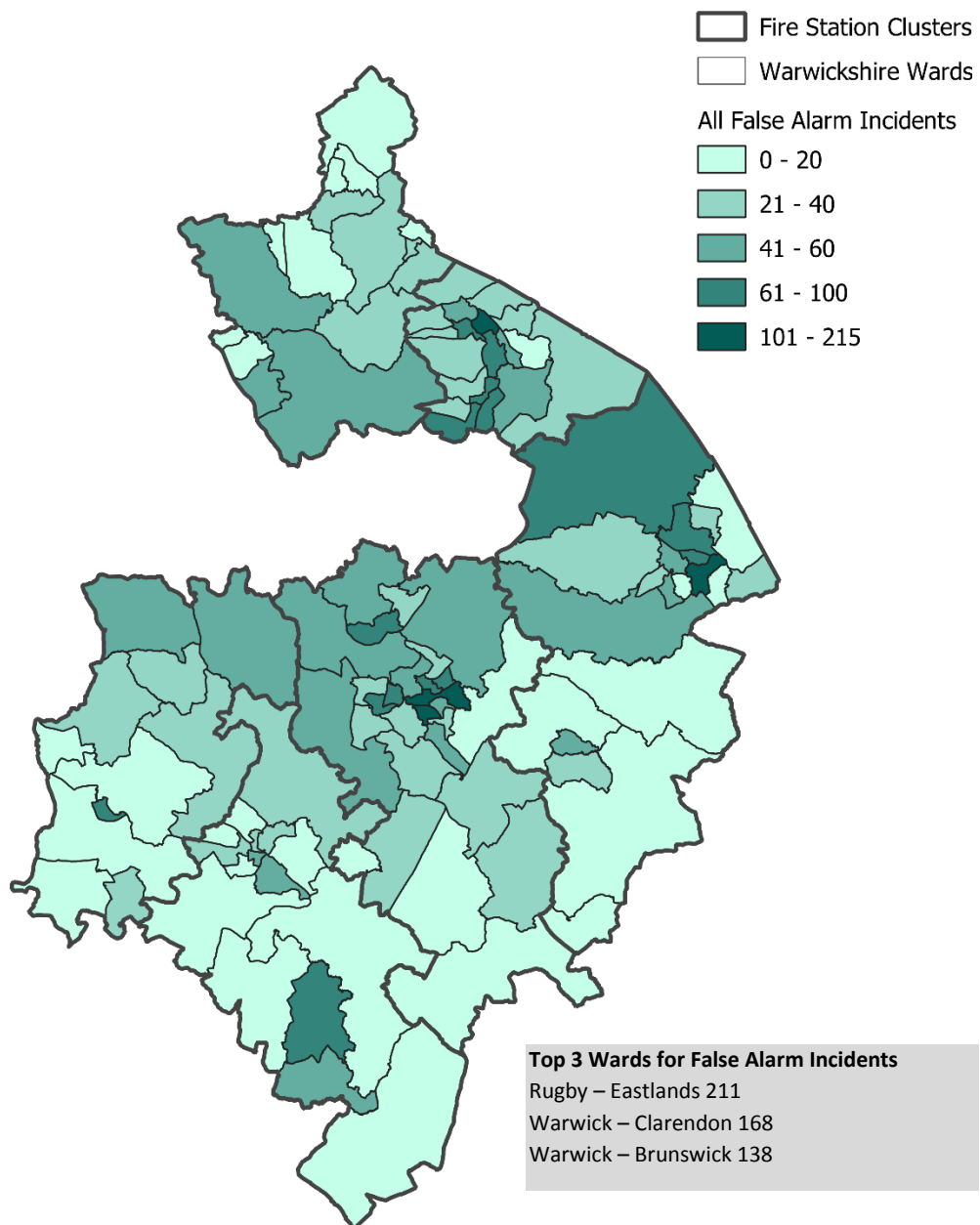
Risks and Issues

- XXXXXXX for False Alarms

Top 3 Wards for False Alarm Incidents
Rugby – Eastlands 211
Warwick – Clarendon 168
Warwick – Brunswick 138

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7.0 Special Services

Special Services incidents are non-fire incidents (excluding RTCs) that are attended by WFRS. They consist of incidents that require the attendance of an officer or an appliance, from domestic incidents through to major disasters (examples of these can be water rescues or stabilising unsafe structures). The attendance at these types of incidents have increased significantly over the last decade. The last report advised an increase of 41% (75 incidents) and over the last three years there has been a further increase of 46% (217 incidents).

28%	**70**	**- 5**
(486 incidents) The proportion of Special Services incidents reported over the 3 year period in the Warwick Station Cluster	The increased number of Special Services incidents that the Warwick Station Cluster has reported when comparing 2019 (194) to 2017 (124)	Rugby Station Cluster was the only area to see a reduction over the three year period – from 137 in 2017 to 132 in 2019

Special Services Incidents by Station Cluster - 3 Year Overview – 2017 to 2019

Station Cluster	Jan to Dec 17	Jan to Dec 18	Jan to Dec 19	Number Change 2019 vs 2017*
Alcester	31	34	76	+ 45
North Warwickshire	44	68	67	+ 23
Nuneaton & Bedworth	83	126	132	+ 49
Rugby	137	138	132	- 5
Stratford	49	62	85	+ 36
Warwick	124	168	194	+ 70
Total	**469**	**596**	**686**	**+ 217**

*RAG based on percentage change: red an increase above 5%, green a reduction greater than 5%, amber increases or reductions within 5%

Top 5 Types of Attended Special Services Incident

	13% Flooding	**46%** Make safe **27%** Advice only
	12% Assist other agencies	**61%** Assistance to other agencies **27%** Other **10%** Missing person
	12% Effecting entry / exit	**37%** For child **26%** For person in distress **18%** For medical case
	10% Other rescue / release of persons	**61%** Other **22%** Trapped in or under machinery or other object
	9% Animal Assistance	**33%** Domestic animal **22%** Livestock **18%** Trapped animal

Over the last three years flooding incidents were highest type of Special Services incident call out for WFRS and was directly affected by bad weather periods. Climate change and changing weather patterns are a contributory factor to the increase in Special Service incidents and increased demand on WFRS services. WFRS remain prepared for an increase in these types of incidents and their continued training enables Warwickshire crews to be able to respond when their skills are needed. Training and development of Fire Officers is extremely important as the nature of Special Services incidents can change quite quickly and officers need to be able to adapt to changing demands.

Risks and Issues

- Weather risks
- Training
- ADD HERE

8.0 Hospital to Home

The Hospital to Home scheme was launched by WFRS in August 2018 and is run in partnership with Public Health, Adult Social Care and the local hospitals and funded by the Better Care Fund. The aim of the scheme is to support elderly and vulnerable patients who have been treated at hospital and are well enough to get back to where they feel safe and can be supported to live independently, which could be either in their own home or to a care home. The scheme has helped to reduce the number of patients who have previously had to be admitted to hospital because they had no immediate friends or family to help the get home. Once home the patient is settled in by the Hospital to Home team and makes a referral for a Safe and Well Check. Those delivering the service are not on duty and are used on a self-rostering basis.

The scheme has been a big success in the county and has helped to strengthen WFRS' brand within the community, where crews are getting involved in a wide range of work keeping our communities safe. An analysis of the scheme so far, for the period 1st October 2018 to 31st December 2019 is below.

Hospital to Home Visits – 1st October 2018 to 31st December 2019
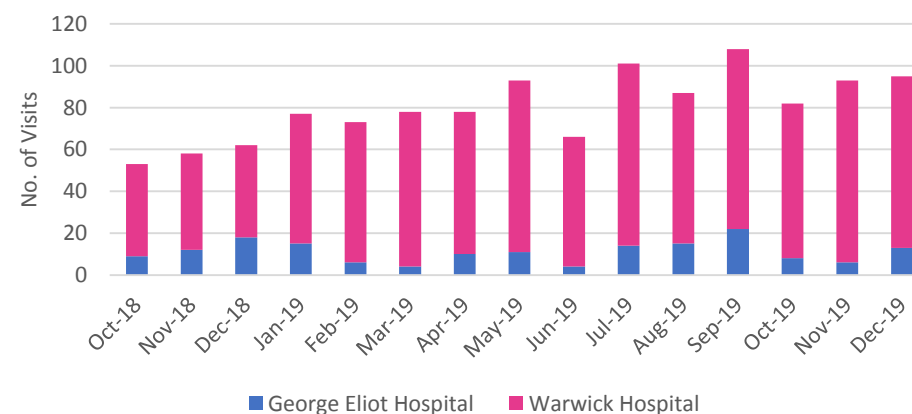
Hospital to Home Visits – Key Statistics

	86% Referrals from Warwick Hospital	**14%** Referrals from George Eliot Hospital
	39% 60 min response time achieved	**61%** 60 min response time **not** achieved
	79 Safe and Well Checks were carried out at the visit	**395** Safe and Well Checks were scheduled for a crew to return
	50% Returned to homes in Warwick District (highest proportion of users of the service)	**76%** Of Warwick District users of the service were returned to their own home, 24% to a care home
	48% Of users were aged 85 years plus	**59%** Of users of the service were female

The Hospital to Home scheme has seen an increase in visits over the months since it began, with the largest proportion of the referrals being from Warwick Hospital. It is too early in the scheme to be able to see any trends in peaks and demands of the service but demand is expected to increase in light of COVID-19 pressures.

Risks and Issues

- In light of the recent COVID-19 situation there has been more pressure put on the scheme and at the time of writing it was anticipated that the scheme was having to adapt to a different way of working to cope with the higher numbers needing the service.
- The Hospital to Home scheme will be a crucial avenue to help identify even more vulnerable people who may not have access to other resources to report issues. For example, those suffering domestic abuse, where volunteers may notice signs of concern when returning a person home or they may be asked directly for help. Similarly it could help to identify situations of hoarding which can be linked to mental health problems.

9.0 Risk Management

One of the roles of Fire and Rescue Services is to protect against fire and are therefore involved in the design process of the construction of new buildings, making sure that they are designed in accordance with fire safety specifications.

Premises Risk

Premises are surveyed and risk assessed by WFRS so that fire crews are familiarised with the risks associated with, and unique to, each premises. These risk assessments are distinct from fire safety inspections which are sometimes conducted during the same visit.

There are 26 criteria used to assess premises risk. These include: how a building is constructed, what it is used for, its layout and its contents (e.g. hazardous materials). For each criterion, buildings are scored as having either a low, moderate or severe level of hazard.

These scores are then tallied and a risk level is assigned to each premises. A building with up to two severe hazards is classed as a Level 1, those with between three and five severe hazards are a Level 2, and premises with more than five severe hazards are categorised as Level 3. Once they are scored, buildings are referenced with a unique number and information is gathered to support the formulation of operational strategies and tactics. In the case of Level 3 buildings operational plans are also made detailing how a fire would be dealt with in a safe and effective way, such that damage is mitigated should a fire occur. Hence, the more risk present in the building the more information provided for the support of operational plans. Across Warwickshire at May 2020 there are 155 Level 2 buildings, including building types such as hotels, hospitals and factories. There are 35 level 3 buildings in Warwickshire.

Heritage Risk

A subcategory of high risk buildings is heritage buildings. These properties are buildings that are important to the country's heritage and history, and some of them were built as far back as medieval times. This section concerns the protection of heritage properties from fire, and the management of the 'heritage risk' associated with such buildings. One of the 26 criteria used in premises risk assessments detailed previously is 'heritage' which assesses whether the building is listed, of local, national or international importance.

Heritage buildings pose a great threat to firefighter safety due to their complex layouts and old construction. They are also immensely valuable and often contain irreplaceable artefacts.

Warwickshire County is renowned for many of its historical attractions such as Warwick castle, which was originally built in 1068 and is a Level 3 risk heritage building. Heritage buildings contribute largely to Warwickshire's economy through the creation of employment opportunities as well as through the attraction of tourists from across the country.

There is legislation surrounding the responsibilities of fire and rescue authorities to manage heritage risk, and this is taken into account by the Warwickshire Fire and Rescue Service. WFRS also works with heritage building occupiers and owners to advise them on how to reduce the risk of fire. The map below shows high risk properties across the County. As detailed above, Warwickshire Fire and Rescue Service Firefighters are aware of the location of all of these properties and of their associated risks.

The map below shows Level 2 and Level 3 risk properties across Warwickshire, including both heritage and non-heritage buildings.
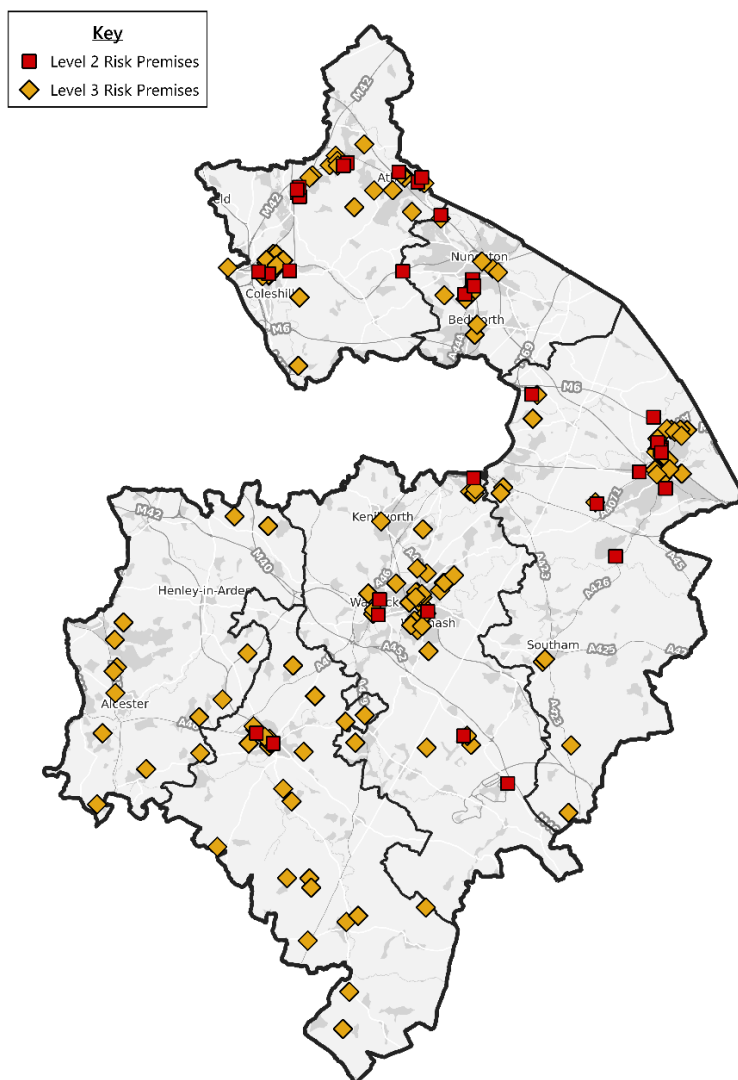
Sprinklers

Automatic Fire Suppression Systems, more commonly referred to as sprinklers, are strongly championed by WFRS. Sprinklers have been proven to have up to a 99% success rate, and in the UK a death from fire has <u>never</u> occurred in a building fully fitted with sprinklers.

When there is a fire, sprinkler heads act as heat sensors and operate when their temperature rises to between 57 and 68 degrees, and each fire head is individually activated. This means that not all sprinklers in a building operate/ need to operate in order to control a fire. In almost 90% of cases, the activation of sprinklers is able to confine the fire to the room in which it started (room of origin).

There are benefits of installing sprinklers in a commercial or domestic building. These can be broadly classified into four categories:

1. A reduction in the number of fire fatalities and casualties.
   Sprinklers reduce fatalities and casualties from fire in a number of ways such as by allowing people to escape the building while the fire is confined and by reducing the toxicity and quantity of smoke which is the main cause of fire fatalities.
2. A reduction in property damages and a subsequent reduction in insurance costs and premiums.
   By for example restricting the fire to its room of origin, and allowing more time to evacuate, property damages in sprinklered properties have been shown to be less by between 30 and 60% than in buildings without sprinkler systems.
3. A reduction in the environmental impact of fires.
   Substantially less water is required by sprinklers to contain a fire as compared to that needed by firefighters to manually suppress a fire. They also reduce the carbon footprint of fires, by controlling and sometimes

extinguishing them altogether. Sprinklers also act to reduce the amount of this run-off water, and to reduce the requirement for the disposal of hazardous waste.

4. A reduction in incident levels attended by fire and rescue services and subsequent cost savings.

Sprinklers control fires whilst fire crews arrive at the scene of a fire meaning fewer appliances are required. Sprinklers also mean that the number of Automatic False Alarm incidents is reduced.

WFRS recognises these benefits and advocates the installation of sprinklers in non-domestic premises and in new housing developments. WFRS can continue to support sprinkler installation through working with WCC to allocate Community Infrastructure Levy funds towards the installation of sprinklers in new developments. Alternatively, WFRS and WCC could incentivise property developers to install sprinklers by granting a concession on the CIL payable on fully sprinklered buildings.

Water Risk

Warwickshire is subject to flood risk from a variety of sources that include main rivers, ordinary watercourses, surface water and reservoir inundation. This risk is managed through the work of the County Council's Flood Risk Management Team.

Assessment of current flood risk is conducted by partners of the Warwickshire Local Resilience Forum who consider the likelihood and potential impact of flooding events from all sources. This assessment forms part of the Local Resilience Forum Community Risk Register and identifies both Major Local Fluvial Flooding and Major Reservoir Dam Failure as Medium to High risks within Warwickshire.

Flood response planning in Warwickshire is led by the CSW Resilience Team and is coordinated with all partners of the Local Resilience Forum to produce the Warwickshire Multi-Agency Flood Plan. The plan outlines agency responsibilities, monitoring resources, local arrangements and specific areas of risk to ensure an appropriate and coordinated response is delivered across the county in the event of widespread flooding.

Further water risk includes the risk of a fatality due to drowning in a static body of water, for example in a reservoir or lake. WFRS undertake preventative work at key times of the year when the risk of these types of incidents are higher, with public information and safety messages being distributed.

10.0 Future Risk and Opportunities

This section aims to identify a number of key changes that may potentially affect WFRS' future activities and the demand on the service. The ever-changing context in which WFRS operates presents it with a number of challenges and threats, as well opportunities. This section provides an insight into factors that may impact WFRS activity in the short and long term future, such as demographic changes, organisational and legislative changes, technological advancements and environmental factors. The issues described are categorised into **PESTELO** categories: **p**olitical, **e**conomic, **s**ocial, **t**echnological, **e**nvironmental, **l**egal and/or **o**rganisational. The overall purpose of this section is to allow WFRS to take into account these various factors when planning for the future.

Risk or Issue	Description	Potential Impact on WFRS	Risk Category (PESTELO)	Impact Level and Type
COVID 19 – Short term	The global pandemic of COV-19 has led to an unprecedented national and local picture. At the time of writing this picture was still developing. Short-term this is impacting on all areas of life.	- Increased demand on Hospital to Home service – requiring a change in the way this one on one service is delivered to help cover a greater number of residents with less risk to WFRS officers and volunteers. - Firefighters being called upon to support new areas e.g. supporting health colleagues in relation to the pandemic and responding to community incidents that are outside of the usual parameters. - Increase in demand for the services of the Arson Reduction Team due to a possible increase in anti-social behaviour incidents and deliberate fire setting incidents due to young people not attending schools and colleges, particularly over warmer weather periods.	**Political** **Economic** **Social** **Organisational**	High and negative impact on service demand. There will be huge pressures on service demand and likely a reduced workforce where officers are self-isolated or ill.
COVID 19 – Long term	Longer-term the impact will be far reaching into all parts of daily life.	- There will be a new risk profile for WFRS. - There will likely be a shift to working from home for employees and less people working on business premises. - A reduction in business premises as more employees are working remotely. - A potential increase in fires in the home with people having more electrical equipment at home at risk of causing a fire (it also increases the use of white goods if more people are at home for long periods). - A change in the role of the Firefighter. A shift to support the health services, local partners and the community. Using Safe and Well Checks to help target vulnerable people.	**Political** **Economic** **Social** **Technological** **Environmental** **Organisational**	High and negative impact on service demand. There will be significant pressures on service demand and likely a reduced workforce where officers are self-isolated or ill.

Risk or Issue	Description	Potential Impact on WFRS	Risk Category (PESTELO)	Impact Level and Type
Firefighters roles expanded	Following on from COVID-19 there will be a need to expand Firefighters roles formally – with a shift to seeing officers supporting different types of community incidents (for example supporting health services). Officers supporting the protection of NHS services and staff.	- A shift to officers supporting health services and helping to protect the NHS. This is not statutory currently but this could change. - Safe and Well Checks to be expanded to assist Police and partners with intelligence gathering and targeting vulnerable individuals e.g. to help with intelligence gathering of County Lines work.	**Political Economic Legal Organisational**	High and positive impact on service demand. An opportunity to increase the community role for WFRS.
Hospital to Home	The COVID-19 pandemic is changing the way that the Hospital to Home service works in the short-term and it is likely that this will affect it long-term.	- An increase in the number of vulnerable people being supported by the service. - Greater impact on officers and volunteers with a push to recruit more volunteers. - A change in the way the service is delivered by supporting more people with less resources.	**Economic Social Technological Organisational**	High and positive impact on service demand. The scheme is invaluable to residents and is a proactive partnership approach with the aim of reducing demands on NHS services.
Joint Strategic Needs Assessment – **Place Based Approach**	The Business Intelligence team have been conducting a two year work programme of place-based needs assessments for all areas of the county. Almost all of the JSNA areas have their own needs assessments completed. The key themes emerging are: - mental health and wellbeing - loneliness and social isolation - long-term health and disability - obesity or being overweight	- The needs assessments have identified priority needs across the JSNA areas which link to some wider themes for Warwickshire. Several of the themes link to WFRS activity: - An increase in incidents that are suicide related or linked to mental health issues that need WFRS support, of particular concern is that fire related suicides may increase. - An increase in incidents for call outs to people that are obese that need rescuing from their home or from an incident. - An increase in accidental incidents where social isolation is an issue, particularly for older people.	**Political Economic Social Environmental Organisational**	High and positive impact on service demand. A proactive partnership approach to support and protect the most vulnerable in our communities will improve outcomes for residents and reduce the demand on WFRS services.
Ageing Population	An ageing population who are living an increasing number of their later years in poor health will impact on health and social care services. Dementia, diabetes, musculoskeletal diseases and mental ill health are all areas that are likely to have greater impact on health services.	- Older people are amongst the most vulnerable groups to fire and are considered more at risk of an accidental home fire. Mobility issues can impact on a person's ability to react quickly to a fire or escape from a property. There are also mental health issues which come with old age, such as dementia, which can increase the risk of accidentally starting a fire or being a fatality. - An ageing population means an increase in the number of vulnerable residents in the community. WFRS will need to adapt their preventative work around Safe and Well Checks to accommodate a growing number of people.	**Political Economic Social Organisational**	High and negative impact on service demand. An ageing population will place significant pressures on public services.

		- Partnership work will be a focus in order to help reduce the risk of accidental fires in the home.		
Population growth and new housing developments	A growing number of households, residents and employees in Warwickshire will increase demand on infrastructure (e.g. roads, schools, social housing) and services (e.g. social care, waste management). New housing developments are common sights across Warwickshire.	- An increasing population will impact on WFRS and health services with more demand for services, particularly for older people where the largest population growth is set to be seen (50 plus). - An increased risk of accidental home fires. - Increased traffic on the roads, particularly at peak times, with a risk of increasing road traffic accidents. - Roads will become busier resulting in more congestion on the roads and reduced air quality. Developments in self-driving cars and trucks, and improved battery technology leading to more electric or hybrid cars may offer solutions. - More infrastructure will need to be put in place for new housing stock, for example the installation of fire hydrants to ensure water supplies are close by in the case of a fire. - A need to support people living healthy and longer lives in their own home – a partnership approach supported by all agencies to reduce the demand on services. - To tailor services to diverse communities based on their preferences.	**Political Economic Social Technological Environmental Legal Organisational**	High and negative impact on service demand. An increasing population will place significant pressures on public services and WFRS will have to adapt to these changing and diverse communities.
Poverty and Deprivation	Unemployment and poverty are expected to increase during the COVID-19 pandemic. Many businesses will collapse and people will lose their jobs. The full extent of this may not be felt for some time.	Unemployment, poverty and deprivation are all factors that impact on WFRS' services – the Nuneaton & Bedworth area being the area with the highest levels. - An increase in deliberate fire setting, linked to anti-social behaviour where the highest levels are in Nuneaton & Bedworth Borough. - An increase in alcohol and drug linked incidents, particularly accidental fires where victims are unable to respond quickly. - An increase in fires for vulnerable groups, including older people living in poverty living in poor housing.	**Economic Social**	High and negative impact on service demand. It is impossible to predict the scale of this following the COVID-19 pandemic.
HS2	A new high speed railway will connect London, Birmingham, Manchester and Leeds, cutting through Warwickshire. It is expected to carry 300,000 passengers per day when fully operational.	Increases in the number of new home developments and an increase in the number of people living within Warwickshire, impacting directly on WFRS resources across all incident types. In particular an increase in people will lead to more people travelling on the roads, an increase in the number of road traffic collisions and there will be more people at risk of a home fire. There is the risk of a train derailment or serious incident within Warwickshire which would have a large impact on resources in its response.	**Economic Social Technological Environmental**	High and negative impact on service demand. An increasing population both living in and travelling within Warwickshire will place significant pressures on public services. WFRS will have to review the way they deliver services in order to respond to higher levels of incidents being reported.

Climate change	By 2025 action on climate change will be advancing and include measures such as better insulation of buildings, less use of fossil fuels, more use of green electricity, local schemes to generate electricity and offsetting of carbon through initiatives like tree planting.	Climate change will likely impact on WFRS by an increase in special services incidents and rescue incidents, in particular where flooding is involved. Changing weather patterns can also lead to hotter, drier periods which can increase incidents of outdoor fires and deliberate small fire setting. A requirement to be flexible to respond to a changing need and an investment in suitable equipment e.g. water rescue specialist equipment. Training is key to fire officers being able to respond safely and effectively to incidents	Environmental	High and negative impact on service demand. Climate change is likely to increase special services incidents.

Also to consider:

BREXIT

11.0 Summary and Conclusions

Forming the evidence base for the Integrated Risk Management Plan, this document analyses attended incident levels by WFRS between January 2017 and December 2019 (3 years). Divided into 5 main categories (Primary Fires, Secondary Fires, False Alarms, RTCs and Special Services), current and emerging trends have been identified where possible. Recommendations have been made, and emerging risks and issues identified that may affect WFRS in the years ahead.

As mentioned at the start of the document, the COVID-19 situation is changing the risk profile for Warwickshire and WFRS need to be responsive to the challenges it brings. There is an evolving role for fire in providing a community response in supporting its residents, with a greater focus on prevention, and this will be a focus for the IRMP in future years.

The central themes of this risk profile are as follows:
- WFRS continues to respond appropriately to service demand, responding and adapting flexibly to evolving pressures, in particular adapting to the challenges that the current COVID-19 situation brings.
- WFRS adopts an expansive proactive and preventative agenda, engaging with communities, particularly those who are vulnerable, across the county to raise awareness and appreciation of personal resilience and safety.
- WFRS continues to work successfully with a range of agencies, such as the Police and Local Authorities, working in partnership where possible to collaborate on keeping Warwickshire residents safe from harm;
- Protocols, policies and supporting systems need to continue to be reviewed regularly, reflecting changing need and demand.

It is important that WFRS does not operate in isolation and uses the resources that being part of the wider County Council offers. WFRS needs to respond appropriately to broader challenges, notably pressures of austerity and the increasing need to operate with greater efficiency and less resources.

Looking ahead, uncertainty will likely remain. T is important that the IRMP process is a live process that can easily adapt and respond to a changing national and local climate. WFRS remains in a strong position to respond to these challenges, notably due to their proactive and preventative approach to existing pressures, enhancing skill-sets and community resilience.