

SOUTH YORKSHIRE FIRE & RESCUE AUTHORITY

Meeting	FIRE & RESCUE AUTHORITY
Meeting Date	14 SEPTEMBER 2020
Report of	DEPUTY CHIEF FIRE OFFICER
Report Sponsor(s)	CHIEF FIRE OFFICER
Subject	DRAFT INTEGRATED RISK MANAGEMENT PLAN 2021 TO 2024

EXECUTIVE SUMMARY

This report and appendices presents members with the service's draft Integrated Risk Management Plan (IRMP) 2021 to 2024.

The way fire services understand and reduce risk is through something called an IRMP. This is an up-to-date analysis of local risk and describes how we will effectively coordinate our prevention, protection, response and resilience work to improve public safety and save lives.

The plan describes the steps the service has undertaken to update its understanding of local risk for South Yorkshire.

A national inspection reported that it was undesirable for us not to have a set of response standards for how quickly we respond to 999 calls. We currently aim to get to emergencies as fast as we can, every time.

We will still aim to get to each emergency as fast as we can, but we now plan to introduce a set of response times and we will measure our performance to ensure we are delivering the best possible service to our communities with the resources we have available to us.

Members are recommended to:-

- a) Note the contents of the draft IRMP, risk model review and consultation outcomes
- b) Instruct the service to begin further public and staff consultation on the draft IRMP

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Appendix A - Draft Integrated Risk Management Plan 2021 to 2024

Appendix B - Public consultation outcomes

Appendix C – IRMP methodology and timeline

BACKGROUND

1. The service presented an IRMP to the Fire Authority in 2019. This was a short term plan which largely considered the implications of a funding shortfall on the service.
2. The service believes that it is now time to develop a more comprehensive plan which considers in detail the way it understands the different risks in South Yorkshire and how it intends to address them by adopting an integrated approach to its response, prevention and protection work.
3. Furthermore, an inspection by Her Majesty's Inspectorate for Constabulary and Fire & Rescue Services (HMICFRS) reported that it was undesirable that the service did not have stated response time arrangements for responding to 999 calls. Therefore, the plan has proposed a set of response times for the county.

Risk Model

4. A 'risk model' is a way of using data to work out which parts of the county are most at risk when it comes to fires and other emergencies.
5. We define risk as 'the potential for an emergency to occur that may threaten life, cause injury or damage property or the environment'.
6. We've developed a revised methodology for how we plan to assess risk across the county. This includes a detailed analysis of specific data sets that determine the risk of fires and other emergencies occurring, to help inform our response, prevention and protection activities to mitigate these risks.
7. There is a range of data that can inform how we deliver our services across the county. The key is selecting the most appropriate set/s of data that gives us the best chance of putting our resources in the right places at the right times to protect the communities of South Yorkshire. This is constantly being refined as new data emerges and we develop our ability to interpret this data which in turn informs our decisions.
8. The service already has a community risk model which matches historical house fire data with other information which can help to determine which parts of the county are more likely to suffer from dwelling fire incidents, and help inform our prevention activity. We use this to target Home Safety Checks in areas and households most at risk of fire.
9. The service has now undertaken work to refresh this model and has used external specialists to review and quality assure this work.
10. The feedback we received was that we could look to incorporate some additional data and information into our model. They highlighted the wide variety of approaches taken by different Fire and Rescue Services, and recommended benchmarking with others and working with the National Fire Chief's Council on their Programme of work to standardise approaches to Integrated Risk Management, which we are doing.
11. As a result of the feedback we received we have decided to further develop how we profile risk and this includes the use of data to build a Response Risk model which will complement and supplement the Community Risk model. The Response Risk model will provide detail to inform where we should locate response resources and the Community Risk model will be used to inform prevention activity.

Response Times

12. A national inspection reported that it was undesirable for us not to have a set of response standards for how quickly we respond to 999 calls. We currently aim to get to emergencies as fast as we can, every time.
13. Most fire services use a set of expected response times which varies according to things such as whether someone's life is at risk and according to the level of risk in a particular area. This approach supports services to ensure they are placing resources in the right places at the right time to best protect the communities we serve. This includes the work we do around preventing fires, protecting buildings and responding to incidents when they do occur.
14. By developing a Response Risk model, we can produce a set of response times that are appropriate to the risk that exist within the county. The second element that will determine the response times will be the severity of the incident we are attending.
15. In developing our response times for the county, we employed the skills of a specialist risk management consultancy, who analysed our method for assessing risk in addition to looking back at our performance over the past 3 years. This included a detailed analysis of the response times to the areas of risk we have identified that in turn informed us about what our response times should be. From this work, we have determined the response times that are included within the draft IRMP document.
16. To be clear, we will still aim to get to each emergency as fast as we can, but having a set of response times means we can measure our performance to ensure we are delivering the best possible service to our communities with the resources we have available to us.

Consultation

17. The service wants to design and deliver its work having first considered what local people want. It has therefore carried out extensive consultation work to help inform the contents of its draft IRMP, using a range of research methods. More detail is provided in Appendix B- Public Consultation Outcomes.
18. The service now intends to begin a further period of consultation on the draft plan. This will begin immediately upon member approval and will end on 7 December 2020. Feedback on the draft IRMP and appendix documents should be sent to comments@syfire.gov.uk.

CONTRIBUTION TO OUR ASPIRATIONS

- Be a great place to work-** we will create the right culture, values and behaviours to make this a brilliant place to work that is inclusive for all
- Put people first-** we will spend money carefully, use our resources wisely and collaborate with others to provide the best deal to the communities we serve
- Strive to be the best in everything we do-** we will work with others, make the most of technology and develop leaders to become the very best at what we can be

OPPORTUNITIES FOR COLLABORATION

- Yes
- No

If you have ticked 'Yes' please provide brief details in the box below and include the third party/parties it would involve:

<p>Opportunities to collaborate will be explored in the further development of the Community Risk Model, both with local partners and access to more datasets, and in terms of the methodology and approach. We will work with other Fire Services through benchmarking and identifying best practise, and through the NFCC Community Risk Programme which aims to provide a consistent risk assessment methodology to help FRSs develop their IRMPs and Service delivery planning.</p>

CORPORATE RISK ASSESSMENT AND BUSINESS CONTINUITY IMPLICATIONS

19. N/A

EQUALITY ANALYSIS COMPLETED

- Yes

If you have ticked 'Yes' please complete the below comment boxes providing details as follows:

Summary of any Adverse Impacts Identified:	Key Mitigating Actions Proposed and Agreed:

- No
- N/A

If you have ticked 'No' or 'N/A' please complete the comments box below providing details of why an EA is not required/is outstanding:

<p>An EA is in progress, and will be completed following the consultation period when the final IRMP is developed.</p> <p>The consultation plan describes research methods which are specifically designed to ensure a broad range of views, including from people with protected characteristics.</p>
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HEALTH AND SAFETY RISK ASSESSMENT COMPLETED

- Yes
- No
- N/A

If you have ticked 'No' or 'N/A' please complete the comments box below providing details of why a Health and Safety Risk Assessment is not required/is outstanding:

<p>The IRMP is a fundamental assessment of risk across the whole county. If any specific H&S assessments are required during the consultation or implementation period (subject to approval from the FRA) then they will be completed in due course.</p>
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SCHEME OF DELEGATION

20. Under the South Yorkshire Fire and Rescue Authority [Scheme of Delegation](#) a decision *is required / *has been approved at Service level.

Delegated Power Yes
 No

If yes, please complete the comments box indicating under which delegated power.

D: Legislation
D2: Consultations

IMPLICATIONS

21. Consider whether this report has any of the following implications and if so, address them below:., Diversity, Financial, Asset Management, Environmental and Sustainability, Fleet, Communications, ICT, Health and Safety, Data Protection, Collaboration, Legal and Industrial Relations implications have been considered in compiling this report.

List of background documents		
Public consultation outcomes		
Report Author:	Name:	Chris Kirby, Deputy Chief Fire Officer / Director of Service Development
	e-mail:	ckirby@syfire.gov.uk
	Tel no:	0114 2532202



**South Yorkshire
FIRE & RESCUE**

SOUTH YORKSHIRE FIRE & RESCUE

INTEGRATED RISK MANAGEMENT PLAN

2021-24

Making
**SOUTH
YORKSHIRE
SAFER &
STRONGER**

DRAFT

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FOREWORD

This document is the Integrated Risk Management Plan for South Yorkshire Fire and Rescue.



South Yorkshire Fire and Rescue has an overarching aim which is 'making South Yorkshire safer and stronger'. All of our fantastic staff joined this service to help the people of South Yorkshire and from every frontline firefighter, to every member of dedicated support staff, they all work to achieve our aim.

The Fire and Rescue Services National Framework document (published in 2018) sets the requirement for us to design and deliver this plan. It is also important to deliver this plan as it reassures the public that we take time to understand the risks they face from fires and other types of emergency, and carefully plan how we can reduce those risks through the services we deliver.

The service has faced some significant financial challenges over the past ten years. We have

responded well to the financial situation, with significant reductions in the amount of money allocated to us from central government. The future financial picture is far from certain and this often makes planning for the long term more difficult. However, the service continues to adapt to changes in society and it is our intention to continue to deliver an excellent service to the communities we serve- placing a strong focus on those most vulnerable to fires and other emergencies.

We will work across all of the local authority areas of Barnsley, Doncaster, Rotherham and Sheffield and, alongside our key partners from within the local authorities and other agencies such as South Yorkshire Police and Yorkshire Ambulance Service, we will work collaboratively to provide the best value for our communities.

Our focus is to prevent emergencies happening in the first place, to protect local buildings and workplaces so that our local economy can prosper and to respond effectively if an emergency does occur. We have dedicated, professional people and we will continue to strive to improve what we do to ensure the safety of everyone across South Yorkshire.

Alex Johnson
Chief Fire Officer

Robert Taylor
Fire Authority Chair

INTRODUCTION

More than 1.3 million people rely on us to provide our service to them.

They rightly expect us to do this in a planned and coordinated way, matching what we do and the work we prioritise to the different risks they face.

Understanding and reducing risk in our communities is crucial to this- and to achieving our purpose, which is 'making South Yorkshire safer and stronger'.

The way fire services assess and reduce risk is through something called an Integrated Risk Management Plan (IRMP). This is an up-to-date analysis of local risk and describes how we will effectively coordinate our work to improve public safety and save lives.

This plan does not describe everything we will be doing over the next few years. For example, our annual service plan describes our yearly priorities for changing and improving our service.

What this plan does describe though, is the steps we've taken to understand risk in South Yorkshire and the work we're taking now and in the future to address it.

“ The way fire services understand and reduce risk is through something called an Integrated Risk Management Plan (IRMP) ”

WHY WE ARE HERE

Our overarching aim:

Making
SOUTH YORKSHIRE
SAFER & STRONGER

To achieve this we will deliver the following key services:

PREVENTION – to raise awareness of the risks people face from fire and other types of emergency. This will focus on those most vulnerable

PROTECTION – to promote and enforce fire safety arrangements in buildings that fall within relevant legislation. This is to ensure buildings and occupants are as safe as possible

RESPONSE – to have trained staff ready and able to respond to a variety of emergency situations, equipped with the best vehicles and equipment to do their job as effectively as possible

RESILIENCE – to deal with major emergencies that demand significant resources or require the support from other services and agencies, whilst still continuing to deliver business as usual activity across the county

Our first goal will always be to save lives and make people safer. This is what we do every single day, whether it's responding to 999 calls or carrying out work to prevent emergencies from happening in the first place.

Much of our work goes beyond this though, from improving the life chances of young people and protecting businesses, to helping to tackle other issues like crime and healthcare. Our organisation's purpose extends therefore to making our communities stronger places for the future.

WHO WE ARE

As a fire and rescue service we are responsible for delivering a wide range of services to our communities. These are set out clearly in the Fire and Rescue Services Act 2004. We also have specific duties under the Civil Contingencies Act 2004 and the Regulatory Reform (Fire Safety) Order 2005.

The service is governed by the South Yorkshire Fire and Rescue Authority. The Fire and Rescue Authority is made up of 12 councillors from the four metropolitan district councils of Barnsley, Doncaster, Rotherham and Sheffield. The Police and Crime Commissioner for South Yorkshire also sits on the Fire and Rescue Authority. The Fire Authority funds the service and works closely with the Chief Fire Officer/Chief Executive to decide how our services can be provided in the most efficient and effective way.

Our responsibilities include:

age

Firefighting

Extinguishing fires and protecting life and property in the event of fires



Road traffic collisions

Protecting and rescuing people from serious harm in the event of a road traffic collision



Fire safety

Promoting fire safety, including provisions taken to prevent fires and means of escape from buildings in the event of fire



Civil emergencies

Response to other civil emergencies- like flooding



Special service calls

Rescuing people from water, height or other situations where they are trapped, at risk of harm or generally in need of fire service assistance




Our firefighters respond to a wide range of emergencies including building collapse, rescues from height, water rescues and many other types of 'special service' incidents.

However, whilst our work responding to 999 calls is both well-known and well valued by the public, far more of our contact with local people is actually through our varied and extensive work to **prevent incidents from happening in the first place.**

To deliver this work, we employ more than 600 people, most of whom are firefighters. The majority of these are wholtime firefighters, which means they are available to attend emergency incidents 24 hours a day. A smaller number are 'on-call' firefighters, meaning they live or work in the communities they serve and, often, provide on-call emergency cover from these places. Our firefighters are supported by

teams of support staff who provide a wide range of specialist services. This includes community safety work and our responsibilities to enforce business fire safety laws. We also work with a network of volunteers to further extend our reach to educate the public and prevent emergencies.

We will continue to attract, select and develop the best people as we recognise the importance that our workforce plays to achieving our overarching aim. We invest in the health and well-being of our teams, we provide leadership development and promote the right values and behaviours across the whole organisation. We place equality and fairness at the heart of everything we do and recognise that we need to continue to work to improve the diversity of our teams so we are more representative of the communities we serve.

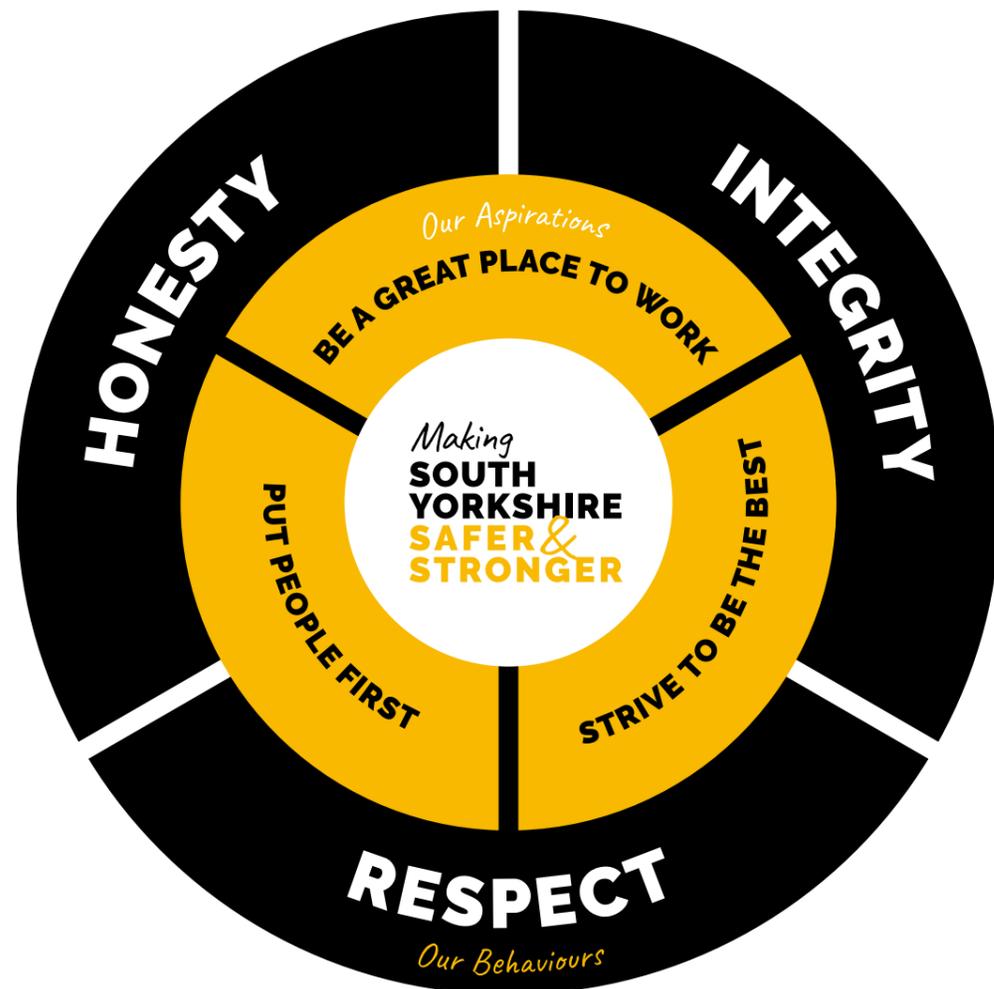
“ We will continue to attract, select and develop the best people as we recognise the importance that our workforce plays to achieving our overarching aim. ”

WHERE WE ARE GOING

We recently worked with our staff to develop a new, long term vision which explains how we aspire to become a leading fire and rescue service.

'Our Story' clearly sets out our established objective of 'making South Yorkshire safer and stronger'. It also explains the behaviours we expect our staff to display, regardless of rank or role, and describes our aspirations for the future. Together, it all forms an essential part of everything we do.

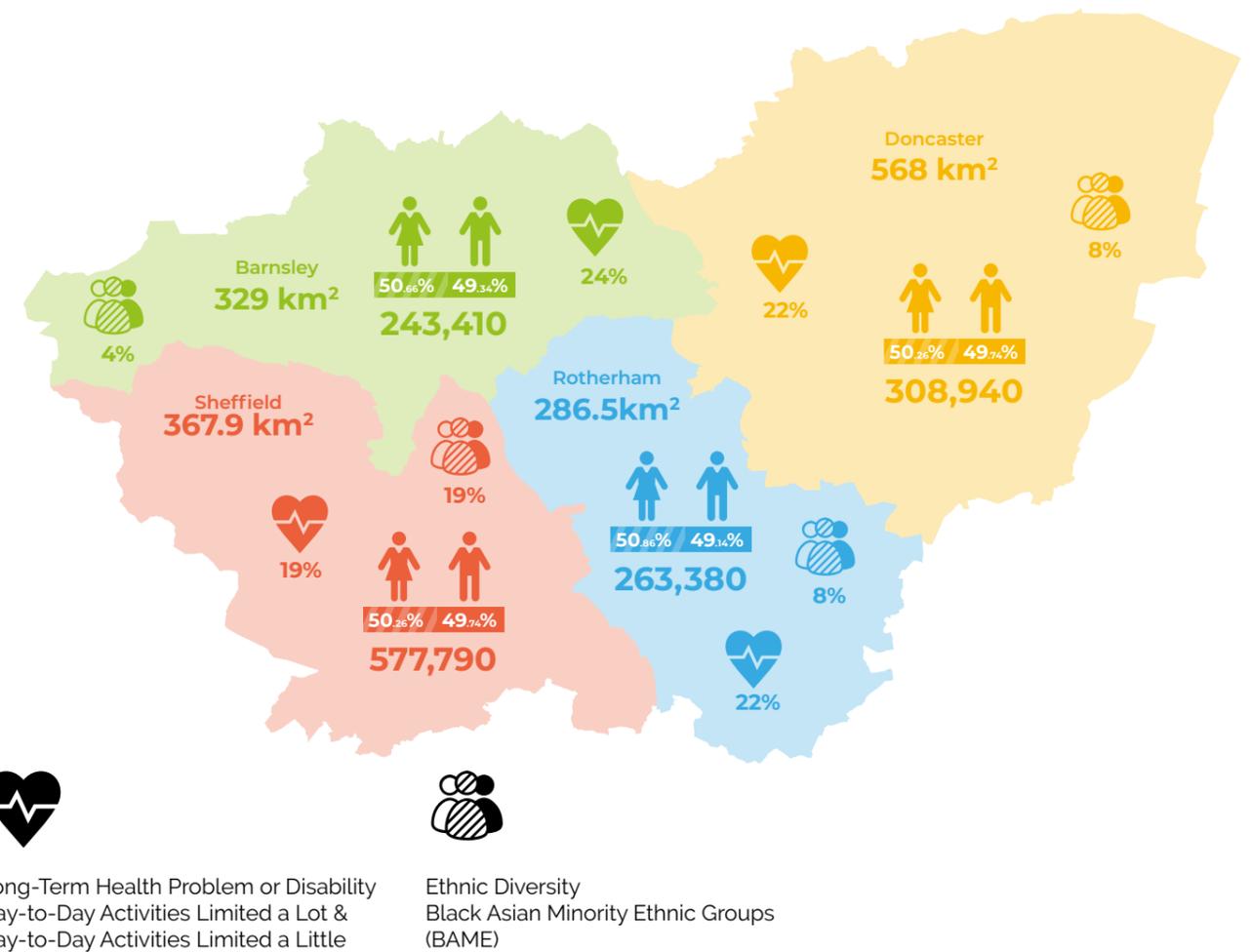
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WHO WE SERVE

We serve the public and communities of South Yorkshire. As a metropolitan county, South Yorkshire has the usual mix of risks associated with a large, urban area. That's everything from sports stadiums, shopping centres, high rise flats and historic buildings, to a vast transport network of road and rail, as well as an international airport. The new HS2 high speed rail line will also pass through the county.

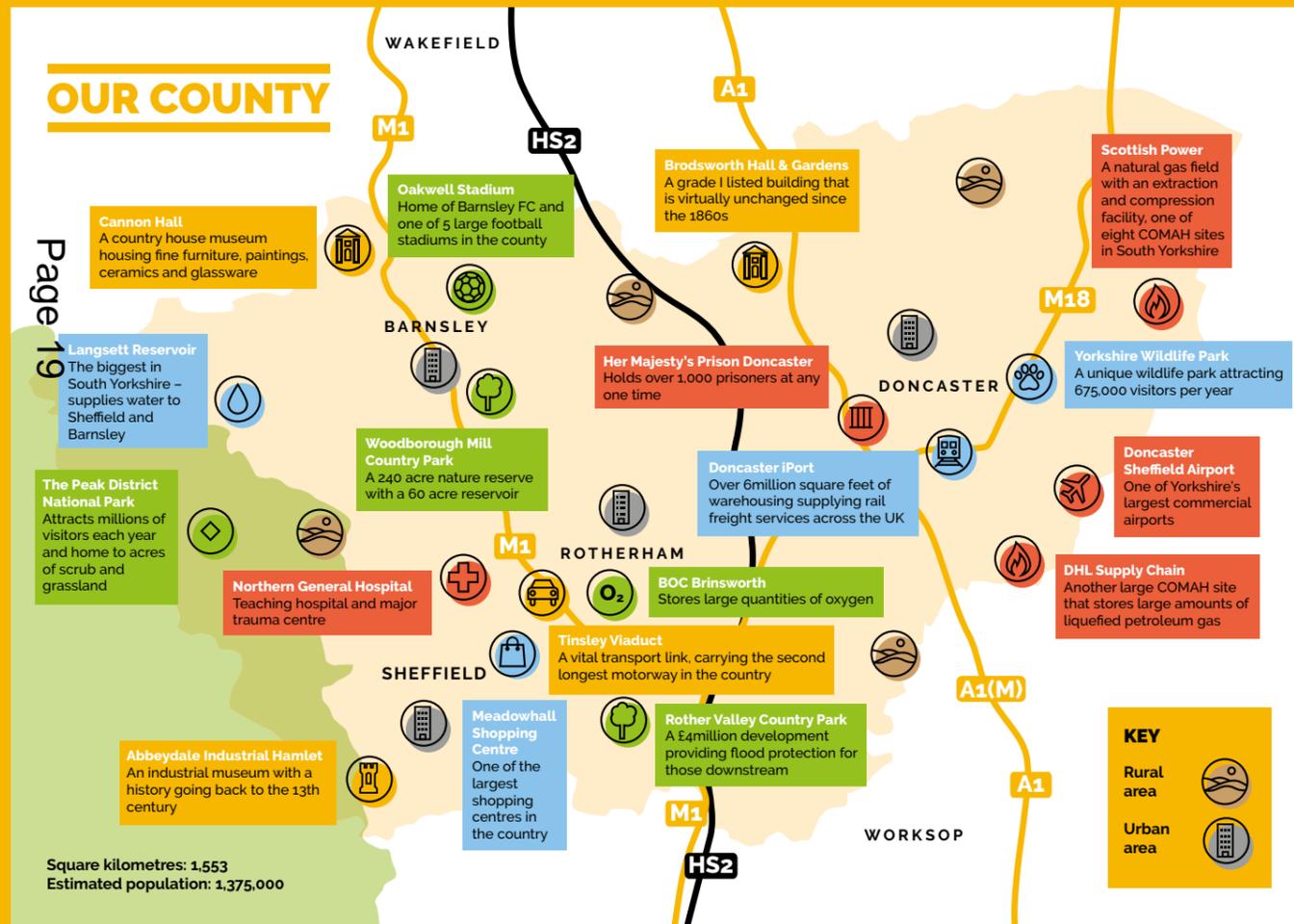
Our population density is more than double the average for England, with significant areas of deprivation and inequality spread across Barnsley, Doncaster, Rotherham and Sheffield.



This map shows the population figures for each of our four districts. It also shows the area in kilometres as well as the percentage figures for male/female residents, those with health problems and those from BAME backgrounds.

Yet, our status as a metropolitan service does not tell the whole story. For example, the geographic area we cover is actually big when compared to other similar fire and rescue services with more sparsely populated, rural areas and even part of the Peak District national park forming part of our county too.

This 'sparsity factor' means our fire stations are more spread out than other metropolitan services and this inevitably impacts on our speed and weight of response to emergencies. Our geography has also affected our funding, because we're neither urban enough, nor rural enough to do well in the way the money we get from government is currently calculated.



This map gives an overview of our county. It details landmarks and some of the risks we face across South Yorkshire – including a prison, large commercial airport and one of England's largest shopping centres.

WHAT LOCAL PEOPLE SAY

To help us produce this plan, we've used focus groups and surveys with representative samples of local people to ask them what they think about the work we do, what they would like us to focus on in the future and their views on our future 999 response time arrangements.

People told us that they greatly value our service and they think we provide good value for money. They strongly value all of our core services- prevention, protection and response- with our ability to respond quickly and skilfully to a wide range of incidents the thing which they value and would like us to prioritise the most.

The public told us that they expect us to attend all 999 calls as quickly as possible and they are concerned about introducing anything perceived as a 'target', which could place extra pressure on an already pressurised service.

However, when considering different response time options, the public overwhelmingly told us that they would prefer to introduce a set of response times which prioritise the severity of an incident and the level of risk in a geographic area, instead of a single response time for the whole of the county.

UNDERSTANDING AND MANAGING RISK

We have undertaken a process to consider the whole range of foreseeable fire and rescue related risks and developed this plan to explain how we will work to protect our communities and respond to emergency incidents when they occur, balancing our resources against local risk.

Experience tells us that certain incidents such as house fires and road traffic collisions are more likely to occur than more significant incidents such as a train crash or large industrial chemical release.

Although the latter may have a more significant impact on the community, they are much less likely. Therefore, we direct our prevention, protection and response resources to provide the greatest possible return on investment by reducing the overall impact of the foreseeable risks we face.

In summary, we:

- Use evidence, insight and professional experience to list all the risks that we face
- Assess how likely each risk is to threaten life, property and the environment
- Model the level of risk in small geographical areas to create a 'risk profile'
- Use this information to understand where to base our people and resources

There are lots of different types of risk and some of the main ones we face are described below.

COMMUNITY AND HOUSE FIRE RISK

Although it is impossible to predict exactly when or where a fire may occur, we are able to profile the areas and people that are more at risk and vulnerable to fire. In simple terms, our risk analysis shows that some areas and people are much more at risk and vulnerable to fire than others.

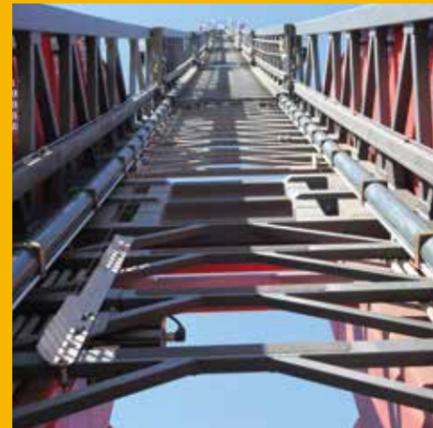
Analysis of incident data and studies into what makes someone more likely to have a fire also shows that there is a very strong link between fire and deprivation. The more deprived an area is, the more house fires there are likely to be. It's also likely that those fires will be more severe, possibly resulting in someone being taken to hospital or even dying.

Understanding all this, and using data sources like the English Index of Multiple Deprivation, is really important for supporting our integrated risk management planning because it is unlikely to change very quickly in the future. We explore our risk model in more detail, later on in this plan.

HIGH-RISE RESIDENTIAL BUILDING RISKS

We already know that high-rise residential buildings present different risks compared to other types of home. One of our roles has always been to understand and reduce this risk for our area. The Grenfell Tower disaster and the inquiry and building safety reviews which followed it have rightly put renewed focus on this part of our work.

We have already taken steps, along with other fire and rescue services around the country, to consider the risks particularly affecting high-rise residential buildings which were built using a particular type of cladding. Now, we are turning our attention to auditing all other high-rise residential buildings in our county.



TRANSPORT AND OTHER SPECIAL SERVICE CALL RISKS

We don't just attend fires. A large proportion of our emergency calls are classed as 'special service calls'. Lots of these are road traffic collisions.

With high population density in our urban areas we can expect a significant number of road traffic incidents in these areas. However, they also occur on more rural roads, away from populated places.

Where these incidents are likely to occur is more difficult to predict because analysis of our data shows that they do not necessarily match areas of increased deprivation like fires do.

We know that response to road traffic collisions can be affected if they occur in more rural areas or if there is a significant build-up of

traffic due to the collision, which can impact on attendance times. We currently undertake partnership work with other agencies with the aim of reducing the number and severity of road traffic incidents and we focus this work on those most vulnerable and at risk such as young and inexperienced drivers.

Other types of special service calls include extrications from collapsed buildings or machinery, flooding, water rescues, rescues from height and lift rescues.

COMMERCIAL AND INDUSTRIAL RISKS

Homes aren't the only types of buildings which can catch fire, with lots of the calls our firefighters attend involving non-domestic buildings.

Some of these premises have their own particular risks to consider- from hospitals and hotels, to petrol

stations, sports stadiums and waste recycling sites.

To help prevent major public and environmental accidents, some premises are required by law to produce emergency plans to mitigate on site accidents involving substances that the premises produce, use or store. The legislation is called the Control of Major Accident Hazards Regulations 2015 and the premises it relates to are known as COMAH sites. There are eight of these in South Yorkshire.

We are the local authority responsible for COMAH sites in South Yorkshire, which means we have the responsibility for preparing, reviewing, testing and exercising external emergency plans for upper tier sites. These plans are designed to formulate a response and mitigate off-site impacts of a major accident.



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ENVIRONMENTAL RISK

The impact of climate change and the increase in extreme weather conditions (e.g. heatwaves) has the potential to increase environmental incidents such as flooding and wildfires which may in turn place extra demands upon our resources.

The most recent major flooding which hit South Yorkshire was in November 2019, with parts of Doncaster particularly badly affected for several days. The last major flooding before this was in 2007.

The term 'wildfire' meanwhile refers to any large fire in open countryside, like grass and scrubland or moorland and woods. Large scale wildfires are quite rare, but when they do occur they can take a long time to tackle and often require the use of lots of firefighters, fire engines and other specialist equipment.

They can also cause significant environmental damage.

With part of our country bordering the Peak District national park and other areas of moorland and sites of special scientific interest, the risk of wildfires is higher than in some other parts of the country. National analysis also suggests that the frequency of this type of incident could be increasing as a result of climate change.

On occasions, our firefighters also attend incidents which involve working in or around water, ice and deep mud. Specially trained crews are expected to attend these types of incidents with the purpose of saving life or giving humanitarian aid.

HERITAGE RISK

The term 'heritage risk' relates to historic buildings, stately homes, monuments, museums, historic parks and other attractions. There were 823 new Grade I and II* listed buildings, monuments, archaeological sites, landscapes and conservation sites at risk across the Yorkshire region in 2016.

South Yorkshire itself is home to a number of national heritage sites and although the number of these sites in comparison to domestic dwellings is few, we recognise the unique risk they pose if involved in fire. For obvious reasons, this type of risk rarely changes.

Sites remaining on the 'at risk' register in South Yorkshire include Broadsworth Hall, Conisbrough Castle, Wentworth Woodhouse, Monk Bretton Priory, Roche Abbey, Oakes Park, at Heeley, and

structures within Sheffield General Cemetery, Sharrow. The most important buildings also have their own salvage plans should a disaster occur, which are made available to us and enable us to mitigate the damage in the event of fire, flooding or any other emergencies.

NATIONAL RISK

The National Risk Register takes into account all national risks, but not all apply to South Yorkshire. These risks are nationally graded and then locally analysed to see if and where they sit within our community risk register. The risks which currently feature highly for South Yorkshire are:

- National pandemic
- Coastal flooding
- Widespread electricity failure
- Catastrophic terrorist attacks
- Poor air quality events
- Crowd related disorder
- Severe weather flooding
- Dam reservoir failure or collapse

Locally, we play a leading role in the work of South Yorkshire Local Resilience Forum and are members of its associated sub-groups. The forum brings together all agencies with a significant role to play in responding to and recovery from the effect of emergencies, and was formed to meet the requirements of the Civil Contingencies Act 2004.

Its work includes making sure responders work together to minimise community risk and respond collectively in the most appropriate and effective manner where emergencies occur.



Emerging risks include new housing or business developments and changes to transport infrastructure. We have measures in place to keep informed about these things as we are statutory consultees for major housing and commercial developments.

We must also continue to learn and we have a dedicated team who will capture learning from local, regional and national emergencies and consider any gaps in our current capability.

This work will continue into the future with the aim being to keep our firefighters as safe as possible when responding to incidents. It will inform our operational policy, how we train our staff and the equipment we use to ensure we are prepared for all foreseeable risks that we face.

We are currently in the process of increasing the resources we have for our internal Operations Support Team, including the development of a dedicated Firefighter Safety Team that will help provide this essential function.

FUTURE RISKS

Risk changes all the time. Some things can emerge very quickly, with the Covid-19 pandemic a very recent and stark example of this. Other risks emerge more slowly, such as population changes or new housing or business developments.

Our job is to review these risks regularly. This will involve us regularly reviewing our community risk model and working with partners including local and national government to understand the changes which could affect South Yorkshire in the future.

We will capture all such risks on a foreseeable risk register and consider what resources we have in place to reduce these risks through a combination of prevention, protection, response and resilience capabilities.

The majority of emerging risks will be covered by our existing resources. However, we must continue to maintain our awareness of these risks to ensure that we do have the resources in place to reduce any that may arise.



INTEGRATED RISK MANAGEMENT MODELLING

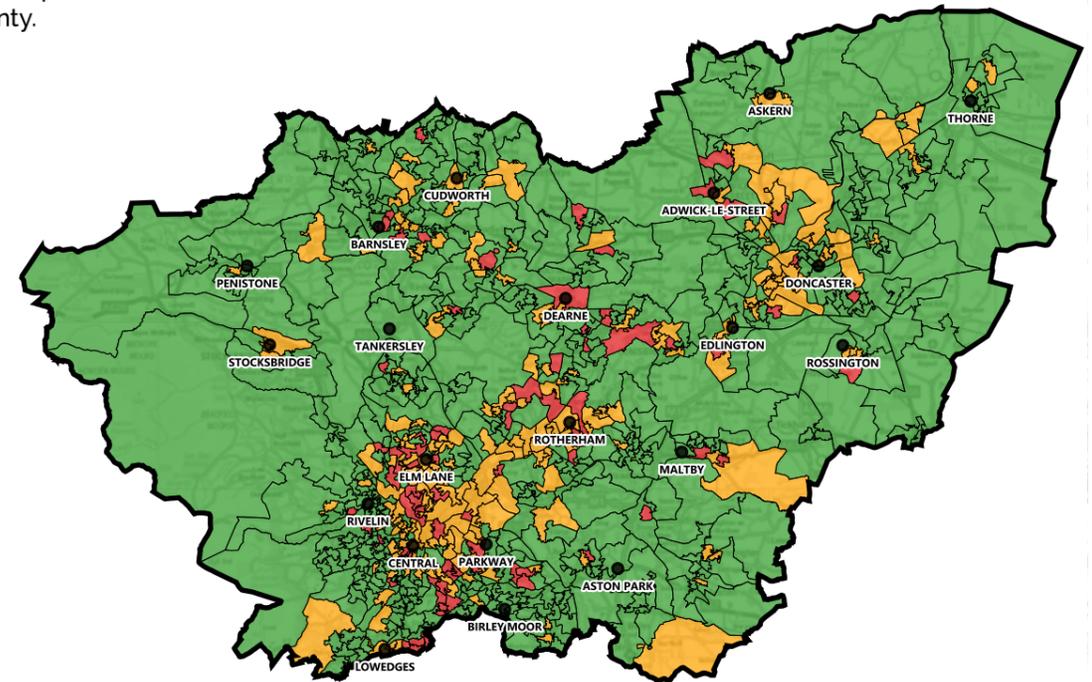
A 'risk model' is a way of using data to work out which parts of the county are most at risk when it comes to fire and other emergencies.

We define risk as 'the potential for an emergency to occur that may threaten life, cause injury or damage property or the environment.'

We've developed a revised methodology (awaiting hyperlink) for how we plan to assess risk across the county.

This includes a detailed analysis of specific data sets that determine the risk of fires and other emergencies occurring. This helps to inform our response, prevention and protection activities to mitigate these risks. There is lots of information which can inform how we deliver our services across the county. The key is selecting the most appropriate sets of data to give us the best chance of putting our resources in the right places at the right times to protect the communities of South Yorkshire.

This is constantly being refined as new data emerges and we develop our ability to interpret this data which in turn informs our decisions. We have selected some examples of the data we use to inform us about risk within the community with an explanation of how we use them below.

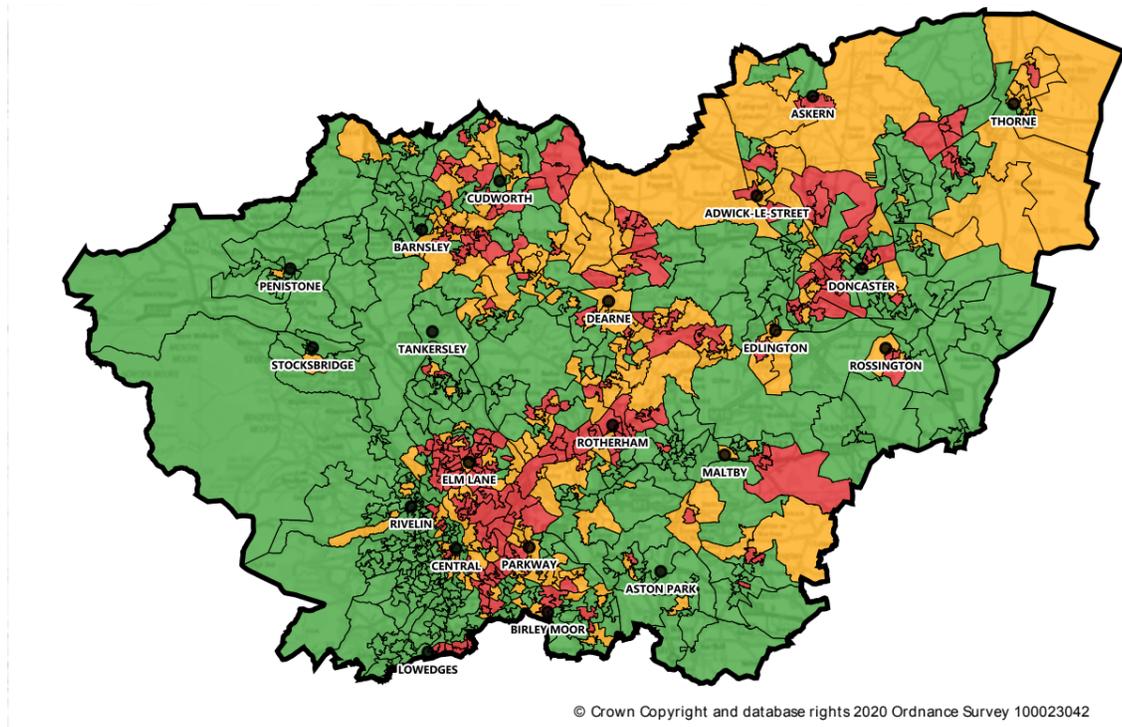


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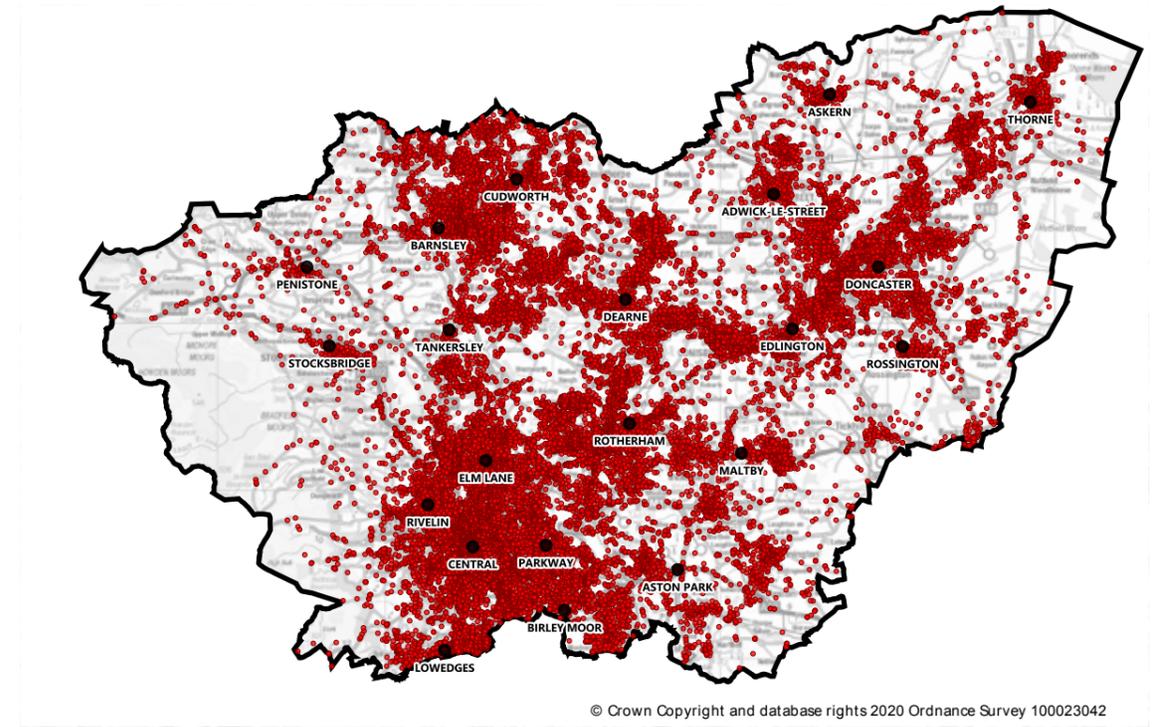
This is our community risk model (CRM) which shows the level of risk across South Yorkshire based on external data (Mosaic) sets and internal data (based on where we experience house fires). There are close links between the risk of fire and certain lifestyle types, so the availability of the Mosaic information is very useful for risk profiling. We use

this map to help inform our prevention activity, with the aim of targeting our efforts at those most at risk. This map can change quickly if there is a spike in incidents within one particular area. This makes it useful to inform our prevention activity as we can deploy our resources into any area of South Yorkshire to react to spikes in activity.

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This map shows the levels of deprivation across South Yorkshire, by area. It is taken from a national data set called the Index of Multiple Deprivation (IMD). The red zones are the areas with most deprivation, the green are the areas with least. When we talk about deprivation we mean things such as low income, employment, health and education levels. The IMD provides us with a useful indication of risk because areas that are more deprived tend to experience more fires. The benefit of this data set is it is produced every three years by the government and is less susceptible to short term changes. For example, if we experienced a particularly quiet year of operational activity, the base IMD would still reflect the risk that exists due to the deprivation index.



This map shows a heat map based on our previous incident activity. We have specifically used the previous three years of data to show where we experience emergency incidents over a longer period of time.

These are just some examples of how we can use the data that is available to inform our work. More information on these data sets and others can be found in our Integrated Risk Management Methodology document ([insert link once known](#)).

We know that it's very important that the public have faith in the risk models we use. That's why we've used external specialists to analyse how we use data to inform our understanding of risk and we will continue to develop it further, to make sure that the assumptions we've made about risk in our area are accurate and up to date.

PREVENTION, PROTECTION AND RESPONSE

There are three main ways we address the risks we have identified in our area. These are to:



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PREVENT	PROTECT	RESPOND
Prevent emergencies from happening in the first place through safety education and engagement with our communities	Protect buildings by checking compliance with fire safety laws	Respond to emergencies quickly and professionally

Making sure all these strategies work together effectively to make the biggest impact is what we mean by 'integrated risk management'.



PREVENTION

A key responsibility of any fire and rescue service is to prevent emergencies before they occur.

We do this by using data to carefully direct our work at the people and places where it will have the greatest impact.

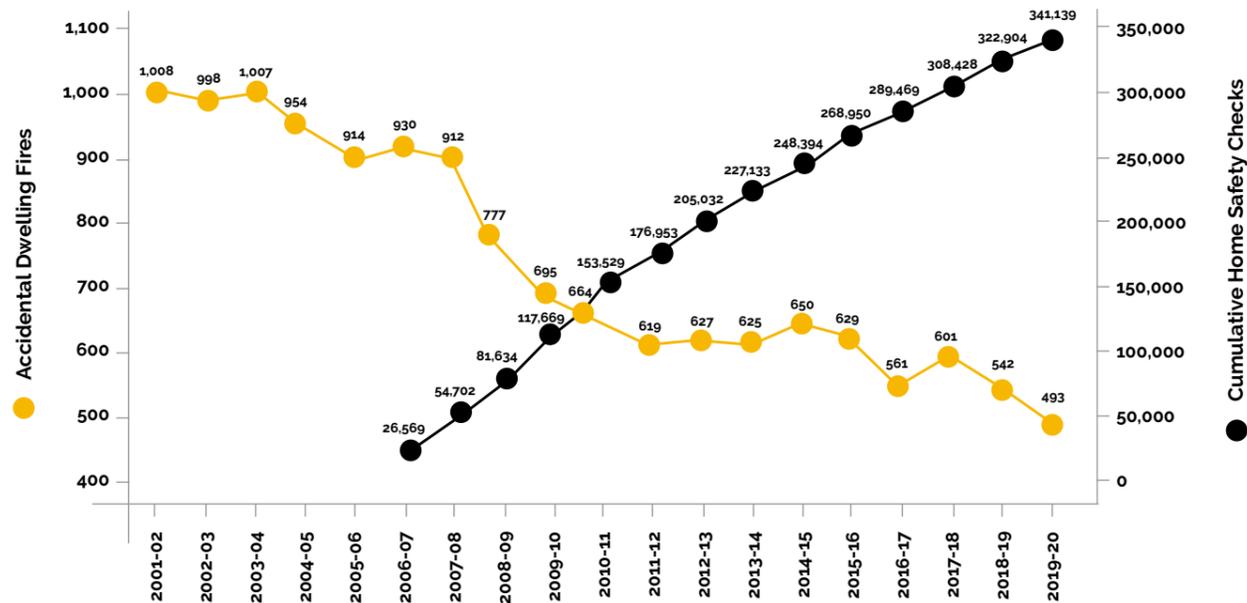
This has already produced big results. In 2019/2020 for example, we recorded the lowest ever number of accidental house fires in South Yorkshire. More homes than ever before are also fitted with smoke alarms.

As the number of incidents reduces, we must become even more targeted in how we deliver high-impact, resource intensive work like Home Safety Checks.

Home Safety Checks are where we visit people's homes and give people specific advice on reducing their fire risk, help them with tailored escape plans and provide fire safety equipment, like smoke alarms.

We now only deliver these visits in the homes of people who we believe are more at risk of fire, based on some clearly defined criteria. We also now co-create and co-deliver a range of education packages through our joint police and fire community safety department.

South Yorkshire Fire and Rescue Cumulative HSCs and Accidental Dwelling Fires



This chart shows the relationship between the amount of home safety visits our staff have done, since 2006, and the number of accidental dwelling fires we have attended.



We also use sophisticated computer software to help us model where we should target these visits based on lots of different data sources, such as census and deprivation information, anonymised healthcare data and our own house fire statistics.

In some cases we also now offer a wider range of advice to the public in what we call 'safe and well visits'. This is where specially trained staff deliver advice on behalf of partners, for example around crime prevention, falls prevention and healthy aging. We do this because we recognise the role we can play to support wider public health goals and because there is a clear link between vulnerabilities such as falls and isolation, and the risk from fire. Another big part of our prevention story is our work with schools and young people.

We visit schools at key times in a child's education to talk to them about keeping safe from fire, plus other risks like roads and water.

We carefully design our education

packages so that we are delivering the right messages, to the right children, at the right age. Where necessary, we also prioritise school visits in areas which we know tend to be at higher risk of certain types of incident.

Alongside our partners, we invite every year six pupil in South Yorkshire to receive education at our film-set style Lifewise Centre, which we jointly run with South Yorkshire Police.

We also believe risk management involves building resilient and sustainable communities. Improving the life chances of young people delivers a long term social return on investment because of known links between employability and demands on public services. This includes someone's susceptibility to fire, but also extends to other issues such as crime, healthcare and the economy.

We deliver this through schemes like Princes Trust Team Programme, which is a 12 week personal development course

for unemployed 16 to 25 year olds, delivered jointly with South Yorkshire Police. It offers work experience, qualifications, practical skills, community projects and a residential week. Individuals gain new skills and qualifications, mix with new people and make new friends, get help with job-hunting and CV writing and most importantly a big boost to their self-esteem. Other initiatives for young people include our seven fire cadets branches and the delivery of Achieving Respect and Confidence (ARC) courses, which are short, fire station based courses designed to highlight the consequences of anti-social behavior.

Lastly, whilst we cannot realistically speak to every single person in South Yorkshire about safety face-to-face, there's lots we can achieve through public information campaigns. Many of the safety campaigns we have delivered in the last few years are proven to have helped reduce common types of incident, like cooking and electrical fires.

PROTECTION

Protection is the term fire and rescue services use to describe their work to enforce fire safety laws and reduce the risks in different types of building.

Most of this work focuses on non-domestic premises like shops, factories, offices, warehouses, hospitals, sports stadiums and hotels. There are other premises too like petrol stations and fireworks retailers which have their own special regulations and licensing arrangements, which we also oversee and enforce.

Aside from businesses, we are also responsible for ensuring high-rise residential buildings comply with fire safety laws. This is an issue which has particularly come to the fore following the Grenfell Tower disaster and subsequent inquiry and building safety reviews.

The Home Office has provided us with some specific funding to address this at a local level and we are using this to set up a temporary 'building risk review' team. The team's main responsibility will be to triage, inspect and desktop audit these premises by December 2021, in line with the target laid down by government.

There are thousands of commercial buildings in South Yorkshire and it's not possible with the resources available to us to check them all regularly.

Instead, we use something called a 'risk based audit programme.' This is a way of prioritising which of these buildings we inspect most often based on different things, such as whether people sleep in the buildings at night or the types of processes a business undertakes.

We still check lower risk premises, but do this less often. For example, there is generally less risk associated with something like a small shop, compared to a premises like a hospital.

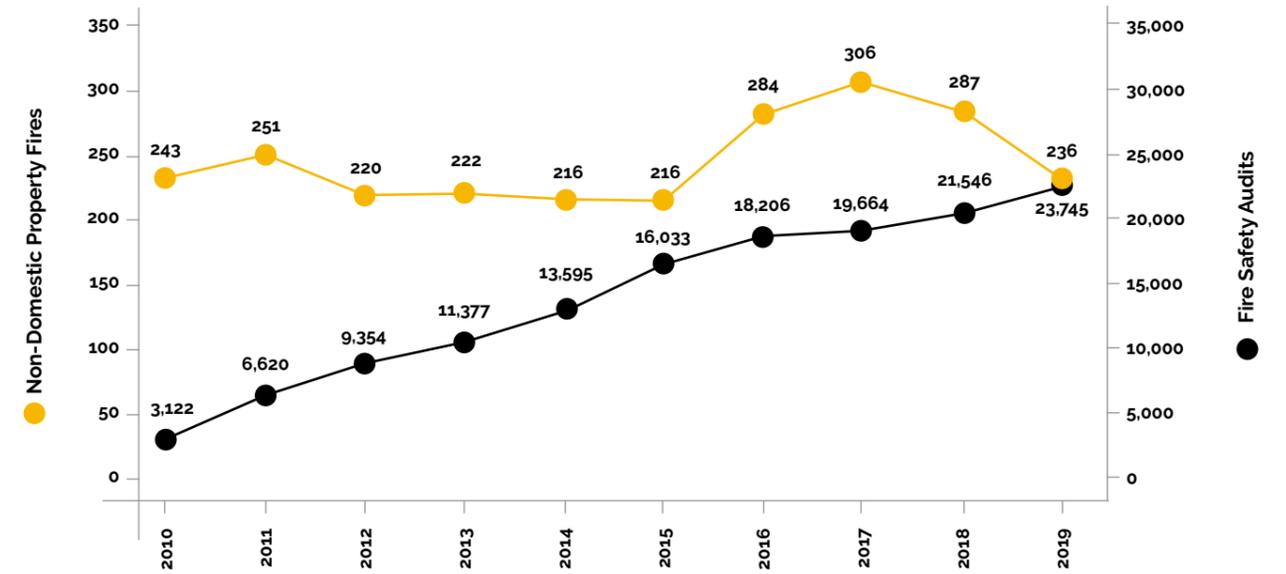
We also set aside some of our business fire safety inspectors' time to respond to complaints from members of the public, who might have spotted a safety issue with a building and then reported it to us.



The immediate concern nationally was to address safety concerns relating to buildings with ACM cladding which were over 18 metres tall. This work has now been completed.

Now, attention is being given to checking the safety of thousands more non-cladded, high rise buildings across the country- more than 200 of which can be found in South Yorkshire.

South Yorkshire Fire and Rescue
Non-Domestic Property Fires and Fire Safety Audits



RESPONSE

Whilst we would much rather prevent emergencies from happening in the first place, we are best known for our ability to respond to a very wide range of emergencies using the skills and equipment available to us.

Our response to emergencies involves several functions. From firefighters on fire stations who respond to incidents in the first instance and more senior officers who support and may take charge as incidents escalate, to our Control room operators who take 999 calls, support the public and dispatch our staff and vehicles to incidents. Calls we respond to include:

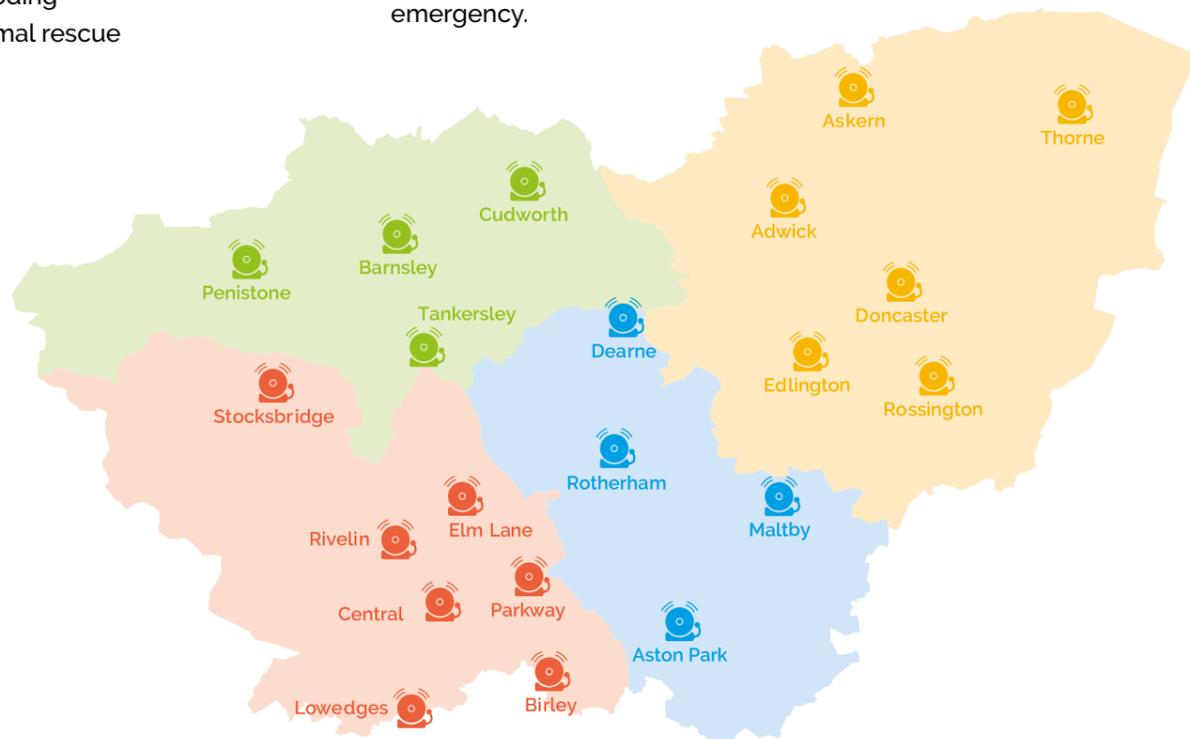
- Fires
- Road traffic collisions
- Specialist rescues, including from water, confined spaces and height
- Flooding
- Animal rescue

- Gaining access to assist other agencies

We can't afford to have fire engines and fire stations everywhere, so we aim instead to put them in the places where they are needed the most based on the risks we are likely to face. The majority of our fire stations are permanently staffed so firefighters are able to respond immediately to an emergency. Other fire stations, in areas where we experience fewer emergencies, are staffed using on-call firefighters who will respond from home or work to their local fire station if there is an emergency.

In addition to normal fire engines, we also have some very specialist equipment, like high reach appliances, boats, very powerful pumping equipment and decontamination vehicles, which are placed strategically across the county so that we can call upon them if needed.

This map shows the location of our 21 fire stations that are positioned strategically across South Yorkshire.



This table shows where each of our fire engines is based.

Station	Crewing type
Barnsley district	
Barnsley	
Cudworth	
Tankersley	(following conversion from CPC in 2021)
Penistone	
Doncaster district	
Doncaster	
Adwick	
Askern	
Edlington	
Rossington	
Thorne	
Rotherham district	
Rotherham	
Aston Park	
Dearne	
Maltby	
Sheffield district	
Central	
Birley Moor	
Elm Lane	
Lowedges	
Parkway	
Rivelin	
Stocksbridge	

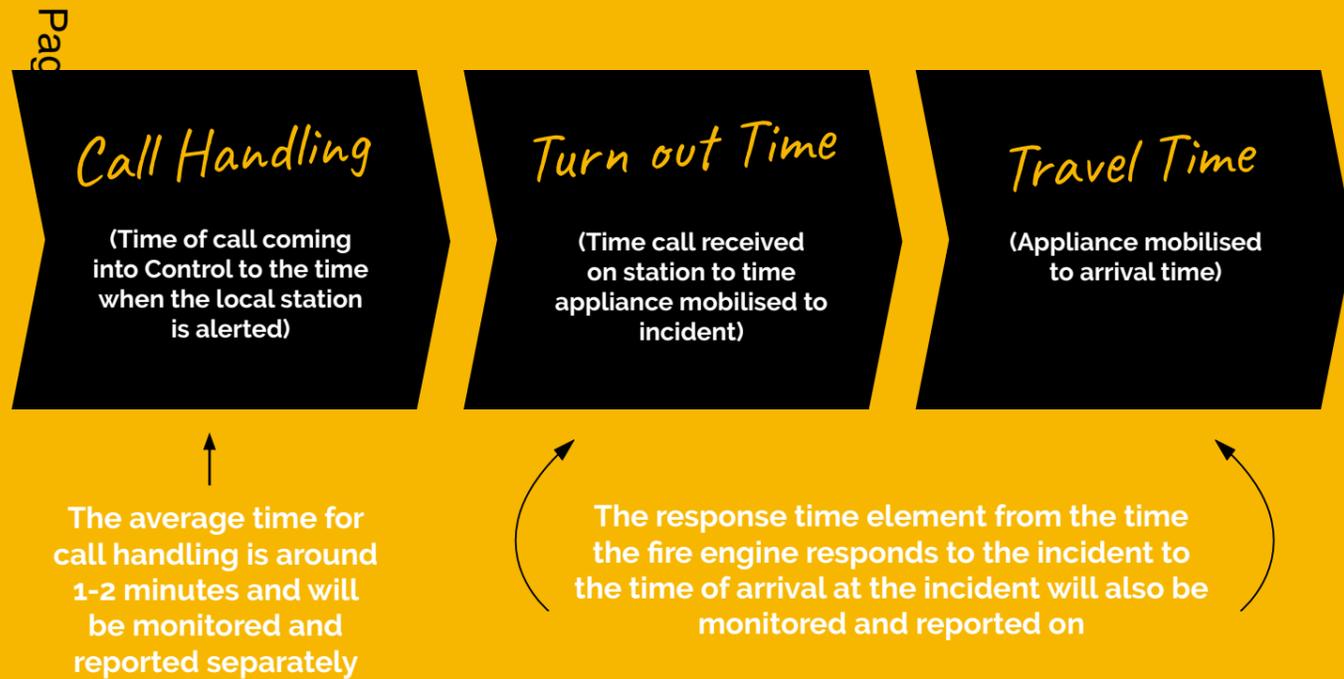
- Pump (wholetime)
- Pump (on call)
- Pump (wholetime at day, resilience at night)
- Small Incident Unit
- Aerial (wholetime)
- Aerial (retained)

RESPONSE TIMES

A national inspection reported that it was undesirable for us not to have a set of response standards for how quickly we respond to 999 calls. We currently aim to get to emergencies as fast as we can, every time. We will continue to do this, but we also aim to become more sophisticated in how we allocate our resources and respond to emergencies based on two specific factors:

1. The level of risk that exists within different areas of the county, and
2. The severity of the incident we are called to attend

Our total response time is made up of the length of time it takes for a 999 call to be handled, a fire engine to be mobilised, firefighters to crew that fire engine and the travel time for that fire engine to arrive at an incident. The overall response time can be broken down into different elements, as shown below:



All three elements of the total response time are important, but the second two elements (turn out time and travel time) determine the most appropriate location of our fire stations and the staffing models we use. They are also the critical element of the response times which we plan to set.

Most fire services use a set of expected response times which varies according to factors such as whether someone's life is at risk and according to the level of risk in a particular area. Adopting this approach will allow us to ensure we are placing resources in the right places at the right time to best protect the communities we serve.

To be really clear, we will still aim to get to each emergency as fast as we can, but having a set of response times means we can measure our performance to ensure we are delivering the best possible service to our communities with the resources we have available to us.

To inform our response times, we have used some of the information and data described in the Integrated Risk Management Modelling section to produce a risk map of the county. This will determine three risk categories (High, Medium and Low). Next, we turn our attention to the different types of incident, shown in the table below. Each is given a risk category (High, Medium and Low) based on the type of incident and the respective risk to life.

Accidental Dwelling Fire	Fire	A – High Risk
Accidental Primary Other Fire	Fire	A – High Risk
Deliberate Primary Fire	Fire	A – High Risk
Non Domestic Property Fire	Fire	A – High Risk
Special Service Life at Risk	Special Service	A – High Risk
Special Service Other	Special Service	B – Medium Risk
Accidental Secondary Fire	Fire	C – Low Risk
Chimney Fire	Fire	C – Low Risk
Deliberate Secondary Fire	Fire	C – Low Risk
False Alarm due to Apparatus	False Alarm	C – Low Risk
False Alarm Malicious	False Alarm	C – Low Risk
False Alarm Good Intent	False Alarm	C – Low Risk

In developing our response times for the county, we employed the skills of a specialist risk management consultancy, who analysed our method for assessing risk in addition to looking back at our performance over the past three years. This included a detailed analysis of the response times to the areas of risk we have identified that in turn informed us about what our response times should be. From this work, we have determined the response times in the table below:

Risk Category (Community)	Incident Type		
	High Risk	Medium Risk	Low Risk
High	7 minutes	9 minutes	11 minutes
Medium	9 minutes	11 minutes	13 minutes
Low	11 minutes	13 minutes	15 minutes

The service is developing a system that will allow us to monitor and report our performance against these response times.

We have GPS information showing where each fire engine is located at all times and we can determine the closest resource to send to any emergency when it occurs. We are also planning to introduce some more technology to assist this process in the coming months. There will be occasions when we will be unable to arrive at an incident within our response time and this can be for a variety of reasons (for example, traffic congestion) but we will endeavour to understand why and seek to continually improve in order to prioritise our response performance at all times.



RESILIENCE

Occasionally, we experience large scale incidents that require us to call in support from other fire and rescue services.

This is captured in local regional agreements. Not only do we sometimes request support we will send firefighters and equipment from South Yorkshire to help other services if they are dealing with a major emergency. Being resilient means we must have such plans in place and this also ensures we can still deal with any normal activity across the county whilst also resourcing a large scale incident that may last several days or longer.

National resources are strategically located within fire and rescue services throughout the UK to provide an emergency response to larger scale incidents and disasters. In South Yorkshire, we host a suite of specialist resources that can be deployed anywhere in the UK. These include a High Volume Pump (HVP) which is used for widespread flooding incidents where greater pumping capacity is required. We also have a Detection Identification and Monitoring (DIM) vehicle, which can be used to identify and monitor hazardous substances.

These resources are not only available for national deployment- they can also be used to support local response to any incident where they would be required within South Yorkshire.

WHAT WE'RE GOING TO DO

Following the development of our risk model and associated response time arrangements, over the course of this plan we now intend to:

1. Further develop our risk model so that we use even more sophisticated datasets to plan our prevention, protection and response work and distribute our resources accordingly

2. Introduce the expected response time standards we've described in this plan, so that our performance can be more effectively measured and we can deliver an even better service to local people

3. Review our special attributes so that we can make sure we have the right vehicles and skills in the right places, according to our risk model

4. Further target our prevention and protection activity at the people and places where they will have the greatest impact, based on our risk model

MONEY AND RESOURCES

South Yorkshire Fire and Rescue is funded by the taxpayer so we need to ensure we are allocating our resources in the most efficient and effective way.

Our annual budget is £55m. After a decade of austerity measures, fire services nationally have seen their core spending power reduced by 28.55 percent, in real terms. Like

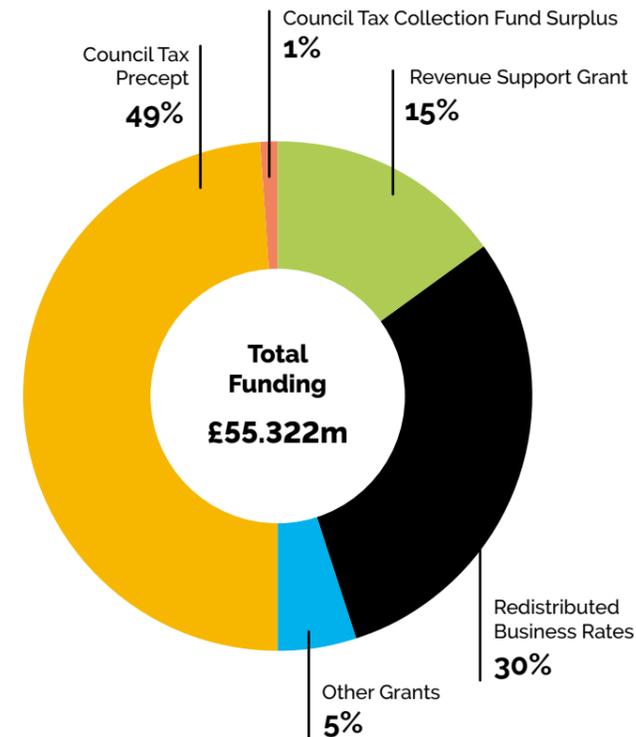
other fire and rescue services our capabilities are built around our people and staff costs make up over 80 percent of our budget. It is, therefore, inevitable that staff numbers have declined during this period. Our full-time equivalent firefighter numbers have reduced from 787 in 2010/11 to 574 in 2019/20.

Despite this, we continue to operate from the same number of fire

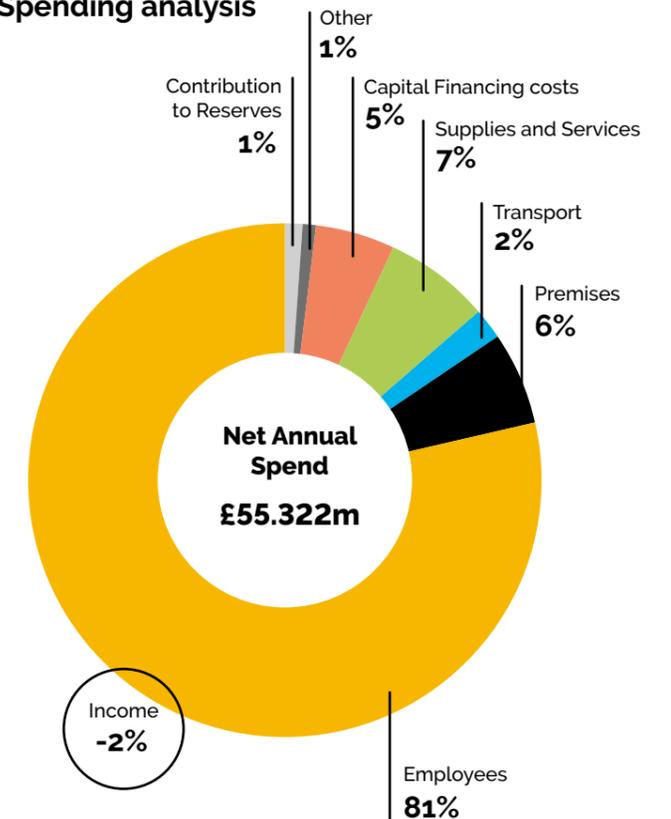
stations, albeit some are in different locations and some have different crewing systems. Ultimately, we still aim to deliver the best possible service to the communities of South Yorkshire with the funds we are given. To this end a recent HMICFRS inspection found us to be **good** at keeping people safe and secure.

Historically, we have received the majority of our funding from direct government grants. However, over time this has changed.

Government Funding



Spending analysis



These charts, based on our latest income and expenditure figures, show where our money comes from and how it is spent.

As government grants have been cut, we have become more dependent on funding from South Yorkshire council taxpayers via the precept we levy on each local authority in the area.

Besides spending £45m on people, the majority of our other spend is on using and maintaining our fire stations and training and development centre (£3m), running appliances and other vehicles (£1m) and on vital supplies and services- including the provision of fire kit and uniforms, vital ICT and other firefighting equipment (£4m).

Most of the rest (£3m) is required to repay and service historical borrowings previously used to finance capital investment, for example building a new fire station.

Unlike other public services which are demand led, we need to have enough resources available to provide an emergency response even in times of exceptional demand. This includes the ability to deal with large scale emergencies, a range of smaller incidents that may happen together and/or incidents that are of extended duration. This resilience is vital to ensuring safe systems of work for our people.

Our challenge is to balance our resources against the risks we face. By resources, we mean money and people. By risk, we mean the potential for emergencies to occur- that's everything from fires and road traffic collisions to flooding and even terrorism.

Like all public services, we have to work within the budget we're given. We have adopted a progressive approach to managing our finances making sensible and sustainable

efficiencies and savings (about £2m a year from 2020 to 2023) to offset known cost pressures (mostly pay and pensions)- this has enabled us to now be 'cautiously optimistic' about our future.

Our financial plan for the next few years clearly shows we have an affordable and sustainable future that will support our plans to:

- Recruit more new firefighters
- Enhance our building safety work to make sure we do enough to ensure premises comply with fire safety regulations
- Invest more in protection activity to ensure we have the capacity and capability for undertaking new duties and responsibilities with regard to high risk, high rise buildings
- Continue to invest in our infrastructure and assets like providing new fire engines, firefighting kit and equipment and on-going technology developments as part of our digital transformation roadmap

This plan assumes government funding levels will at least be maintained and council tax will increase by two percent a year. However, the plan was published shortly before the COVID-19 pandemic. As we pen this document, we still don't know what the impact of the pandemic will be on the money the government makes available to the fire and rescue sector.

All we do know is that the service has demonstrated its versatility in responding to the crisis, maintaining its ability to respond to emergency and other incidents while simultaneously helping others.

To avoid paralysis in decision making we are sticking with our improvement and financial plans until it is clear that we need to change. The government is expected to provide this clarity by the end of 2020, but it may not do so until later in 2021.

Given this financial uncertainty, we have diligently held a higher level of general reserve (£5m) than normal. This is expected to provide a sufficient buffer to work up and enable our Fire Authority members to consider sensible choices to reduce costs, make efficiencies and other savings, should the financial need arise.

For every five percent reduction in government grant funding the service would need to save half a million pounds. This equates to the cost of running one wholetime fire station, with one fire engine, for six months.

The remainder of our financial plan considers the sensible use of other reserves that we have available to us. These now stand at £14m and will mostly be used over the next 12 to 24 months to finance the approved investments in new infrastructure.

This includes a new Barnsley fire station, the refurbishment of Aston Park, Tankersley and Rivelin fire stations, and other assets, for example a new structural fire kit and rescue jacket.

By using reserves to finance these investments we avoid expensive borrowing costs (about £55,000 for every £1m borrowed for the next 25 years) which reduces how much money we have available to spend on people and other day-to-day things.

EFFICIENCIES AND INVESTMENT

The service recognises the financial challenges as described in the previous section. To deliver an efficient service, we will continue to consider ways of improving our service whilst operating in a cost effective way. However, if the level of investment in the service drops significantly and we need to make large-scale savings, then we will have to consider a range of options. These will include:

- Matching our response resources to the risks we identify through our risk modelling
- How we crew our fire stations (duty systems)
- When we crew our fire stations (peak period crewing)
- The number of firefighters we crew a fire engine with
- Increased use of 'on-call firefighters'
- Service support reviews and potential restructures of support functions
- More flexible employment contracts

We are positive about the future, however uncertain it might be, and this plan does not include any specific proposals to generate efficiency savings. In 2019, the service consulted on proposals to staff fire engines with four firefighters and these were approved by the Fire Authority. However, we will continue to staff our fire engines with five firefighters wherever possible and consider alternative ways to generate savings if they are required.

Our investment plan will also be prepared following a series of internal meetings to determine what our service currently delivers and what demands are being placed on us in the future. The investment plan will also take account of any recommendations given to us through our inspection programme and we have an on-going 'Service Improvement Plan' that may require us to invest in some areas of the service.

An example of this is where we will be investing in our fire protection services in response to the Grenfell Tower fire and the increased demands around ensuring commercial buildings are as safe as they can be.

We will then hold an annual workforce planning event that will allow managers from all functions within the service to request additional resources, if they feel they are required. Service leaders will then make decisions on the areas that require investment following a gap analysis against what the service needs to deliver to make our communities as safe as they can be.

HOW WE WILL MEASURE OUR SUCCESS

We already publish a set of performance indicators which show how well we are doing at managing risk in our area. These include measures like the number of accidental house fires, injuries and deaths in South Yorkshire, the number of other incidents we attend and statistics relating to our prevention and protection work.

We will also now report against the expected response time standards we have set out in this plan. We will internally capture and monitor the benefits of this IRMP, too.

All fire and rescue services are regularly inspected by Her Majesty's Inspectorate of Constabulary and Fire & Rescue Services (HMICFRS), which is another way in which our success at managing local risk can be scrutinised and compared with that of other fire and rescue services.

CONSULTATION ON THIS PLAN

This is a draft plan. We have made it publicly available on our website so that local people and partner organisations can review it and decide if they agree with our proposals, or not.

We've already carried out consultation whilst we were developing this plan and have summarised the feedback we received elsewhere in this document.

We will consider any further feedback we receive on this plan, before publishing our final Integrated Risk Management Plan in early 2021.

Arabic

"الطلب ترجمة لهذه المنشورة أو للمزيد من المعلومات عن خدمة الإطفاء والإنقاذ في جنوب يوركشاير، يرجى إرسال رسالة إلكترونية إلى: customer@syfire.gov.uk أو الاتصال بالرقم 0114 253 2209"

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Farsi

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Kurdish

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Turkish

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Urdu

اس دستاویز کا ترجمہ حاصل کرنے یا 'ساوتھ یارکشاير فاير اينڈ ريسکيو' سے متعلق مزید معلومات کے لیے برائے مہربانی ای میل بھیجیں: customer@syfire.gov.uk یا فون کریں: 0114 253 2209





**South Yorkshire
FIRE & RESCUE**

PUBLIC CONSULTATION OUTCOMES

Findings from public perception research carried out to inform development of the service's Integrated Risk Management Plan 2021-24

Making
**SOUTH
YORKSHIRE
SAFER &
STRONGER**

Public Consultation Outcomes

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Public Consultation Outcomes

Executive Summary

This page is intended to provide casual readers with a headline summary of the main points from the consultation. In-depth analysis of the consultation findings can be found elsewhere in this report.

- South Yorkshire Fire & Rescue wanted to speak to members of the public to gain a better understanding of their perceptions of its service and views on possible future 999 response time arrangements. This consultation was carried out in August 2020 using a mixture of qualitative and quantitative research methods.
- A total of **2,984 people took part in the consultation** across each of the quantitative feedback methods- telephone, online and postal. A further 22 people took part in an online, focus group style feedback forum.
- **The vast majority of people think the fire service in South Yorkshire does a good job-** 95% of people across all study groups say they 'strongly agree' or 'agree' that it provides a good service to local people
- Many respondents said they believe the fire service is a critical service which is always available and can be relied upon to be there quickly when needed.
- **Most people also think the service provides good value for money-** 95% of people across all study groups said they 'strongly agree' or 'agree' that the service provides good value for money, including in comparison with other neighbouring fire and rescue services
- **All of the service's three main functions- response, prevention and protection- are very well valued by the public,** though 'responding to emergencies' is the service which people value the most. 98% of people say they 'strongly value' or 'value' this service, compared to 97% for 'preventing emergencies' and 97% for 'protecting buildings and enforcing safety laws'
- This feedback was repeated when we asked people what they want us to focus on over the next few years. All three primary functions scored very strongly, with 'responding to emergencies' again coming out on top.
- **The vast majority of people supported the idea of having different response time standards based on severity,** with 95% of respondents saying they 'strongly agree' or 'agree' with the statement
- **Most people also supported adopting response time standards with took into account of the risk in a geographic location,** with 85% of respondents saying they 'strongly agree' or 'agree' with the statement
- **Focus group participants rejected a standard response time arrangement for the whole county,** instead favouring one which takes into account both severity of an incident and the level of risk in a geographic area.

Main report

Introduction

Fire and rescue services have consulted on Integrated Risk Management Plans for many years. Traditionally, they've done little to seek or respond to the views of local people away from these though, or whilst their plans are still at a formative stage.

A clear message from Her Majesty's Inspectorate of Constabulary and Fire & Rescue Services (HMICFRS) is that this needs to change- engaging with the public more regularly about what they want from their fire and rescue service and using this information to shape service design.

Asking the public some fundamental questions like "what do you want from your local fire and rescue service?" or "which services do you want your fire service to focus on" whilst our plans are still being developed goes some way towards achieving this.

We also wanted to use this consultation to help inform our thinking around the introduction of a set of response time standards.

This is one of the biggest consultation exercises South Yorkshire Fire & Rescue has undertaken with local people for many years.

Methodology

The best consultation exercises combine a mixture of qualitative and quantitative research methods.

Qualitative research methods like interviews and focus groups offer higher quality, in depth responses and can be useful for capturing people's views on more complex subject matters. Our approach was to run an online forum with 22 people from South Yorkshire. The forum acted like a virtual focus group, with an independent facilitator generating feedback and promoting discussion around the subject areas.

Quantitative research methods like questionnaires and surveys are useful for providing a high volume of responses and ensuring that organisations have captured views from a broad and representative sample of local people. For this consultation we carried out:

- A telephone survey with 1,100 residents of South Yorkshire
- A postal survey which was sent out to 8,000 residents of South Yorkshire
- An online survey which was publicised in the media and online which anyone could complete

The questions we asked across each of the various survey channels were consistent. However, we presented some more detailed options around possible response time arrangements as part of the online forums, where there was an opportunity to have more in depth discussions about some of the issues involved.

We informed staff representative bodies and Fire Authority members of the proposed consultation questions, before conducting this research throughout August 2020.

Research audience samples

Some consultation exercises are unrepresentative, because they rely on a small number of feedback methods and the people who respond are often self-selecting. It was important to us therefore that wherever possible, we took steps to capture the views of a representative sample of local people and to monitor who we received responses from.

The participants in the online forum (focus groups) underwent a screening questionnaire to ensure their suitability for the research. The aim was to gather qualitative feedback from a wide range of people across different life stages, economic circumstances and demographic backgrounds. Across the 22 respondents there was a representative mixture according to:

- Gender
- Age
- Marital status
- Ethnicity
- Parenthood
- Socio-economic group
- Location by South Yorkshire district

Respondents were also screened according to their awareness of fire safety, from 'low', 'moderate' or 'high' as we believed this could be important for understanding people's views of the fire service, particularly in relation to response times.

The address list for the postal survey was developed by matching an address list for South Yorkshire against different demographic profiles using the Mosaic audience segmentation tool. Equal numbers of surveys were sent out to the four districts of South Yorkshire based on the demographic make-up of those areas.

Mosaic Group	Barnsley			Doncaster			Rotherham			Sheffield		
A Country Living	2825	0.02531	51	3451	0.02495	50	1505	0.01274	25	1221	0.00486	10
B Prestige Positions	2586	0.02317	46	4307	0.03113	62	3645	0.03085	62	13600	0.05416	108
C City Prosperity	2	0.00002	0	10	0.00007	1	1	0.00001	0	1722	0.00686	14
D Domestic Success	4207	0.03769	75	4991	0.03608	72	5615	0.04752	95	14000	0.05576	112
E Suburban Stability	9839	0.08816	176	11696	0.08455	169	13757	0.11643	233	18519	0.07376	148
F Senior Security	9463	0.08479	170	13119	0.09483	190	12281	0.10394	208	19167	0.07634	153
G Rural Reality	4475	0.04010	80	6012	0.04346	87	2182	0.01847	37	2516	0.01002	20
H Aspiring Homemakers	11071	0.09919	198	13204	0.09545	191	14118	0.11948	239	19313	0.07692	154
I Urban Cohesion	103	0.00092	2	298	0.00215	4	738	0.00625	12	9408	0.03747	74
J Rental Hubs	743	0.00666	13	1437	0.01039	21	718	0.00608	12	37676	0.15005	300
K Modest Traditions	15362	0.13764	275	16923	0.12233	245	13467	0.11397	228	19217	0.07654	153
L Transient Renters	18293	0.16390	328	21729	0.15707	314	14647	0.12396	248	22083	0.08795	175
M Family Basics	12764	0.11436	229	18816	0.13601	272	14590	0.12348	247	25561	0.10180	204
N Vintage Value	11887	0.10651	213	12900	0.09325	186	11869	0.10045	201	22872	0.09109	182
O Municipal Tenants	7989	0.07158	143	9445	0.06827	137	9026	0.07639	153	24210	0.09642	193
Grand Total	111609		2000	138338		2000	118159		2000	251085		2000

We further monitored the returned surveys we received across criteria including age, ethnicity and disability.

The telephone survey sample was developed by matching quota numbers for the survey against the demographic profiles for the four districts of South Yorkshire. We could only match quota numbers against characteristics for which reliable data exists- age, gender and ethnicity. Again, equal numbers of telephone surveys were carried out across the four districts of South Yorkshire.

Age	Barnsley			Doncaster			Rotherham			Sheffield		
	Population	%	Quota									
16-24	24,934	13.24%	36	34,560	14.11%	39	28,229	13.57%	37	92,266	20.41%	56
25-34	27,239	14.46%	40	38,064	15.54%	43	29,755	14.30%	39	74,741	16.54%	45
35-44	32,932	17.49%	48	40,433	16.51%	45	35,541	17.09%	47	74,331	16.44%	45
45-54	34,047	18.08%	50	43,500	17.76%	49	37,324	17.94%	49	68,713	15.20%	42
55-64	29,173	15.49%	43	37,211	15.19%	42	32,327	15.54%	43	56,265	12.45%	34
65 and over	40,010	21.24%	58	51,141	20.88%	57	44,842	21.56%	59	85,698	18.96%	52
Total	188,335	100.00%	275	244,909	100.00%	275	208,018	100.00%	275	452,014	100.00%	275

Gender	Barnsley			Doncaster			Rotherham			Sheffield		
	Population	%	Quota									
Male	113,634	49.15%	135	149,230	49.35%	136	126,247	49.07%	135	272,661	49.33%	136
Female	117,587	50.85%	140	153,172	50.65%	139	131,033	50.93%	140	280,037	50.67%	139
Total	231,221	100.00%	275	302,402	100.00%	275	257,280	100.00%	275	552,698	100.00%	275

Ethnicity	Barnsley			Doncaster			Rotherham			Sheffield		
	Population	%	Quota									
White	226,285	97.87%	269	288,066	95.26%	262	240,758	93.58%	257	462,544	83.69%	230
BAME	4,936	2.13%	6	14,336	4.74%	13	16,522	6.42%	18	90,154	16.31%	45
Total	231,221	100.00%	275	302,402	100.00%	275	257,280	100.00%	275	552,698	100.00%	275

The online survey was not targeted at particular groups- anyone could complete it. However, we did record some demographic data so that we could monitor who we were receiving responses from. People identifying as White British made up 93% of respondents, with BAME respondents making up the remaining 7%. Around 22% of respondents declared they had a disability. A mixture of age ranges responded, from those aged 24 or under (6%) to those aged 65 or over (15%).

Qualitative research results

Twenty-two people took part in an online community over three days. The research was conducted by an independent research agency and moderator.

General perceptions

The public see the fire service as a critical service which is always available and can be relied upon to be there quickly when needed.

Firefighters are seen as adaptable and highly skilled, able to deal with a wide range of issues.

There is recognition though that much like other public bodies the fire service is under increased financial pressure.

Due to many years of fire safety measures, education and relatively easy access to the fire service, fire safety is less at the top of people's minds than other worries. However, people do become more concerned about fire safety when it is out of their immediate control or when their life stage changes, for example when they become a parent.

Response times

The public are concerned by the idea of introducing anything which might be interpreted as a target or measure. The benefits of having a response time standard are not well understood by the public. Many people have seen the shift towards 'targets' in other services, like the NHS, having a negative impact. For example, it is perceived as increasing pressure on an already pressurised job. However, if accepting that response time arrangements need to be established, the public prefer options which prioritise risk to life.

Of the options presented to the public, a standard response time across the board was unanimously rejected. People said that whilst such an arrangement would represent an equality of service, the lack of prioritisation for higher life risk calls could cost lives. They also told us that a standard target would not be achievable and could have negative repercussions as a result.

Response times which prioritise severity of incident were seen as being easy to understand, highly rational and in line with the ethos of the fire and rescue service. The public also said this option could allow the service to prioritise and distribute its resources appropriately. However, some people raised the point that even low risk incidents can escalate quickly and develop into life threatening ones.

Response times based on geographic risk data were also viewed positively by the public, who felt that it would help the service to make informed decisions based on empirical facts and data. Targets based on community risk data were felt to be more achievable. People felt times based on geographic risk should be reviewed regularly though, as it was perceived that risk can change very quickly in an area.

The public's preferred option is a response time arrangement which combines both risk and severity. This was felt to be the most appealing option as it takes into account all factors and offers reassurance on public safety. The public said that using data to inform decision making positions the service as modern and bases decisions on evidence. However, the public did say that this would be the most complex response time arrangement to explain to the public.

Quantitative research results

The consultation period ran from 1 to 31 August during which we received 2,984 responses.

I believe my fire service does a good job					
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Telephone	807	226	66	1	0
Postal	253	76	27	1	0
Online	1083	233	46	3	5
Total:	2143	535	139	5	5
Percentage:	76%	18%	5%	0.1%	0.1%

The service has a net approval rating of 94%, based on those who strongly agree (76%) or agree (18%) that it does a good job for local people.

When asked to explain the reasons behind this extremely positive perception, respondents cited a combination of personal experience, perceptions and visibility – both physical and via traditional media and social media.

Residents are clearly understanding and appreciative of the dangerous job that fire and rescue staff undertake and therefore retain a high base opinion of the service. Those who have required the help of South Yorkshire Fire & Rescue report high standards of service including the speed of attendance alongside the response and actions. Respondents who have engaged with the service through prevention campaigns are aware of the importance of safety advice in saving lives and establishing connections with communities.

Barnsley

"I have family who have been affected by fire and they have said the fire service responded quickly as well as seeing them respond quickly to grass fires."

"Its local to me and one of the firefighters is a friend of mine and I know how hard they work, plus I have had a house fire and they were really good."

"I think that they go out of their way to help before people would expect them to come into effect. They try to prevent fires before they happen."

Doncaster

"With what I have seen happen around the local area they have been straight out to deal with, and they responded quickly to the garage that was on fire near where I live."

"I work in the care sector and we have had to call them out a number of times to get into people's property, they also come out assess property and provide smoke alarms."

"I have seen them come out quickly all of the time when needed. We have had a few gangs starting fires and they are always dealt with."

Rotherham

"I think the fire service fitted my fire alarms and I feel that they have been a great service I have always got the local number and they come out to call outs about faults and fixing smoke alarms."

"We had a heat wave a couple of years ago and there was a fire near me, I reported the incident and they responded really quickly. I can only go by that and what I see on the news."

"We had a fire and it took them half an hour to get to us and I can see the fire station from my house, but it had to come from somewhere else in the Worksop area."

Sheffield

"They have been round to my house and tested my fire alarms and one was faulty and they came the next day and changed it and I called them about a neighbour, and they were out within minutes."

"They always seem to be in the area, and I live near the fire station and I see them responding to incidents."

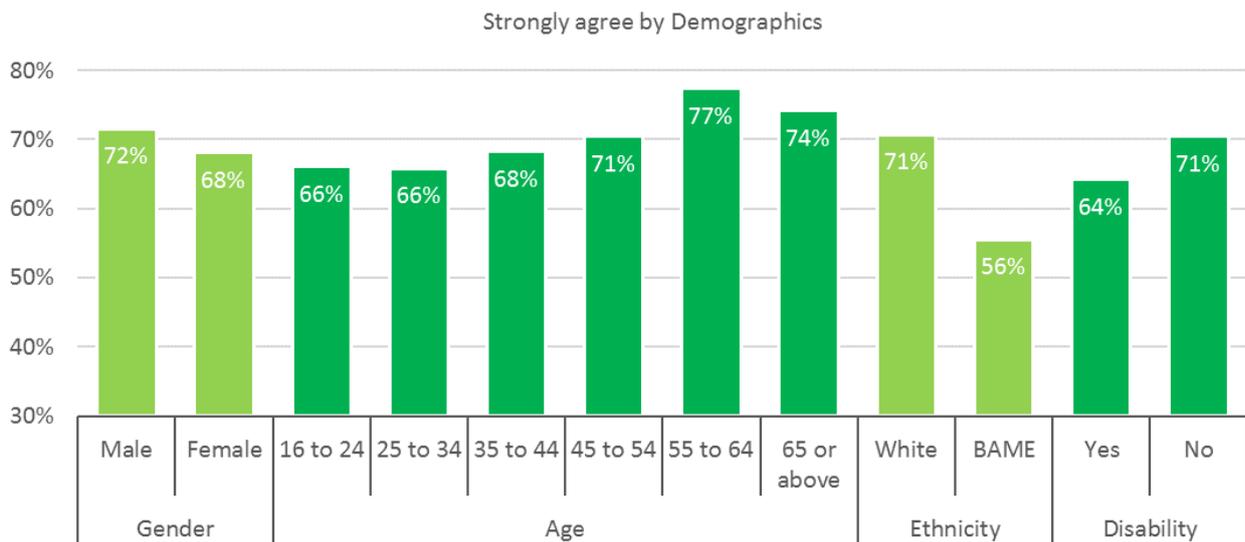
"My son locked himself in the house and the fire station is just around the corner from where we live. They came out straight away and cut the chain of the door they were really good."

I believe my fire and rescue service provides good value for money					
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Telephone	768	285	43	4	0
Postal	221	92	40	3	1
Online	939	316	89	21	5
Total:	1928	693	172	28	6
Percentage:	68%	26%	6%	1%	0.2%

The telephone survey found that older respondents were the most likely to strongly agree that their fire and rescue service provides good value for money. We found that 77% of those aged 55 to 64 and 74% of those 65 or above strongly agreed. Younger respondents were less likely to have strongly agreed their fire and rescue service provides good value for money with around two-thirds (66%) of those aged 16 to 24 and 25 to 34 that stated this was the case.

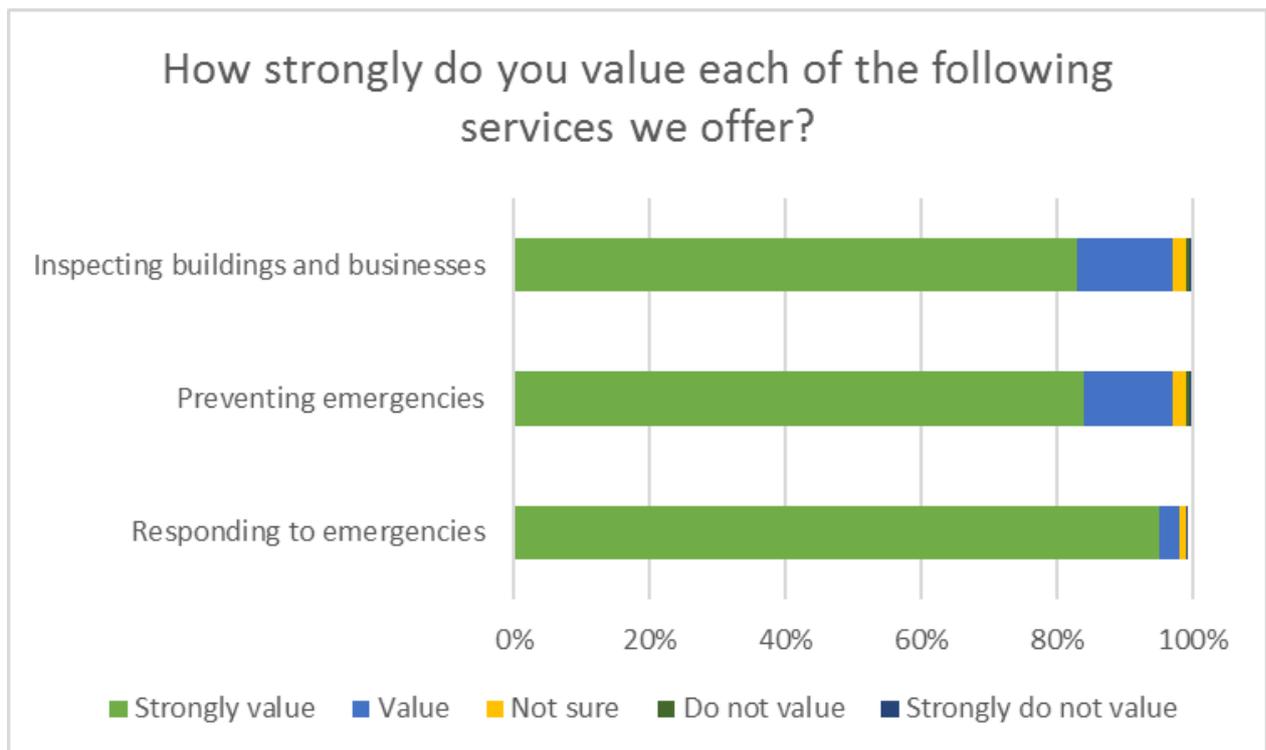
BAME respondents were the least likely to feel their fire and rescue service provides value for money with only 56% that strongly agreed with this compared to 71% of White respondents that strongly agreed.

Females (68%) and those with a disability (64%) were slightly less likely to strongly agree their fire and rescue service provides good value for money when compared to males (72%) and those without a disability (71%).



How strongly do you value each of the following services we offer?						
		Strongly value	Value	Not sure	Do not value	Strongly don't value
Responding to emergencies	Telephone	1018	37	31	0	0
	Postal	333	19	5	0	0
	Online	1317	49	6	0	1
	Total:	2668	105	42	0	1
	Percentage:	95%	3%	1%	0%	0.01%
Preventing emergencies before they occur	Telephone	963	88	32	1	0
	Postal	302	51	3	0	0
	Online	1109	225	19	17	3
	Total:	2374	364	54	18	3
	Percentage:	84%	13%	2%	0.6%	0.1%
Inspecting buildings and businesses	Telephone	982	80	24	1	1
	Postal	282	63	11	0	1
	Online	1084	239	37	10	3
	Total:	2348	382	72	11	5
	Percentage:	83%	14%	2%	0.4%	0.2%

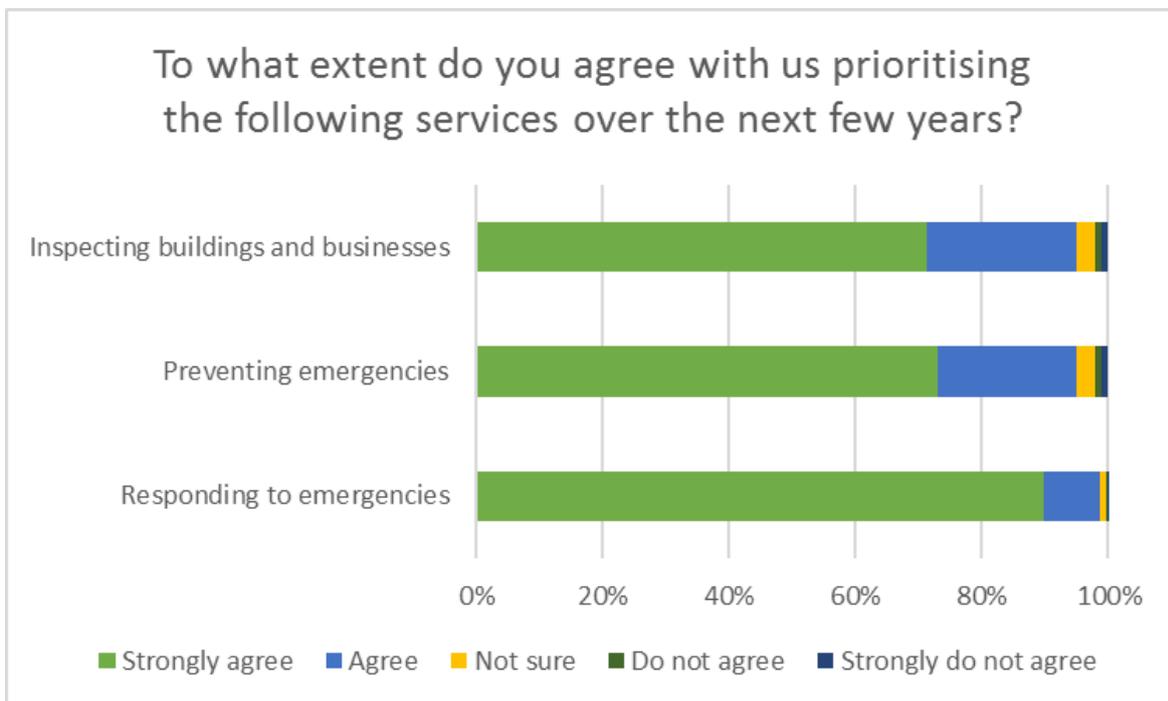
All three services are very strongly valued by the public. Responding to emergencies saw the highest number of respondents selecting that they 'strongly value' this service, compared to 84% for preventing emergencies and 83% for inspecting buildings and businesses.



To what extent do you agree with us prioritising each of the following services over the next few years?

		Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Responding to emergencies	Telephone	925	146	11	0	1
	Postal	325	27	3	0	2
	Online	1275	76	6	8	8
	Total:	2525	249	20	8	11
	Percentage:	90%	9%	0.7%	0.1%	0.2%
Preventing emergencies before they occur	Telephone	824	233	20	3	0
	Postal	265	85	7	0	0
	Online	974	314	48	21	21
	Total:	2063	632	75	24	21
	Percentage:	73%	22%	3%	1%	1%
Inspecting buildings and businesses	Telephone	831	230	15	2	0
	Postal	263	85	7	0	0
	Online	932	355	52	20	9
	Total:	2026	670	74	22	9
	Percentage:	72%	24%	3%	1%	0.5%

Respondents were also asked to provide their thoughts on further priorities or anything the service should be doing for local people. Much of the feedback provided supported prioritising prevention through education, safety measures and engagement with communities or cohorts within communities such as the young or older people. There was also a strong sense that landlords should be legally obliged to ensure fire safety measures are implemented in homes and premises they let.



Barnsley

"The service is good as they did a home visit and talked to the children and checked all the smoke alarms. It would be nice to have more community-based events. They have knocked on doors with safety tips when someone had a chip pan fire."

"They should have more powers to landlords and business owners to be more responsible. Fining people that do not abide by the rules. We have to do that as landlords, and we are subject to checks."

"More help for the elderly people and more education because sometimes they leave the gas on."

Doncaster

"I think the laws should make landlords responsible or homeowners responsible for their safety. I think the elderly should be looked after."

"More people been able to have fire alarms fitted, there should be something done with parking so the fire engines can get through."

"We have issues with kids setting fires. It has been a problem for years. More things for kids to do in the area."

"Prevention in the education. Presence in the community awareness and safety campaigns. Visits to fire stations."

Rotherham

"I do not know what the investment is or what the training is to make a comment. I do not know what equipment they have. Knock on doors about fire safety and explain about free smoke alarms. To have a point of contact."

"No, the only thing I would say is some children want to work for the fire services and it is hard to find out how to get into it, so maybe more of an education to say how it is done."

"They should ensure every household has the right amount of smoke alarms and show that they do care and that we have enough safety and alarms."

Sheffield

"I think they should be more cohesion within the area to and get the young people involved who are not at school and are in the vulnerable category."

"They could educate more in local youth centres about the hazards of fire in general, also fireworks and the dangers of them."

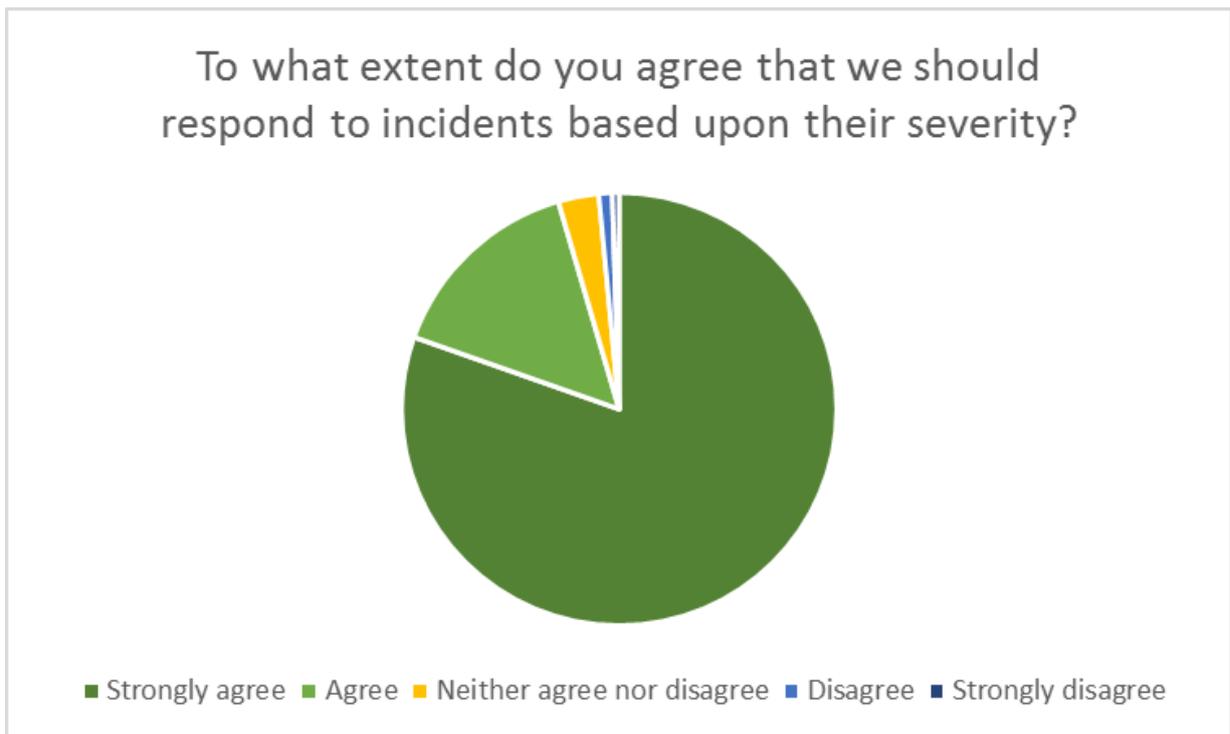
"They should have some kind of system to filter out scam and nuisance calls, so they don't have to respond to those people."

"I am an allotment holder and we do have fires here and some do get out of control. They are helpful and do give advice."

To what extent do you agree that we should respond to incidents based upon their severity?

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Telephone	813	230	48	7	2
Postal	302	43	7	4	1
Online	1,120	157	36	26	10
Total:	2,235	430	91	37	13
Percentage:	80%	15%	3%	1%	0.5%

Over nine-tenths (95%) agreed that South Yorkshire Fire and Rescue should respond to incidents based upon severity with well over three-quarters (80%) that strongly agreed. Barely 2% disagreed incidents should be responded to, based on severity with a further 3% that neither agreed nor disagreed.

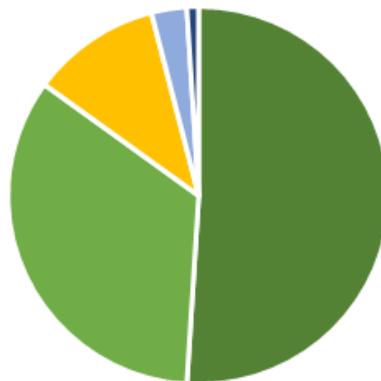


To what extent do you agree that we should respond to incidents based upon the level of risk in a geographic area?

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Telephone	577	388	48	7	2
Postal	181	121	43	9	3
Online	631	421	196	66	35
Total:	1389	930	287	82	40
Percentage:	51%	34%	11%	3%	1%

Just under nine-tenths (85%) felt that response to incidents should be based upon the level of risk in a geographical area, with just over half (51%) that strongly agreed and a further 34% that agreed. A tenth neither agreed nor disagreed and only 4% disagreed.

To what extent do you agree that we should respond to incidents based upon the level of risk in a geographic area?



■ Strongly agree ■ Agree ■ Neither agree nor disagree ■ Disagree ■ Strongly disagree

Barnsley

"Where I live, we have people who call people the police and the fire service also respond, it's a waste of resources maybe information on how wasting their time can result in other issues been left."

"A fire is a fire, it needs dealing with immediately. Whether it is a barn on fire or a house fire, it must be dealt with as quick as possible before anyone gets into harm."

"I do not think someone who lives in a rural should have less priority. I feel there are older buildings in rural areas."

Doncaster

"They need to look at all the data and what the responses were. It needs to be analysed."

They need to look at the moral compass also. It could be looked at the age like saving a young family rather than the elderly."

"They need to respond to emergencies first before responding to bush fires, but bush fires can lead to more serious incidents."

"They should prioritise safety to save time as house fires and RTC have lives at risk."

"I feel what they are doing is right. It would be nice to have more fire stations."

Rotherham

"To me it might be worth having different types of resources to different types of incidents. The fire service should have a first response like the ambulance services do."

"Preserve life if it's a highly populated area or businesses that should be priority over less risk of life areas."

"They should attend the house fires rather than bin fires. The fire service knows the history so leave it them."

"I think they should respond with the appropriate equipment. Do not measure response times."

Sheffield

"When an incident is reported, it can be that the call handlers call you back to say that they are there but can't quite see what's going on, so they call back for more information. When the call handlers are talking to the officers, they need to be careful of who's around as the person we're calling about might hear who has called it in. Some confidentiality between the call room and the firefighters at the scene."

"Putting a measure in place is difficult as there maybe traffic incidents and that is difficult and unfair. They should have something built in for this. With cycle lanes in place it makes it more difficult."

Conclusions

We have good confidence in the consultation findings, based upon the range of research methods we used and the steps we have taken to ensure that we have captured the views of a wide range of local people. Our overall conclusions are:

- Most people think we do a good job and do so whilst providing value for money
- All three of our core services are very well valued by local people, with responding to emergencies the service which is valued the most
- Most people agree that we should respond to incidents based upon the severity of the incident and the level of geographic risk in an area

Next steps

We have summarised some of the main findings from this research in our draft Integrated Risk Management Plan 2021-24. We have also conscientiously considered the feedback we have received in the proposals this plan makes- particularly around 999 response time arrangements.

We also intend to consider the feedback we have received when planning other areas of our work and making improvements to our service.

Now, we intend to consult further with our staff and the public upon the proposals set out in our draft Integrated Risk Management Plan 2021-24. This will involve a further, online survey asking for people's views on the proposals set out in the draft plan together with further engagements with relevant stakeholders.

In the years to come, we would like to carry out further consultation and engagement with our communities, to ensure we are continually taking into account the views of the people we serve when making plans for our future.



**South Yorkshire
FIRE & RESCUE**

INTEGRATED RISK MANAGEMENT METHODOLOGY

Making
**SOUTH
YORKSHIRE
SAFER &
STRONGER**

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Introduction

Understanding and reducing risk in our communities is crucial to achieving our ambition of making South Yorkshire safer and stronger.

South Yorkshire Fire and Rescue is planning to introduce a revised methodology for assessing risk across our county. This document will also support the development of our Integrated Risk Management Plan.

Whilst it is a statutory duty to respond to emergencies across South Yorkshire, our role is much broader than this. We aim to do everything we can to prevent an emergency response in the first place. We do this through prevention and protection activity. The residual risk that remains is managed through our response and resilience arrangements.

Legal Responsibilities

The Fire and Rescue Services Act (2004) and The Fire & Rescue National Framework for England (2018) set out many of the priorities for a Fire and Rescue Service. These include:

- Making appropriate provision for fire prevention and protection activities and response to fire and rescue related incidents
- Identifying and assessing the full range of foreseeable fire and rescue related risks their areas face
- Collaborating with other emergency services and other local and national partners to increase the efficiency and effectiveness of the service they provide
- Being accountable to communities for the service they provide
- Developing and maintaining a workforce that is professional, resilient, skilled, flexible and diverse

The Fire and Rescue National Framework for England requires each service to produce an Integrated Risk Management Plan (IRMP). Each IRMP will cover at least a three-year lifespan and be revised as often as is necessary to ensure the requirements set out in the National Framework are being met. Specifically, the IRMP must:

- Reflect up to date risk analysis including an assessment of all foreseeable fire and rescue related risks
- Demonstrate how prevention, protection and response activities will best be used to prevent fires and other incidents and mitigate the impacts on the community
- Outline how resources are allocated to deliver the service

- Set out the management strategy and risk based programme for enforcing the provisions of the Regulatory Reform (Fire Safety) Order 2005

Community risk is complex and although the numbers of fires have fallen over the last ten years, the demand on our prevention and protection services continues to grow.

This document details the methodology for the assessment of risk faced by the communities we serve. Risk is constantly changing and varies across the county- therefore we need to be proportionate and flexible in how we align our resources to this risk.

Foreseeable Risk

To manage foreseeable risk we will identify and monitor various risks through our Risk Management Strategy. We will record corporate level risks on a Corporate Risk Register. In addition to corporate risks, we also need to ensure we are keeping up to date with National and Local Risk Registers, taking account of learning from various emergencies across the country to inform our understanding and preparedness against foreseeable risks.

The full range of potential scenarios facing our communities will be based on the following types of emergencies:

- Fire
- Transport
- Technical Rescue
- Hazardous Materials
- Environmental
- Terrorism
- Special Services

During the development of the 2021-24 Integrated Risk Management Plan, we will consider our existing prevention, protection, response and resilience arrangements against the risks we have identified across our communities and further afield. To mitigate these risks we may need to, where reasonably practicable, develop our existing provisions, enter into effective collaboration with partners or build new capability.

Experience tells us that certain incidents such as house fires and road traffic collisions are more likely to occur than more significant incidents such as a train crash or large industrial chemical release. Although the latter may have a more significant impact on the community, they are much less likely to occur. Therefore, we direct our prevention, protection and response resources to provide the greatest possible return on investment by reducing the overall impact of the risks we face. We also deliver a comprehensive training programme for our firefighters,

officers and control staff to ensure they are prepared and equipped to deal with the range of emergencies listed above.

Although it is impossible to predict exactly when or where an emergency incident may occur, we are able to profile the areas and people that are more at risk and vulnerable to fire, or other incidents that require fire and rescue service intervention. In simple terms, when we look at the outcomes of our risk analysis we see that some areas or people are much more at risk and vulnerable to fire than others.

Analysing fire risk - Community Risk Modelling

A 'risk model' is a way of using data to work out which parts of the county are most at risk when it comes to fire and other emergencies.

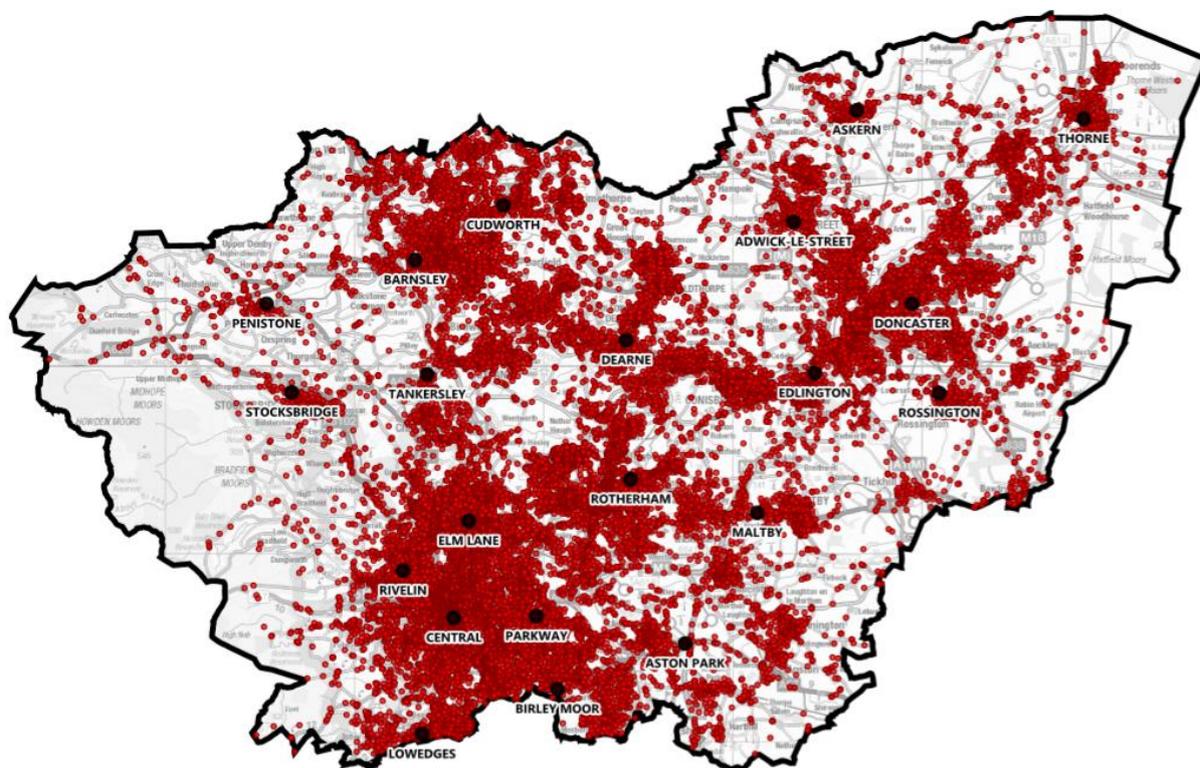
We define risk as 'the potential for an emergency to occur that may threaten life, cause injury or damage property or the environment'.

Specific data sets can support us to determine the risk of fires and other emergencies occurring which in turn will inform our response, prevention and protection activities to mitigate these risks. There is a range of data we have available to us from internal and external sources. The key is selecting the most appropriate set/s of data that gives us the best chance of putting our resources in the right places at the right times to protect the communities of South Yorkshire.

We will continue to refine our understanding of risk within the county as new data emerges and we develop our ability to interpret this data which in turn informs our decisions. We have selected some examples of the data we use to inform us about risk within the community with an explanation of how we use them below.

Analysis of data entered into the national **incident recording system**, following every emergency incident we attend, allows us to plot the areas where we have experienced emergency incidents. We can analyse this data to identify trends and hot spots and determine from this where emergencies are most likely to occur. Various studies that look into how to predict future fire activity have found that historical incident trends are a strong indicator of where future incidents will occur.

The image below is an example of how we can use this information to show where emergency incidents have occurred over a three-year period across South Yorkshire. This information is useful to predict future activity and it also informs where we should be focussing our service delivery activities around preventing fires from happening, protecting buildings and responding to emergencies when they do occur.



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Our risk analysis also looks into what makes an individual vulnerable to fire. Studies have shown there is a correlation between fire and deprivation¹, the more deprived an area, the larger the number of fire related incidents. Additionally, some services have noted a strong correlation between severity of fire and deprivation. We class a severe fire as one requiring hospitalisation or resulting in a fatality. In summary, the higher the level of deprivation, the higher the likelihood of fire.

The Index of Multiple Deprivation (IMD) is the official measure of relative deprivation in England and is part of a suite of outputs that form the Indices of Deprivation (IMD). The latest edition of the English Index of Multiple Deprivation (IMD) was published in 2019 and is an update of the 2015 version. IMD 2019 is based on geographical areas called Lower Super Output Areas (LSOAs). There

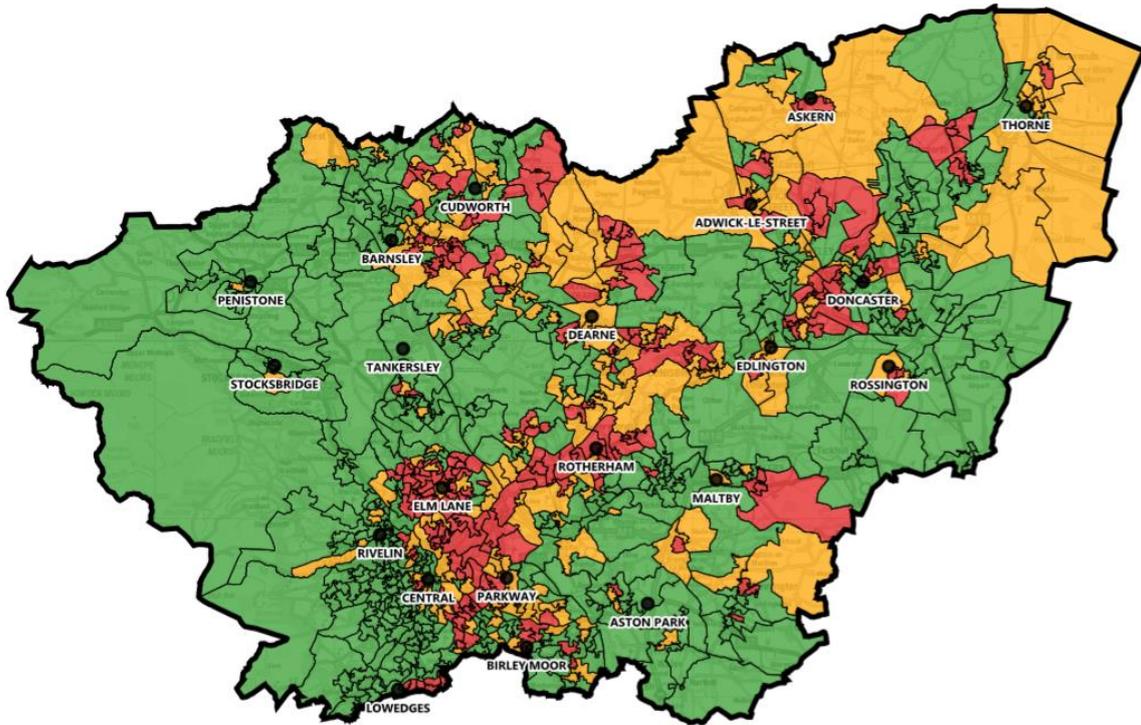
¹ Hastie, C. and Searle, R. (2016) 'Socio-Economic and Demographic Predictors of Accidental Dwelling Fire Rates'. *Fire Safety Journal* 84, 50–56

are 32,844 LSOAs in England and they are designed to be of a similar population size, with each one containing around 1,500 residents.

Deprivation is not just related to poverty, but to a lack of resources and opportunities. IMD 2019 uses 39 deprivation indicators, organised across seven domains (income, employment, education skills and training, health and disability, crime, barriers to housing and services, and living environment) which are weighted and combined to calculate an average IMD score. IMD 2019 ranks all 32,844 LSOAs in England with one being the most deprived and 32,844 the least deprived. Once ranked these are generally grouped into bands with the lowest 10 percent used to define the most deprived LSOAs in England. For example, in Sheffield nearly a quarter of its LSOAs fall in the most deprived 10 percent nationally.

We intend to develop our Response Risk modelling to incorporate IMD and explore the data in more detail. The use of deprivation to assess risk will support integrated risk management planning because it is unlikely to change without significant external influence and it can be seen that there is close correlation between incidence of fire and areas that are most deprived. In addition, if SYFR experiences a particularly quiet year from a response perspective, the risk model would suggest a significantly reduced risk if we rely on incident trends alone. So to combine IMD to our historical incident trends will smooth out any peaks and troughs and balance the risk model over time.

The map below show the IMD 2019 data organised into three risk bands – red are the LSOAs with higher deprivation scores, amber the LSOAs with medium deprivation scores, and green the LSOAs with low deprivation scores (comparative to each other). So the red areas are more deprived, the green less deprived. This map is overlaid with incident hotspots based on the last three years of incident data. What we see is that the hotspots largely correlate with the more deprived areas.



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In addition to an assessment of deprivation, we also consider lifestyle factors that increase the likelihood of someone experiencing a fire. This is down to a number of factors but research, along with our experience of attending domestic fires and subsequent fire investigations, suggests that there are certain lifestyle factors that increase both the likelihood and severity of a fire. These include (but are not limited to):

- Living alone
- Smoking
- Mental health
- Hearing impairment
- Excessive use of alcohol
- Drug use/prescription and illegal – especially if it causes drowsiness
- Disability that may compromise an escape
- Excessive storage of materials/hoarding

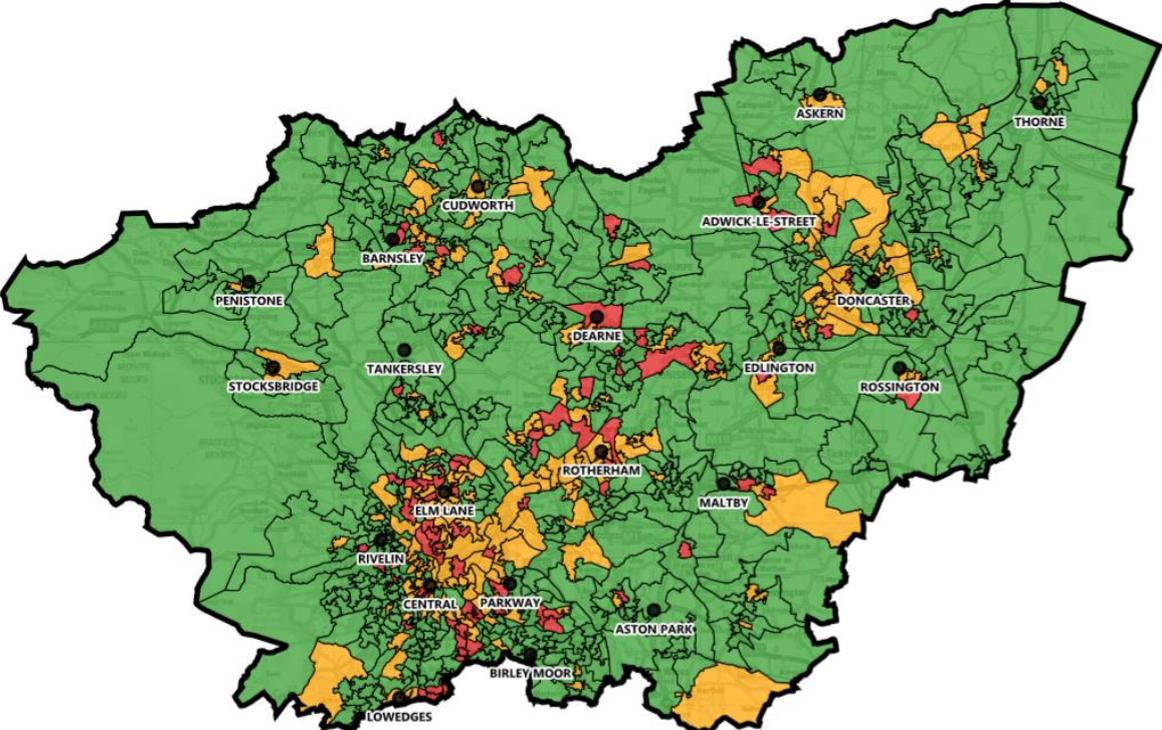
Other data sets that we have available include profiling software called Mosaic Public Sector. This data set breaks down the population into 66 lifestyle classifications and we can then determine, based on the incident profile across the

county, the lifestyle classifications that are more likely to experience an emergency that requires a fire and rescue service response. This in turn can inform our prevention and response strategies.

This compliments our other data sets because we can combine the information on where we experience incidents, consider the areas that are more at risk and this can focus our attention to those more vulnerable. It also allows us to identify higher risk households within generally low risk areas.

The service has access to other relevant risk data from external agencies and we continue to consider how we refine our awareness and understanding of community fire risk, to ensure we can best inform our relevant service delivery strategies for prevention and protection work, in addition to where we locate our response resources.

The current Community Risk Model picture below captures relevant data and produces the following map for South Yorkshire with four distinct risk zones identified. The zones are categorised based on High (red), Medium (amber) and Low (green) risk levels that are informed by the various data sets we have available to us. This model will be reviewed annually to ensure it is fit for purpose. A detailed description of the model is available [here](#).

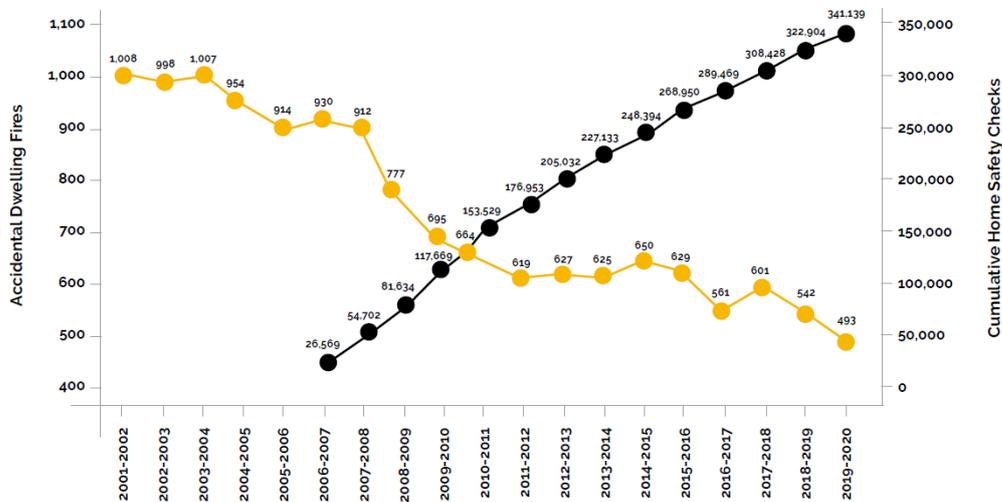


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Prevention Strategy

Our work to prevent emergencies occurring in the first place has seen a significant reduction in the number of incidents we attend.

South Yorkshire Fire and Rescue
Cumulative HSCs and Accidental Dwelling Fires



We have both dedicated prevention teams and our operational crews also deliver work to prevent fires and other emergencies through a series of activities including:

- **Home safety visits** – we visit people in their homes to assess fire risk, provide education and advice on how to stop fires occurring and also to fit interventions such as smoke alarms
- **Safe and well visits** – these are also home visits but add additional elements of risk assessment and advice around general health and well-being such as falls, social isolation, crime prevention and healthy aging. This work delivers multiple messages and supports the work of many of our key partners
- **Work with community groups** – we engage with the community in various forms from attending community events, local neighbourhood groups and tenants and residents associations. Our key messages are around fire and road safety but they can be focussed on other areas such as water safety
- **Children and young People** – the fire service has a great reputation working with children and young people. Our flagship programme for primary school pupils involves school children in year six visiting our safety education centre at Lifewise in Rotherham where they learn about everything from fire, road and water safety to how to prevent crime. In addition to this, we now work with more complex young people through our dedicated community safety team. For example, we deliver Prince's Trust programmes and are committed to the delivery of early intervention and education programmes for children and young people

- **Safety campaigns** - there's lots we can achieve through public information campaigns. Many of the safety campaigns we have delivered in the last few years are proven to have helped reduce common types of incident- such as cooking and electrical fires

Protection Strategy

The National Framework sets a requirement for us to have a fire protection management strategy and risk based programme for enforcing the provisions of the Regulatory Reform (Fire Safety) Order 2005.

We deliver our fire protection work in order to protect businesses and other non-domestic properties, and to ensure they are compliant with the relevant fire safety legislation.

We deliver our fire protection work through a team of dedicated, skilled fire protection officers and our operational crews also support with some basic fire safety assessments and general advice.

Our dedicated business safety department delivers a 'Risk Based Audit Programme' that places priority on those buildings that are highest risk. This may be because of the processes that happen there, the materials that are stored within the building or that lots of people sleep there. We also check the safety of lower risk buildings but this will be done less frequently.

We will ensure adherence to fire safety legislation and that the responsible person has carried out an adequate assessment of fire risk and put reasonable measures in place to protect the building and its occupants in case of fire. If there are concerns, we have powers of enforcement which we can take the form of improvement, restriction or prohibition notices. In more serious cases, we also have the powers to prosecute.

Response Strategy

Our emergency response strategy determines the deployment of firefighters, appliances and equipment to provide the most effective response to emergencies across South Yorkshire. We refer to this as fire cover.

Having an appropriate speed (the time it takes us to get there) and weight (the number of resources we send) of response to fire incidents has a significant impact on fire development, risk to life, property loss, and firefighter safety. We assign a standardised level of response known as the pre-determined attendance (PDA) for each different category of emergency call. The PDA ensures that the correct level of resource is mobilised to the incident and is, on the majority of occasions, sufficient to deal with the incident without requesting additional resources.

Our PDAs continue to reflect the unique nature of specific risks and information gathered by operational crews during operational risk visits at commercial properties. The PDAs are reviewed annually alongside our foreseeable risk register.

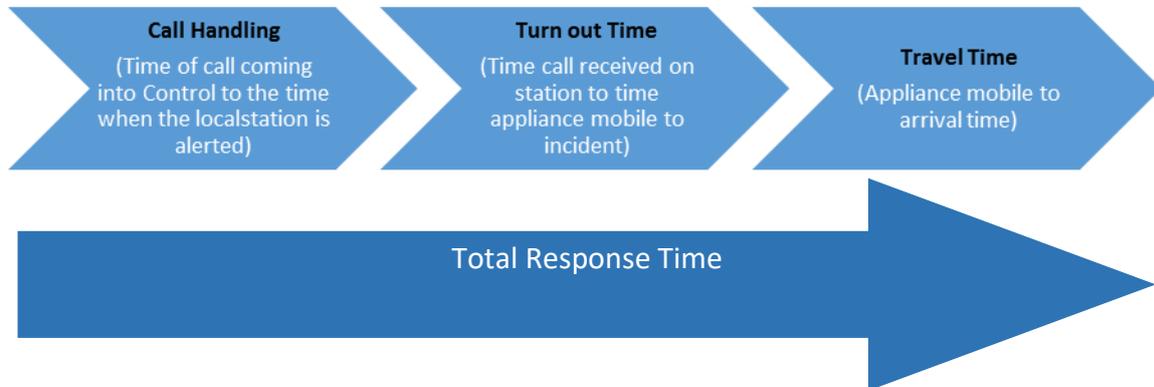
Some of the county's highest risk buildings currently require several fire engines as the PDA. Examples of such premises include high rise residential blocks, large chemical sites, hospitals and sites where water supplies are sparse.

Other types of emergencies demand mobilising a specialist capability such as an aerial appliance or our technical rescue capability as part of the initial response. We aim to ensure that the speed and weight of our emergency response is proportionate to the level of risk and each category of emergency. No two emergencies are the same. However, for the purpose of planning, some generalisations have to be made and these have been based on experience.

Experience tells us that the chances of survival for a person trapped in the room where the fire started is very low. In these circumstances it is very unlikely we will be able to respond in time to save life. Therefore, when determining how quickly we need to arrive, we consider the likely scenario that a person may be trapped in a room above or adjacent to the room on fire. Evidence suggests that an average room should contain a fire for between 15 and 20 minutes with the door closed.

Risk Based Response Times

Our total response time to an emergency is made up of the length of time it takes for a 999 call to be handled, a fire engine to be mobilised, firefighters to crew that fire engine and the travel time for that fire engine to arrive at an incident. The overall response time can be broken down into different elements, as shown below:



All 3 elements of the total response time are important, but the second two elements (turn out time and travel time) determine the most appropriate location of our fire stations and the staffing models we use. They are also the critical element of the response times that we plan to set.

We do recognise that call handling is also an important element and we continue to look at ways to make improvements to how quickly we can receive emergency calls and dispatch the nearest fire engine to deal with an emergency.

Most fire services use a set of response times which varies according to factors such as whether someone's life is at risk and according to the level of risk in a particular area.

In order to inform our response times, we have used some of the information and data described above to produce a risk map of the county. This will determine 3 geographical risk categories (High, Medium and Low). Next, we turn our attention to the different types of incident, shown in the table below. Each is given a risk category (High, Medium and Low) based on the type of incident and the respective risk to life.

We will categorise the incidents based on severity, as set out in the table below.

Main Type	Sub Type	Category
Accidental Dwelling Fire	Fire	A – High Risk
Accidental Primary Other Fire	Fire	A – High Risk
Deliberate Primary Fire	Fire	A – High Risk
Non Domestic Property Fire	Fire	A – High Risk
Special Service Life Risk	Special Service	A – High Risk
Special Service Other*	Special Service	B – Medium Risk
Accidental Secondary Fire	Fire	C – Low Risk
Chimney Fire	Fire	C – Low Risk
Deliberate Secondary Fire	Fire	C – Low Risk
False Alarm due to Apparatus	False Alarm	C – Low Risk
False Alarm Malicious	False Alarm	C – Low Risk
False Alarm Good Intent	False Alarm	C – Low Risk

*Special Service Other include, but are not limited to, local emergencies (such as medical emergencies, the rescue of persons/animals and making areas safe), major environmental disasters (such as flooding, oil spills and incidents involving hazardous materials) and domestic incidents (such as lift rescues and people locked in or out of their homes).

By developing a risk response model, and combining this with the categories of emergency, we can produce a set of response times that are appropriate for the whole county. We will still aim to get to each emergency as fast as we can, but having a set of response times means we can measure our performance to ensure we are delivering the best possible service to our communities with the resources we have available to us.

It is not an exact science, so professional judgement will also have to support the data and intelligence to ultimately inform decision making.

Risk Category (Community)	Incident Category		
	High Risk	Medium Risk	Low Risk
High	7 minutes	9 minutes	11 minutes
Medium	9 minutes	11 minutes	13 minutes
Low	11 minutes	13 minutes	15 minutes

In developing these response times, we employed the skills of a specialist risk management consultancy, who analysed our method for assessing risk in addition to looking back at our performance over the past 3 years. This included a detailed analysis of the response times to the areas of risk we have identified that in turn informed us about what our response times should be.

The Home Office collects and publishes data on response times by measuring the time between the call being made and the first fire engine arriving at the scene of the emergency.

The 21 fire stations across the county are staffed using a variety of staffing models, as described below:

Staffing Model	Response
2-2-4 Wholetime	Immediate
Day Crew	Immediate between 0800-1900
On Call	Up to five minute delay to respond when crew is available

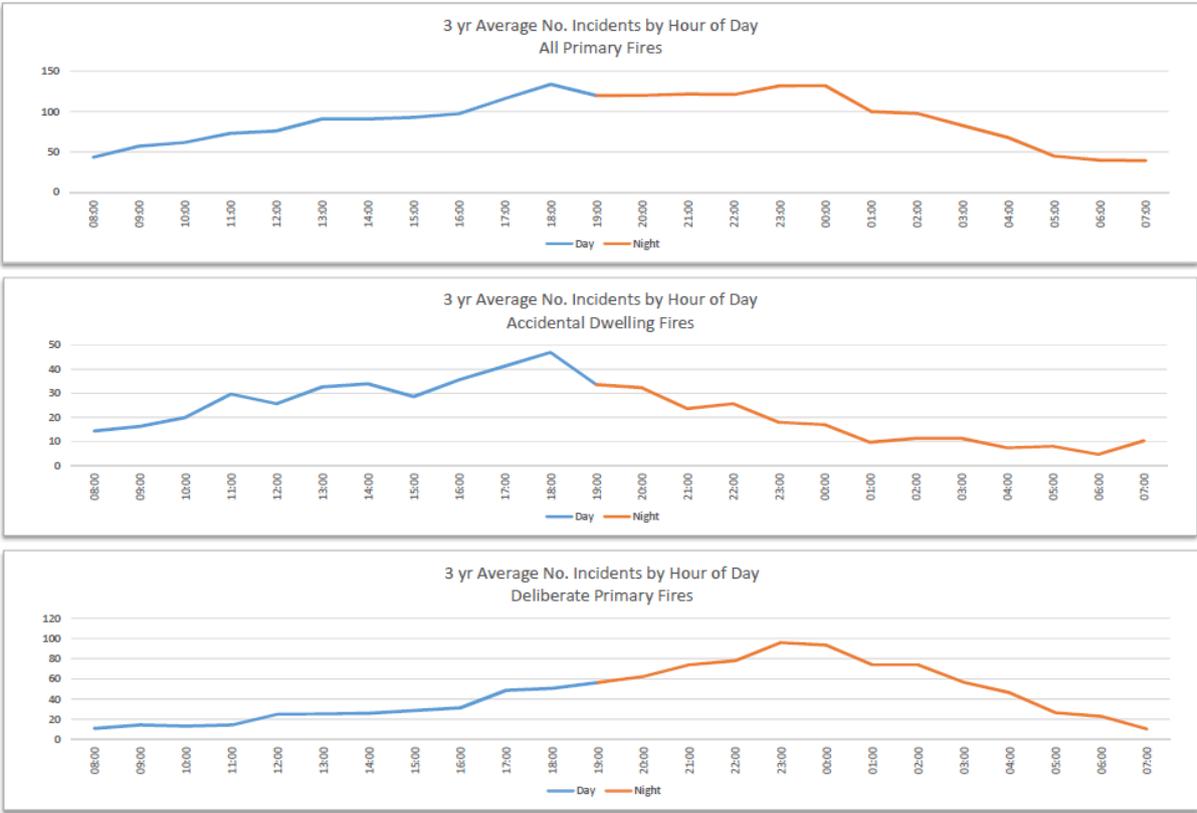
Fire cover is always monitored by our team within fire control. If they deploy resources to an incident from an area of high risk, they may re-allocate other fire engines on strategic cover moves to maximise our ability to respond to the highest risk areas. This will be supported in future through better use of technology such as dynamic fire cover software and is something that we plan to develop further, utilising our risk models and maps.

Workload Modelling

We utilise sophisticated modelling software to help us plan our resourcing requirements, and use this information to inform our integrated risk management planning activities. Our data analysts are able to produce ‘what if’ scenarios to determine the impact changes to fire cover may have. For this plan we have also employed the services of an external specialist company to support our analytical modelling.

Our analysis of workload and demand based on past incidents shows that we have busier periods at different times of year, days of the week, and during the 24 hour day, when we are more likely to be called to certain type of incidents, or multiple incidents at the same time.

The graphs below show a peak in accidental dwelling fires around tea time and early evening, dropping off in the early hours of the morning. Deliberate primary fires, such as deliberate car fires or property fires, peak later in the evening. This type of demand profiling, which can be further broken down by geographical area and by station, can help to determine when and where our resources are likely to be required, and assist with our response planning activities.



Resilience Strategy

The Civil Contingencies Act (2004) requires fire and rescue services to have effective business continuity arrangements in place. As a 'category one' responder, we must plan and prepare for the types of emergency that are foreseeable, especially those captured within national and local risk registers.

We are actively engaged with key partners within the Local Resilience Forum and support the planning and preparation of emergencies that would stretch the local resources of agencies within the county. This requires us to be prepared and available to respond out of county to regional or national emergencies, and to have arrangements in place to request the resources from other fire and rescue services to support any local emergency that overwhelms the resources we have available. This includes maintaining the ability to also deal with normal day to day activity.

In addition to the support of other fire and rescue services, secured through local reinforcement arrangements and a national resilience arrangements, we also have the ability to staff additional fire engines and other appliances through the use of:

- Personnel in non-operational roles being brought back to staff appliances subject to them having maintained competence
- Firefighters and officers being requested to work additional shifts through the use of pre-arranged overtime and recall to duty arrangements
- Standing up surplus on-call duty staff to ride fire appliances

Performance Management

We have a comprehensive system of performance management in regards to our key performance indicators. These are monitored regularly and inform our activity in relation to prevention, protection, response and resilience. The performance against our newly established risk based response times will be added to this process and updates will be reported to the Fire and Rescue Authority to ensure appropriate scrutiny and oversight is in place.

External Validation

We have used external specialists to review and quality assure our Community Risk Model, and they have provided feedback on how we could improve this in the future, and also develop our response model.

Assurance and Audit

The internal audit process is planning to conduct a review of the Integrated Risk Management Plan in January 2021 and along with this supporting methodology, we will receive a report and act on any recommendations following this audit.

Stakeholder Engagement

Throughout the design, development and implementation of the IRMP, the following key stakeholders should be considered:

- Staff
- Representative Bodies
- Service Managers
- Members of the FRA
- Local Authority Leaders and Scrutiny Panels
- PCC
- Local MPs
- Public (through specific engagement and consultation)

There will be a dedicated Stakeholder Engagement and Communications Plan to support the development of the IRMP.

Timeline:

July - August 2020: Initial Public Consultation on IRMP foundation work

July – January 2020: Development of Response Model and Risk Based Attendance Assumptions

September 2020 – Draft IRMP Presented to the FRA

September 2020 – December 2020 – Consultation period

January 2021 – Final IRMP Presented to FRA

Conclusion

The proposed Integrated Risk Management methodology will allow us to assess and define risk across our communities using a range of intelligence and data sets. Internal data such as previous incident activity can be combined with external, independent data sets such as IMD 2019 to provide a rich picture of risk against which our prevention, protection, response and resilience activities can be arranged.

The proposal to progress with a blend of internal assessment of community risk, with some external validation, will offer a level of scrutiny and independence to this process.

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