



**NORTH YORKSHIRE
FIRE & RESCUE SERVICE**

COMMUNITY RISK PROFILE METHODOLOGY 2020

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Introduction

There are four key responsibilities for FRAs that they must ensure that they make provision for including:

- extinguishing fires in their area
- protecting life and property in the event of fires in their area
- rescuing and protecting people in the event of a road traffic collision, and
- rescuing and protecting people in the event of other emergencies.

Fire and rescue authorities also need to collect information to assess risk in their areas as well as protect the health and safety of their workers. The Fire and Rescue Services Act 2004¹ also gives the Government responsibility for producing the Fire and Rescue National Framework² which outlines the Government's high-level priorities and objectives for Fire and rescue authorities in England. The National Framework's priorities for FRAs are to:

- identify and assess the full range of foreseeable fire and rescue related risks their areas face, make provision for prevention and protection activities and respond to incidents appropriately
- work in partnership with their communities and a wide range of partners locally and nationally to deliver their service
- be accountable to communities for the service they provide

The Civil Contingencies Act 2004 sets out FRAs responsibility to react to emergencies as a category 1 responder.

The aim of an IRMP³ is to bring about improved community safety, and to make a more productive use of fire and rescue service resources providing communities with value for money

North Yorkshire Fire and Rescue Service has a Community Safety Plan, 2016/17 - 2020/21, which is effectively the Integrated Risk Management Plan (IRMP). A new IRMP needs to be produced ready for implementation from 2021.

The new plan will be called the Risk and Resource Model (RRM) which more accurately reflects its purpose.

Integral to the RRM is a Community Risk Profile (CRP). We have looked at factors that put individuals/groups/communities and businesses at an increased likelihood of requiring an intervention or response from North Yorkshire Fire and Rescue Service.

Our analysis helps us understand the needs of the community so that we can shape our prevention, protection, emergency response interventions and community resilience and support decision making on how NYFRS meets that need.

¹ https://www.legislation.gov.uk/ukpga/2004/21/pdfs/ukpga_20040021_en.pdf

² [Fire and Rescue National Framework](#)

³ [Roles and responsibilities of fire & rescue authorities | Local Government Association](#)

We have based the Community Risk Profile using sociodemographic and infrastructure data relevant to North Yorkshire and the City of York. We have used a range of data from different sources that helps us understand the community groups most at risk. This data is:

- relevant
- reliable
- based on a suitable sample size
- validated and
- sustainable.

To ensure we keep abreast of changes to our existing risks, as well as emerging or future projected risks we will regularly update our Community Risk Profile to keep the communities of North Yorkshire and the City of York safe.

The key legislation, regulation, and duties linked to a Fire and Rescue Service's community risk management planning include:

- [Fire and Rescue Services Act 2004 \(legislation.gov.uk\)](#)
- [The Regulatory Reform \(Fire Safety\) Order 2005 \(legislation.gov.uk\)](#)
- [Civil Contingencies Act 2004 \(legislation.gov.uk\)](#)
- [National Risk Register](#)
- [Chapter 4 Local Responder Risk Assessment Duty](#)
- [Fire and rescue national framework for England - GOV.UK \(www.gov.uk\)](#)
- [Health and Safety at Work etc. Act 1974 \(legislation.gov.uk\)](#)
- [Control of Major Accident Hazards Regulations \(COMAH\) 2015 - L111 \(hse.gov.uk\)](#)

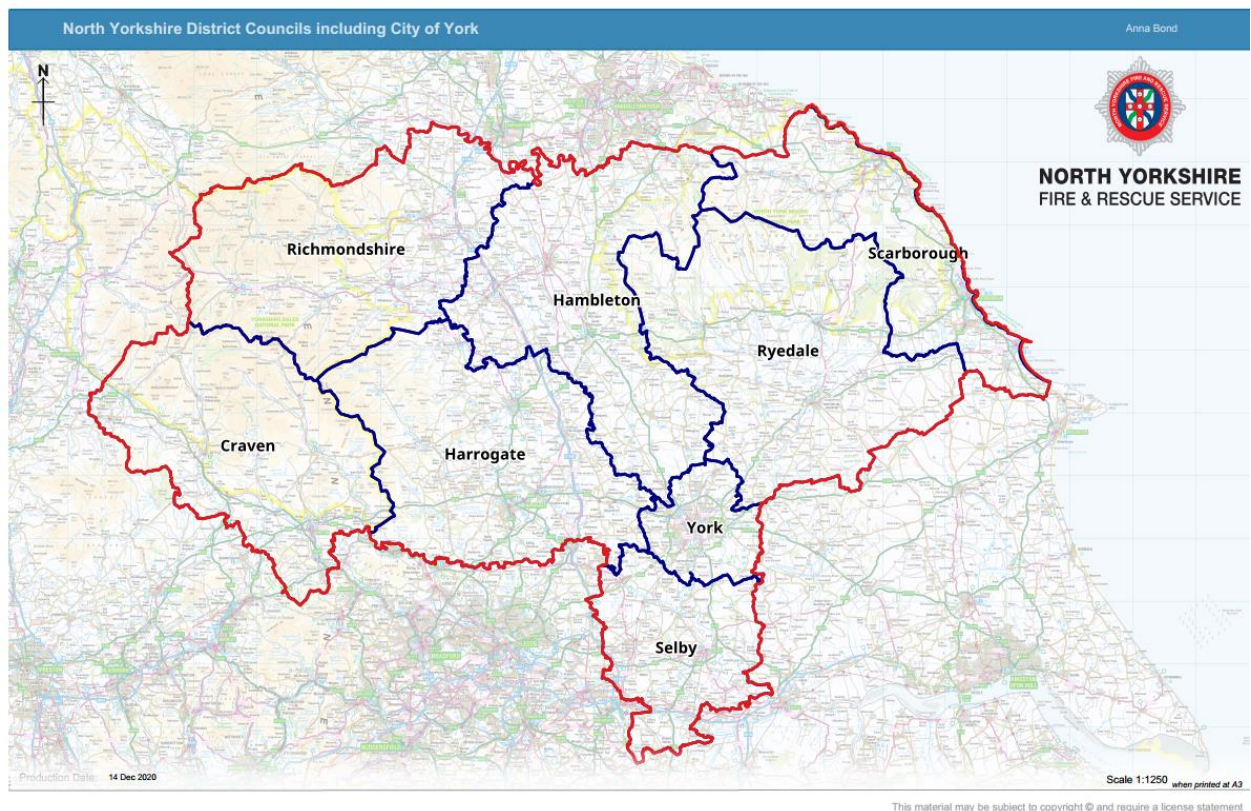
North Yorkshire and the City of York

North Yorkshire is England's largest county, covering an area over 3,200 square miles. It is home to approximately 830,000 residents.

The county of North Yorkshire consists of seven districts and boroughs and the City of York, and ranges from isolated rural settlements and farms to market towns and larger urban areas such as York, Harrogate and Scarborough. Overall, it is sparsely populated, but the population is increasing steadily. In particular, the number of people in the older age groups is increasing at a higher rate than the average in England.

The county has two upper tier authorities: North Yorkshire County Council and the City of York Council.

North Yorkshire is divided into 7 districts and borough council areas. North Yorkshire Fire and Rescue Service (NYFRS) cover all seven districts and the City of York. (8 in total)



Stretching from the North Sea in the east to beyond the Pennine watershed in the west and from the Tees in the north to the Ouse and beyond in the south, the county has two of England's ten national parks, three designated areas of outstanding natural beauty, over 200 sites of special scientific interest and over 12,000 listed buildings.

North Yorkshire has approximately 6,000 miles of road. With most of the county sparsely populated, the road network is the main means of transport connecting small towns and villages. The distance between these small communities means that people travel greater

mileage to access work, education and services. This increases their exposure to the risk of road injury by virtue of the miles travelled on these rural roads. The County also sees tens of thousands of visitors who travel to, in and around the county, primarily on rural roads.

The A1M and M62 motorways and the East Coast Main Line from London to Edinburgh run through the county.

The East Coast Main Line is a 393 mile-long electrified railway between London and Newcastle. It passes through North Yorkshire the main station stop being in York. Steam railways also run within the County area.

The coastline of North Yorkshire runs for approximately 45 miles from just North of Whitby to south of Filey. It plays host to a thriving tourist industry attracting visitors to the area throughout the year.

The City of York is a university city (York University⁴ and York St John University⁵) and has a different demographic make-up to North Yorkshire; the highest proportion of people in York is within the 20-24 bracket. Population growth in York has been even stronger than across the county.

Harrogate is a major conference and exhibition town attracting visitors throughout the year. It regularly hosts political party conferences.

The county hosts several major agricultural shows between April and September. The Great Yorkshire Show is the largest attracting over 150 000 visitors over a 3-day period in July.

The Tour de France Grand Depart in 2014 saw worldwide interest in the area as a venue for cycling. Since then, the county has hosted stages of the Tour de Yorkshire and the World championships drawing large numbers of enthusiasts and visitors to the area.

Catterick Garrison is a major garrison and military town 3 miles (5 km) south of Richmond. It is the largest British Army garrison in the world, with a population of approximately 20,000.

Royal Air Force Menwith Hill station near Harrogate provides communications and intelligence support services to the United Kingdom and the United States. The site contains an extensive satellite ground station and is a communications intercept and missile warning site. It has been described as the largest electronic monitoring station in the world.

North Yorkshire has several military airfields including RAF Dishforth and RAF Leeming. There are also several private airfields and club sites such as Elvington.

The Trans-Pennine Ethylene Pipeline (TPEP) is a high-pressure pipeline transporting ethylene from Wilton Site to Runcorn running through North Yorkshire.

Drax is a solid fuel (Bio Mass) power station forming part of the national power infrastructure.

⁴ <https://www.york.ac.uk/>

⁵ <https://www.yorks.ac.uk/>

Statistical comparison for the NYFRS area

This section provides a series of comparison with other fire and rescue services in England regarding socio demographic and infrastructure data. It has been provided to show the significance of some of the data sets used in the community risk profiling model.

Number of all households (2011) for North Yorkshire Fire and Rescue⁶

This is the total resident population based on mid-year population estimates. The estimated resident population of an area includes all people who usually live there, whatever their nationality. Members of UK and non-UK armed forces stationed in the UK are included and UK forces stationed outside the UK are excluded. This value is provided as unrounded.

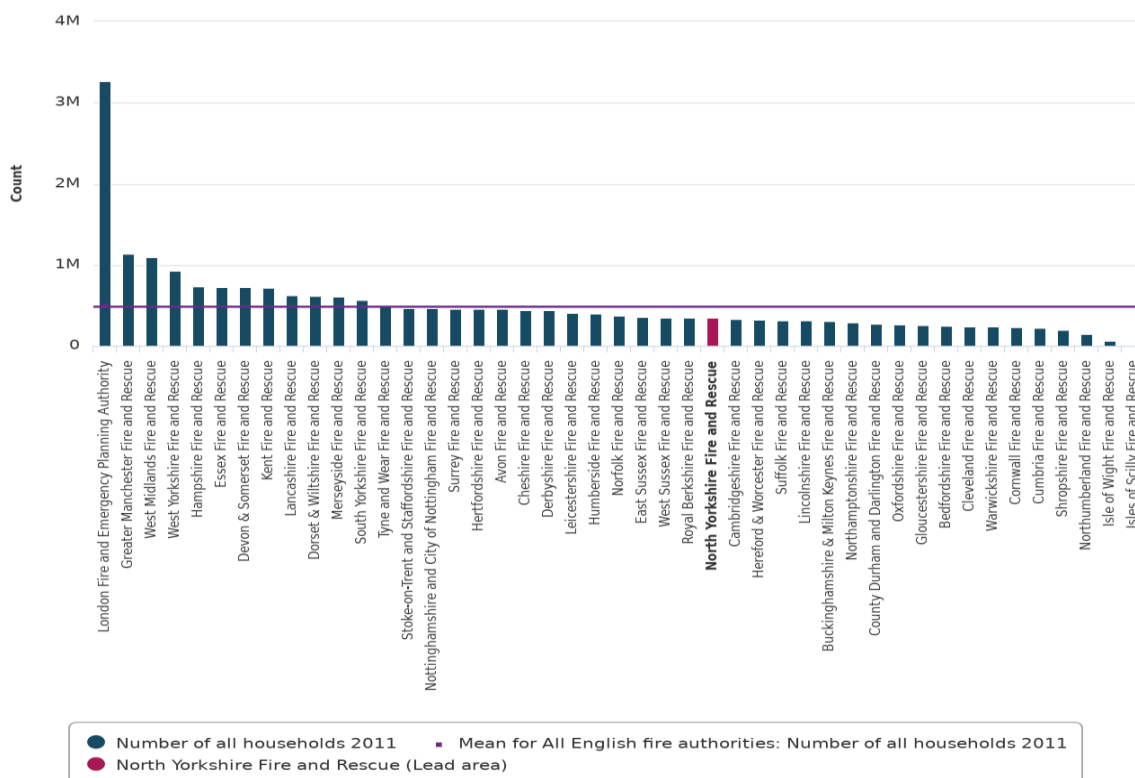
Source Name: Office for National Statistics

Collection Name: Mid-year estimates

Polarity: Not applicable

Unit: Count

Period	Number of all households			
	Households			
	North Yorkshire Fire and Rescue	Minimum for All English fire authorities	Mean for All English fire authorities	Maximum for All English fire authorities
2011	<u>340,146</u>	989	490,297	3,266,173



Source: Office for National Statistics

Powered by LG Inform

⁶<https://lginform.local.gov.uk/reports/lqastandard?mod-metric=1803>

IMD - Overall - score in North Yorkshire Fire and Rescue⁷

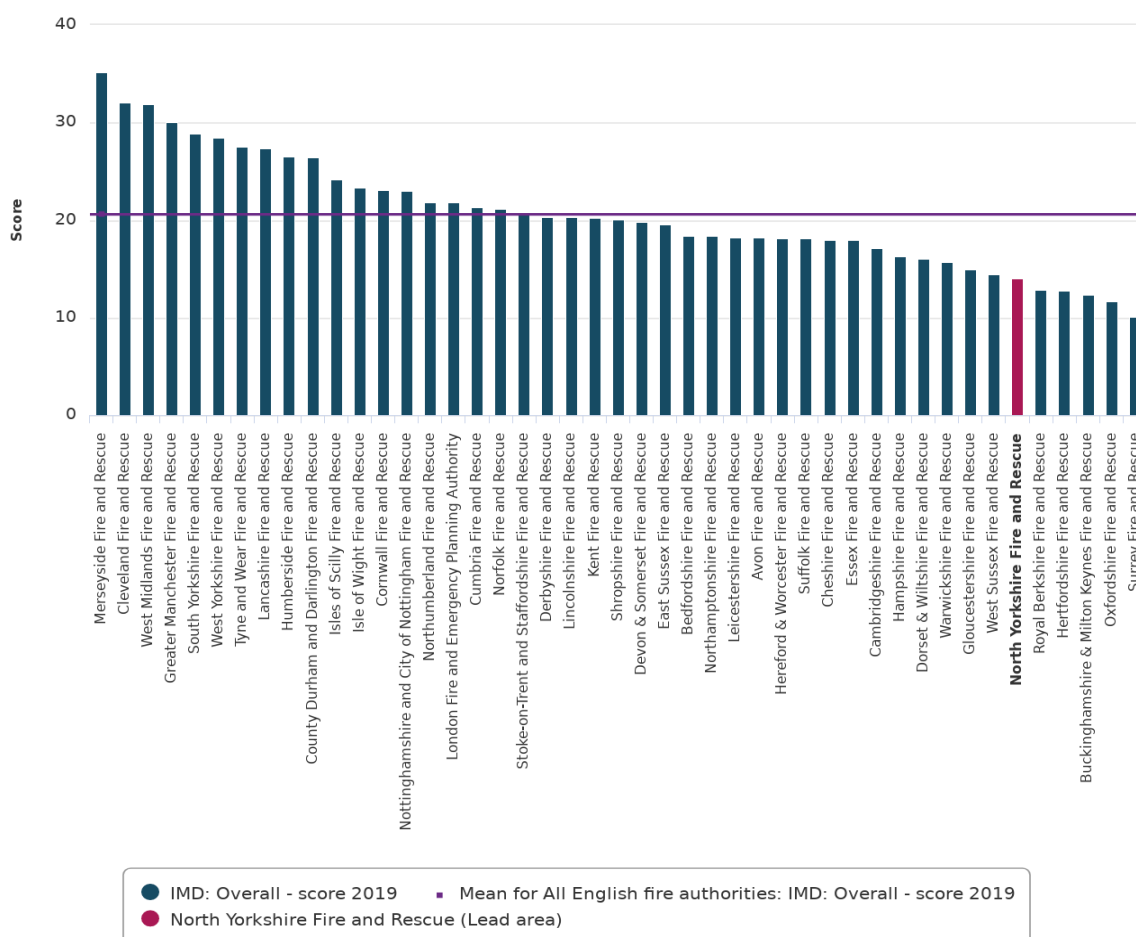
IMD⁸ is a weighted average of the seven IMD domains: Income Deprivation, Employment Deprivation, Health Deprivation and Disability, Education Skills and Training Deprivation, Barriers to Housing and Services, Living Environment Deprivation, and Crime. The more deprived is an area, the higher the IMD score but the lower the rank.

Period	IMD: Overall - score			
	Score			
	North Yorkshire Fire and Rescue	Minimum for All English fire authorities	Mean for All English fire authorities	Maximum for All English fire authorities
2019	<u>13.991</u>	10.087	20.613	35.139

Source name: Ministry of Housing, Communities & Local Government

Collection name: Indices of deprivation

Polarity: No polarity



Source: Ministry of Housing, Communities & Local Government

Powered by LG Inform

⁷ <https://lginform.local.gov.uk/reports/lqastandard?mod-metric=3902>

⁸ <https://www.gov.uk/government/collections/english-indices-of-deprivation>

Total resident population in North Yorkshire Fire and Rescue⁹

Total resident population - This is the total resident population based on mid-year population estimates. The estimated resident population of an area includes all people who usually live there, whatever their nationality. Members of UK and non-UK armed forces stationed in the UK are included and UK forces stationed outside the UK are excluded. This value is provided as unrounded.

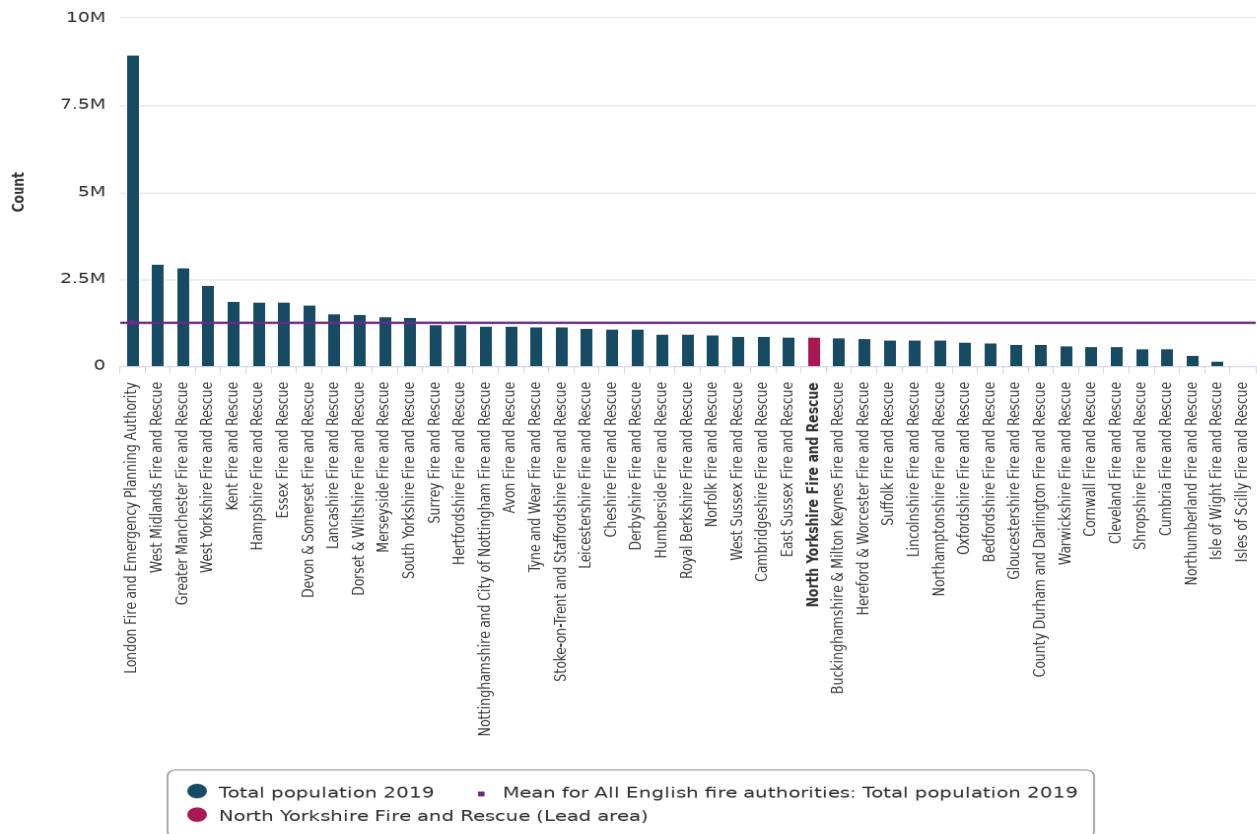
Source name: Office for National Statistics

Collection name: Mid-year estimates

Polarity: No polarity

Period	Total population			
	People			
	North Yorkshire Fire and Rescue	Minimum for All English fire authorities	Mean for All English fire authorities	Maximum for All English fire authorities
2019	<u>828,672</u>	2,224	1,250,821	8,961,989

Total resident population (2019) for North Yorkshire Fire and Rescue



Source: Office for National Statistics

Powered by LG Inform

⁹ <https://lginform.local.gov.uk/reports/lgastandard?mod-metric=3281>

Number of fatal casualties - annual (from 2015/16 to 2019/20) in North Yorkshire Fire and Rescue¹⁰

This is the number of people whose death is attributed to a fire, even if death occurred weeks or months later. As death can occur some time after the event and the cause of death is not always apparent this data is subject to potential revision.

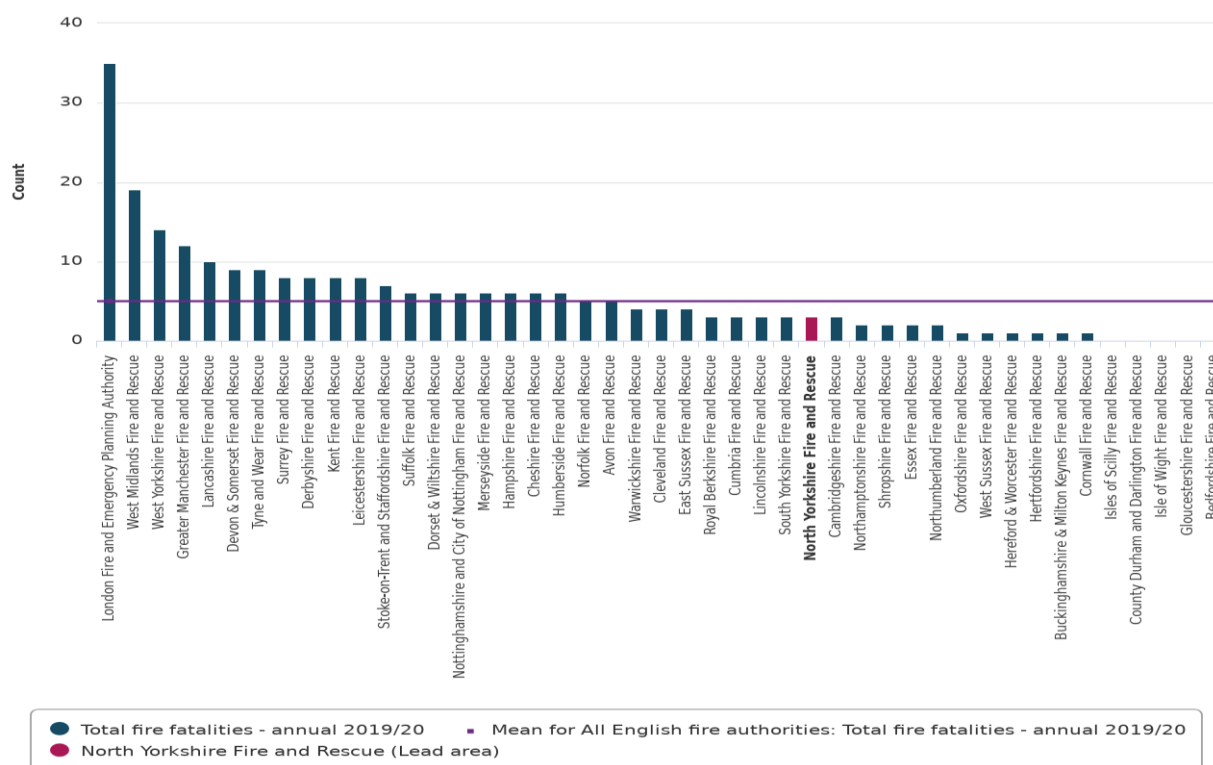
Source name: Home Office

Collection name: Fire Statistics UK, Annual Data

Polarity: Low is good

Period	Total fire fatalities - annual			
	Casualties			
	North Yorkshire Fire and Rescue	Minimum for All English fire authorities	Mean for All English fire authorities	Maximum for All English fire authorities
2015/16	<u>7</u>	0	7	36
2016/17	<u>2</u>	0	6	44
2017/18	<u>5</u>	0	8	108
2018/19	<u>1</u>	0	6	39
2019/20	<u>3</u>	0	5	35

Number of fatal casualties - annual (2019/20) for All English fire authorities



Source:
Home Office

Powered by LG Inform

¹⁰ https://lginform.local.gov.uk/reports/lgstandard?mod-metric=727&mod-period=5&mod-area=E31000027&mod-group=AllFireAuthorities_England&mod-type=namedComparisonGroup

All chimney fires - annual in North Yorkshire Fire and Rescue

All chimney fires - annual - Chimney fire are fires in buildings (usually residential - this does NOT cover industrial chimneys which are reported as a Primary fires) where the fire was contained within the chimney structure and did not involve injuries, fatalities, rescues or attendance by five or more appliances

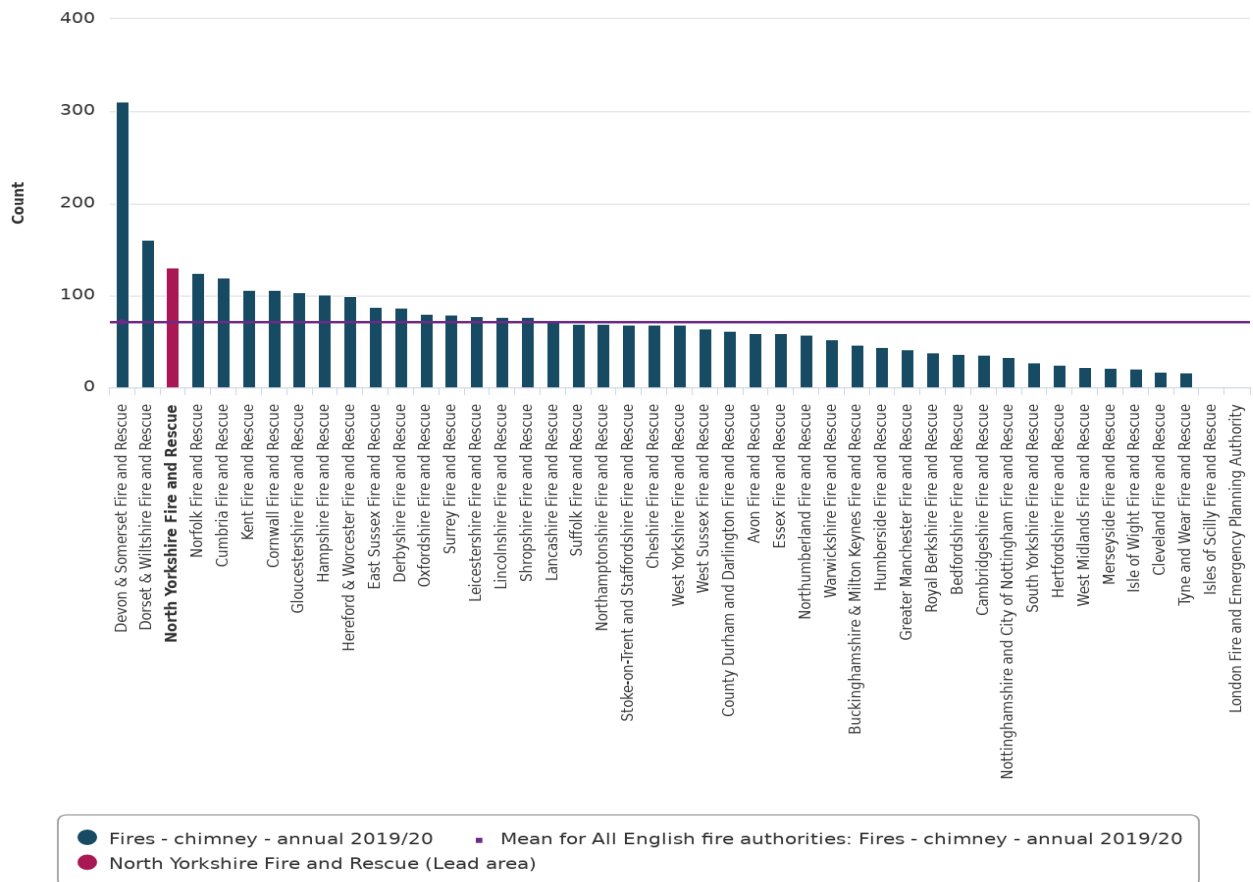
Source name: Home Office

Collection name: Fire Statistics UK, Annual Data

Polarity: Low is good

All chimney fires - annual (from 2015/16 to 2019/20) for North Yorkshire Fire and Rescue

Period	Fires - chimney - annual			
	North Yorkshire Fire and Rescue	Minimum for All English fire authorities	Mean for All English fire authorities	Maximum for All English fire authorities
2015/16	171	2	93	400
2016/17	150	2	94	439
2017/18	162	0	90	365
2018/19	130	0	74	326
2019/20	130	1	71	310



Source:
Home Office

Powered by LG Inform

Number of accidental secondary fires - quarterly (from 2019/20 Q2 to 2020/21 Q1) for North Yorkshire Fire and Rescue¹¹

Secondary fires are the majority of outdoor fires including grassland and refuse fires unless they involve casualties or rescues, property loss or five or more appliances attend. They include fires in single derelict buildings. Accidental fires include all fires where the cause was not known or unspecified. It excludes fires where the cause was, malicious, deliberate or doubtful. This data item is about all accidental secondary fires.

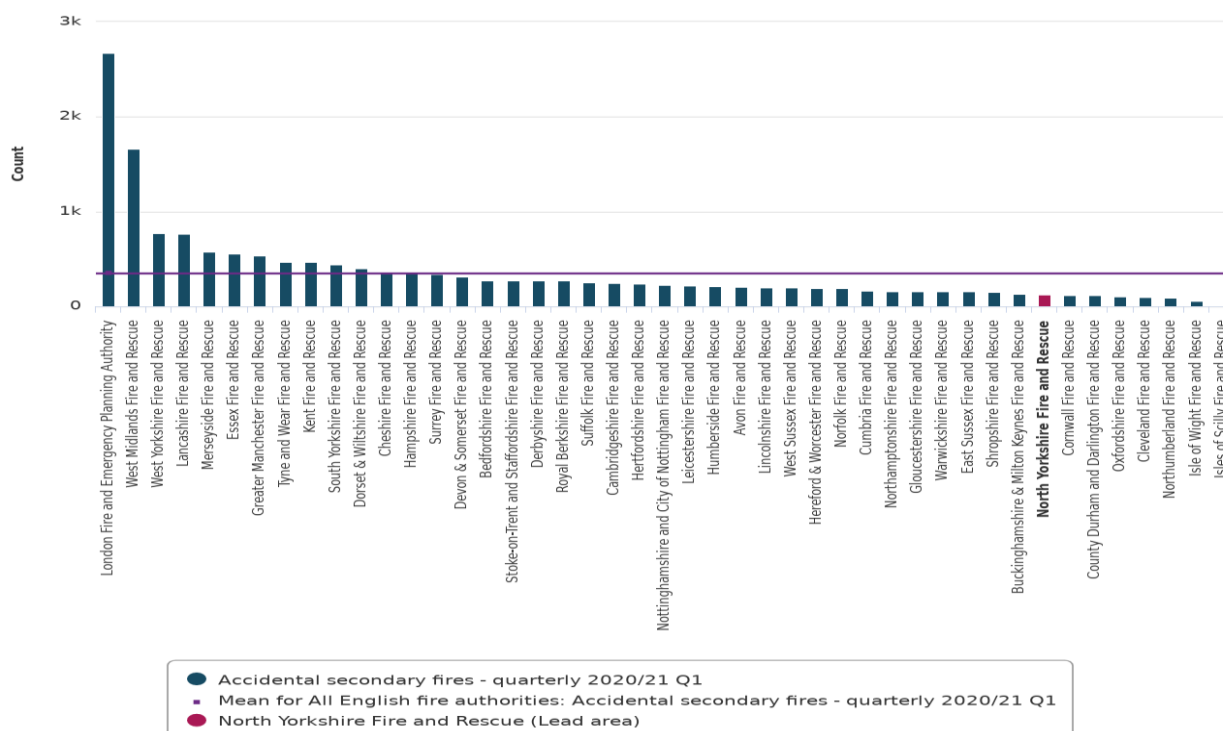
Source name: Home Office

Collection name: Fire statistics monitors

Polarity: Low is good

Period	Accidental secondary fires - quarterly			
	Fires			
	North Yorkshire Fire and Rescue	Minimum for All English fire authorities	Mean for All English fire authorities	Maximum for All English fire authorities
2019/20 Q2	<u>78</u>	1	250	2,348
2019/20 Q3	<u>26</u>	0	91	1,006
2019/20 Q4	<u>34</u>	1	118	1,134
2020/21 Q1	<u>123</u>	0	352	2,667

Accidental secondary fires – quarter 1 2020-1



Source:
Home Office

Powered by LG Inform

¹¹ <https://lginform.local.gov.uk/reports/lgastandard?mod-metric=981>

Number of deliberate dwelling fires - quarterly in North Yorkshire Fire and Rescue¹²

Dwellings are buildings and non-permanent structures occupied solely by households, including mobile homes, caravans, houseboats, etc. It excludes hotels, hostels and residential institutions. Caravans, boats etc. not used as a permanent dwelling are shown according to the type of property (caravan, vehicle etc.). Primary fires include all fires in buildings, vehicles and outdoor structures or any fire involving casualties, rescues, or fires attended by five or more appliances. An appliance is counted if either the appliance, equipment from it or personnel riding on it, were used to fight the fire. The motive for the fire can be recorded as one of: Accidental, Deliberate or Not Known. For the purpose of this metric deliberate is defined as when the motive was recorded as deliberate (only).

Source name: Home Office

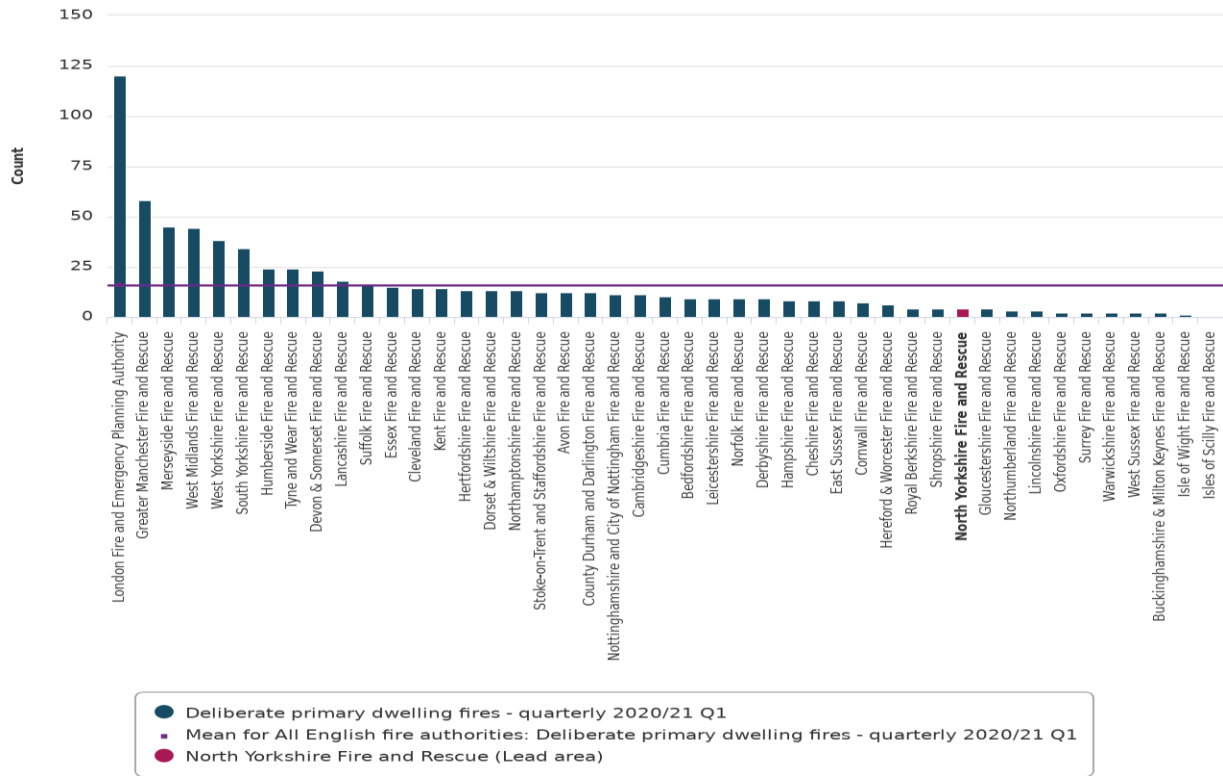
Collection name: Fire statistics monitors

Polarity: Low is good

Period	Deliberate primary dwelling fires - quarterly			
	Fires			
	North Yorkshire Fire and Rescue	Minimum for All English fire authorities	Mean for All English fire authorities	Maximum for All English fire authorities
2019/20 Q2	<u>7</u>	0	18	89
2019/20 Q3	<u>6</u>	0	17	95
2019/20 Q4	<u>7</u>	0	16	91
2020/21 Q1	<u>4</u>	0	16	120

¹² <https://lginform.local.gov.uk/reports/lgastandard?mod-metric=982>

Deliberate primary dwelling fires – quarter 1 2020-1



Source:
Home Office

Powered by LG Inform

Safe and Well Visits (Number of visits) where Person is neither aged 65+ or disabled (2018/19 and 2019/20) for North Yorkshire Fire and Rescue ¹³

Safe and Well Visits (Number of visits) where Person is neither aged 65+ or disabled - Fire and Rescue Services (FRS) have a duty to undertake community fire safety campaigns and initiatives. Typical activities include: home fire safety checks, arson prevention, promotional work with young people and other vulnerable groups. These checks are conducted either by the Fire and Rescue Service direct or their partners e.g. local councils. HFSCs are often targeted towards the more vulnerable members of the community, including older people and those with disabilities, and aim to offer bespoke fire safety advice based on their household and lifestyle which can mitigate the risk of fire. These visits can result in the installation of smoke alarms and safety recommendations such as moving/removing furniture which may be hazardous. Safe and Well Visit (SWV), cover additional factors such as falls risk assessment, smoking cessation, cold homes and fuel poverty and a range of other health and community issues depending on local arrangements. This data item is the number of Safe and Well Visits where Person is neither aged 65+ or disabled.

Source name: Home Office

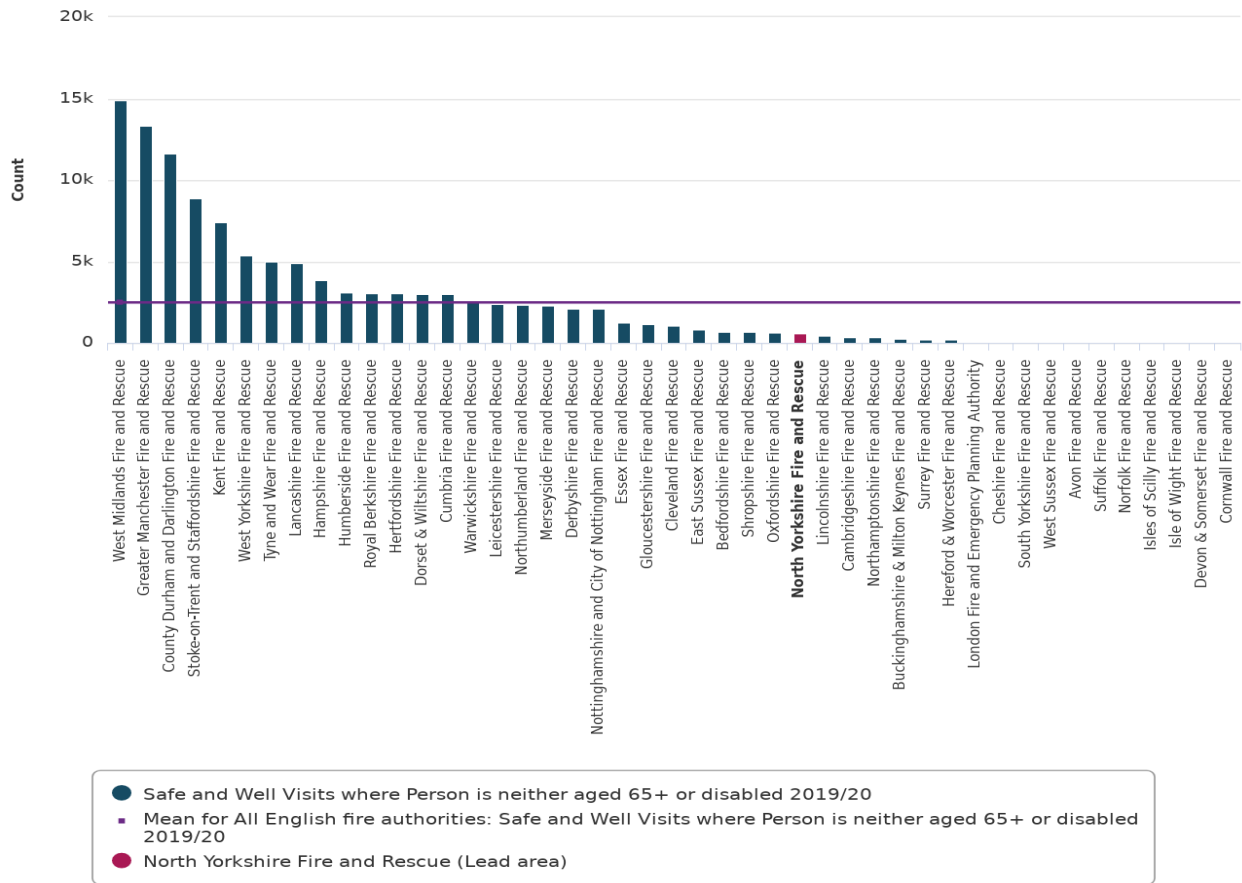
Collection name: Fire and Rescue Service operational statistics

Polarity: High is good

Period	Safe and Well Visits where Person is neither aged 65+ or disabled			
	Visits			
	North Yorkshire Fire and Rescue	Minimum for All English fire authorities	Mean for All English fire authorities	Maximum for All English fire authorities
2018/19	<u>332</u>	0	2,221	16,964
2019/20	<u>562</u>	0	2,501	14,867

¹³ <https://lginform.local.gov.uk/reports/lgastandard?mod-metric=12449>

Safe and Well Visits where Person is neither aged 65+ or disabled



Source:
Home Office

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Total incidents - annual (from 2015/16 to 2019/20) for England ¹⁴

Total incidents - annual - All incidents, including fires, false alarms and special service incidents.

Source name: Home Office

Collection name: Fire Statistics UK, Annual Data

Polarity: Low is good

Period	Total incidents - annual			
	Fires			
	England	Minimum for North Yorkshire Fire and Rescue	Mean for North Yorkshire Fire and Rescue	Maximum for North Yorkshire Fire and Rescue
2015/16	<u>529,472</u>	7,050	7,050	7,050
2016/17	<u>560,493</u>	6,594	6,594	6,594
2017/18	<u>566,437</u>	6,546	6,546	6,546
2018/19	<u>576,391</u>	7,326	7,326	7,326
2019/20	<u>557,299</u>	7,533	7,533	7,533

¹⁴ <https://lginform.local.gov.uk/reports/lgastandard?mod-metric=5353>

Number of special service incidents - annual (from 2016/17 to 2019/20) for North Yorkshire Fire and Rescue¹⁵

Number of special service incidents - annual - This is the number of special service incidents, Examples include flooding incidents, responding to road traffic collisions, animal assistance and release type incidents such as lift releases and effecting entry/exit.

Source name: Home Office

Collection name: Fire Statistics UK, Annual Data

Polarity: Low is good

Number of special service incidents - annual (from 2015/16 to 2019/20) for England

Period	<u>Special service incidents - annual</u>			
	Fires			
	England	Minimum for North Yorkshire Fire and Rescue	Mean for North Yorkshire Fire and Rescue	Maximum for North Yorkshire Fire and Rescue
2015/16	<u>146,741</u>	2,020	2,020	2,020
2016/17	<u>168,520</u>	1,590	1,590	1,590
2017/18	<u>166,306</u>	1,575	1,575	1,575
2018/19	<u>154,979</u>	1,751	1,751	1,751
2019/20	<u>164,464</u>	2,148	2,148	2,148

Total annual fires in NYFRS compared to England¹⁶

Total fires - annual - All fires, including primary and secondary fires in buildings and outdoors, and chimney fires.

Source name: Home Office

Collection name: Fire Statistics UK, Annual Data

Polarity: Low is good

Total fires - annual (from 2015/16 to 2019/20) for England

Period	<u>Total fires - annual</u>			
	Fires			
	England	Minimum for North Yorkshire Fire and Rescue	Mean for North Yorkshire Fire and Rescue	Maximum for North Yorkshire Fire and Rescue
2015/16	<u>162,261</u>	1,805	1,805	1,805
2016/17	<u>162,003</u>	1,708	1,708	1,708
2017/18	<u>167,330</u>	1,841	1,841	1,841
2018/19	<u>182,915</u>	2,101	2,101	2,101
2019/20	<u>153,957</u>	1,850	1,850	1,850

¹⁵ <https://lginform.local.gov.uk/reports/lgastandard?mod-metric=12798>

¹⁶ <https://lginform.local.gov.uk/reports/lgastandard?mod-metric=745>

Number of false alarms - annual (from 2017/18 to 2019/20) for North Yorkshire Fire and Rescue¹⁷

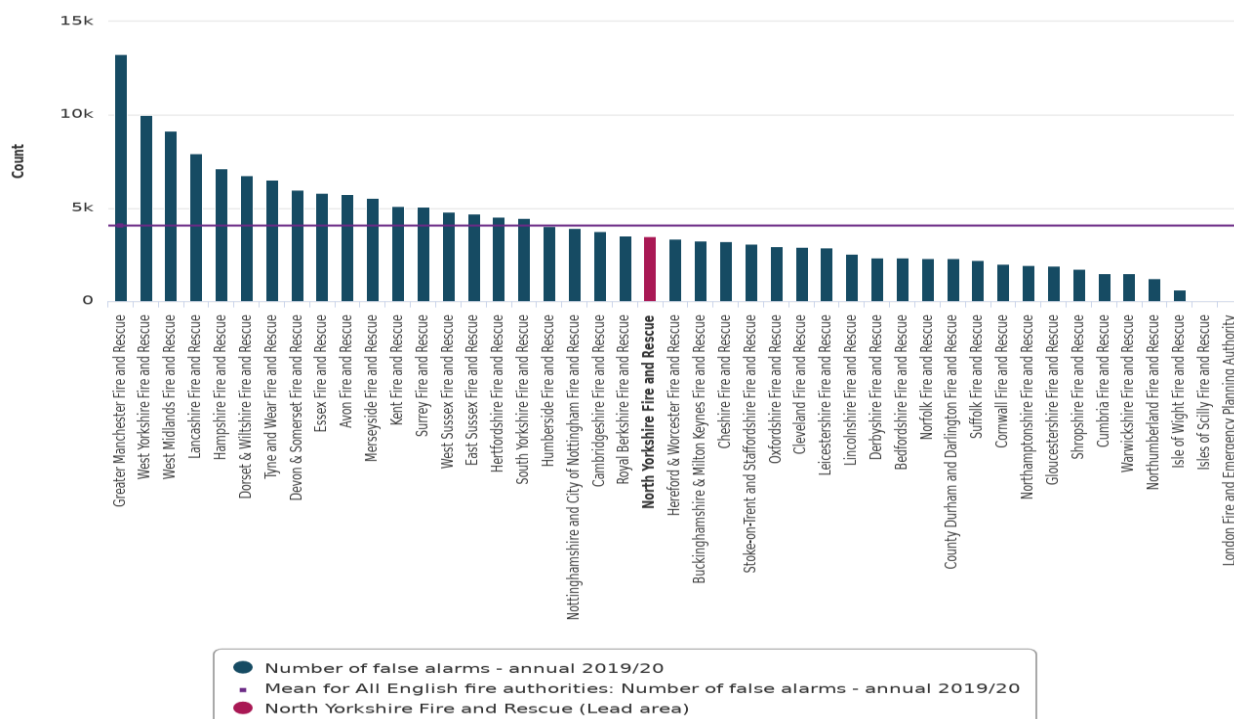
The number of false alarms is an event in which the fire and rescue service believes they are called to a reportable fire and then find there is no such incident. False alarms are categorised as: Malicious the call was made with the intention of getting the fire and rescue service to attend a non-existent fire-related event. This includes deliberate and suspected malicious intentions. Good Intent the call was made in good faith in the belief that the fire and rescue service really would attend a fire. Due to Apparatus the call was initiated by fire alarm and firefighting equipment operating (including accidental initiation of alarm apparatus by person).

Source name: Home Office

Collection name: Fire Statistics UK, Annual Data

Polarity: Low is good

Period	Number of false alarms - annual			
	England	Minimum for North Yorkshire Fire and Rescue	Mean for North Yorkshire Fire and Rescue	Maximum for North Yorkshire Fire and Rescue
2015/16	<u>214,385</u>	3,159	3,159	3,159
2016/17	<u>223,923</u>	3,219	3,219	3,219
2017/18	<u>226,027</u>	3,033	3,033	3,033
2018/19	<u>231,225</u>	3,383	3,383	3,383
2019/20	<u>231,431</u>	3,461	3,461	3,461



Source:
Home Office

Powered by LG Inform

¹⁷ <https://lginform.local.gov.uk/reports/lgastandard?mod-metric=5354>

Number of flat, maisonette or apartments: Purpose-built block of flats or tenement (2011) for North Yorkshire Fire and Rescue ¹⁸

Number of flat, maisonette or apartments: Purpose-built block of flats or tenement - Number of flat, maisonette or apartments: Purpose-built block of flats or tenement

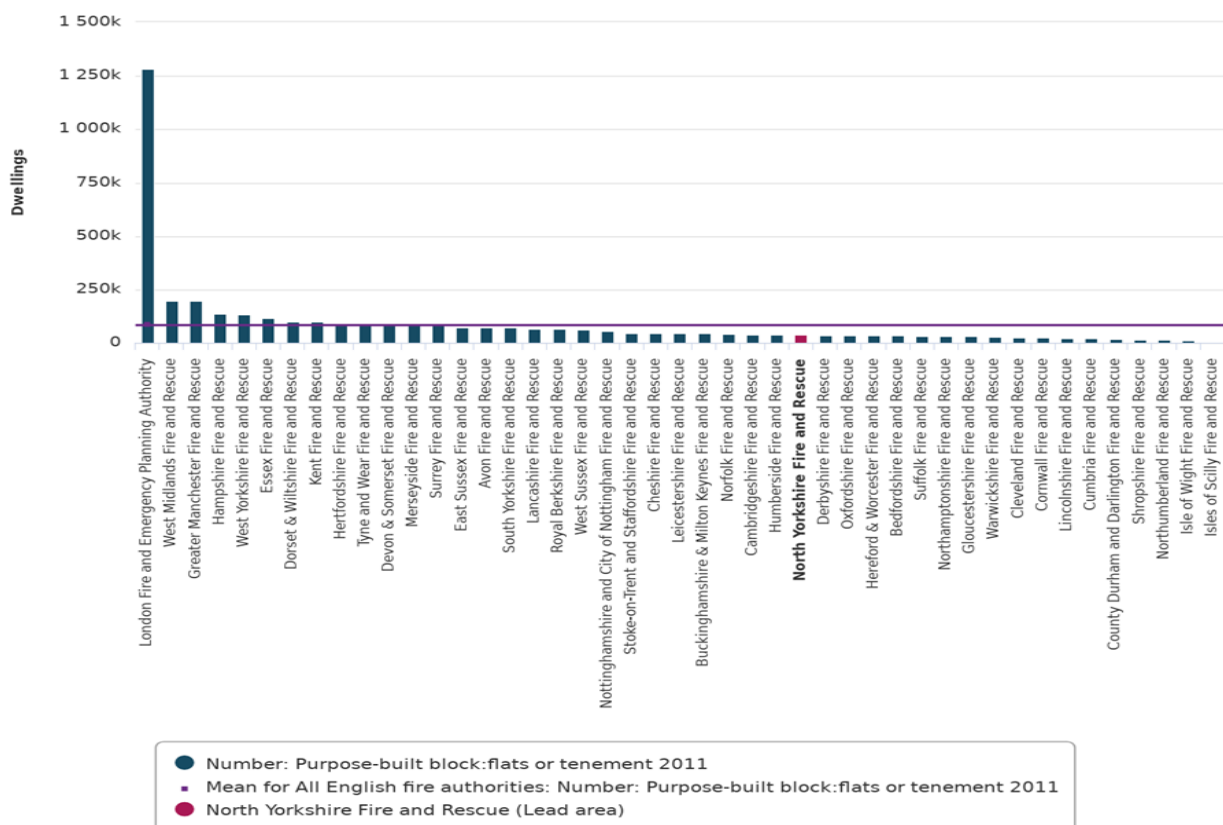
Source name: Office for National Statistics

Collection name: Census 2011

Polarity: No polarity

Period	Number: Purpose-built block:flats or tenement			
	Dwellings			
	North Yorkshire Fire and Rescue	Minimum for All English fire authorities	Mean for All English fire authorities	Maximum for All English fire authorities
2011	<u>36,187</u>	130	85,811	1,281,588

Purpose-built block: flats or tenement



Source: Office for National Statistics

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¹⁸ <https://lginform.local.gov.uk/reports/lgastandard?mod-metric=3729>

Number of flat, maisonette or apartments: In a commercial building in North Yorkshire Fire and Rescue¹⁹

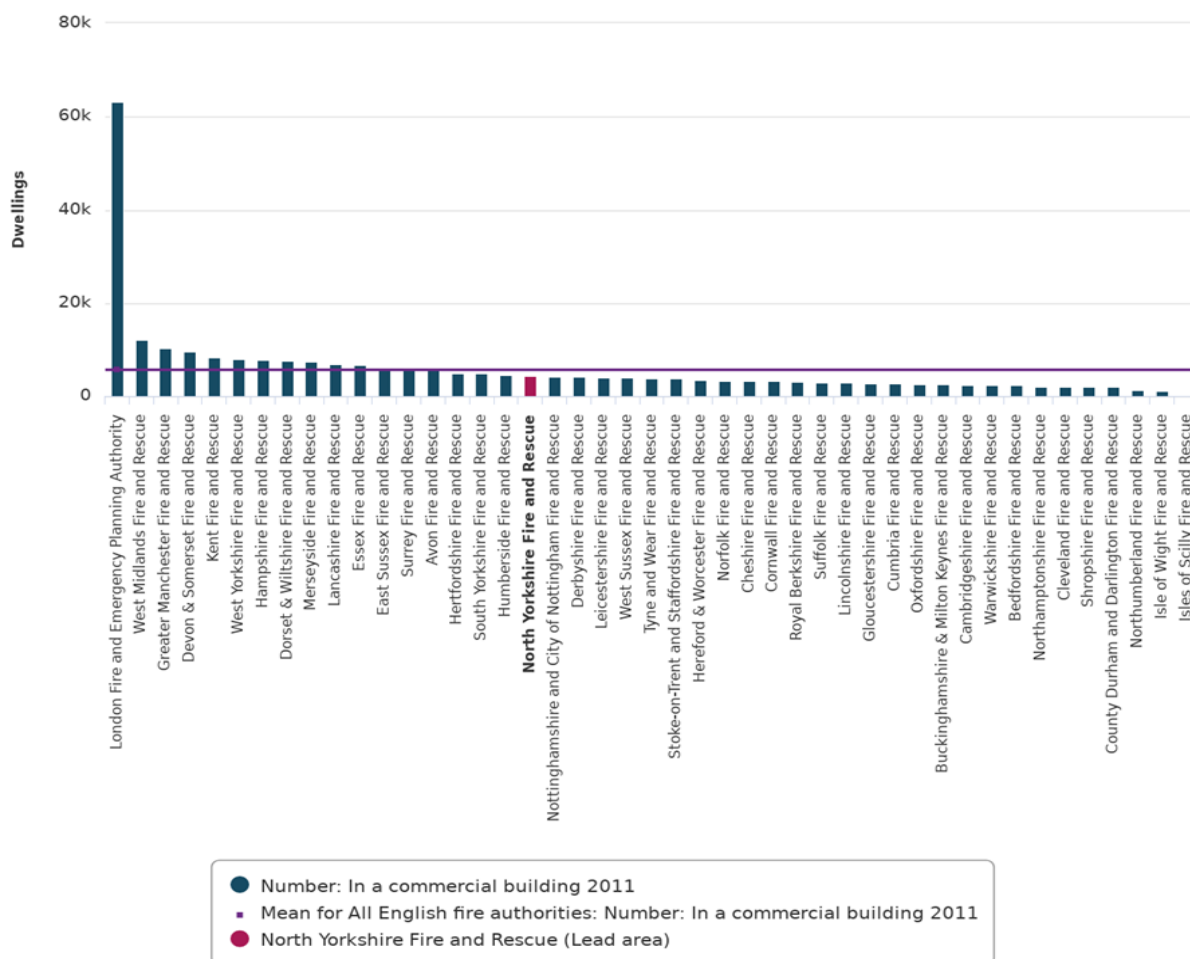
Number of flat, maisonette or apartments: In a commercial building -

Source name: Office for National Statistics

Collection name: Census 2011

Polarity: No polarity

Period	Number: In a commercial building			
	Dwellings			
	North Yorkshire Fire and Rescue	Minimum for All English fire authorities	Mean for All English fire authorities	Maximum for All English fire authorities
2011	<u>4,354</u>	70	5,724	63,164



Source:
Office for National Statistics

Powered by LG Inform

¹⁹ <https://lginform.local.gov.uk/reports/lgastandard?mod-metric=3731>

Total count of all dwellings (2011) for North Yorkshire Fire and Rescue²⁰

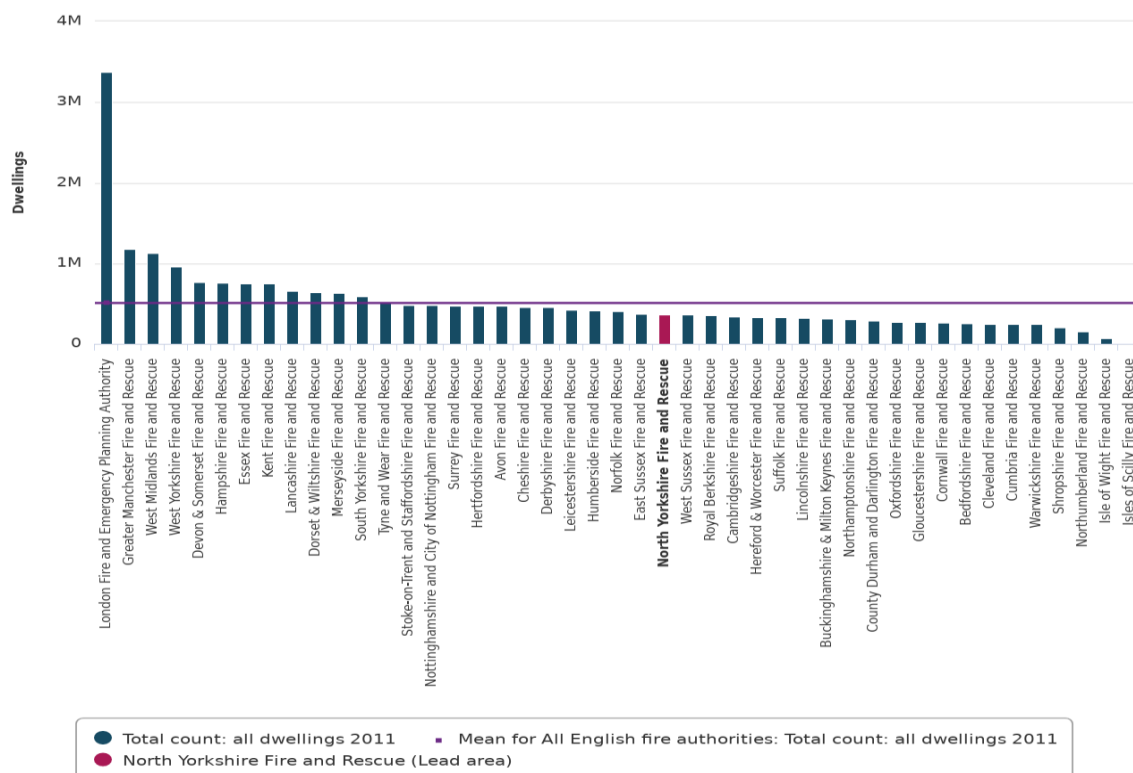
A dwelling is a unit of accommodation in which all rooms - including the kitchen, bathroom, and toilet - are behind a door that only that household can use. A dwelling may comprise one or more household spaces (the accommodation used or available for use by an individual household). A dwelling may be classified as shared or unshared. A dwelling is shared if: the household spaces it contains have the accommodation type 'part of a converted or shared house not all of the rooms (including kitchen, bathroom and toilet, if any) are behind a door that only that household can use, and there is at least one other such household space at the same address with which it can be combined to form the shared dwelling. Dwellings that do not meet these conditions are unshared dwellings.

Source name: Office for National Statistics

Collection name: Census 2011

Polarity: No polarity

Period	Total count: all dwellings			
	Dwellings			
	North Yorkshire Fire and Rescue	Minimum for All English fire authorities	Mean for All English fire authorities	Maximum for All English fire authorities
2011	<u>364,061</u>	1,388	510,937	3,374,247



Source: Office for National Statistics

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²⁰ <https://lginform.local.gov.uk/reports/lgastandard?mod-metric=3714>

Number of active enterprises in North Yorkshire Fire and Rescue²¹

This is a count of active enterprises in the area. This indicator is a refinement of the indicator covering the number of VAT-registered businesses at the start of the year: for instance, it recognises business activity occurring at any point in the year and it picks up PAYE-registered business as well as VAT-registered businesses. As a result of this being a more comprehensive measure, the figures are slightly higher than for the VAT-registered businesses measure. Data on the number of VAT-registered businesses at the start of the year is no longer produced.

Source name: Office for National Statistics

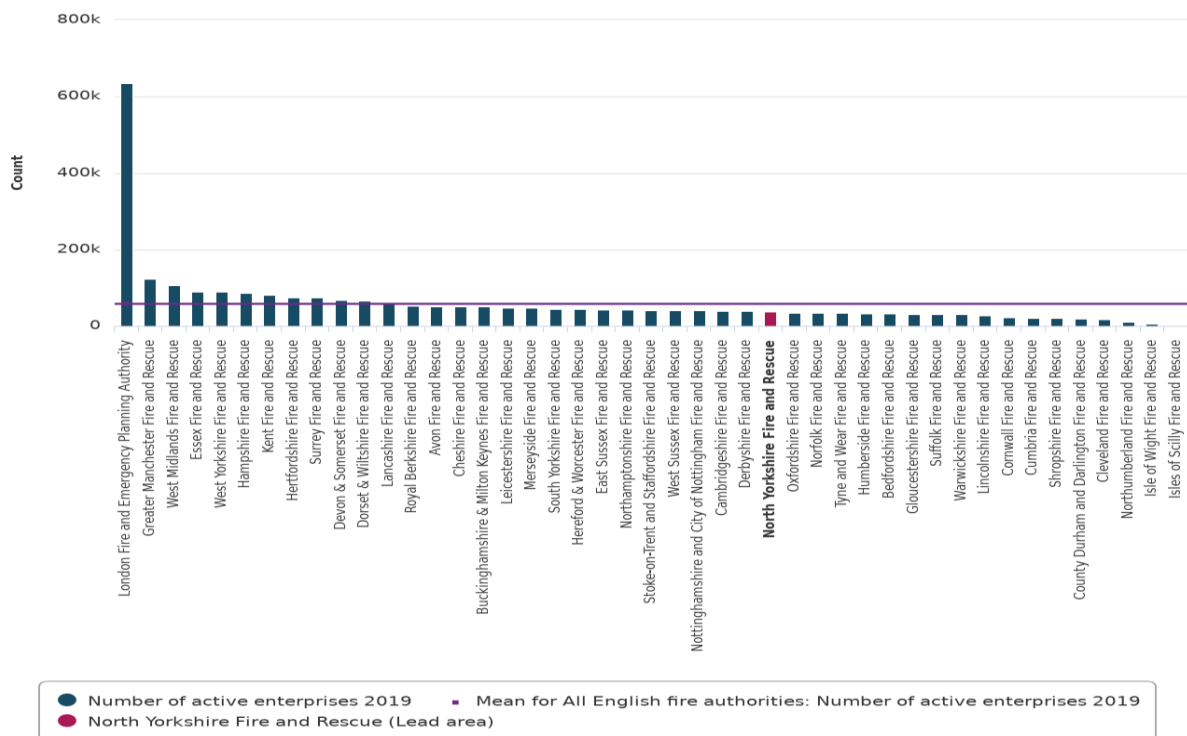
Collection name: Business Demography

Polarity: High is good

Number of active enterprises (2019) for North Yorkshire Fire and Rescue

Period	<u>Number of active enterprises</u>			
	Enterprises			
	North Yorkshire Fire and Rescue	Minimum for All English fire authorities	Mean for All English fire authorities	Maximum for All English fire authorities
2019	<u>36,760</u>	170	58,650	634,075

Number of active enterprises (2019) for North Yorkshire Fire and Rescue



Source:
Office for National Statistics

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²¹ <https://lginform.local.gov.uk/reports/lgastandard?mod-metric=186>

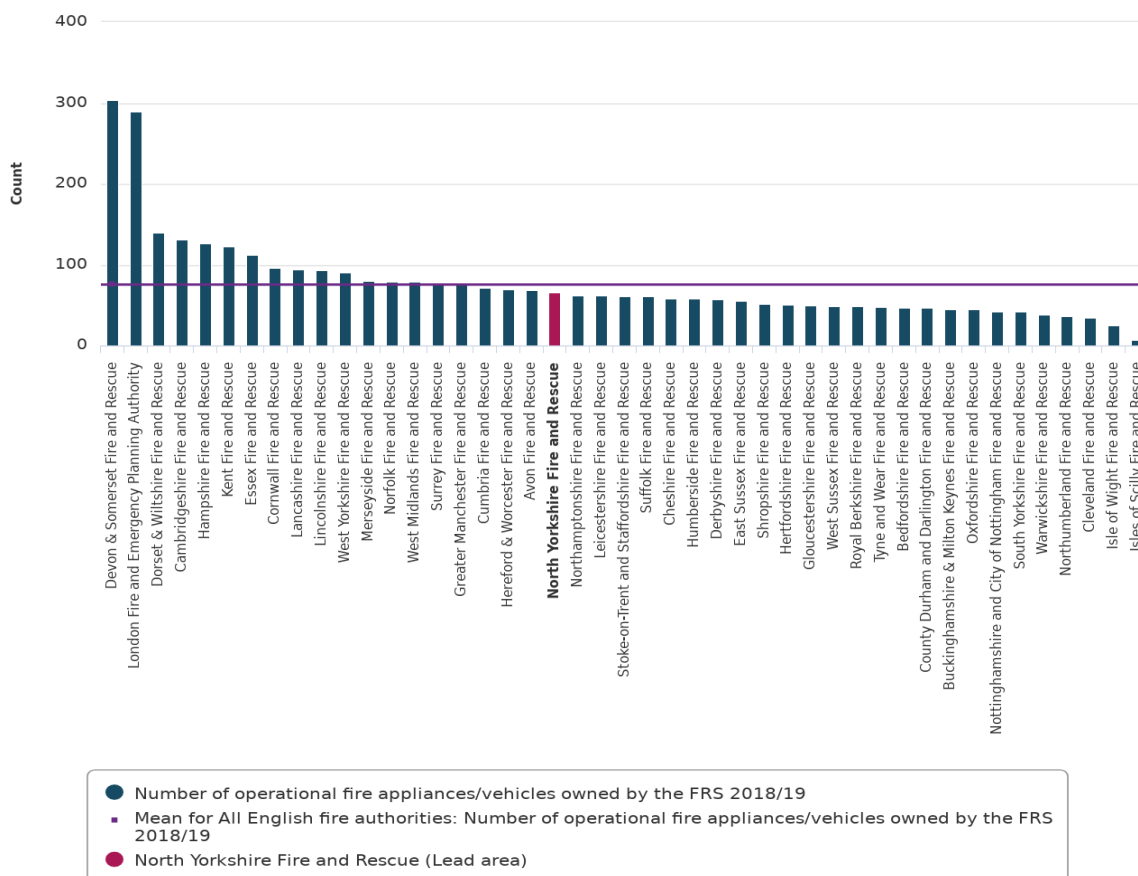
Number of operational fire appliances/vehicles owned by the Fire and Rescue Service (2018/19) for North Yorkshire Fire and Rescue²²

This is the total number of operational fire appliances/vehicles owned by North Yorkshire Fire and Rescue Service. It is the sum of the number of operation pumps, operational aerials and other operational appliances (Fire-boats, Urban Search and Rescue (USAR), High Volume Pumps (HVPs), Incident Response Units (IRUs), Incident Command Units (ICUs)/Control Units (CUs), Detection, Identification & Monitoring (DIMs), Decontamination Unit (DeConU) and Chemical Incident Unit (CIU)).

Source name: Home Office

Collection name: Fire and Rescue Service operational statistics

Period	Number of operational fire appliances/vehicles owned by the FRS			
	Appliances/vehicles			
	North Yorkshire Fire and Rescue	Minimum for All English fire authorities	Mean for All English fire authorities	Maximum for All English fire authorities
2018/19	<u>65</u>	7	76	303



Source:
Home Office

Powered by LG Inform

²² <https://lginform.local.gov.uk/reports/lgastandard?mod-metric=8877>

Demographics

The population of North Yorkshire is ageing. By 2025, there will be 21,200 additional people aged 65+, a 14% increase from 2018, but a 4% decrease in the working-age population. This is likely to lead to increased health and social care needs with fewer people available to work in health and care roles.

Overall population health in North Yorkshire is better than England. However, there are stark inequalities: life expectancy varies by 15 years between wards within North Yorkshire; the healthy life expectancy gap for men is even wider at 18 years.

Rates of child poverty are higher than poverty in older people. Over 28,000 children are growing up in poverty in North Yorkshire, with about one quarter of them in Scarborough Borough.

Suicide²³

The latest published rates are for the three-year period 2014-16. Published suicide figures in the North Yorkshire Suicide audit are calculated as rates per 100,000 of population and are adjusted to consider differences in the age breakdown of different areas.

The 2015 audit highlights that suicides remain more common amongst males than females.

The rate of suicides in North Yorkshire (10.1 per 100,000) is lower than that observed regionally (10.4 per 100,000) but slightly higher than the national average (9.9 per 100,000). North Yorkshire is ranked 9th out of the 16 CIPFA neighbours and the rate among males is much higher than among females in North Yorkshire.

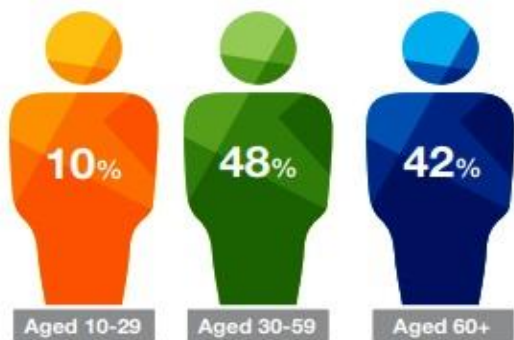
In North Yorkshire, the suicide rate fell to 9.7 per 100,000 in 2012-14, but this has since increased to 10.1 per 100,000 population in 2014-16. Within North Yorkshire, Craven and Scarborough districts have the highest rate of suicide (11.5 per 100,000) compared to Richmondshire district which has the lowest rate (9.0 per 100,000) but this is not statistically significantly different. In 2018-19 suicide rate in the City of York district was 11.90 per 100 000, which is higher than the national average of 9.6 per 100 000

The proportion of suicides that were females increased in the 2015 audit in line with national trends.

Of the 48 suicides recorded as part of the audit (2015), 71% involved males with the highest number of incidents recorded in men aged 50 to 59. This trend differs when compared to the 2010-14 audit as the most at risk group was males aged 40-49.

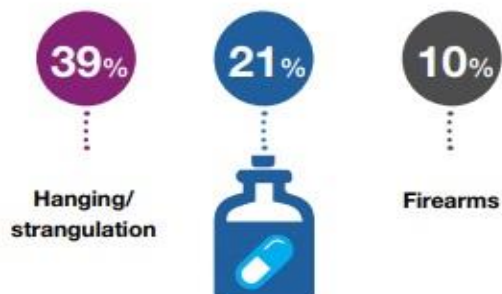
It is interesting to note the change in age group for at risk group between the two audits as there is an increase in older people are taking their own life. However, in contrast to men, the number of incidents among women is highest in the 60 to 69 age group, followed by the 50 to 59 age group. This trend differs when compared to the 2010-14 audit where the number of incidents among women was highest in those aged 40-49. More elderly females are more likely to take their own life which follows a similar pattern to males.

²³https://nypartnerships.org.uk/sites/default/files/Partnership%20files/Health%20and%20wellbeing/Public%20health/74916_Suicides%20Audit%20in%20NY%202015_web.pdf

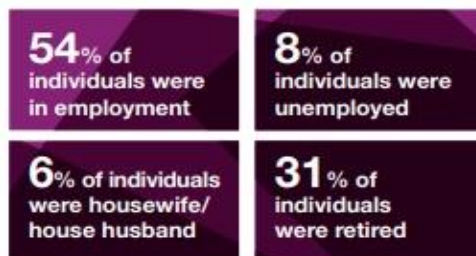


- The average age of the deceased was 56.
- 38% of individuals who died by suicide were aged under 49 and
- 21% of individuals were between 50 and 59.

Most common methods of suicide



Previous **mental health** issues were identified as a contributory factor in just under half (42%) of incidents with 33% of individuals' suffering from **anxiety or depression**.



35% of individuals took drugs at the time of death.

- Of this, **71%** of individuals took non-prescribed drugs at the time of death in comparison to
- **18%** who took prescribed drugs.



Alcohol was identified in **35%** of deaths;

- in men **71%** versus
- **29%** in women.

Those aged 40 to 49 (**35%**) were more likely to take alcohol at the time of death.



Over half (**63%**) of incidents occurred at the individuals' home address in comparison to **4%** of incidents which occurred in a park or woodland.



35% of individuals had a history of self-harm and **47%** had experienced a self-harm episode within the 12 months leading up to death.

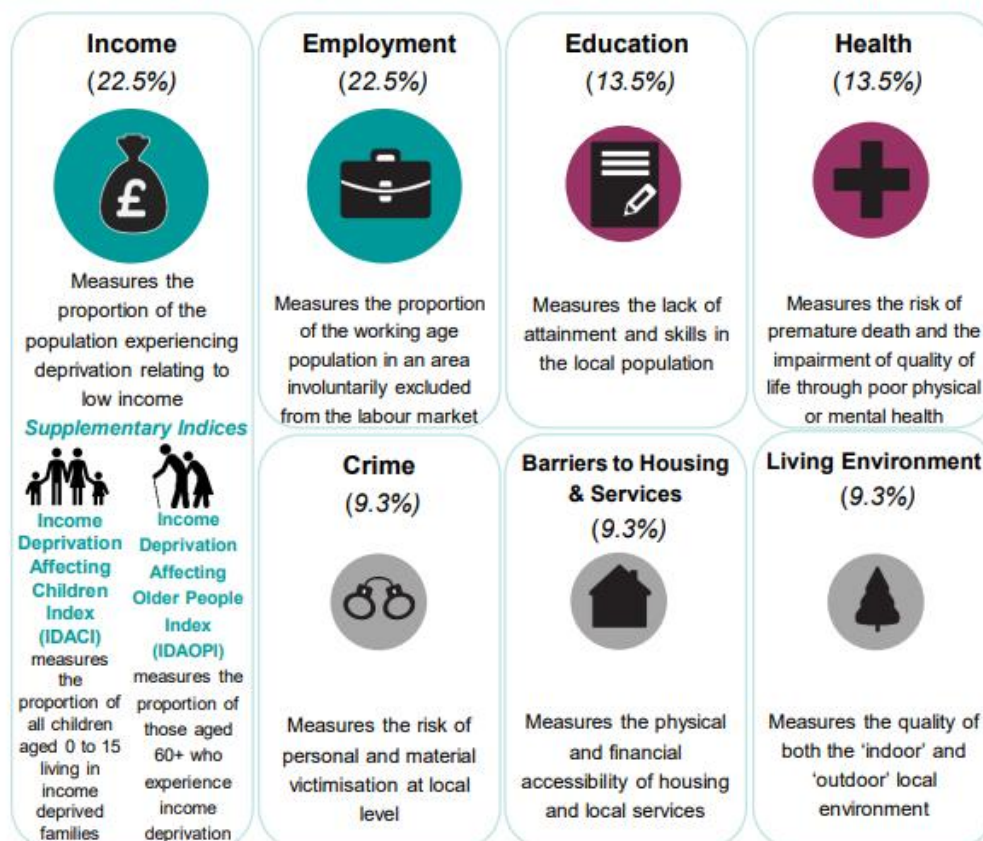
Deprivation²⁴

Lower-layer Super Output Areas (LSOA's) are small areas designed to be of a similar population size, with an average of approximately 1,500 residents or 650 households. There are 32,844 Lower-layer Super Output Areas (LSOAs) in England. They were produced by the Office for National Statistics for the reporting of small area statistics.

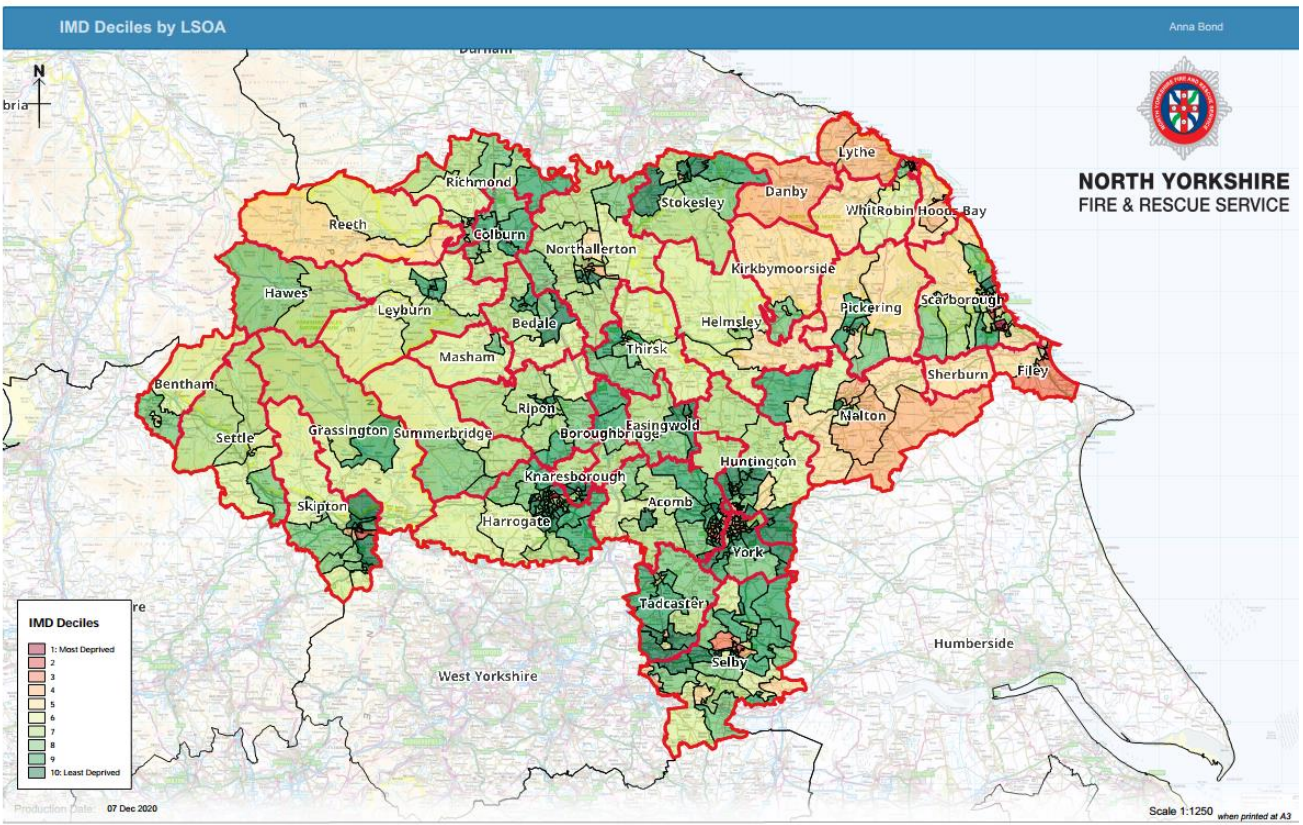
The 2019 Index of Multiple Deprivation (IMD) identifies 24 Lower Super Output Areas (LSOAs) of the 373 LSOAs in North Yorkshire which are amongst the 20% most deprived in England, with a population of 36,000 people. Twenty of these LSOAs are in Scarborough district with a combined population of 30,000.

IMD also calculates deprivation for specific groups based on key indicators. Eastfield, Woodlands and North Bay wards in Scarborough have higher rates of overall deprivation. North Bay and Eastfield wards together with Harrogate Bilton Woodfield ward have higher rates of older people in deprivation. Across the county, around 23% of children (28,275) are living in poverty after housing costs, lower than the national average of 30%. However, this rises to 41% in the Northstead ward in Scarborough.

There are 7 domains of deprivation, which combine to create the Index of Multiple Deprivation (IMD2019):



²⁴<https://hub.datanorthyorkshire.org/dataset/f562bfe7-e297-4151-a427-168984b1d40b/resource/7a5b62a5-8673-44aa-be61-87341a8b0ad3/download/ny-county-profile-2019.pdf>



Map to be swapped with newer version including Lofthouse and Goathland

Housing

Housing affordability affects where people live and work. It also affects factors that influence health, including poverty, community cohesion, housing quality, and time spent commuting. There is increasing evidence of a direct association between unaffordable housing and poor mental health, over and above the effects of general financial hardship. Type of housing tenure may also be an important factor in determining how individuals experience and respond to housing affordability problems.

Alcohol

Linked to Fire Safety²⁵

Fatal Fires Drug/Alcohol Involvement

During the period of 1st April 2011 to 31st March 2016, 30.9% of accidental fire fatalities were thought to have been under the influence of alcohol or drugs at the time of the fire, 29.9% of cases it was unknown and 39.2% were not thought to have been under the influence of alcohol or drugs. In cases due to a deliberate nature, 10.8% of fatalities were suspected to be under the influence of drugs or alcohol, 24.3% were believed to not be under the influence and in 64.9% of cases it was unknown.

Linked to Road safety

Alcohol consumption is responsible for around one in seven deaths in reported road traffic accidents in Great Britain. Any amount of alcohol affects people's ability to drive safely. The effects can include slower reactions, increased stopping distance, poorer judgement of speed and distance and reduced field of vision, all increasing the risk of having an accident or fatality.

The rate of alcohol-related road traffic accidents in North Yorkshire is 25 per 1,000 accidents and this is similar to the England rate of 26 per 1,000 accidents. Selby is the only district significantly higher than the national rate (46 per 1,000 accidents), and Scarborough is the only district that has a rate that is significantly lower than England rate at 13 per 1,000 accidents. All other districts are statistically like the national rate.

More information on staying safe on the road can be found in Safer Roads, Healthier Place: York and North Yorkshire Road Safety Strategy.²⁶

²⁵ <file:///C:/Users/00634/Desktop/Risk%20Resource%20Model/FINAL-Learning-from-Fatal-Fires-Yorkshire-and-the-Humber-Regional-Report.compressed.pdf>

²⁶ <https://www.nypartnerships.org.uk/sites/default/files/Partnership%20files/Health%20and%20wellbeing/Public%20health/Safer%20roads%20strategy.pdf>

Smoking

Smoking prevalence in North Yorkshire is significantly lower than England, at 12.0% versus 14.4%. Between 2017 and 2018 there has been a decrease in the proportion of smokers. All districts in North Yorkshire have smoking rates that are statistically similar to the England rate, other than Craven which has a rate of 13%, and is significantly lower than England. For adults in routine and manual professions, rates are higher than for the general population and prevalence in North Yorkshire is similar to England (25.1% locally vs 25.4% nationally). Craven district has the highest rates of smoking in routine and manual professions in the county.

District Demographics

Craven²⁷

The population in Craven District is ageing. By 2025, there will be 2,100 additional people aged 65+, a 14% increase from 2018, but a 4% decrease in the working-age population. This will lead to increased health and social care needs with fewer people available to work in health and care roles.

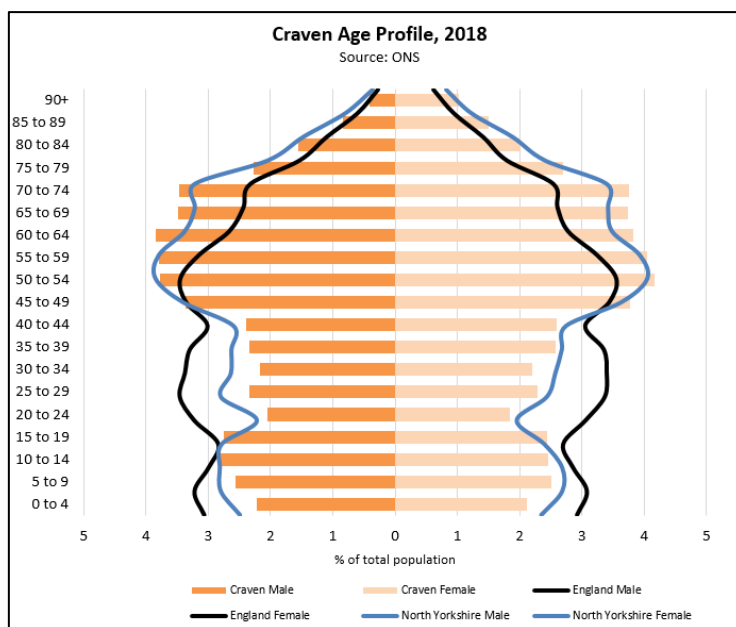
Health inequality is less pronounced in Craven compared with other districts in North Yorkshire. However, a significant number of children grow up in poverty, particularly in Skipton South and Skipton West wards.

Despite recent reductions, the rate of people being killed and seriously injured on Craven's roads remains more than double the England average, with over 50 casualties annually.

There has been a notable decline in the employment rate in recent years.

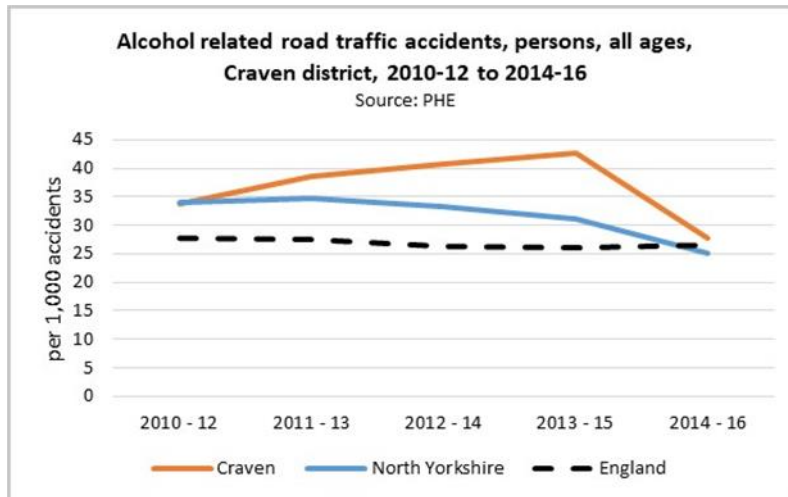
The population pyramid shows that, overall, Craven district has an older population than England, with more residents aged 50-84, and fewer aged under 45. The population makeup is broadly similar to North Yorkshire, but there are noticeably fewer people aged 20-44 in Craven.

The shape of the pyramid is typical of a population with long life expectancy and low birth rate. There are about 6,600 people aged 65+ with a limiting long-term illness. Of these people, 43% (2,800) report that their daily activities are limited a lot because of their illness (POPPI, 2019).

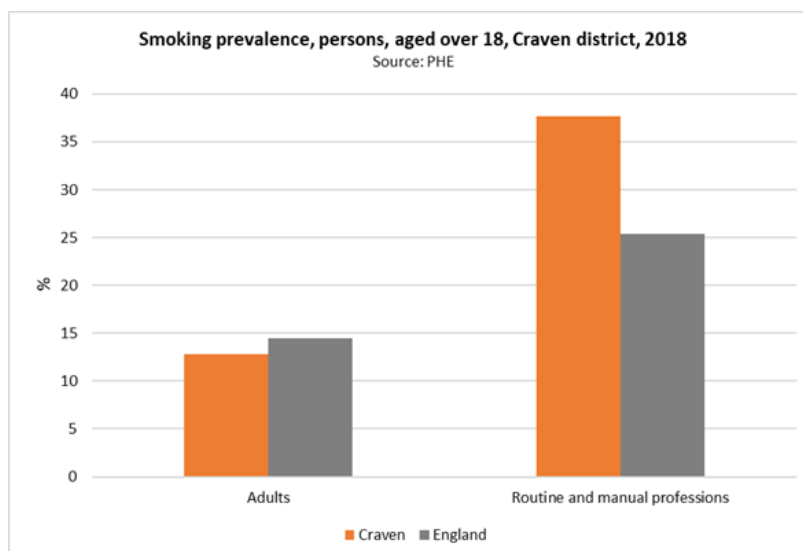


²⁷ <https://hub.datanorthyorkshire.org/dataset/11b7f353-dddd-4850-b424-b6ffde93673b/resource/34ad7926-ee5d-4876-9ffc-c962fbc5be5d/download/craven-2019.pdf>

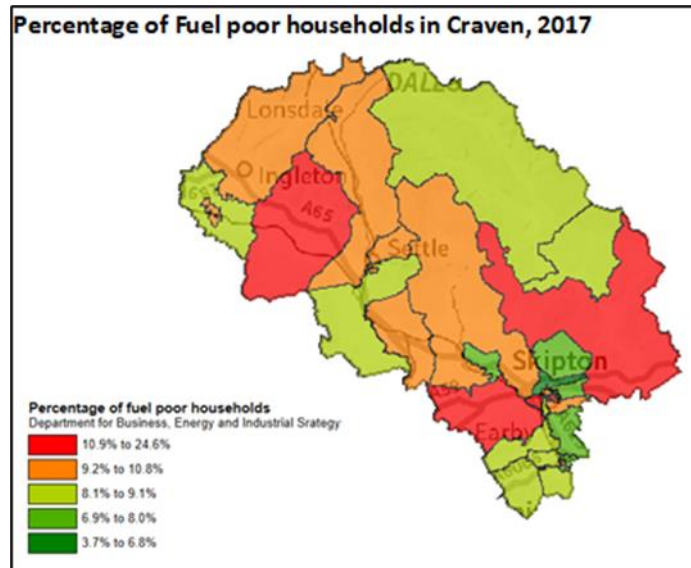
The rate of alcohol-related road traffic accidents in Craven has decreased between 2013-15 and 2014-16 and is similar compared to county and national rates. The rate of people being killed and seriously injured (KSI) casualties on roads in Craven is significantly higher than the national average at 95 per 100,000. Between 2014-16 and 2015-17 there has been a slight decrease in Craven in the proportion of people being killed or seriously injured on the road.



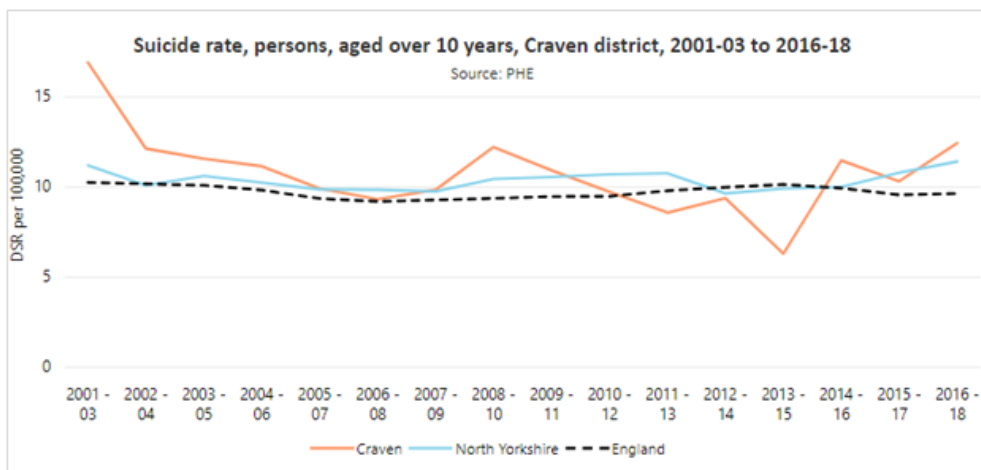
Smoking prevalence for adults in Craven is significantly lower than prevalence in England at 13% compared to 15% nationally. For adults in the routine and manual professions, prevalence in Craven is 38%, higher than the 25% estimated for England, but not statistically significant.



In 2017, 9% of households (2,394 households) in Craven are classified as fuel poor, lower than the national average (11%). Merely tackling poverty would not necessarily relieve the fuel poverty, as often housing type and access to affordable sources of energy are important. Tackling fuel poverty should in turn improve winter health, decreasing excess winter mortality and the pressure on the health and care system during the winter months.



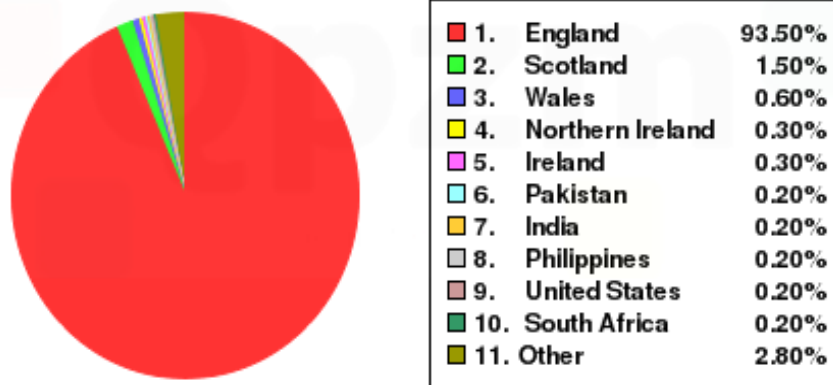
The suicide rate in Craven has increased between 2015-17 and 2016-18 and the rate is similar to England (12 per 100,000 locally compared to 10 per 100,000 nationally). The suicide rate for males is higher than females in Craven and this is in line with national trends. However, these are small numbers and should be interpreted with caution.



Population overview²⁸

In the 2011 census the population of Craven was 55,409 and is made up of approximately 52% females and 48% males.

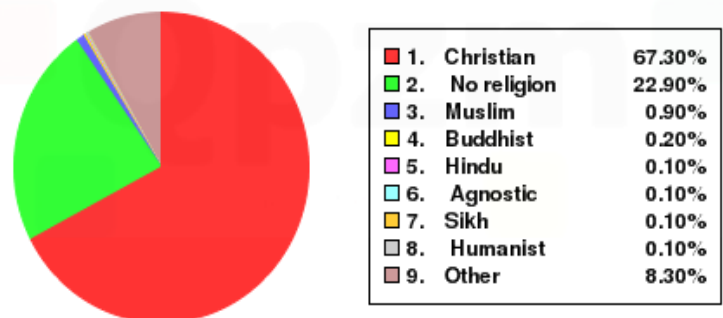
The average age of people in Craven is 44, while the median age is higher at 47.



93.5% of people living in Craven were born in England. Other top answers for country of birth were 1.5% Scotland, 0.6% Wales, 0.3% Northern Ireland, 0.3% Ireland, 0.2% Pakistan, 0.2% India, 0.2% Philippines, 0.2% United States, 0.2% South Africa.

2.8% of the population is from black, Asian and minority ethnic groups, compared with 2.8% in North Yorkshire and 15% in England.

The religious make up of Craven is 67.3% Christian, 22.9% No religion, 0.9% Muslim, 0.2% Buddhist, 0.1% Hindu, 0.1% Agnostic, 0.1% Sikh, 0.1% Humanist. 4,231 people did not state a religion. 157 people identified as a Jedi Knight.



53.6% of people are married, 10.3% cohabit with a member of the opposite sex, 0.5% live with a partner of the same sex, 18.6% are single and have never married or been in a registered same sex partnership, 8.3% are separated or divorced. There are 3,002 widowed people living in Craven.

²⁸ <http://localstats.co.uk/census-demographics/england/yorkshire-and-the-humber/craven>

The top occupations listed by people in Craven are Professional 18.4%, Skilled trades 16.3%, Managers, directors and senior officials 12.7%, Associate professional and technical 11.1%, Elementary 10.5%, Administrative and secretarial 9.9%, Caring, leisure and other service 8.7%, Elementary administration and service 8.3%, Corporate managers and directors 7.4%, Administrative 6.8%.

98.3% of people living in Craven speak English. The other top languages spoken are 0.4% Polish, 0.1% Urdu, 0.1% Tagalog/Filipino, 0.1% Panjabi, 0.1% French, 0.1% Hungarian, 0.1% German, 0.1% All other Chinese, 0.1% Italian.



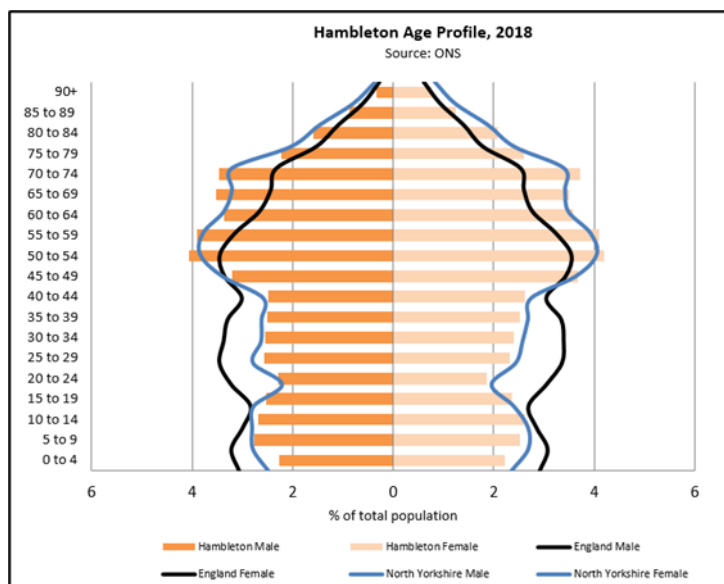
The population in Hambleton is ageing. By 2025, there will be 3,100 additional people aged 65+, a 13% increase from 2018, but a 4% decrease in the working-age population.

Health inequalities within Hambleton District are highlighted by a ten-year difference in life expectancy between wards for men and 9 years for women. This is driven by excess mortality from circulatory and respiratory diseases for both men and women, and cancer deaths for women in the most deprived areas of the district.

The affordability of housing for people on lower-than-average incomes within the district is worse than for England. This may impact on mental health.

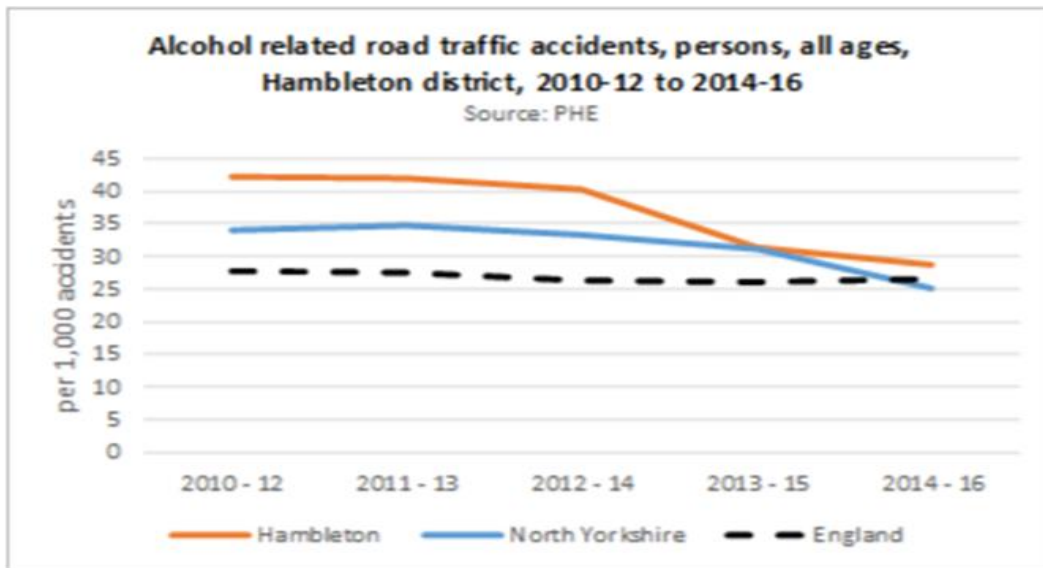
The population pyramid shows that, overall, Hambleton district has an older population than England, with more residents aged 50-89, and fewer aged under 45. The population make-up is similar to North Yorkshire but is slightly older than the county as a whole. The shape of the pyramid is typical of a population with long life expectancy and low birth rate. There are about 10,600 people aged 65+ with a limiting long-term illness. Of these people, 43% (4,500) report that their daily activities are limited a lot because of their illness (POPPI, 2019).

1.8% of the population is from black, Asian and minority ethnic groups, compared with 2.8% in North Yorkshire and 15% in England.

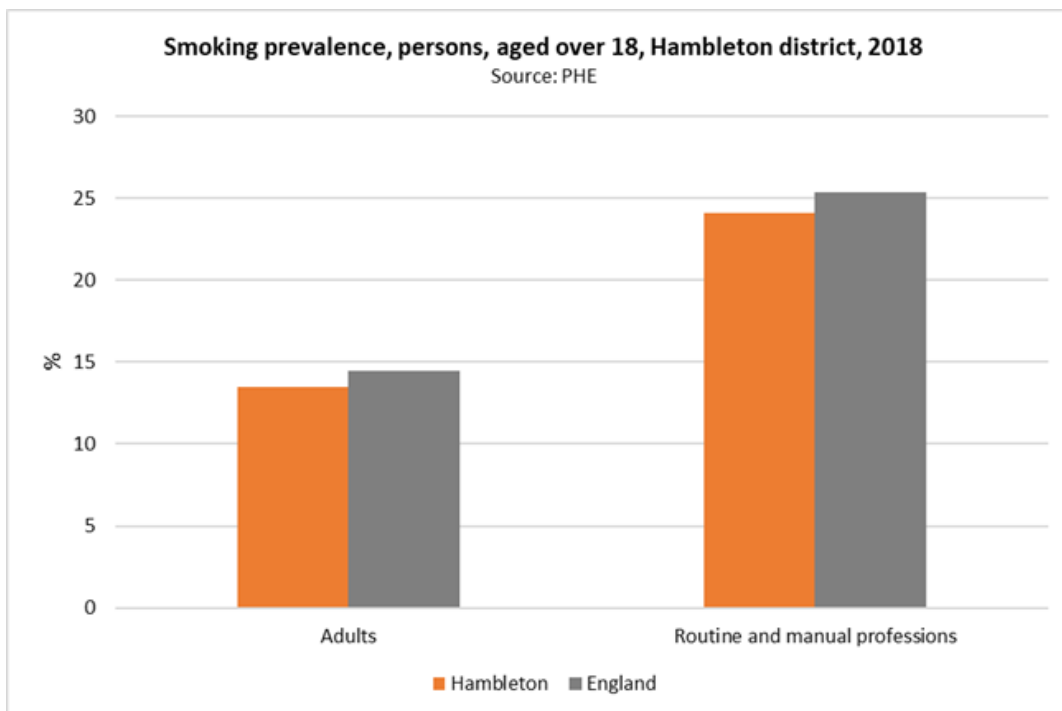


The rate of alcohol-related road traffic accidents in Hambleton has decreased since 2012-14 and is similar to the county and national rates. Nevertheless, the rate of people being killed and seriously injured (KSI) casualties on roads in Hambleton is significantly higher than the national average at 74 per 100,000. Between 2014-16 and 2015-17 rates of people being killed and seriously injured on roads in Hambleton decreased. However, these are relatively small numbers and must be interpreted with caution.

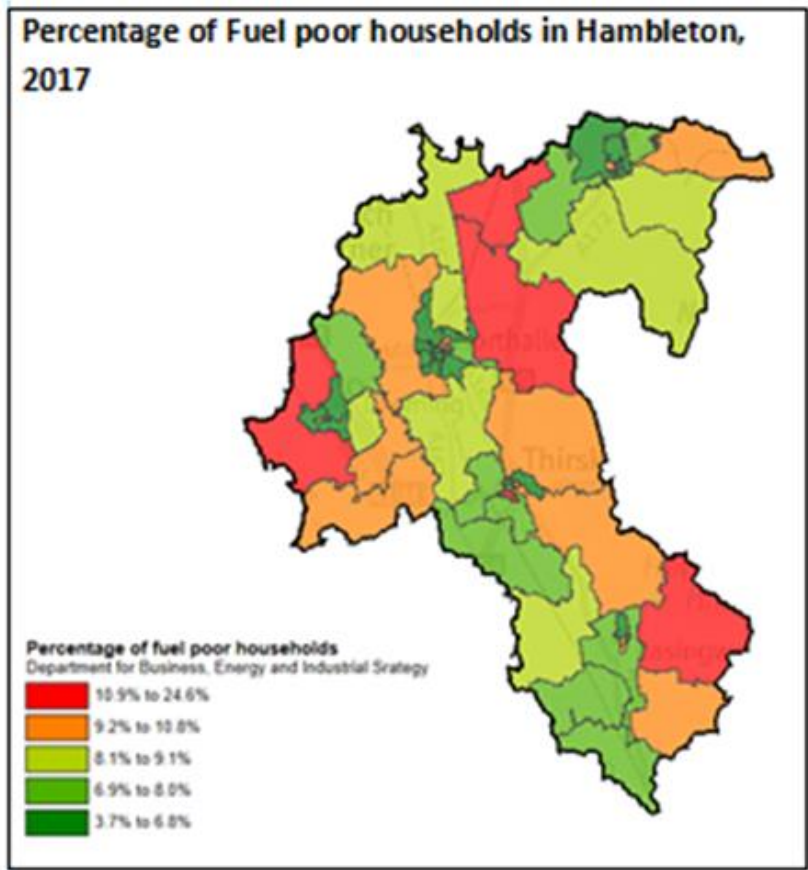
²⁹ <https://hub.datanorthyorkshire.org/dataset/ff2eb1cc-bfee-4723-bacb-efe44bcc77a/resource/4c6aa656-1620-45cf-a22b-27c96fff4467/download/hambleton-2019.pdf>



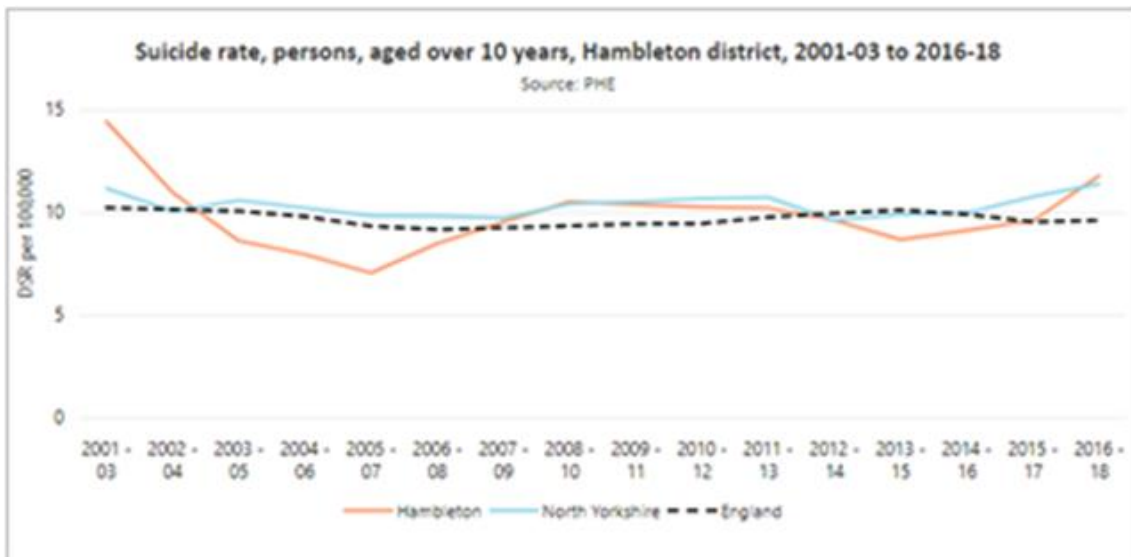
Smoking prevalence in Hambleton is slightly lower than England at 13.5%, compared with 14.4% nationally. For adults in routine and manual professions, smoking rates are higher than for the general population; the prevalence in Hambleton is 24%, similar to England (25%). This is a decrease from the 2017 estimate, although not statistically significant, but suggesting a local reduction in the number of smokers in routine and manual professions.



In 2017, 9% of households (3,394 households) in Hambleton were classified as fuel poor, lower than the national average (11%). Merely tackling poverty would not necessarily relieve the fuel poverty, as often housing type and access to affordable sources of energy are important. Tackling fuel poverty should in turn improve winter health, decreasing excess winter mortality and the pressure on the health and care system during the winter months.



The suicide rate in Hambleton has increased between 2015-17 and 2016-18 and the rate is similar to the England average (11.8 per 100,000 locally compared to 9.6 per 100,000 nationally). The suicide rate for males is higher than females in Hambleton and this is in line with national trends. However, these are small numbers and should be interpreted with caution.

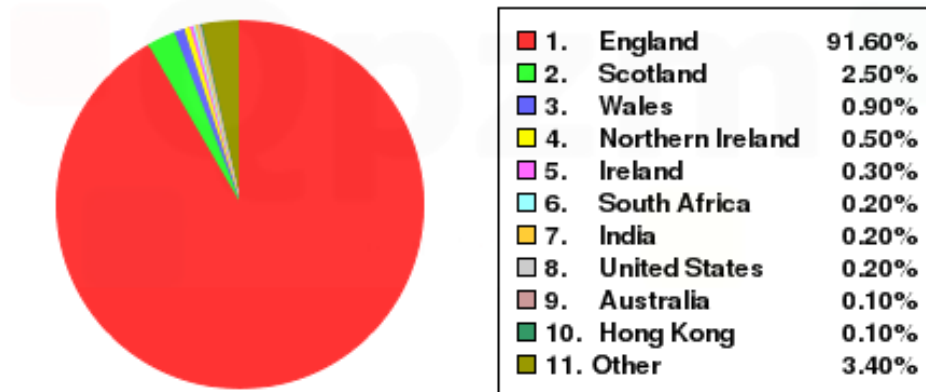


Population overview ³⁰

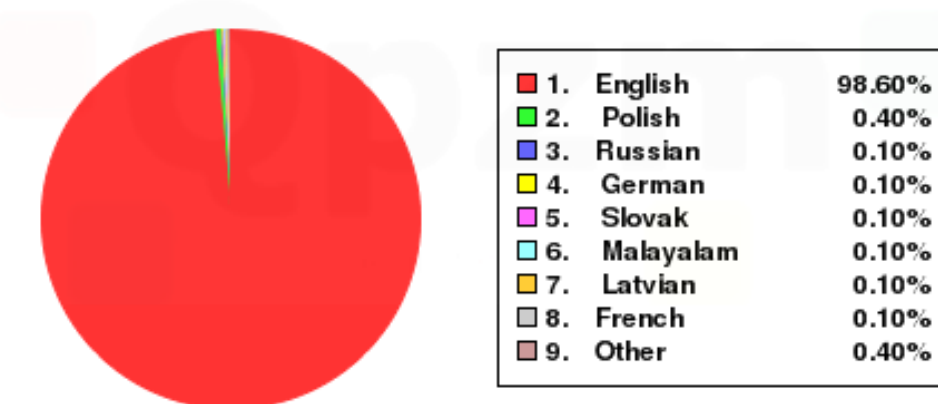
In the 2011 census the population of Hambleton was 89,140 and is made up of approximately 51% females and 49% males.

The average age of people in Hambleton is 43, while the median age is higher at 46.

91.6% of people living in Hambleton were born in England. Other top answers for country of birth were 2.5% Scotland, 0.9% Wales, 0.5% Northern Ireland, 0.3% Ireland, 0.2% South Africa, 0.2% India, 0.2% United States, 0.1% Australia, 0.1% Hong Kong.



98.6% of people living in Hambleton speak English. The other top languages spoken are 0.4% Polish, 0.1% Russian, 0.1% German, 0.1% Slovak, 0.1% Malayalam, 0.1% Latvian, 0.1% French.



The religious make up of Hambleton is 72.6% Christian, 19.5% No religion, 0.3% Muslim, 0.2% Buddhist, 0.1% Hindu, 0.1% Jewish. 6,061 people did not state a religion. 158 people identified as a Jedi Knight and 4 people said they believe in Heavy Metal.

³⁰ <http://localstats.co.uk/census-demographics/england/yorkshire-and-the-humber/hambleton>



1. Christian	72.60%
2. No religion	19.50%
3. Muslim	0.30%
4. Buddhist	0.20%
5. Hindu	0.10%
6. Jewish	0.10%
7. Other	7.20%

56.3% of people are married, 9.8% cohabit with a member of the opposite sex, 0.5% live with a partner of the same sex, 17.9% are single and have never married or been in a registered same sex partnership, 7.2% are separated or divorced. There are 4,053 widowed people living in Hambleton.

The top occupations listed by people in Hambleton are Professional 17.2%, Skilled trades 14.6%, Associate professional and technical 13.5%, Managers, directors and senior officials 13.1%, Administrative and secretarial 10.6%, Elementary 10.4%, Caring, leisure and other service 8.4%, Corporate managers and directors 8.3%, Elementary administration and service 7.9%, Administrative 7.9%.

Harrogate³¹

Harrogate Borough is the least deprived district in North Yorkshire.

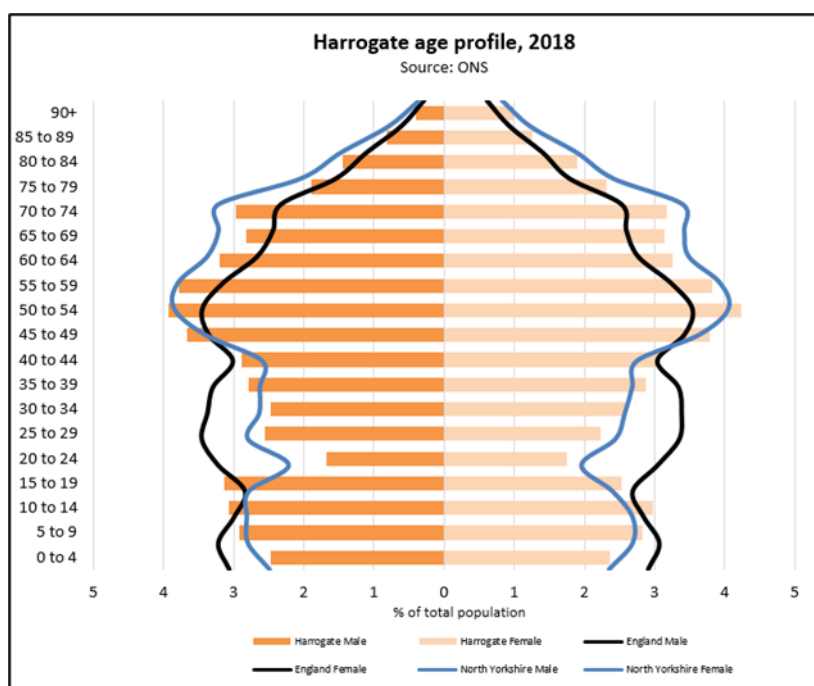
There is an 11-year gap in life expectancy between wards and eight wards where more than one-in-five children grows up in poverty.

The population in Harrogate Borough is ageing. By 2025, there will be 5,800 additional people aged 65+, a 16% increase from 2018, but a 3% decrease in the working-age population.

Smoking rates in Harrogate Borough are similar to England but highest among a group of similar areas. As the leading cause of preventable disease, it is important to continue efforts to minimise smoking.

The population pyramid shows that, overall, Harrogate Borough has an older population than England, with more residents between the ages of 45-89, and fewer aged under 45. Harrogate has proportionately more children and teenagers than North Yorkshire. The shape of the pyramid is typical of a population with long life expectancy and low birth rate. There are about 15,600 people aged 65+ with a limiting long-term illness. Of these people, 42% (6,600) report that their daily activities are limited a lot because of their illness (POPPI, 2019).

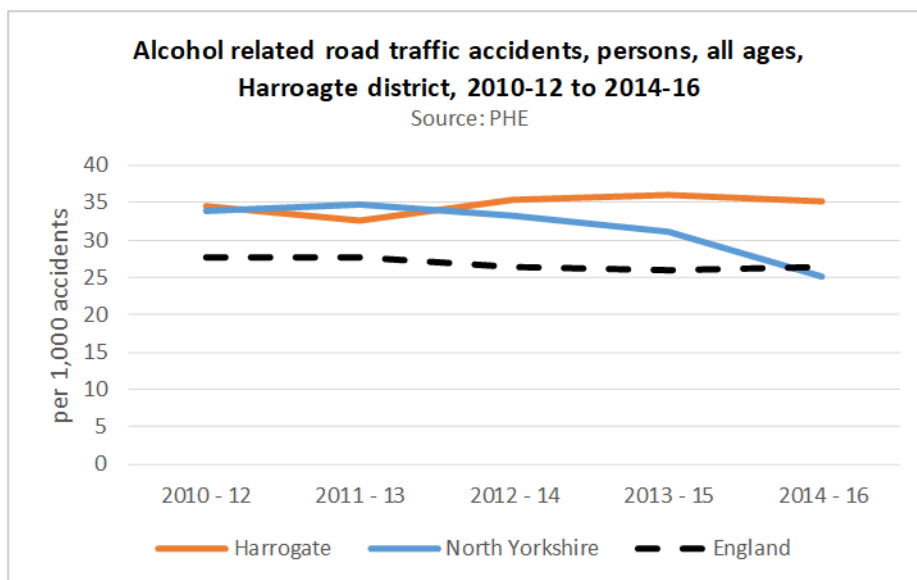
Approximately 4% of the population is from black, Asian and minority ethnic groups, compared with 2.8% in North Yorkshire and 15% in England.



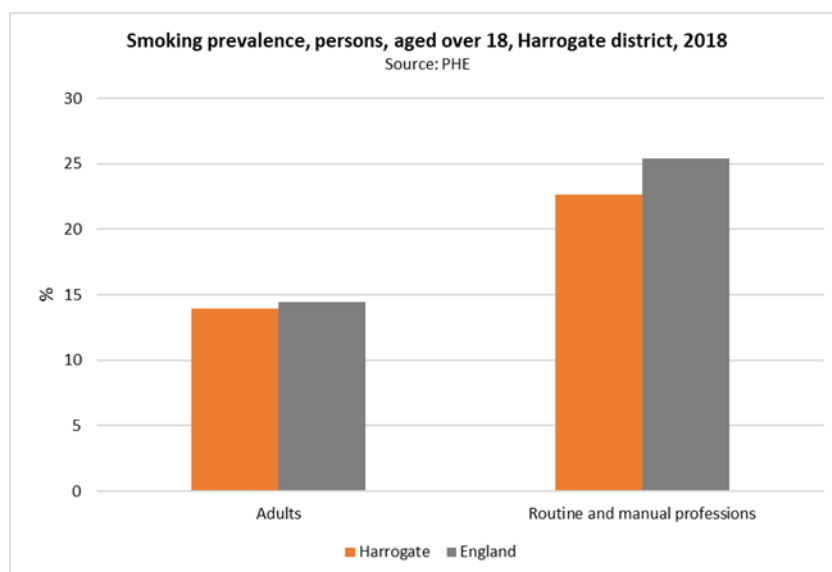
The rate of alcohol-related road traffic accidents in Harrogate has increased from 2011-13 and is similar to the county and national rates. The rate of people being killed and seriously injured (KSI) casualties on roads in Harrogate Borough is significantly higher than the national average at 74 per 100,000 population. Since 2012-14, the rate of people being killed and

³¹ <https://hub.datanorthyorkshire.org/dataset/8523672d-ba16-4d0f-851e-6286ddd60a3d/resource/895f2079-ff5c-43c4-ac6f-54cb8bd74c85/download/harrogate-2019.pdf>

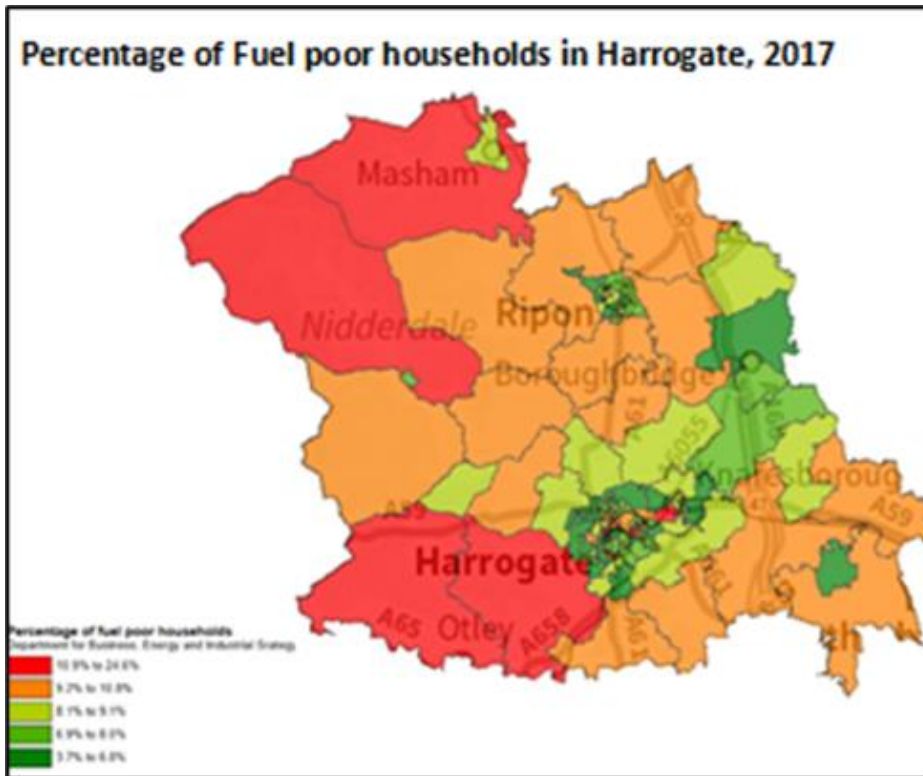
seriously injured on roads in Harrogate increased, and is now close to the North Yorkshire rate. However these are relatively small numbers and must be interpreted with caution.



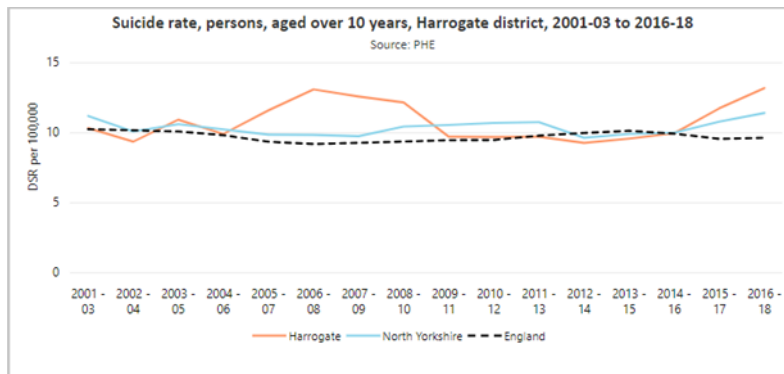
Smoking prevalence for adults in Harrogate is similar to England at about 14%. For adults in routine and manual professions, rates are higher than for the general population; the prevalence in Harrogate is 23%, not significantly different from England. The local rate has been relatively stable since 2013.



In 2017, 8% of households (5,703 households) in Harrogate were classified as fuel poor, lower than the national average (11%). Merely tackling poverty would not necessarily relieve the fuel poverty, as often housing type and access to affordable sources of energy are important. Tackling fuel poverty should in turn improve winter health, decreasing excess winter mortality and the pressure on the health and care system during the winter months.



The suicide rate in Harrogate Borough has increased between 2015-17 and 2016-18 and is significantly higher than England (13 per 100,000 locally; 10 per 100,000 nationally). The suicide rate for males is higher than females in Harrogate, in line with national trends.

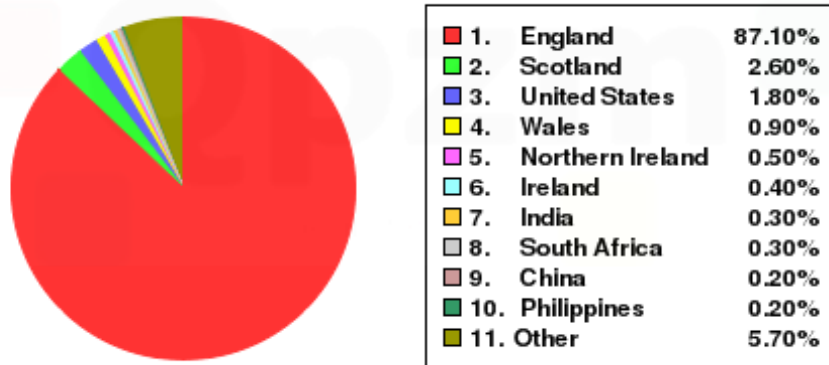


Population overview³²

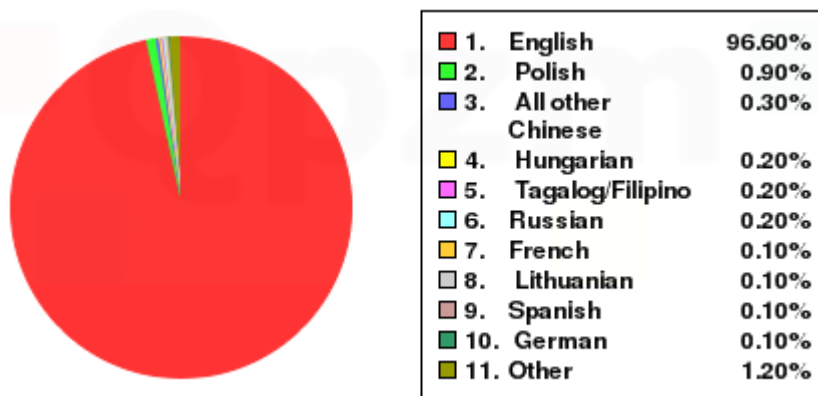
In the 2011 census the population of Harrogate was 157,869 and is made up of approximately 51% females and 49% males.

The average age of people in Harrogate is 42, while the median age is higher at 43.

87.1% of people living in Harrogate were born in England. Other top answers for country of birth were 2.6% Scotland, 1.8% United States, 0.9% Wales, 0.5% Northern Ireland, 0.4% Ireland, 0.3% India, 0.3% South Africa, 0.2% China, 0.2% Philippines.



96.6% of people living in Harrogate speak English. The other top languages spoken are 0.9% Polish, 0.3% All other Chinese, 0.2% Hungarian, 0.2% Tagalog/Filipino, 0.2% Russian, 0.1% French, 0.1% Lithuanian, 0.1% Spanish, 0.1% German.



The religious make up of Harrogate is 68.6% Christian, 22.5% No religion, 0.4% Muslim, 0.3% Buddhist, 0.2% Jewish, 0.1% Hindu, 0.1% Agnostic, 0.1% Sikh.

11,181 people did not state a religion. 430 people identified as a Jedi Knight and 19 people said they believe in Heavy Metal

³² <http://localstats.co.uk/census-demographics/england/yorkshire-and-the-humber/harrogate>



1.	Christian	68.60%
2.	No religion	22.50%
3.	Muslim	0.40%
4.	Buddhist	0.30%
5.	Jewish	0.20%
6.	Hindu	0.10%
7.	Agnostic	0.10%
8.	Sikh	0.10%
9.	Other	7.70%

53.3% of people are married, 10.5% cohabit with a member of the opposite sex, 0.8% live with a partner of the same sex, 19.3% are single and have never married or been in a registered same sex partnership, 8.4% are separated or divorced. There are 8,413 widowed people living in Harrogate.

The top occupations listed by people in Harrogate are Professional 18.3%, Managers, directors and senior officials 14.4%, Associate professional and technical 14.3%, Skilled trades 11.7%, Administrative and secretarial 10.7%, Elementary 9.5%, Corporate managers and directors 9.2%, Caring, leisure and other service 9.0%, Elementary administration and service 8.0%, Administrative 7.7%.

Richmondshire³³

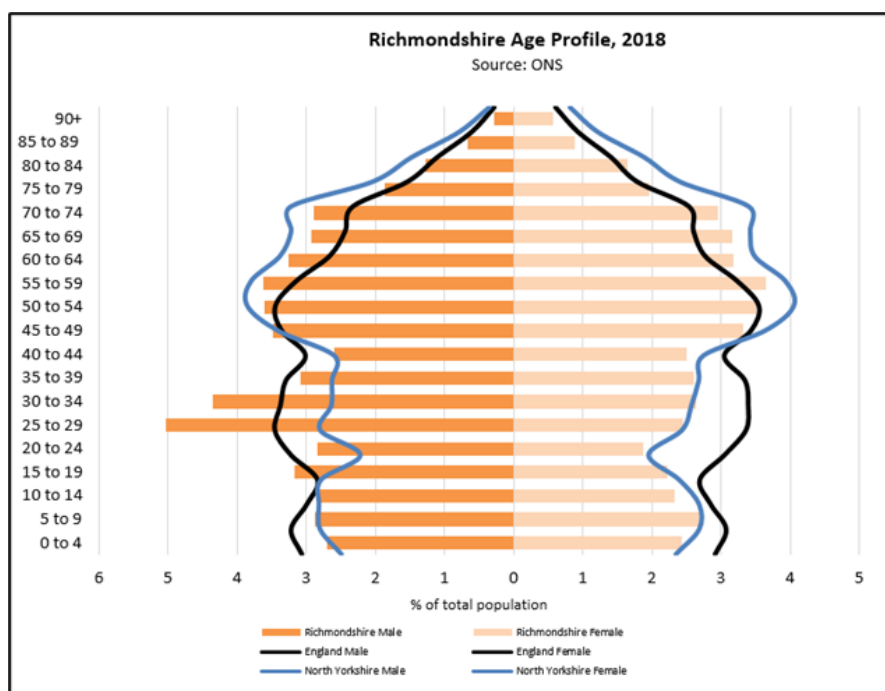
The population in Richmondshire is ageing. By 2025, there will be 1,800 additional people aged 65+, a 16% increase from 2018, but a 6% decrease in the working-age population (excluding planned expansion of military personnel).

There are three wards where more than one-quarter of children grow up in poverty: Colburn, Hipswell and Scotton.

Despite recent reductions, the rate of people being killed and seriously injured on Richmondshire's roads remains more than double the England average (nearly 50 casualties annually).

The population pyramid shows that Richmondshire district has an older population than England, with more residents between the ages of 50-84, and fewer aged under 45. The population is younger than North Yorkshire, with a notably 'spike' in young males due to the military presence. The pyramid is typical of a population with long life expectancy and low birth rate. There are about 5,000 people aged 65+ with a limiting long-term illness. Of these people, 40% (2,000) report that their daily activities are limited a lot because of their illness (POPPI, 2019).

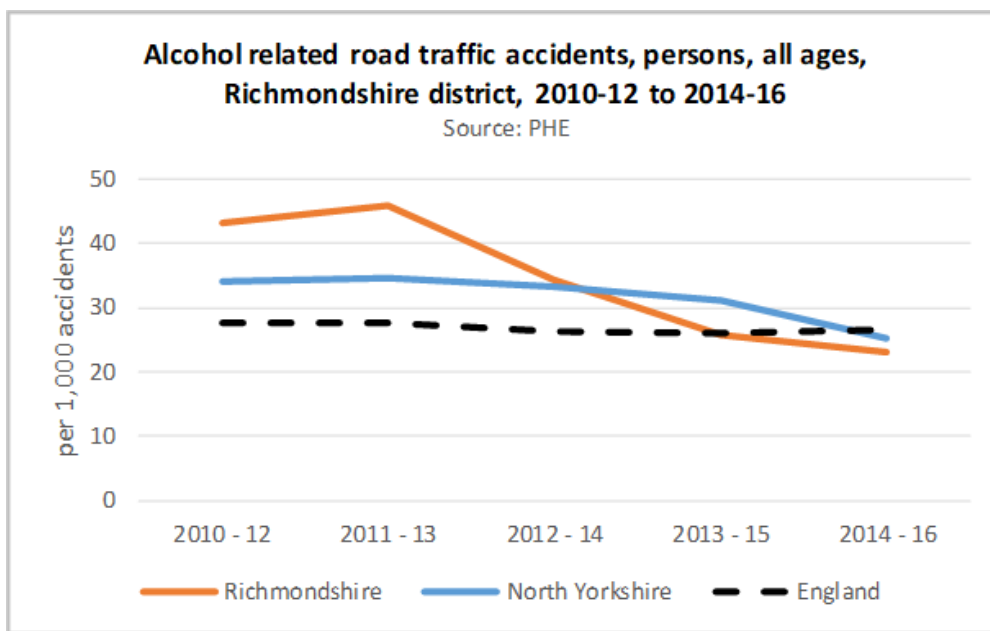
Richmondshire is the most ethnically diverse district of North Yorkshire; 4.7% of the population is from black, Asian and minority ethnic groups, compared with 2.8% in North Yorkshire and 15% in England.



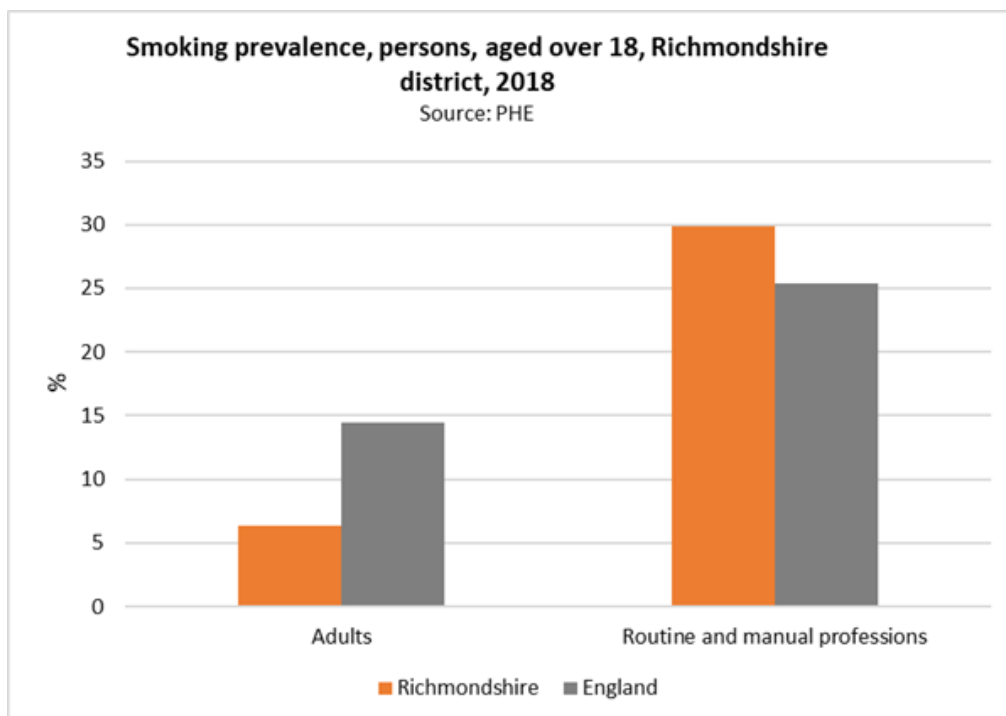
The rate of alcohol-related road traffic accidents in Richmondshire has decreased since 2011-13 and is similar compared the county and national rates. The rate of people being killed and seriously injured (KSI) casualties on roads in Richmondshire is significantly higher than the

³³ <https://hub.datanorthyorkshire.org/dataset/a04b1b75-47b0-4469-8265-3adf2431002e/resource/d09f3276-f893-471e-962f-85811f92c2f0/download/richmondshire-2019.pdf>

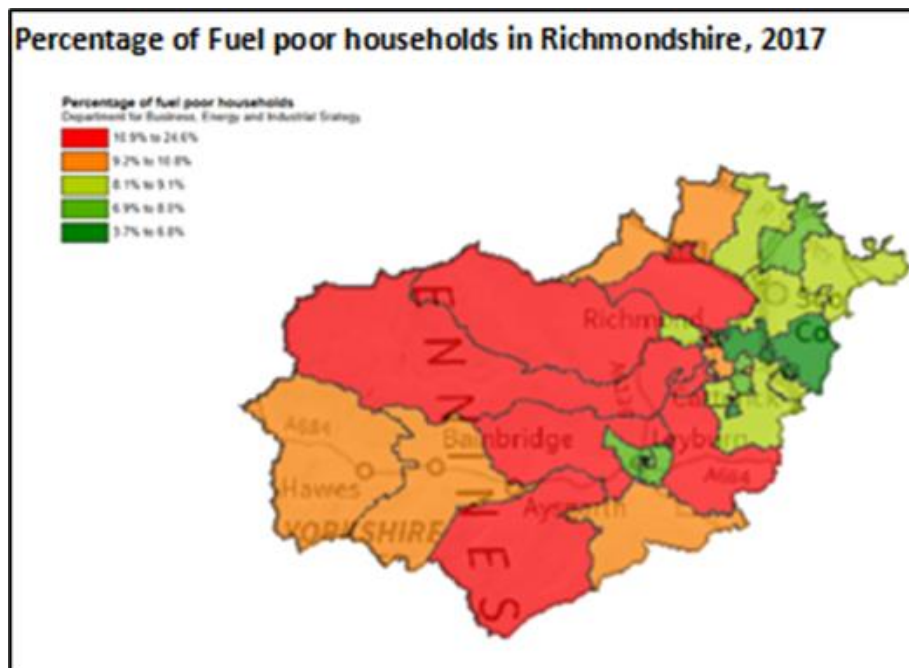
national average, at 88 per 100,000. Between 2014-16 and 2015-17 the rate has decreased in Richmondshire.



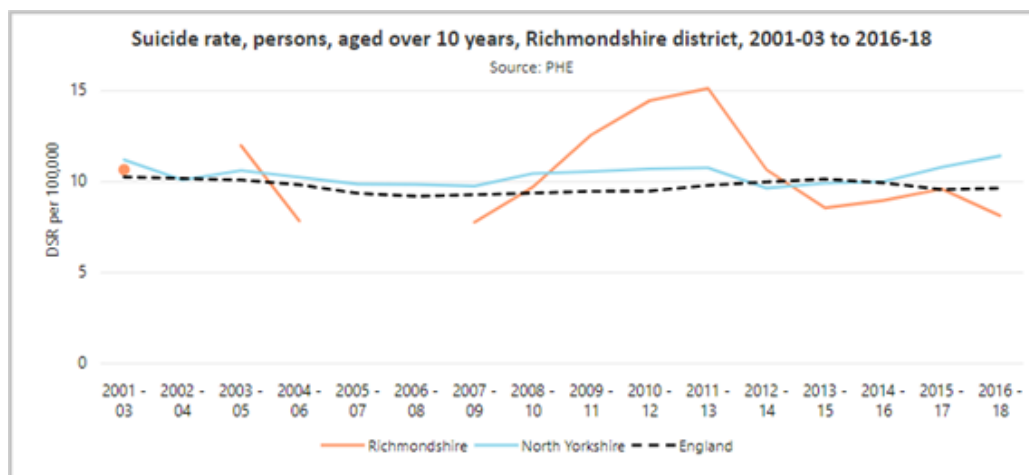
Smoking prevalence amongst adults in Richmondshire is lower than England, at 6% compared with 14% nationally. For adults in routine and manual professions, the smoking rate is higher than for the general population. For this group, the prevalence in Richmondshire is 30%, statistically similar to the 25% estimated for England. There is a slight, non-significant increase on the prevalence for the three previous years, where the rate was 17%.



Fuel poverty rates are an issue for Richmondshire which is linked to deprivation. In 2017, 9.5% of households (1,890 households) in Richmondshire were classified as fuel poor, lower than the national average (11.1%). Merely tackling poverty would not necessarily relieve the fuel poverty, as often housing type and access to affordable sources of energy are important. Tackling fuel poverty should in turn improve winter health, decreasing excess winter mortality and the pressure on the health and care system during the winter months.



The suicide rate in Richmondshire has decreased between 2015-17 and 2016-18 and the rate is similar to the England average (8 per 100,000 locally compared to 10 per 100,000 nationally). The suicide rate for males is higher than females in Richmondshire, in line with national rates. However, these are small numbers and should be interpreted with caution.



Population overview³⁴

In the 2011 census the population of Richmondshire was 51,965 and is made up of approximately 47% females and 53% males.

The average age of people in Richmondshire is 40, while the median age is also 40.

85.2% of people living in Richmondshire were born in England. Other top answers for country of birth were 4.1% Scotland, 1.2% Wales, 1.0% Northern Ireland, 0.3% Ireland, 0.3% South Africa, 0.2% Hong Kong, 0.2% United States, 0.2% India, 0.1% Australia.



1.	England	85.20%
2.	Scotland	4.10%
3.	Wales	1.20%
4.	Northern Ireland	1.00%
5.	Ireland	0.30%
6.	South Africa	0.30%
7.	Hong Kong	0.20%
8.	United States	0.20%
9.	India	0.20%
10.	Australia	0.10%
11.	Other	7.20%

96.6% of people living in Richmondshire speak English. The other top languages spoken are 1.6% Nepalese, 0.4% Polish, 0.2% Oceanic/Australian language, 0.1% German, 0.1% French, 0.1% African language, 0.1% Tagalog/Filipino.



1.	English	96.60%
2.	Nepalese	1.60%
3.	Polish	0.40%
4.	Oceanic/Australian language	0.20%
5.	German	0.10%
6.	French	0.10%
7.	African language	0.10%
8.	Tagalog/Filipino	0.10%
9.	Other	0.80%

The religious make up of Richmondshire is 69.4% Christian, 21.0% No religion, 1.0% Hindu, 0.7% Buddhist, 0.3% Muslim, 0.1% Agnostic, 0.1% Jewish. 3,581 people did not state a religion. 123 people identified as a Jedi Knight and 12 people said they believe in Heavy Metal.

³⁴ <http://localstats.co.uk/census-demographics/england/yorkshire-and-the-humber/richmondshire>



1. Christian	69.40%
2. No religion	21.00%
3. Hindu	1.00%
4. Buddhist	0.70%
5. Muslim	0.30%
6. Agnostic	0.10%
7. Jewish	0.10%
8. Other	7.40%

57.3% of people are married, 9.4% cohabit with a member of the opposite sex, 0.7% live with a partner of the same sex, 16.8% are single and have never married or been in a registered same sex partnership, 7.8% are separated or divorced. There are 2,271 widowed people living in Richmondshire.

The top occupations listed by people in Richmondshire are Associate professional and technical 24.4%, Protective service 16.9%, Skilled trades 14.1%, Managers, directors and senior officials 12.1%, Professional 11.8%, Elementary 10.7%, Elementary administration and service 8.7%, Administrative and secretarial 8.4%, Caring, leisure and other service 7.8%, Corporate managers and directors 7.3%.

<https://hub.datanorthyorkshire.org/dataset/e4bd8ccc-a236-4b6c-8f94-0bc8c5f169ce/resource/9237abde-f012-4355-ab79-3d2a2e21f898/download/ryedale-2019.pdf>

The population in Ryedale District is ageing. By 2025, there will be 2,000 additional people aged 65+, a 14% increase from 2018, but a static working-age population. This will lead to increased health and social care needs with no extra people available to work in health and care roles

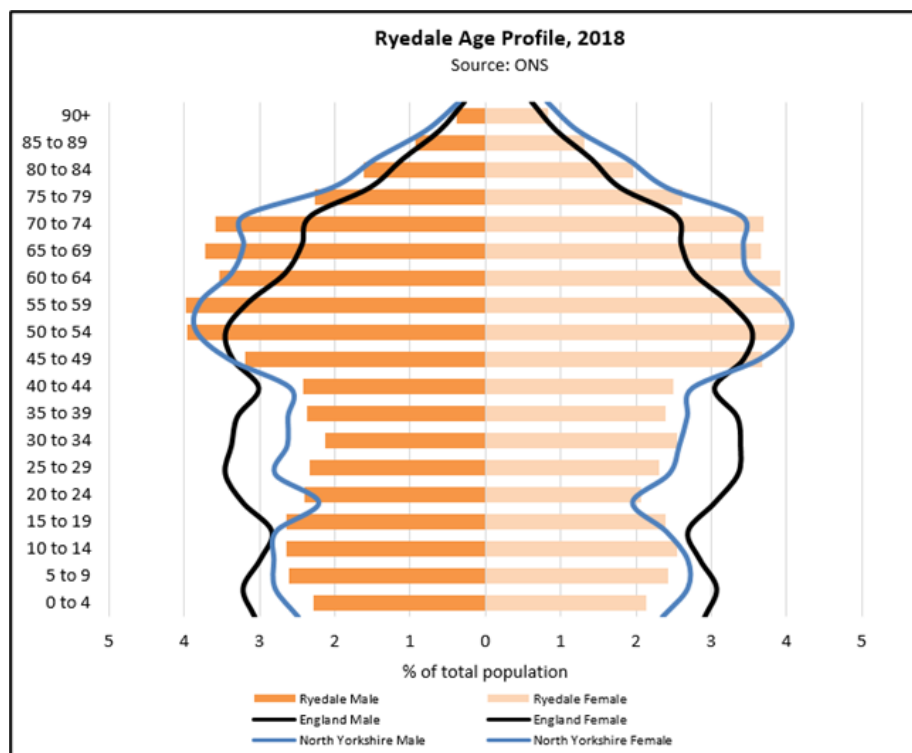
There are 9 wards where about one quarter of children are growing up in poverty, located along the A64 corridor and the Kirkbymoorside, Cropton and Dales wards

Despite recent reductions, the rate of people being killed and seriously injured on Ryedale’s roads remains at double the England average (about 45 casualties annually).

There are high rates of fuel poverty in parts of Ryedale, particularly in the most rural areas.

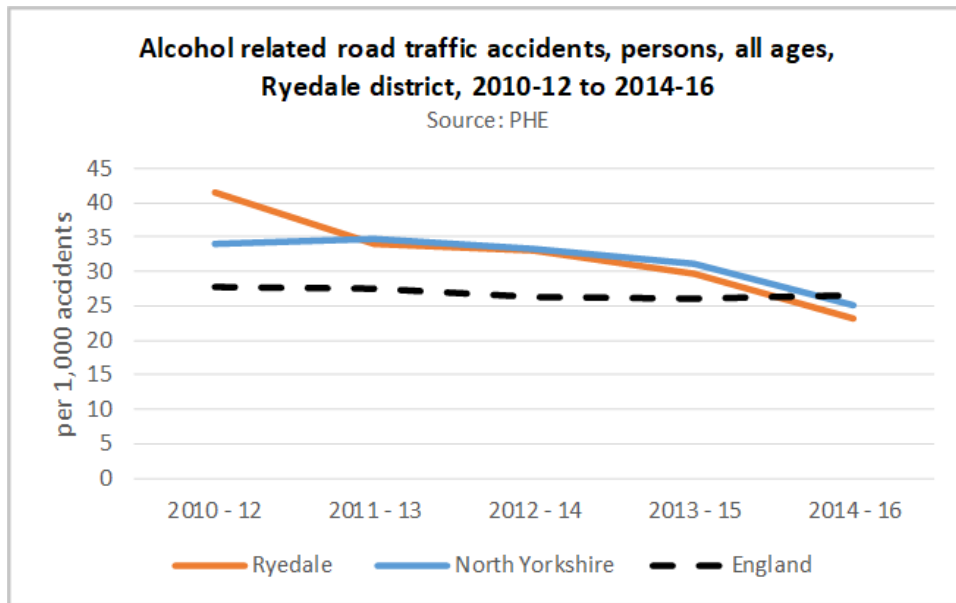
The population pyramid shows that, overall, Ryedale district has an older population than England, with more residents between the ages of 50-89, and fewer aged under 45. The population make-up is similar to North Yorkshire. The shape of the pyramid is typical of a population with long life expectancy and low birth rate. There are about 6,300 people aged 65+ with a limiting long-term illness. Of these people, 42% (2,600) report that their daily activities are limited a lot because of their illness (POPPI, 2019).

1.7% of the population is from black, Asian and minority ethnic groups, compared with 2.8% in North Yorkshire and 15% in England.

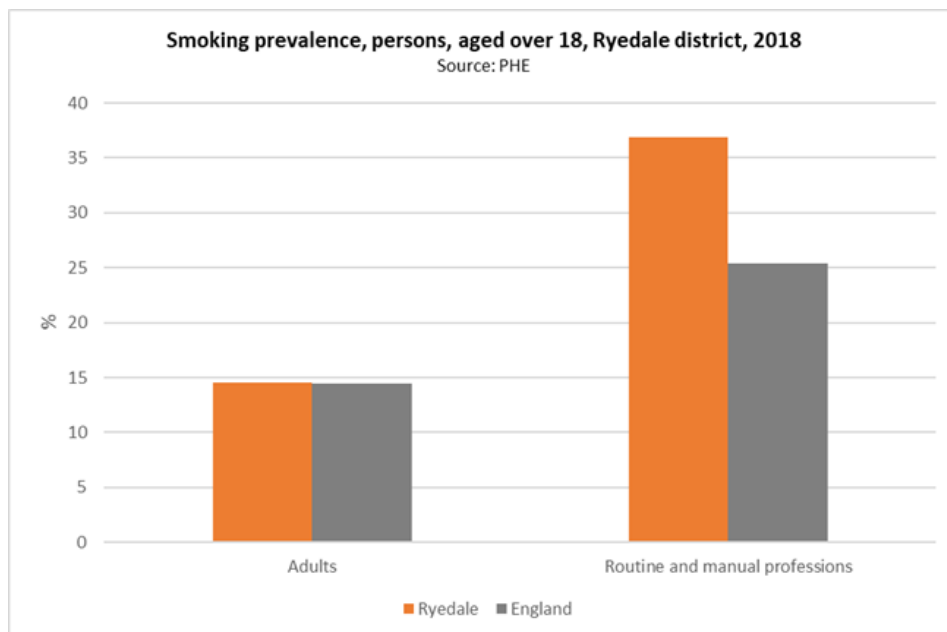


³⁵<https://hub.datanorthyorkshire.org/dataset/e4bd8ccc-a236-4b6c-8f94-0bc8c5f169ce/resource/9237abde-f012-4355-ab79-3d2a2e21f898/download/ryedale-2019.pdf>

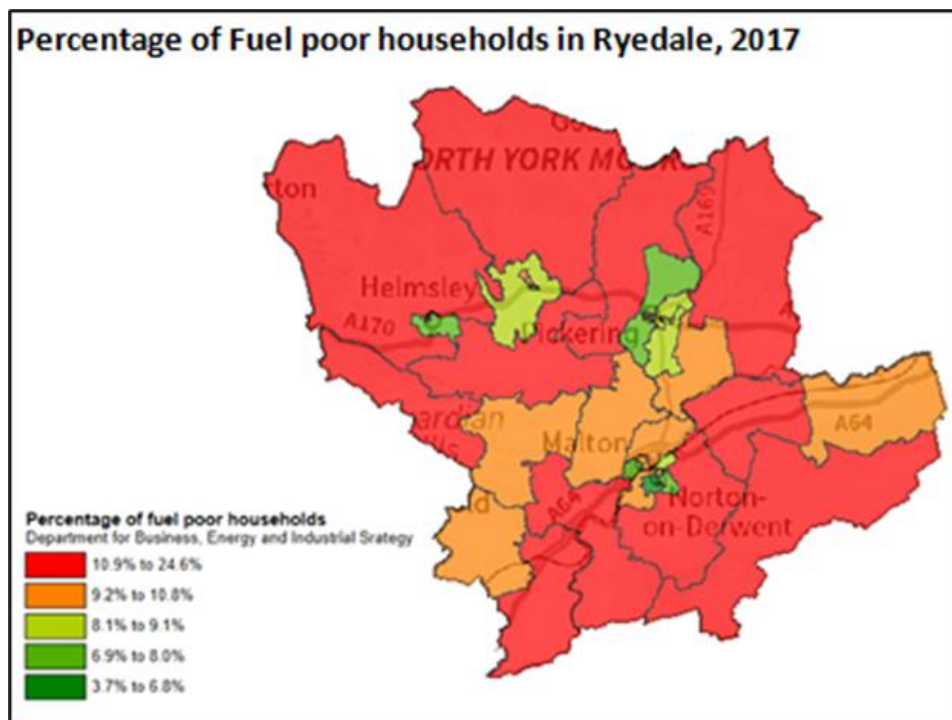
The rate of alcohol-related road traffic accidents in Ryedale has decreased since 2011-13 and is similar to county and national rates. The rate of people being killed and seriously injured (KSI) casualties on roads in Ryedale is significantly higher than the national average at 85 per 100,000.



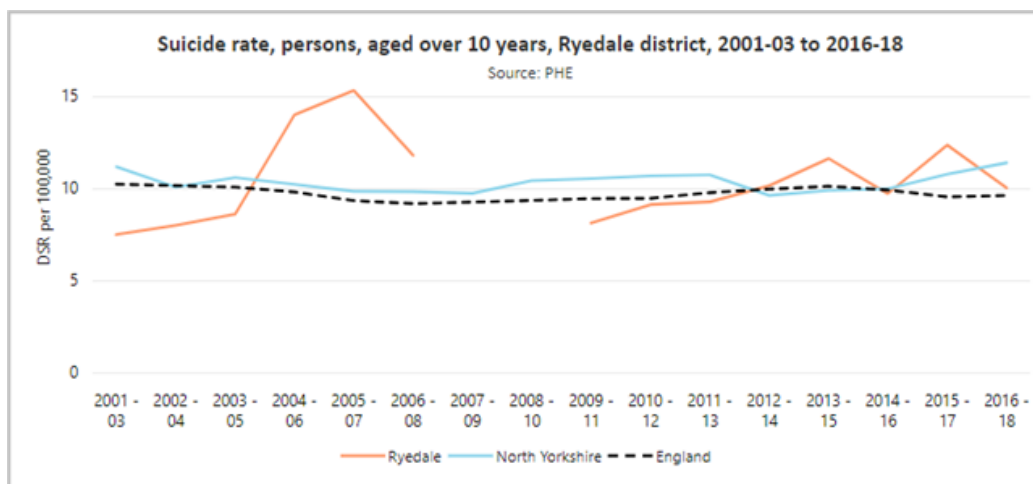
Smoking prevalence for adults in Ryedale is similar to England, at 14.6% compared with 14.5% nationally. For adults in routine and manual professions, smoking rates are higher than for the general population; in Ryedale the prevalence is 37%.



Fuel poverty rates are an issue for Ryedale which is linked to deprivation. In 2017, 10% of households (2,334 households) in Ryedale were classified as fuel poor, similar to the national average (11.1%). Merely tackling poverty would not necessarily relieve the fuel poverty, as often housing type and access to affordable sources of energy are important.



The suicide rate in Ryedale decreased from 2015-17 to 2016-18 and is similar to England (10.1 per 100,000 locally; 9.6 per 100,000 nationally). The suicide rate for males is higher than females in Ryedale, in line with national rates. However, these are small numbers and should be interpreted with caution.



Population overview³⁶

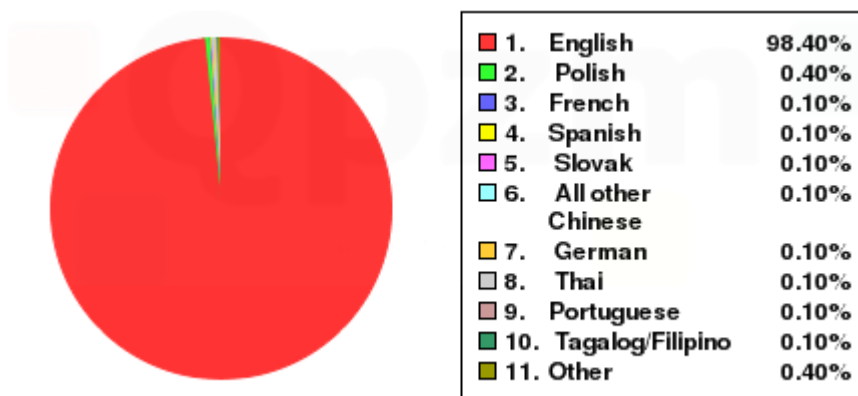
In the 2011 census the population of Ryedale was 51,751 and is made up of approximately 51% females and 49% males.

The average age of people in Ryedale is 45, while the median age is higher at 47.

93.3% of people living in Ryedale were born in England. Other top answers for country of birth were 1.7% Scotland, 0.6% Wales, 0.4% Ireland, 0.3% Northern Ireland, 0.2% United States, 0.2% South Africa, 0.1% Australia, 0.1% Philippines, 0.1% Kenya.



98.4% of people living in Ryedale speak English. The other top languages spoken are 0.4% Polish, 0.1% French, 0.1% Spanish, 0.1% Slovak, 0.1% All other Chinese, 0.1% German, 0.1% Thai, 0.1% Portuguese, 0.1% Tagalog/Filipino.



The religious make up of Ryedale is 71.8% Christian, 19.7% No religion, 0.2% Buddhist, 0.1% Muslim. 3,823 people did not state a religion. 114 people identified as a Jedi Knight and 4 people said they believe in Heavy Metal.

³⁶ <http://localstats.co.uk/census-demographics/england/yorkshire-and-the-humber/ryedale>



1. Christian	71.80%
2. No religion	19.70%
3. Buddhist	0.20%
4. Muslim	0.10%
5. Other	8.20%

54.7% of people are married, 10.7% cohabit with a member of the opposite sex, 0.4% live with a partner of the same sex, 18.0% are single and have never married or been in a registered same sex partnership, 7.3% are separated or divorced. There are 2,385 widowed people living in Ryedale.

The top occupations listed by people in Ryedale are Skilled trades 19.0%, Professional 14.1%, Managers, directors and senior officials 12.5%, Elementary 12.2%, Caring, leisure and other service 9.2%, Administrative and secretarial 9.2%, Associate professional and technical 9.2%, Elementary administration and service 8.6%, Process, plant and machine operatives 8.3%, Caring personal service 6.7%.

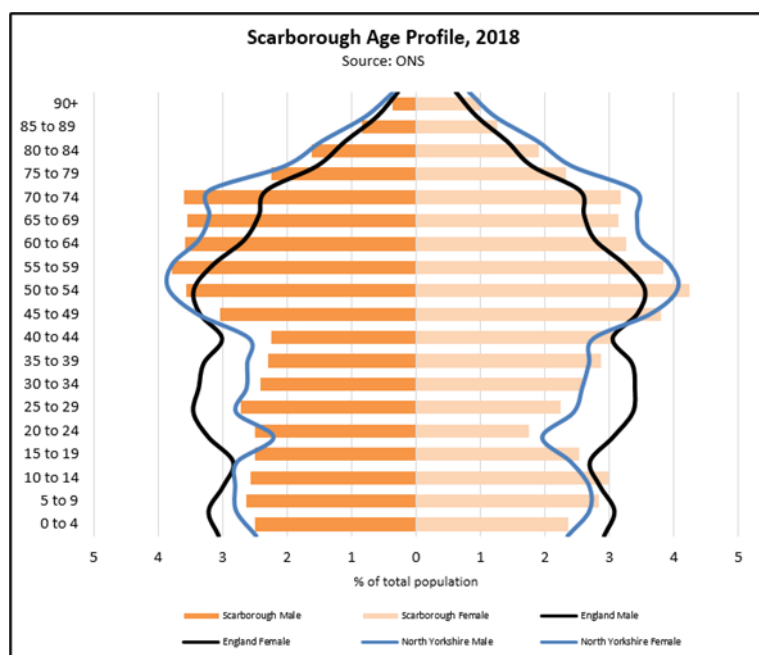
Scarborough³⁷

Scarborough Borough is the most deprived district within North Yorkshire and has three quarters of the county's most deprived areas. Material deprivation has a significant impact on population health, with inequality in outcomes apparent. There are ten wards where more than one-third of children grow up in poverty.

The population in Scarborough is ageing. By 2025, there will be 3,300 additional people aged 65+, an 11% increase from 2018, but a 4% decrease in the working-age population. This will lead to increased health and social care needs with fewer people available to work in health and care roles.

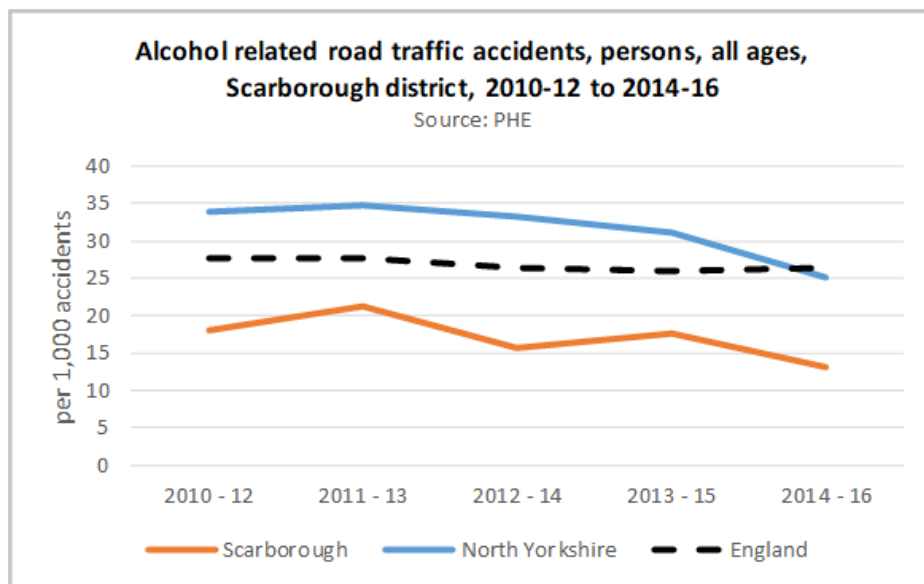
The population pyramid shows that, overall, Scarborough Borough has an older population than England, with more residents aged of 50-89, and fewer aged under 45. The population make-up is broadly similar to North Yorkshire, but there are noticeably fewer females aged 20-29 in Scarborough. The shape of the pyramid is typical of a population with long life expectancy and low birth rate. There are about 14,500 people aged 65+ with a limiting long-term illness. Of these people, 46% (6,700) report that their daily activities are limited a lot because of their illness (POPPI, 2019).

2.5% of the population is from black, Asian and minority ethnic groups, compared with 2.8% in North Yorkshire and 15% in England.

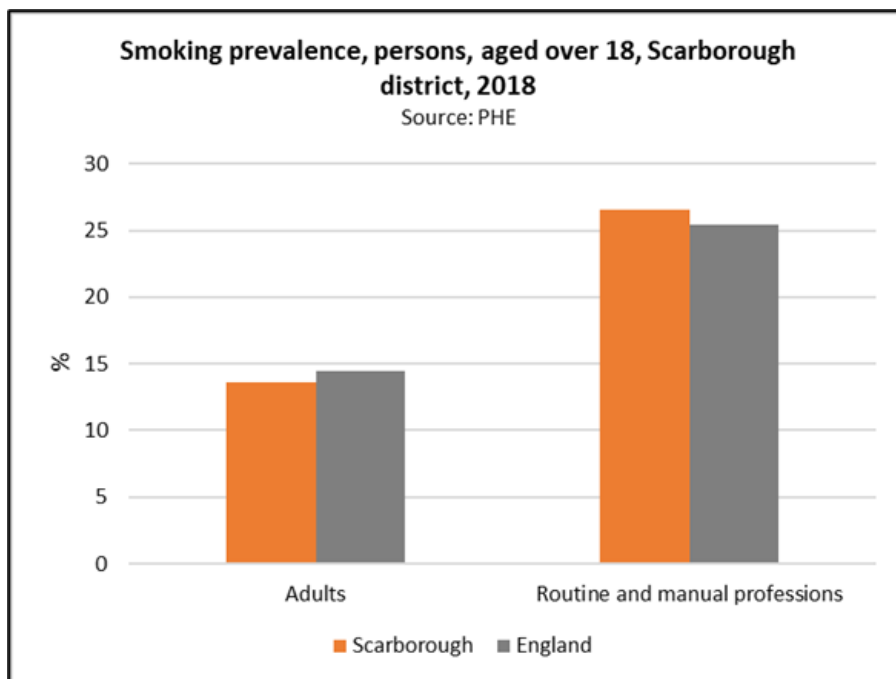


³⁷ <https://hub.datanorthyorkshire.org/dataset/1b3c5919-edec-4154-96a9-68a68991baad/resource/e67cbea9-2934-4133-9840-467d41469f91/download/scarborough-profile-2019.pdf>

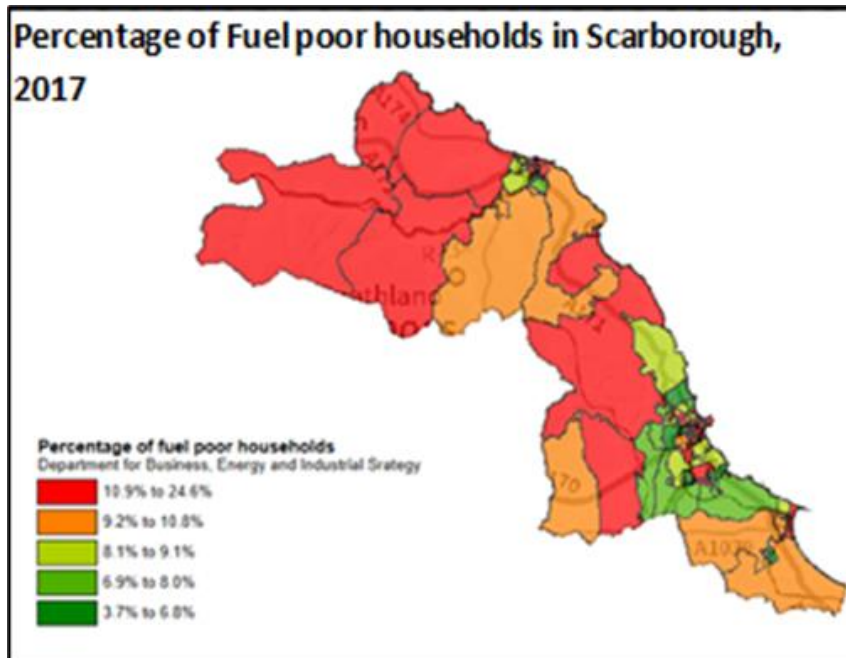
The rate of alcohol-related road traffic accidents in Scarborough has decreased since 2011-13 and is significantly lower than county and national rates. Scarborough is the only district in North Yorkshire with a rate is significantly lower than England. The rate of people being killed and seriously injured (KSI) on roads in Scarborough is similar to the national average at 44per 100,000. The trend has been consistently reducing, narrowing the gap between Scarborough and England. However these are relatively small numbers and must be interpreted with caution



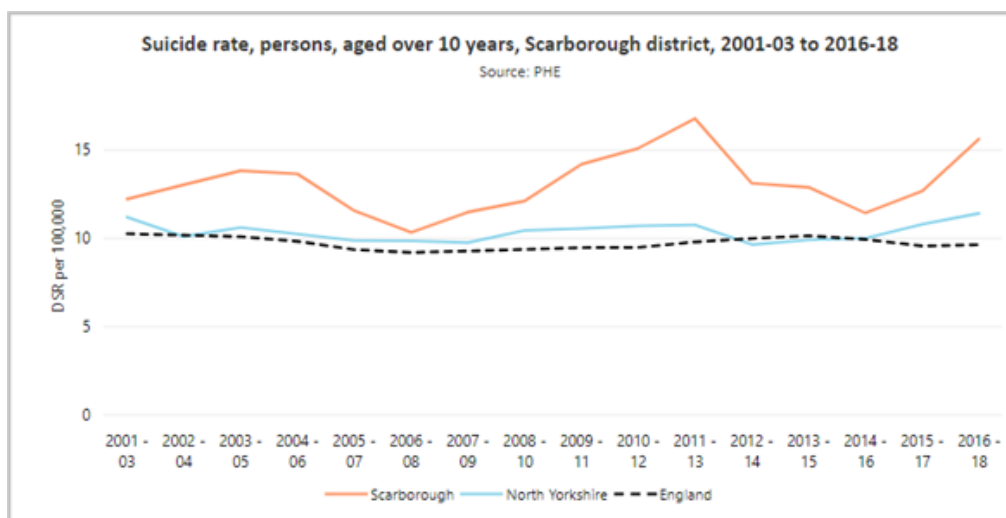
Smoking prevalence for adults in Scarborough is similar to England, at 13.6% compared with 14.5% nationally. For adults in routine and manual professions, smoking rates are higher than for the general population; prevalence in Scarborough is 27%, similar to England 25%. This is a decrease from the 2017 estimate, although not statistically significant, but suggesting a local reduction in the number of smokers in routine and manual professions.



Fuel poverty rates are an issue for Scarborough which is linked to deprivation. In 2017, 12% of households (5,907 households) in Scarborough were classified as fuel poor, slightly higher than the national average (11%). Merely tackling poverty would not necessarily relieve the fuel poverty, as often housing type and access to affordable sources of energy are important.



The suicide rate in Scarborough has increased between 2015-17 and 2016-18 and the rate is significantly higher than England average (16 per 100,000 locally compared to 9.6 per 100,000 nationally). The suicide rate for males is higher than females in Scarborough and this is in line with national trends.

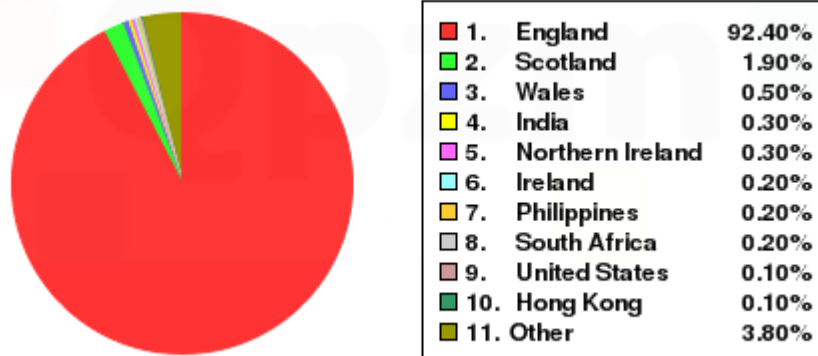


Population overview³⁸

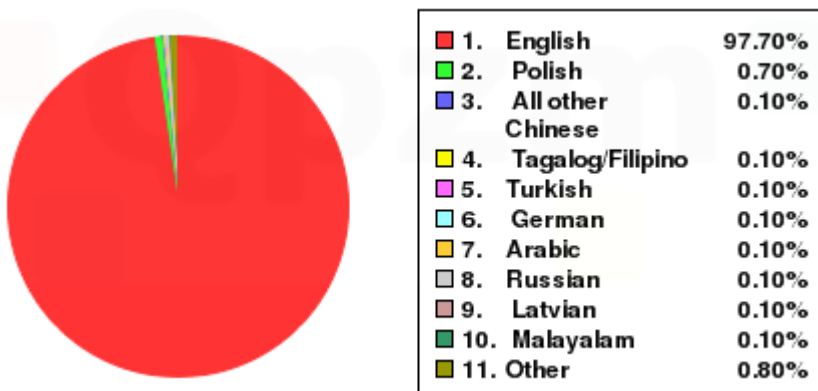
In the 2011 census the population of Scarborough was 108,793 and is made up of approximately 52% females and 48% males.

The average age of people in Scarborough is 44, while the median age is higher at 46.

92.4% of people living in Scarborough were born in England. Other top answers for country of birth were 1.9% Scotland, 0.5% Wales, 0.3% India, 0.3% Northern Ireland, 0.2% Ireland, 0.2% Philippines, 0.2% South Africa, 0.1% United States, 0.1% Hong Kong



97.7% of people living in Scarborough speak English. The other top languages spoken are 0.7% Polish, 0.1% All other Chinese, 0.1% Tagalog/Filipino, 0.1% Turkish, 0.1% German, 0.1% Arabic, 0.1% Russian, 0.1% Latvian, 0.1% Malayalam.



The religious make up of Scarborough is 66.7% Christian, 24.1% No religion, 0.5% Muslim, 0.3% Buddhist, 0.2% Hindu, 0.1% Jewish. 8,094 people did not state a religion. 349 people identified as a Jedi Knight and 6 people said they believe in Heavy Metal.

³⁸ <http://localstats.co.uk/census-demographics/england/yorkshire-and-the-humber/scarborough>



1.	Christian	66.70%
2.	No religion	24.10%
3.	Muslim	0.50%
4.	Buddhist	0.30%
5.	Hindu	0.20%
6.	Jewish	0.10%
7.	Other	8.10%

47.8% of people are married, 11.3% cohabit with a member of the opposite sex, 0.8% live with a partner of the same sex, 20.8% are single and have never married or been in a registered same sex partnership, 9.8% are separated or divorced. There are 6,875 widowed people living in Scarborough.

The top occupations listed by people in Scarborough are Skilled trades 15.8%, Elementary 13.9%, Professional 12.8%, Managers, directors and senior officials 11.9%, Elementary administration and service 11.7%, Caring, leisure and other service 10.7%, Sales and customer service 9.3%, Associate professional and technical 8.6%, Administrative and secretarial 8.6%, Sales 8.5%.

Selby

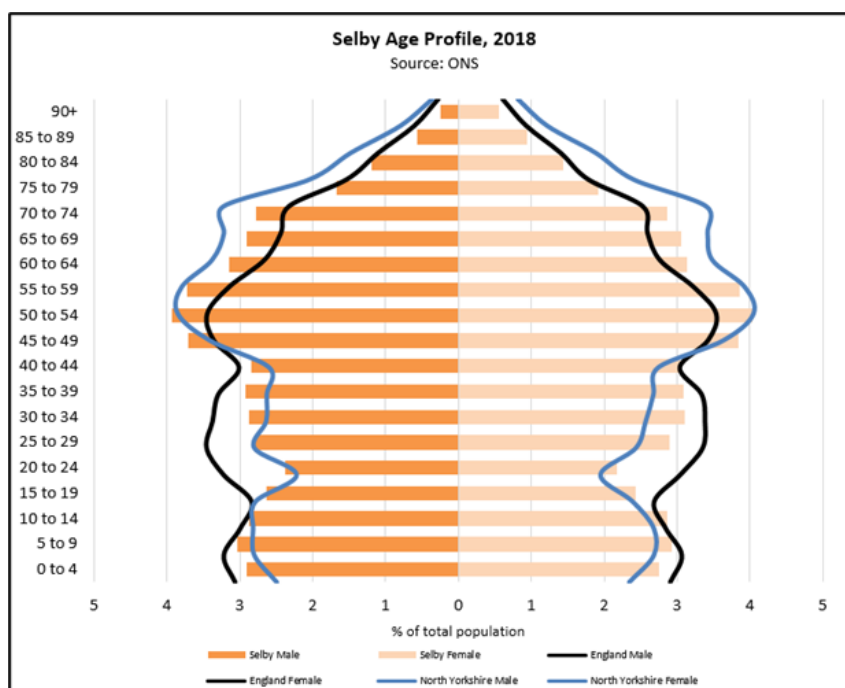
The population in Selby District is ageing. By 2025, there will be 3,300 additional people aged 65+, a 19% increase from 2018, but an unchanged working-age population. This will lead to increased health and social care needs with no extra people available to work in health and care roles.

Selby District has the second highest health inequality in North Yorkshire. Life expectancy varies by 9 years between wards. The main causes of death underlying this inequality are circulatory disease and cancer.

In Selby South and Selby North wards, about one third of children grow up in poverty.

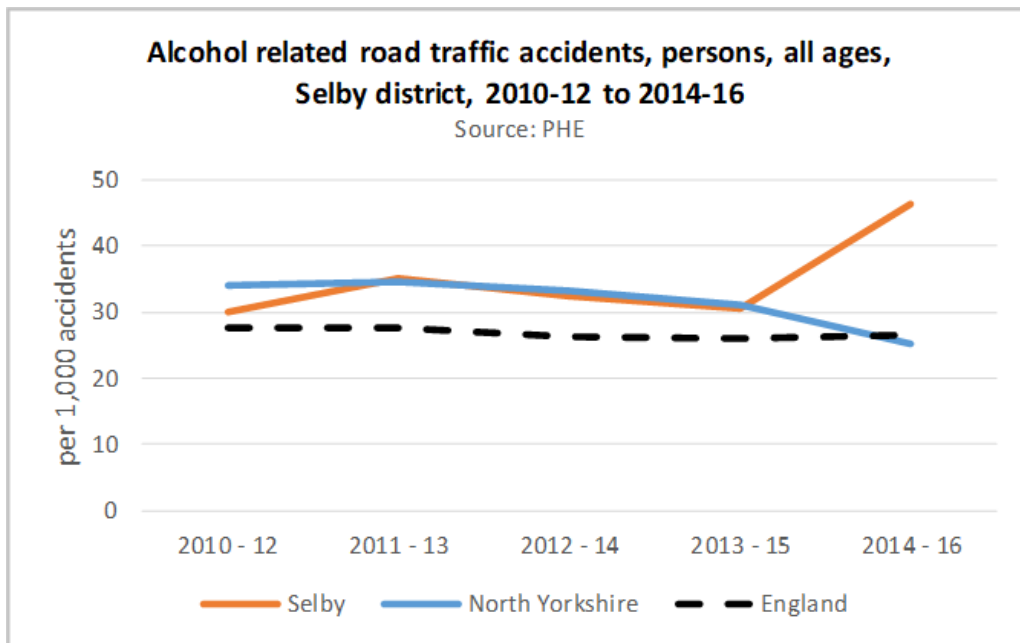
The population pyramid shows that, overall, the population in Selby district is generally older than England, with more residents between the ages of 45 -74, and fewer aged under 45. The population make-up is broadly similar to North Yorkshire. The shape of the pyramid is typical of a population with long life expectancy and low birth rate. There are about 8,600 people aged 65+ with a limiting long-term illness. Of these people, 46% (4,000) report that their daily activities are limited a lot because of their illness (POPPI, 2019).

1.8% of the population is from black, Asian and minority ethnic groups, compared with 2.8% in North Yorkshire and 15% in England.

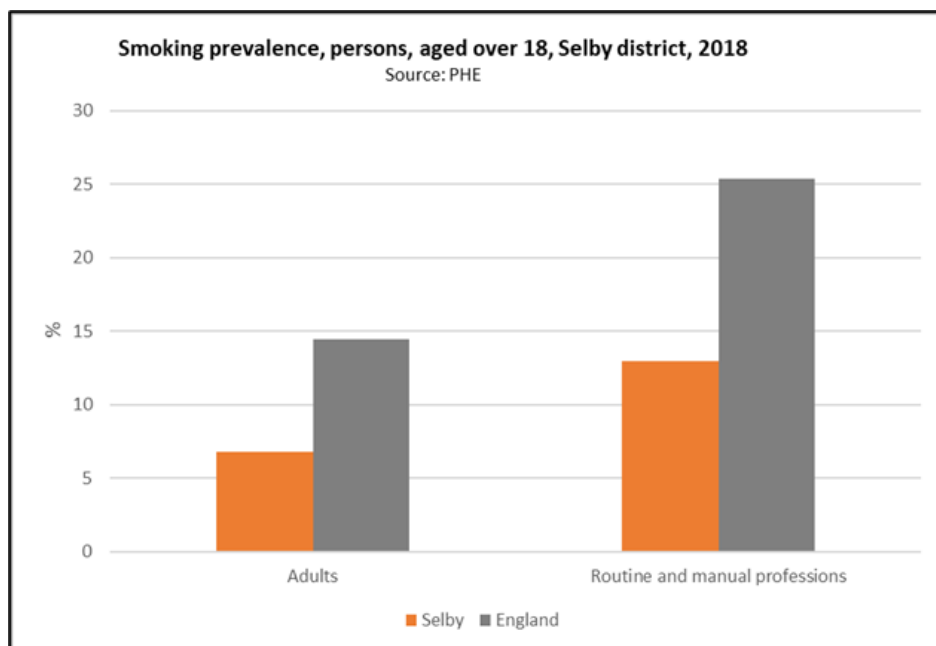


Alcohol consumption is responsible for around one in every seven deaths in reported road traffic accidents in Great Britain. The rate of alcohol-related road traffic accidents in Selby has increased between 2013-15 and 2014-16 and is significantly higher than county and national rates. Selby is the only district in North Yorkshire with a rate significantly higher than England. The chart shows the rate of people being killed and seriously injured (KSI) casualties on roads in Selby District is significantly higher than the national average at 51 per 100,000. However these are relatively small numbers and must be interpreted with caution. Across North Yorkshire, the rate of children killed and seriously injured on England's roads has decreased

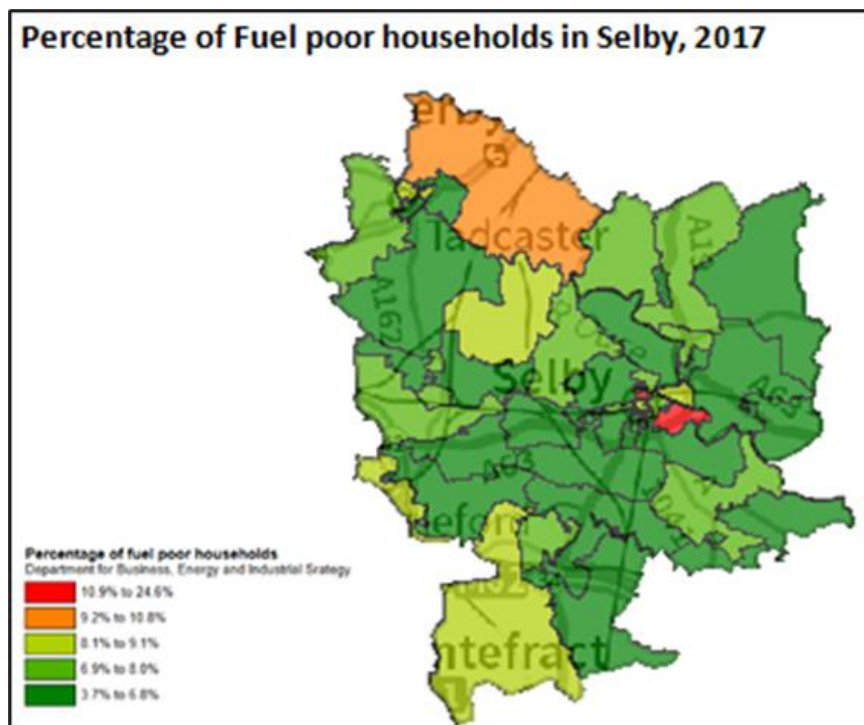
between 2014-16 and 2015-17 (from 19 per 100,000 to 18 per 100,000) and is now similar to the England average (17 per 100,000).



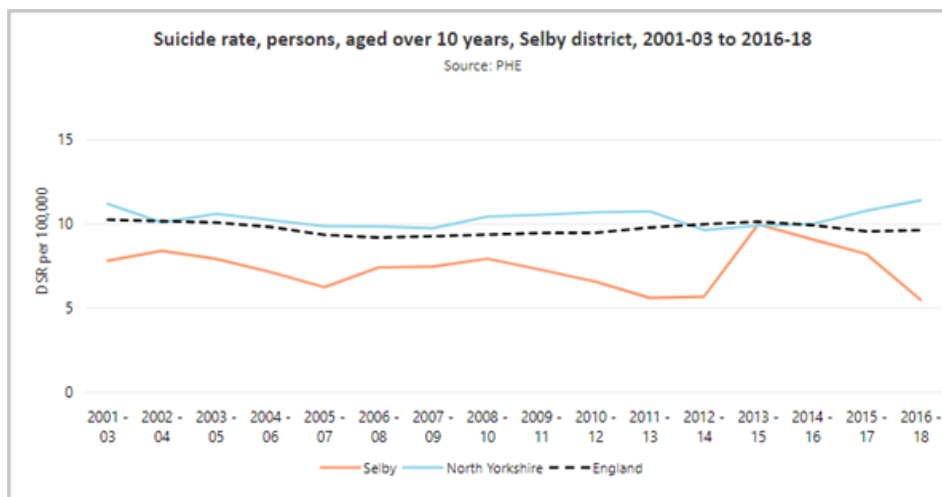
Smoking prevalence for adults in Selby District is lower than England (7% and 14%, respectively). For adults in routine and manual professions, smoking rates are higher than for the general population; the prevalence in Selby District is 13%, which is not statistically significantly different to 25% for England, due to small sample sizes in this survey. Smoking rates in this group have tended to decline since 2014.



Fuel poverty rates are an issue for Selby District which is linked to deprivation. In 2017, 7.1% of households (2,530 households) in Selby District were classified as fuel poor, lower than the national average (11%). Merely tackling poverty would not necessarily relieve the fuel poverty, as often housing type and access to affordable sources of energy are important.



The suicide rate in Selby has decreased between 2015-17 and 2016-18 and the rate is similar to the England average (5.5 per 100,000 locally compared to 9.6 per 100,000 nationally). The suicide rate for males is higher than females in Selby and this is in line with national trends. However, these are small numbers and should be interpreted with caution.



Population Overview³⁹

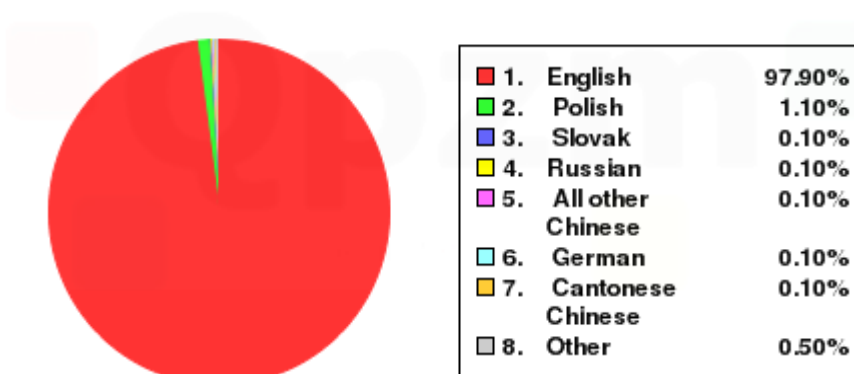
In the 2011 census the population of Selby was 83,449 and is made up of approximately 51% females and 49% males.

The average age of people in Selby is 41, while the median age is higher at 42.

93.0% of people living in Selby were born in England. Other top answers for country of birth were 1.7% Scotland, 0.7% Wales, 0.3% Ireland, 0.3% Northern Ireland, 0.2% South Africa, 0.1% India, 0.1% Australia, 0.1% United States, 0.1% Hong Kong.

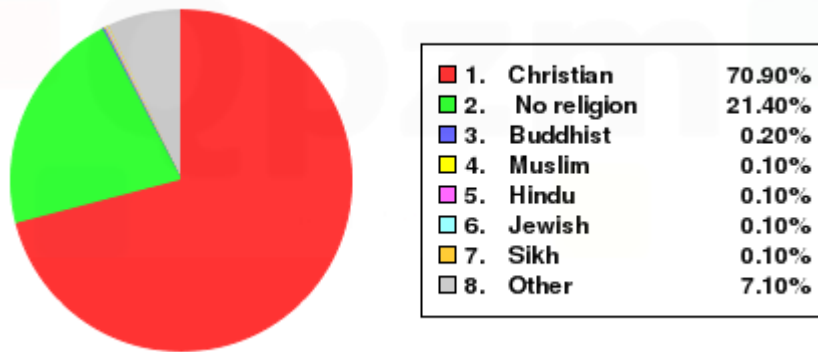


97.9% of people living in Selby speak English. The other top languages spoken are 1.1% Polish, 0.1% Slovak, 0.1% Russian, 0.1% All other Chinese, 0.1% German, 0.1% Cantonese Chinese.



³⁹ <http://localstats.co.uk/census-demographics/england/yorkshire-and-the-humber/selby>

The religious make up of Selby is 70.9% Christian, 21.4% No religion, 0.2% Buddhist, 0.1% Muslim, 0.1% Hindu, 0.1% Jewish, 0.1% Sikh. 5,565 people did not state a religion. 179 people identified as a Jedi Knight and 2 people said they believe in Heavy Metal.



54.6% of people are married, 12.3% cohabit with a member of the opposite sex, 0.7% live with a partner of the same sex, 18.3% are single and have never married or been in a registered same sex partnership, 7.4% are separated or divorced. There are 3,814 widowed people living in Selby.

The top occupations listed by people in Selby are Professional 15.4%, Skilled trades 12.6%, Managers, directors and senior officials 12.3%, Associate professional and technical 11.8%, Administrative and secretarial 11.4%, Elementary 10.7%, Process, plant and machine operatives 9.2%, Caring, leisure and other service 8.8%, Administrative 8.4%, Elementary administration and service 8.4%.

City of York⁴⁰

York has 209,893 residents with 5.7% from a black and minority ethnic community group. 83.9% are in good health, with 15.3% stating that they have some limitation in day-to-day activities.

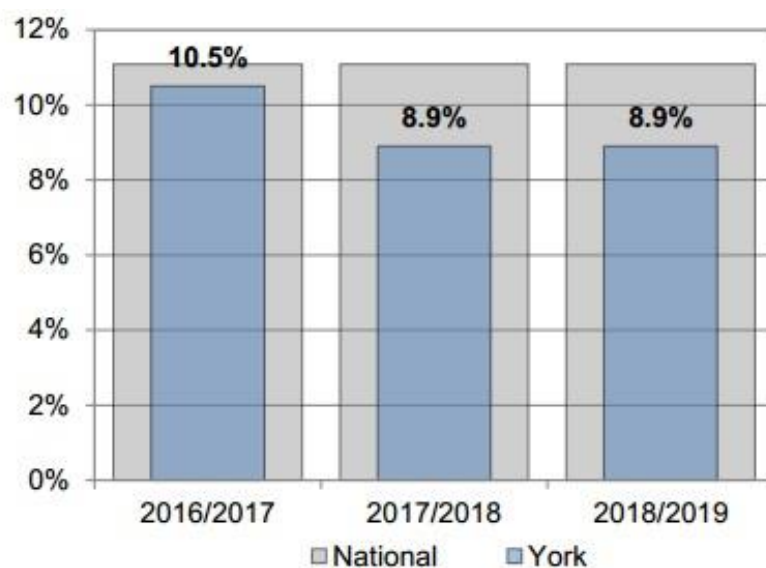
- 66% own their own home, either outright or with a mortgage, 18% are private renters and 14% are social tenants. There are 7,540 Council Houses in York.
- 12.4% of children are in child poverty (7.7% of children live in a household where a parent or guardian claims an out-of-work benefit) and there are 8.9% of households in fuel poverty.
- 3.6% of the working population (aged 16-64) claim out of work benefits (either Job Seekers Allowance or Universal Credit)

Fuel Poverty

The Low-Income High Costs indicator is a twin indicator consisting of

- the number of households that have both low incomes and high fuel costs
- the depth of fuel poverty amongst these fuel poor households.

This is measured through a fuel poverty gap which represents the difference between the required fuel costs for each household and the median required fuel costs.



Source: Department for Business, Energy & Industrial Strategy

⁴⁰ <https://data.yorkopendata.org/dataset/2a844263-5c89-4fe1-95e9-ee5ae289598d/resource/a1104827-9bcb-4582-a1ba-e075bb1175ac/download/york-profile.pdf>

Smoking⁴¹

General population

11.50% population smoke 2018-19. This has fallen from 18.72% in 2013-14.

18.6% of routine and manual workers smoked in 2018-19 falling to 34.4% in 2013-14.

Suicide Rate ⁴²

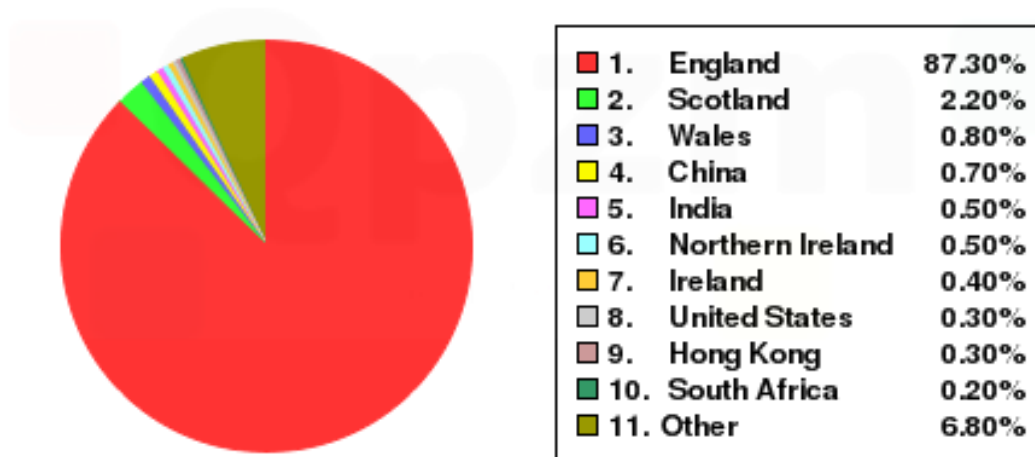
In 2018-19 suicide rate in the City of York district was 11.90 per 100 000, which is higher than the national average of 9.6 per 100 000

Population overview ⁴³

In the 2011 census the population of York was 198,051 and is made up of approximately 51% females and 49% males.

The average age of people in York is 40, while the median age is lower at 38.

87.3% of people living in York were born in England. Other top answers for country of birth were 2.2% Scotland, 0.8% Wales, 0.7% China, 0.5% India, 0.5% Northern Ireland, 0.4% Ireland, 0.3% United States, 0.3% Hong Kong , 0.2% South Africa.

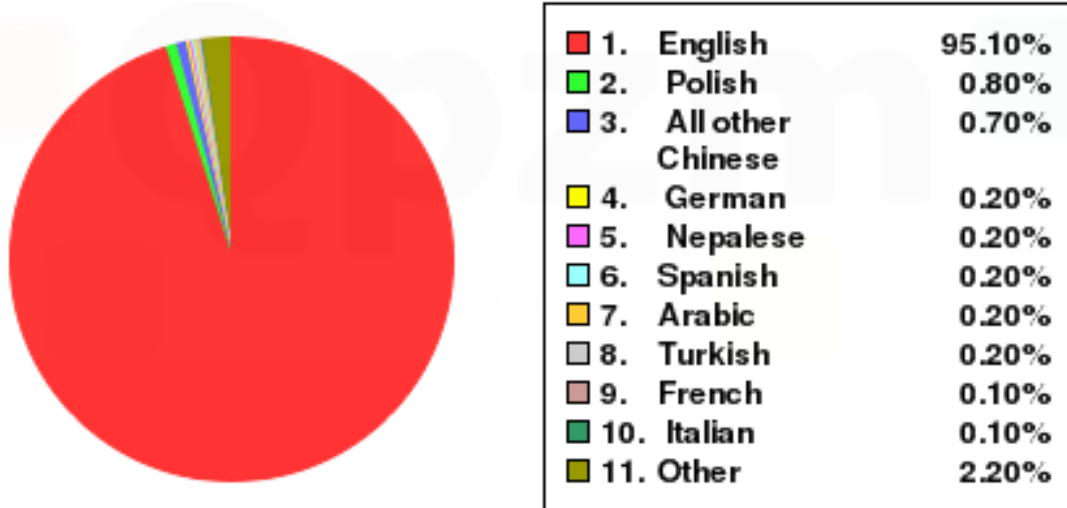


⁴¹ <https://data.yorkopendata.org/dataset/kpi-phof20/resource/436cfceb-7abc-41e3-aeb1-6551d3159eb2>

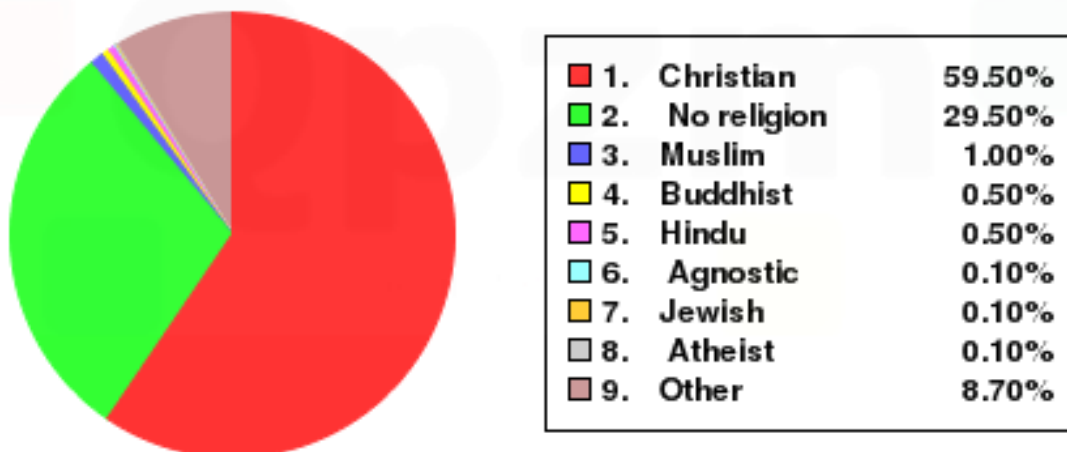
⁴² <https://data.yorkopendata.org/dataset/kpi-phof32/resource/3645700b-0f50-475b-bdf9-6f1b952e573e>

⁴³ <http://localstats.co.uk/census-demographics/england/yorkshire-and-the-humber/york>

95.1% of people living in York speak English. The other top languages spoken are 0.8% Polish, 0.7% All other Chinese, 0.2% German, 0.2% Nepalese, 0.2% Spanish, 0.2% Arabic, 0.2% Turkish, 0.1% French, 0.1% Italian.



The religious make up of York is 59.5% Christian, 29.5% No religion, 1.0% Muslim, 0.5% Buddhist, 0.5% Hindu, 0.1% Agnostic, 0.1% Jewish, 0.1% Atheist. 15,396 people did not state a religion. 750 people identified as a Jedi Knight and 33 people said they believe in Heavy Metal.



44.4% of people are married, 12.4% cohabit with a member of the opposite sex, 1.0% live with a partner of the same sex, 27.0% are single and have never married or been in a registered same sex partnership, 7.8% are separated or divorced. There are 9,879 widowed people living in York.

The top occupations listed by people in York are Professional 20.1%, Associate professional and technical 12.1%, Elementary 11.7%, Elementary administration and service 10.7%, Managers, directors and senior officials 10.5%, Administrative and secretarial 10.4%, Sales and customer service 10.4%, Skilled trades 10.0%, Caring, leisure and other service 9.1%, Sales 8.6%.

Risks

This section profiles our national and local risks and how we, as a Service, prioritise these risks.

Community risk (Relative)

Community Risk is a calculated wider area risk 'profile'. Importantly at this stage, the output from the model (of all and any combined risks) compares areas of risk. It is a relative risk model. By this it is meant that one area will be measured as more (or less) risky than another area.

This means that there will always be some mapped apparent high-risk areas, but they should usually be seen as high-risk compared to others.

Lower Super Output Areas (LSOAs) are used as they enable a reasonable level of detail across the whole of North Yorkshire and the City of York, thereby giving a sensible breakdown of risk, whilst not becoming so detailed that it is impossible to see the overall risk picture. LSOAs are used nationally. For example, the Indices of Multiple Deprivation (IMD) and a wide range of open-source data through sources such as Local Insights.

An additional benefit of using LSOA's is it eases the access to closed source data by reducing the burden of complex data sharing agreements. Where such data has been provided in this model any LSOA with less than 6 persons being presented with an attribute is recorded as nil to avoid any possibility of identifying individuals.

Predictive community risk

We have used data sets to predict incident risk by LSOA for three broad risk aspects:

- Fire and fire fatality/injury risk
- RTC risk.
- Flooding risk

Incident and societal risk factors have been selected for appropriateness, having considered the risk factors giving the greater risk correlations.

Vulnerability risk

To target household risk requires that NYFRS knows about individuals and individual properties. This can be sensitive data and appropriate data security is in place within NYFRS.

The uses of shared data sets from other organisations (Closed Source Data) requires Information Sharing Agreements (ISA) to be in place. Some of the data available to NYFRS has strict caveats that it cannot be used for strategic planning at this time.

Within Web Mapping systems (WMS), Unique Property Reference Numbers (UPRN) are often applied. If data is matched to UPRNs, then it is possible to give a vulnerability risk score by household. The following data is currently available to NYFRS at household (UPRN/address) level: OS Address Based Premium for property type, use, size, location and tenure, historic incident data and SaFer Data (Exeter data).

NYFRS are currently aligning our risk management information systems with Address Based Premium to allow for all buildings to be uploaded based on UPRN's.

N.B. Exeter data (Frailty index and scores) are not currently allowed to be used for strategic planning and therefore is not included in the community risk profile but can be used to help provide targeted prevention services.

Fire⁴⁴

The number of fires attended by Fire and Rescue Services (FRSs) has been on a steady downward trend since the early 2000s. Since 1999/00 (the earliest year for which all fires were recorded) the highest number of fires attended in a year was around 473,600 (in 2003/04). In 2016/17, the number of fires had declined to around 162,000, a decline of 66 per cent since 2003/04 and of 52 per cent over the past decade. Figure 1 outlines the overall trend in fires.

Trends in fires, IRS, England; 1999/00 to 2016/17



Data relating to fire incidents are taken from the Incident Recording System (IRS) which collects information provided by FRS's on all fires they attend.

Fires are categorised as:-

Primary – more serious fires that cause harm to people or damage to property. To be categorised as primary these fires must either: be a fire that occurred in a (non-derelict) building, vehicle or outdoor structure, be a fire that involved fatalities, casualties or rescues, or be a fire that was attended by 5 or more pumping appliances.

Secondary – are generally small outdoor fires, not involving people or property.

Chimney fires – are fires in buildings where the flame was contained within the chimney structure and did not meet any of the criteria for primary fires.

Primary fires have experienced a slow and steady decline over the last 15 years. Secondary, fires which make up the highest proportion of all fires (51 per cent in 2016/17), have also shown a general downward trend, however with greater fluctuation. The weather has a stronger impact on the number of secondary fires than primary fires, for example there was a

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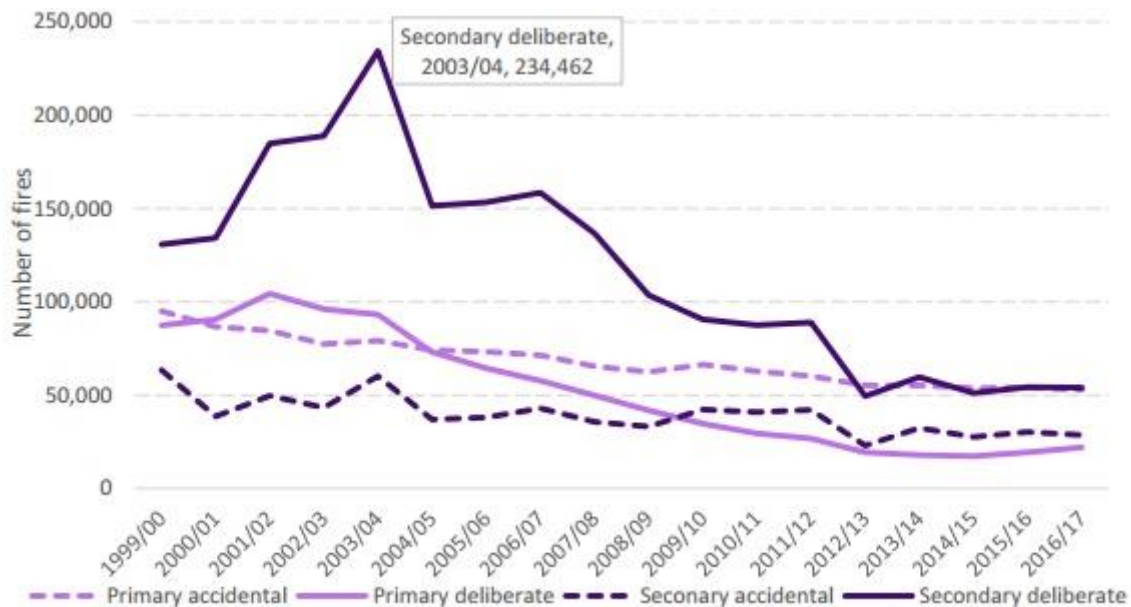
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/650869/focus-trends-fires-fatalities-oct17.pdf

hot dry summer in 2003 and a corresponding spike in secondary fires in 2003/04, whereas the wet summer of 2012 showed a decline in secondary fires. There are a relatively small number of chimney fires, which have also been declining to around 4,200 in 2016/17.

Motive for fire

The IRS also breaks down fires into accidental and deliberate fires. The overall trends in primary and secondary fires broken down into these additional categories.

Primary and secondary fires by accidental and deliberate motive, IRS, England; 1999/00 to 2016/17



Fire-related fatalities ⁴⁵

There has been a national downward trend for many years, from a peak of 485 fatalities in 1999/00 down to a low of 261 in 2016/17.

There are particular groups of people who are more at risk of dying in a fire, and these groups differ from the groups of people who are most at risk from experiencing a fire.

The groups more likely to experience a fire are: -

- Those living in rented households are more likely than owner occupiers
- Those living in flats are more likely to than those in a house
- Those with a respondent under the age of 60 are more likely than those with a respondent over 60
- Those living in a household with five or more members are more likely than those living in smaller households
- Those with a long-term illness or disability are more likely than those without

Research by Department for Communities and Local Government (DCLG) in 2006, which conducted analysis on data collected from FRSs, identified five main groups who were at greater risk of dying in a fire, and subsequent research has reaffirmed these groups: -

- Older people
- People with disabilities
- Those living in single parent households
- Males, aged around 40-60 years (who live alone and drink and smoke in the home)
- Young people (aged 16-24, including students).

Fatal fires recorded by household occupancy type.⁴⁶

Household occupancy types are derived from the people living within the property, for example couples with dependent children or lone people.

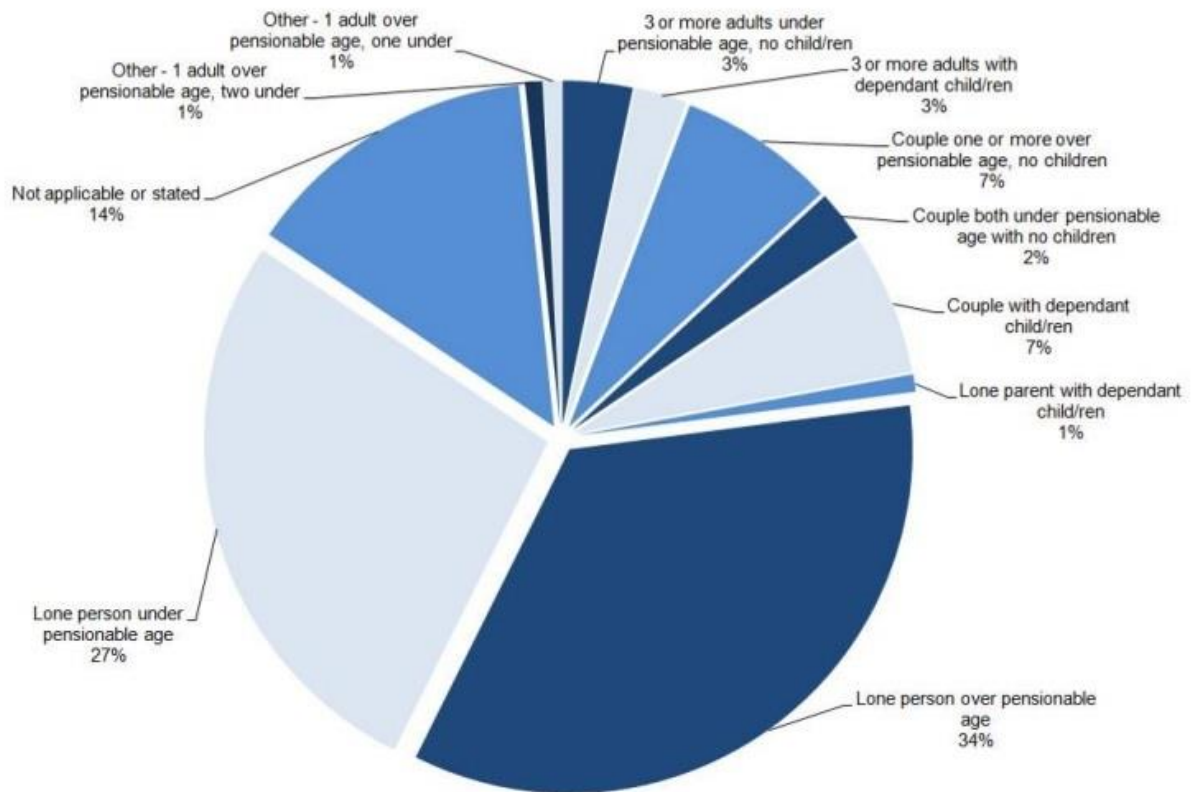
A large proportion (69.3%) of accidentally caused fatal fires started in a household where the occupancy type was a lone person. 9.1% of accidental fatal fires occurred where the occupancy was a “couple with one or more people over pensionable age,” with no children and 6.8% were “couples with a dependent child / children”. In the case of deliberately caused fatal fires, 41.2% occurred in a household where the occupancy type was a “lone person”. In 35.3% of these households, the occupancy types were not recorded.

In general, there is a significant trend across the region that showed people living alone were more likely to be involved in a fatal fire with 61% of fatal fires being in properties where people were living alone.

⁴⁵ <file:///C:/Users/00634/Desktop/Risk%20Resource%20Model/focus-trends-fires-fatalities-oct17.pdf>

⁴⁶ <file:///C:/Users/00634/Desktop/Risk%20Resource%20Model/FINAL-Learning-from-Fatal-Fires-Yorkshire-and-the-Humber-Regional-Report-compressed.pdf>

Household occupancy types in fatal fires



Downwards pressures

There are many factors which could have had a downward pressure on the numbers of fires and fire-related fatalities. Some of the main factors are:

- Changing cooking habits
- Increase in smoke alarm ownership
- Reduction in smoking
- Reduction in drug and alcohol use
- Reduced arson
- Improved safety standards (furniture and furnishings) and improved building regulations
- Preventative work and education

Changes to cooking habits

In 1994 chip pans fires accounted for 20 per cent of accidental dwelling fires declining to around 6 per cent in 2016/17. A small number of fatalities are linked to chip pan fires (6 in 2016/17). Changing cooking habits, 'the rise of the oven chip' and preventative work by FRSs have reduced the use of chip pans in homes.

Increase in smoke alarm ownership

The proportion of households with a working smoke alarm has increased, reaching 89 per cent in 2015/16. This is an important factor as in 2016/17 36 per cent of fire-related fatalities occurred when there was no alarm present in the dwelling. The likelihood of a household having a smoke alarm depends on a number of factors including household occupants (e.g. households with children are more likely to have smoke alarms) and tenure (housing association households are more likely to have a smoke alarm and private renters are less likely).

Reduction in smoking

Since 2001 there has been decline in the prevalence of smoking from 27 per cent to 15.8 per cent of the population over 16 of Great Britain in 2019.⁴⁷

Smoking-related fires are especially important to consider in relation to fire-related fatalities. Whilst these fires only accounted for six per cent of accidental dwelling fires in 2016/17, they accounted for 36 per cent of fire-related fatalities (compared with cooking appliance fires which accounted for 49 per cent of accidental dwelling fires but nine per cent of fatalities) Males aged 40 to 60 years who lived alone and drank and smoked in the home were one of the groups most at risk of dying in a fire.

⁴⁷<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/drugusealcoholandsmoking/datasets/adultsmokinghabitsingreatbritain>

Reduction in Arson and deliberate fires

Deliberate fires result in approximately 15 per cent of the fire-related fatalities occurring each year and the majority of these happen in dwelling fires. FRSs have conducted prevention work which includes educating children about the dangers of fires, and also working with offenders.

Reduction in drug and alcohol use

Drugs and alcohol are a risk factor in fires due to incapacity, however, there has been a reduction in the use of drugs in the adult population, and also a reduction in alcohol consumption.

Improved safety standards

Several safety standards have been introduced, for example, fire resistant furnishings, mains wired smoke alarms, escape windows, electrical standards and general product standards.

Upwards pressures

There are also several factors which could have had an upwards pressure on the numbers of fires and fire-related fatalities. For a number of these there is little data and therefore clear conclusions cannot be drawn, however, these factors remain risk factors to the overall downwards trend of fires and fire-related fatalities. These include:

Ageing population

The ageing population, resulting from longer life expectancy, is expected to be a significant future challenge across a wide range of areas of public policy.

Older people, especially those aged 65 and over, have a higher fire-related fatality rate.

Overcrowding

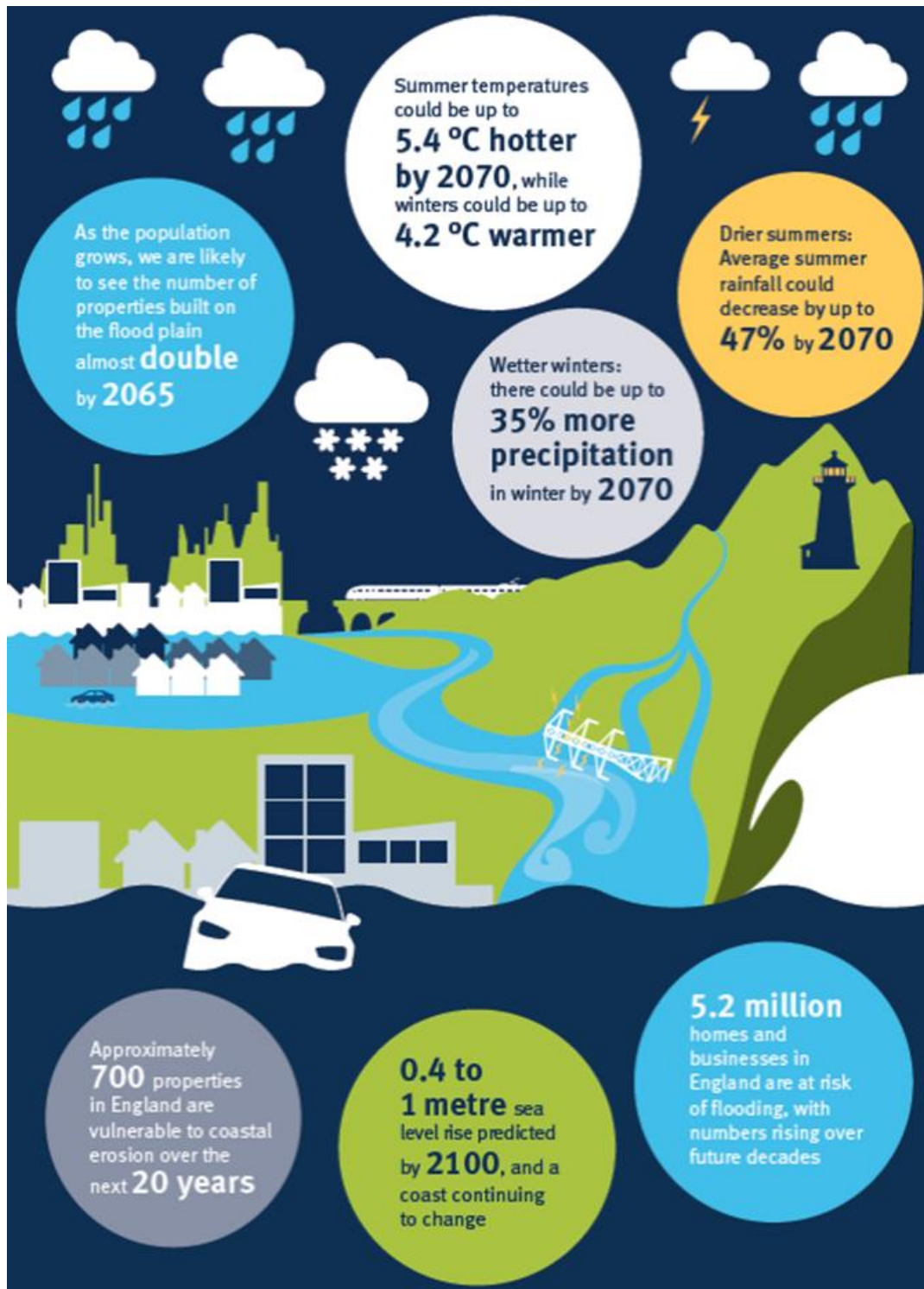
Overcrowding of dwellings can result in a fire risk. Those living in households with five or more members are more likely to experience a fire than those in smaller households.

Environmental Risk

Climate Change

National Flood and Coastal Erosion Risk Management Strategy for England

The vision: A nation ready for, and resilient to, flooding and coastal change – today, tomorrow and to the year 2100.



This Strategy sets out practical measures to be implemented by risk management authorities, partners and communities, which will contribute to longer term delivery objectives and our vision: A nation ready for, and resilient to, flooding and coastal change – today, tomorrow and to the year 2100.

The Strategy has three core ambitions concerning future risk and investment needs:

- Climate resilient places: working with partners to bolster resilience to flooding and coastal change across the nation, both now and in the face of climate change
- Today's growth and infrastructure resilient in tomorrow's climate: Making the right investment and planning decisions to secure sustainable growth and environmental improvements, as well as resilient infrastructure.
- A nation ready to respond and adapt to flooding and coastal change: Ensuring local people understand their risk to flooding and coastal change and know their responsibilities and how to take action.

The current plans and strategies of many risk management authorities go part of the way to providing the ambition for better resilience to flooding and coastal change. But to understand the full resilience picture in a place, the current and future priorities of national infrastructure providers need to be considered alongside the needs of local people, the economy and environment. There is opportunity for national infrastructure providers to better share information about their investment programmes to identify places where there are win-win opportunities for improving resilience in places.

North Yorkshire Fire and Rescue Service attends flooding incidents both coastal and inland. A noticeable amount of these incidents involves people attempting to drive through flood water or livestock being trapped or swept away.

The main areas affected by coastal flooding are Scarborough due to high tides and storm surges and Whitby from tidal inundation.

Flooding

Modelling has been carried out to provide information about flooding. Predictive flood layers have been sourced to indicate the most at risk areas. This provides a geo place/area but does not provide probabilistic information as to when such an occurrence may occur. Currently this relies on more real time information from the Environment Agency and Met Office.

We have used historic water incident related data sourced from VISION to ensure that we capture all incidents including those during spate conditions. All water incidents have been used due to the way incidents have been recorded e.g., rescue from water may relate to a swift water incident or assisting someone to leave a flooded property.

As the community risk profile is based on LSOA's it has been identified that due to the physical size of some LSOA's indicating risk at this level may be misleading. This data has been modelled and presented using a 'heat map'. It can also be presented at a more granular level using a scatter map.

We have looked at other factors that place people, households, and businesses at risk of flooding events. Modelling this in a similar manner to fire related risk is not appropriate as it

does not provide decision makers with enough clarity about the risk at LSOA level for example including a layer of building heights e.g. single storey building linked to Over 65 with frailty proxy indicators can suggest risk that is not actually present.

Wildfire

Uncontrolled vegetation fires in the UK are becoming more common. According to the European Commission, which monitors wildfire activity through its European Forest Fire Information System, there were 79 fires larger than 25 hectares in 2018, rising to 137 fires in 2019. (Compare that to the years 2011 to 2017 when there were fewer than 100 fires altogether.)

The UK doesn't really have a wildfire problem, it has wildfire issues. But this is a situation that could change – with the stresses of global warming fanning the flames. Milder and wetter winters will boost plant growth, while summer heatwaves will dry out potential fuel, making it more flammable.

British wildfires are tame by comparison to those experienced in other parts of Europe/World. Whilst they damage eco-systems, occasionally destroy buildings and property, and present fire services with often resource heavy and protracted deployments to bring them under control and extinguish, they also divert resources from other incidents and activities.

In the UK, most fires are ignited due to human factors; campfires, barbecues, bonfires, catalytic converters on cars, sparks from farm machinery, prescribed burning that runs out of control and arson are all to blame.

In the UK, we experience four main types of wildfire: -

- Lowland heath fires.
- Upland moor fires
- Grassland and arable crop fires.
- Forest fires are much rarer and normally easier to control since as the flames seldom spread between the crowns of trees

Heathland burns mainly in early spring when the moisture in heather is at its lowest. Grassland burns in late summer when it is at its driest and temperatures rise. Peat can burn at any time of year, provided the water table in the soil is low enough.

The focus should be on clever land management rather than emergency firefighting. The Forestry Commission advises landowners to thin out their forests, clear plant debris on the ground, plant fire-resilient species, and create fire breaks between groups of trees.

Prescribed, or controlled burning, where land managers clear sections of vegetation by burning them in a controlled way, is another prevention, but it is a controversial one since occasionally it burns out of control.

Most British wildfires are fought using fire-beating tools and water hoses. Other devices include back-mounted leaf blowers, which blow flames away from vegetation, and back-mounted sprayers, which allow firefighting teams to spread out across a wide area. Occasionally water is drawn several miles along pipes to the affected area on fire using high-volume pumps. Private helicopters with water buckets are sometimes employed.

North Yorkshire Fire and Rescue Service has provided training to operational staff including on incident command and the tactics to be used in tackling wildfires⁴⁸. Specialist equipment such as argocats and 4x4 fire appliances are located at specific locations near the open moorland areas of the Yorkshire Dales and North Yorkshire Moors National Parks.

Under the Section 13 and Section 16 agreements of the Fire Services Act 2004, North Yorkshire Fire and Rescue Service also support other fire and rescue services in tackling large upland and moorland wildfires. Recent examples include fires on Saddleworth Moor (Manchester), Winter Hill (Lancashire) and Ilkely Moor (West Yorkshire).

England and Wales Fire Severity Index⁴⁹

North Yorkshire Fire and Rescue Service have access to the England and Wales Fire Severity Index and this is monitored by the Response and Resilience department.

Detailed Fire Severity Index (FSI) maps are provided for the whole of England and Wales. Historical daily FSI maps are available plus the latest and forecast daily FSI maps out to 5 days ahead. Location can be selected using placename or postcode search; entering OS National Grid Reference or Eastings and Northings; Latitude / Longitude; or by selecting a National Park.

We also have access and use: -

- Meteorological Office Rainfall and Evaporation Calculation System (MORECS version 2.0). This shows the evaporation and soil moisture deficit for the UK calculated by MO using meteorological observations. The output can be for a single site or as averaged over 40 x 40 km grid which cover the UK. The data can be supplied at daily, weekly or monthly time resolution.
- Detailed weather forecasts provided by the Met Office.

The Met Office's Fire Severity Index (FSI), is an assessment of how severe a fire could become if one were to start. It is not an assessment of the risk of wildfires occurring. The FSI shows the current day's fire severity and a forecast of likely fire severity over the coming five days. The index values are from 1 to 5, which represents an increasing degree of fire severity as follows:

- FSI level 1 = low fire severity
- FSI level 2 = moderate fire severity
- FSI level 3 = high fire severity
- FSI level 4 = very high fire severity
- FSI level 5 = exceptional fire severity

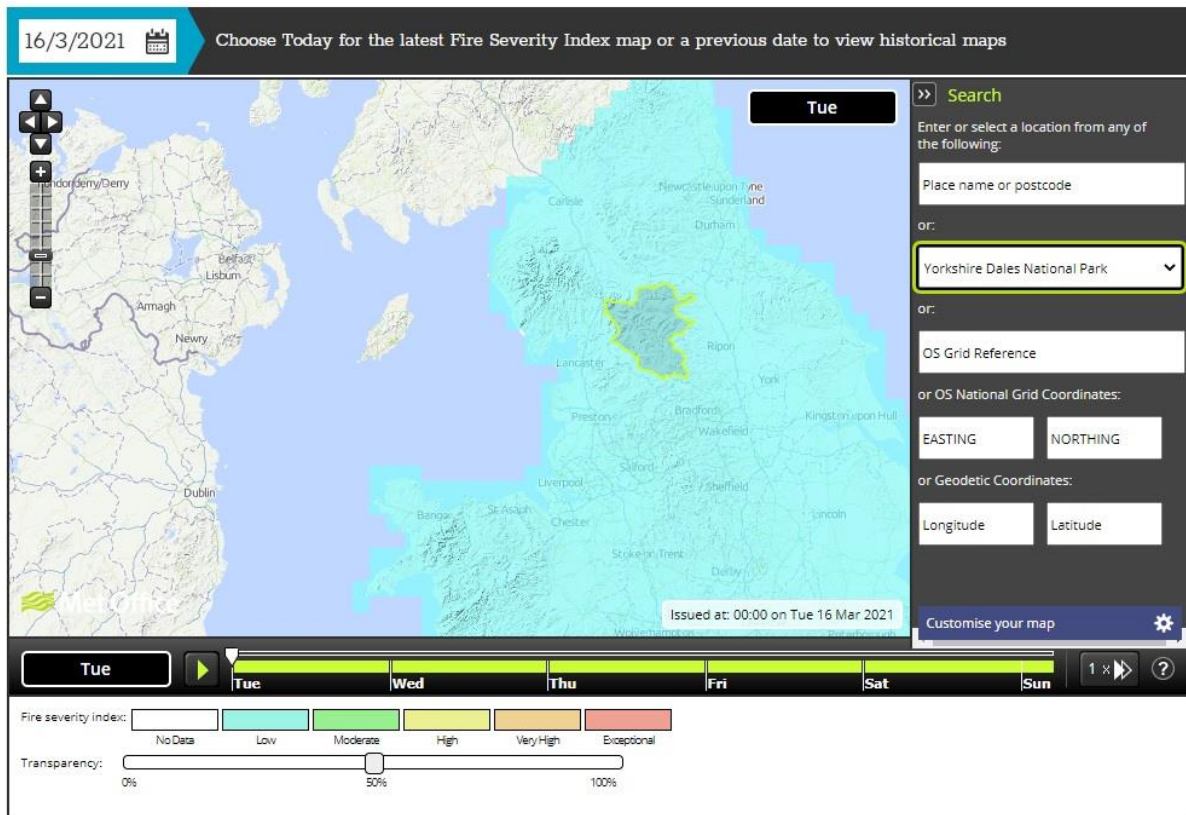
The forecast FSI for 5 days ahead will not be as accurate as the FSI for the current day. This is because there are always uncertainties in weather forecasting several days ahead.

The FSI provides a trigger for fire prevention restrictions on access land mapped under the Countryside and Rights of Way Act (2000). Fire prevention restrictions aim to minimise accidental fires on access land vulnerable to wildfires by suspending open access rights when conditions become exceptional (FSI level 5). Find out more about open access and if there are any restrictions on access land for England, or Wales.

⁴⁸ [Wildfires | NFCC CPO \(ukfrs.com\)](#)

⁴⁹ [Fsi - Met Office](#)

The FSI uses information such as wind speed, temperature, time of year and rainfall to produce a fire severity assessment. To produce forecasts of fire severity, weather information from the Met Office operational forecast model is used.



Information taken from our past 5-year incident data provides a summary of the number of incidents attended by more than 4 pumps and where active for 4 hours or longer. This is for incidents that were within the North Yorkshire Fire and Rescue Service area and does not account for support to other services such as on Saddleworth and Ilkely Moor.

Year	Number
2016	2
2017	5
2018	15
2019	12
2020	1

Road Risk

North Yorkshire is the largest county in England covering over 3,200 square miles and with approximately 6,000 miles of road. With most of the county sparsely populated, the road network is the main means of transport connecting small towns and villages. The distance between these small communities means that people travel greater mileage to access work, education and services. This increases their exposure to the risk of road injury by virtue of the miles travelled on these rural roads. The County also sees tens of thousands of visitors who travel to, in and around the county, primarily on rural roads.

There has been a significant reduction in the number of people killed or seriously injured, both locally and nationally in recent years. However, between 2016-18 North Yorkshire continued to have a significantly higher proportion of people killed and seriously injured on the road (65.9% per 100,000) compared to England (42.6 per 100,000).

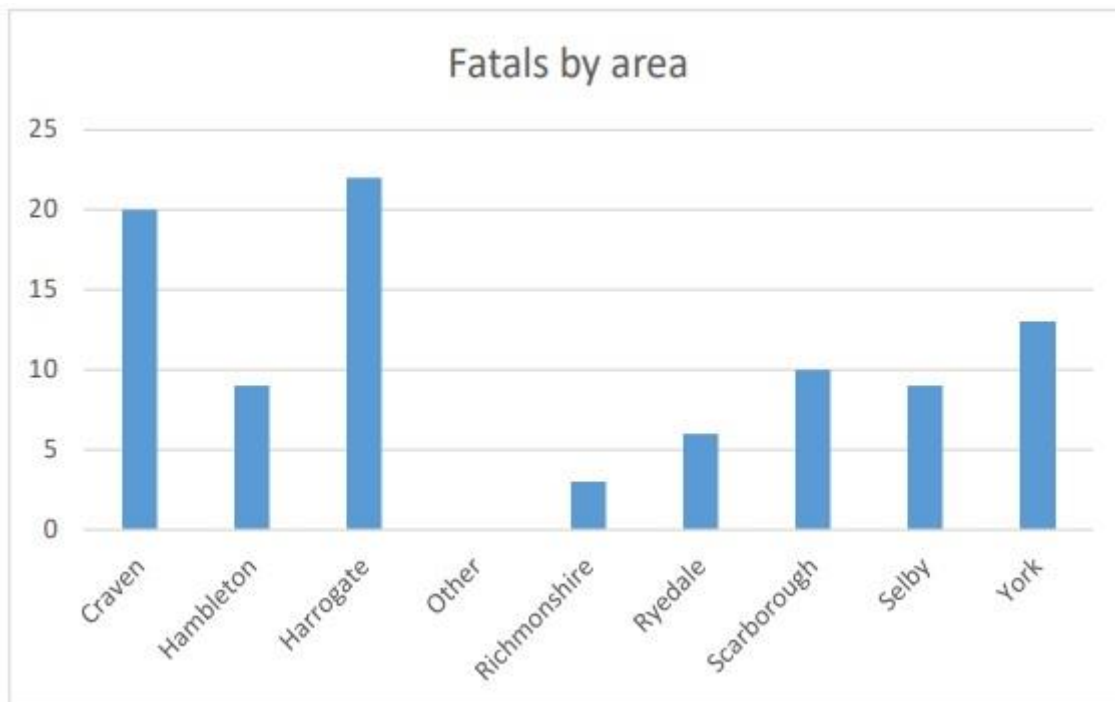
In 2019 there were 45 fatalities and in 2020 there were 44 on the public roads and 1 on a private airfield in 2020.

Out of 15 local authorities considered statistically similar to North Yorkshire had the second highest rate of KSIs in the same time period. With the exception of Scarborough district the remaining 6 districts in North Yorkshire have a significantly higher rate of people killed and seriously injured on the road compared to the England average with Craven having the highest rate (99.5 per 100,000). Source: Public Health Outcomes Framework.

In York, the rates are significantly lower than national average at 27.5% per 100,000.

The highest risk groups using the roads in North Yorkshire are males, in the age groups 18 to 24 and 60 plus. Prevention and early intervention (including education and enforcement) should focus on these groups. Analysis of the North Yorkshire Police data highlights that September is the busiest month for collisions, for both cars and motorcycles. May, July, August, October and December see the next highest numbers, there is not a clear peak at one point in the year. The busiest days of the week for collisions are Friday, Saturday and Sunday.

The chart below shows the distribution of fatal collisions by district, (percentage). This illustrates that nearly 45% of road deaths occurred in Harrogate and Craven districts, in the west of the county. The road network is predominantly rural, the A65 being the main route through the Yorkshire Dales and the A59 crossing west to east. Dales routes are popular with motorcyclists from other parts of the country, who may not be familiar with North Yorkshire's roads and so are more vulnerable to collisions. In 2020, four fatal collisions have involved motorcycles.



Data from North Yorkshire Police shows that across the wider Yorkshire region, the number of fatalities on the roads has increased to 152 in 2018, from a low of 107 deaths in 2016. Over the decade from 2008 to 2018, North Yorkshire experienced a higher number of road deaths than any other part of the region.

FATALS	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Rank	% Change 17/18	% of demand
East Riding of Yorkshire	22	23	19	17	14	8	17	13	14	16	12	6	-25%	8%
Kings ton upon Hull	5	4	3	4	2	7	2	1	7	4	6	11	50%	4%
North East Lincolnshire	5	2	1	2	5	7	4	1	0	3	2	15	-33%	1%
North Lincolnshire	10	8	5	6	10	5	6	4	10	7	10	8	43%	7%
Barnsley	14	6	7	8	5	8	2	3	8	10	9	10	-10%	6%
Bradford	19	21	10	12	15	13	14	7	8	10	15	4	50%	10%
Calderdale	9	9	3	7	2	4	6	6	9	3	5	12	67%	3%
Doncaster	15	12	17	9	11	10	10	19	14	11	11	7	0%	7%
Kirklees	5	22	9	5	7	13	9	7	5	5	10	8	100%	7%
Leeds	27	22	19	26	15	15	21	16	9	15	26	2	73%	17%
North Yorkshire	43	43	46	42	31	51	40	31	28	41	32	1	-22%	21%
Rotherham	14	8	5	4	6	7	6	12	7	10	5	12	-50%	3%
Sheffield	16	11	5	9	7	7	8	15	8	13	20	3	54%	13%
Wakefield	11	10	17	15	10	10	8	12	6	10	14	5	40%	9%
York	9	4	4	7	4	0	5	2	5	2	5	12	150%	3%
Yorkshire/Humber	182	168	142	144	113	138	129	130	107	130	152			

As a proportion of population, North Yorkshire saw 5 road deaths per 100,000 people. This is significantly higher than both Humberside and West Yorkshire (3 road deaths per 100,000 people), and South Yorkshire (2 road deaths per 100,000 people).

It is notable that, of the 44 fatal collisions (on public roads) in 2020, approximately 40% of the victims resided outside of North Yorkshire.

Contributory factors to fatal collisions

Understanding the causes of fatal collisions is essential to determine the police and partnership approach to prevention and early intervention. This section outlines a range of factors that have a bearing on the causation of road deaths.

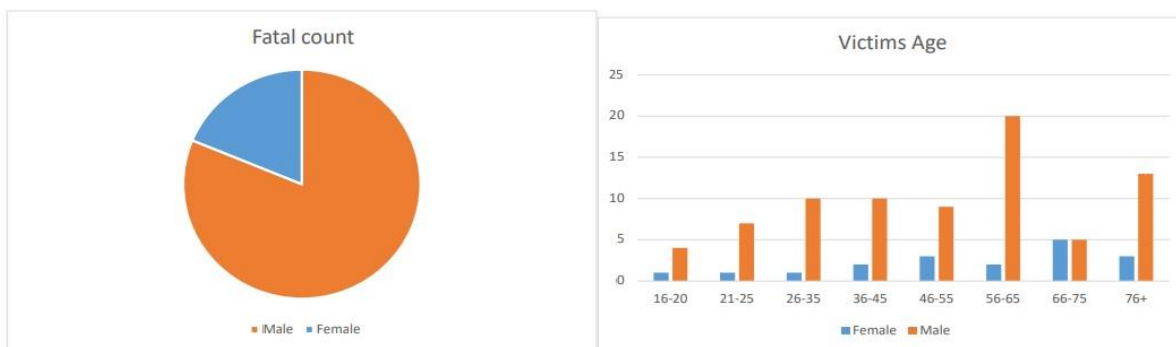
The data from North Yorkshire Police for 2019 highlights that there is:-

- an increased risk of being involved in a fatal collision on weekend days. Peak hours for road deaths are between 1200 and 2000 hrs.
- The distribution by month does not appear to be linked to a particular season, with peaks of 10% in January, March, and September, and July on 9%.
- Adverse weather conditions do not appear to contribute significantly. The majority of fatal collisions happen during fine weather, with dry road conditions and during the hours of daylight.
- This points to other factors, including the fatal five - being more relevant in terms of causation.



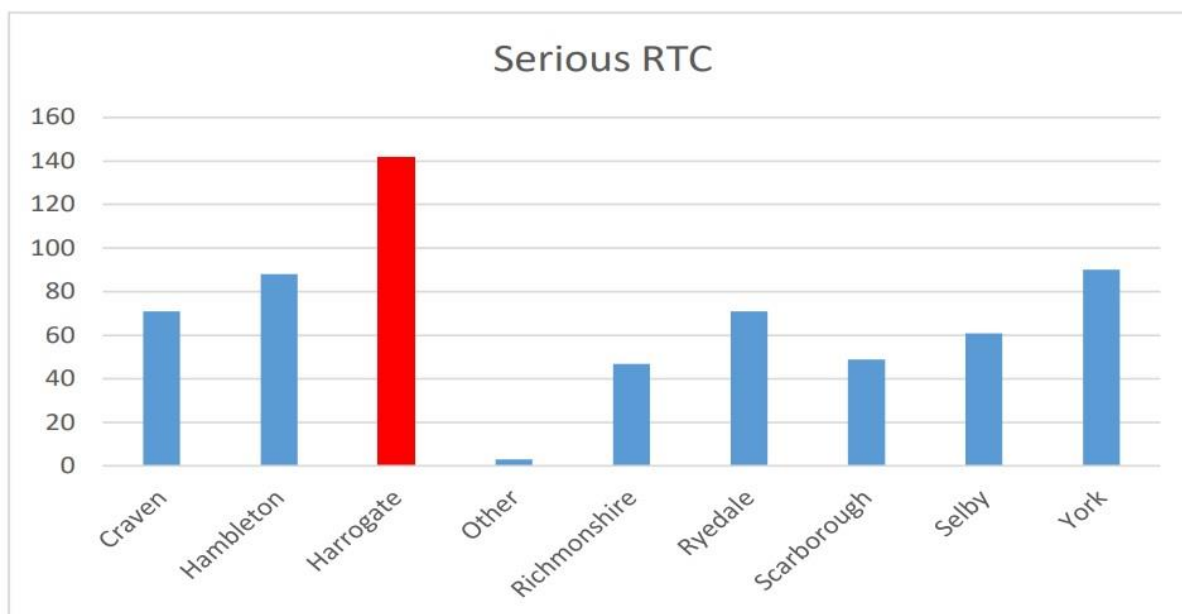
Driver error and reaction is the most significant factor. This highlights that a cohort of drivers have a propensity to make mistakes while in control of a vehicle. It is assumed that a proportion of this behaviour is the result of taking unnecessary risks and reading the road conditions incorrectly.

The second most significant factor is driver impairment or distraction – this includes those under the influence of alcohol or drugs at the time of the collision. The charts below explore victim information, to identify which groups are most vulnerable to road fatalities. Those at most risk of road death are males aged between 55-65 years and 75 plus.



Road casualties – serious injuries

In 2018-2019, North Yorkshire experienced 618 RTCs resulting in serious injuries. The distribution by district is shown in the chart below:



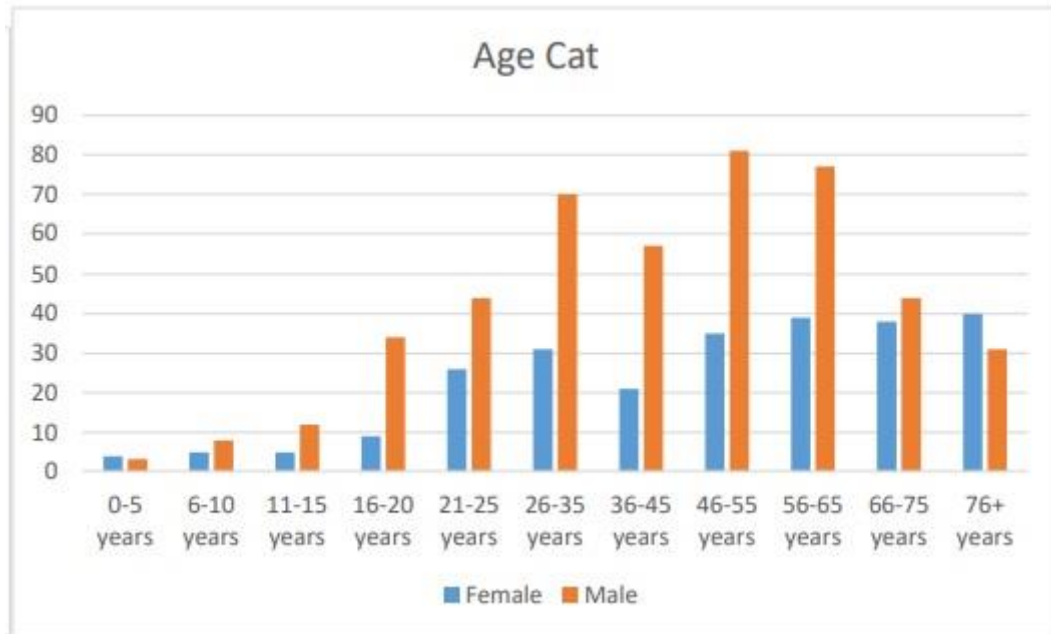
Harrogate district has shown the highest overall prevalence of serious injury RTCs. There are several contributory factors to this including the presence of the A1(M) corridor and popular motorcycling routes.

Over the decade 2008 to 2018, North Yorkshire experienced 20% of the Yorkshire and Humber regions serious injury collisions but has only 14% of the region's population. The regional proportion of serious injury RTCs within North Yorkshire has decreased over the 10-year reporting period. The City of York has shown an increase in recent years.

Contributory factors to serious injury collisions

As with fatal collisions, understanding the causes of serious injury collisions is essential in order to determine the approach to prevention and early intervention. This section outlines a range of factors that have a bearing on the causation of serious injury collisions. Not surprisingly, there is clear commonality with elements contributing to serious injury collisions and those causing fatal RTCs.

- The peak time for serious collisions is 1200 to 1600 hrs. This is earlier in the day than for fatal collisions. The reasons for this are complex, it is not possible to pin down a single factor to explain the difference.
- Contributory elements to explain why fatal collisions tend to happen later in the day include higher traffic flows in the evening rush hour, higher speeds at the same time, and the possibility of more serious driver errors due to the lateness of the hour.
- The risk of being involved in a serious collision is higher at the weekend than on weekdays, however the difference is not as pronounced as it is for fatal collisions. difference in the risks of being involved in a fatal collision and in a serious collision by day of the week. A partial explanation is that the number of serious injury collisions is significantly higher than the number of fatal accidents so differences across days are less pronounced.
- The prevalence of leisure traffic at weekends compared to commuter traffic on weekdays could be a factor in driver behaviour. As with fatal collisions, the peak month for serious injury collisions is September, and there are no significant peaks and troughs in demand through the year.
- Environmental factors including weather, road surface and lighting are very much in line with the findings for fatal collisions. The majority of serious injury collisions occur in fine weather, on dry roads and in daylight. Again, this indicates that other factors are at play.
- There are however some differences in the demographics of those involved in serious injury collisions, compared to fatal accidents. The charts below show that, while those involved in serious injury collisions are predominantly male (as for fatal collisions), younger age groups are affected to a greater degree, and the spread is more even across ages. There is not a singular reason to explain the difference in outcomes of fatal and serious collisions for different age groups. A range of factors will be relevant. It is notable younger age groups are perhaps better placed to survive serious injuries than older people.



Crash data from North Yorkshire County Council has been used to provide heat maps of road related incidents and accidents. Historic incident data has also been used to supplement this, but it is acknowledged that NYFRS response to road incidents is significantly less and does not include the full range as provided in the data.

Due to the obvious transient nature of road users identifying specific risk factors about individuals is extremely difficult.

The use of heat maps allows decision makers to easily note those areas of most significance and drill into the causation factors allowing for suitable intervention to be made. See section of Prevention activity – Road Safety.

National and Local Risk

The risks the UK faces are continually changing. The government monitors the most significant emergencies that the UK and its citizens could face over the next five years through the National Risk Assessment (NRA). This is a confidential assessment, conducted every year that draws on expertise from a wide range of departments and agencies of government. The National Risk Register (NRR) is the public version of the assessment. The Government's National Risk Register of Civil Emergencies (NRR)⁵⁰ and NRA are intended to capture the range of emergencies that might have a major impact on all, or significant parts, of

the UK. These are events which could result in significant harm to human welfare: casualties, damage to property, essential services and disruption to everyday life. The risks cover three broad categories:

- natural events
- major accidents
- malicious attacks.

The Fire Service National Resilience Programme is one part of the Government's Civil Contingencies Capabilities Programme. The strategic aim of this programme is to improve the preparedness and resilience of Fire and Rescue Services in England and Wales by maintaining and improving the capability of the national assets, owned by the Government, but operated by each Fire and Rescue Service.

National Risks:

- Natural hazards
- Human diseases
- Flooding
- Poor air quality events
- Volcanic hazards
- Severe space weather
- Severe weather
- Severe wildfires
- Animal diseases
- Major accidents
- Widespread electricity failure
- Major transport accidents
- Disruptive industrial action
- Widespread public disorder
- An introduction to terrorist and other malicious attacks
- Terrorist attacks on crowded places
- Terrorist attacks on infrastructure
- Terrorist attacks on transport systems
- Unconventional terrorist attacks

⁵⁰ <https://www.gov.uk/government/publications/national-risk-register-for-civil-emergencies-2015-edition/national-risk-register-of-civil-emergencies-chapter-1-main-types-of-civil-emergency>

- Cyber security

The highest priority national risks

The following, as reflected within the risk matrices, are considered by the government to be the highest priority risks.

- Pandemic influenza
- Coastal flooding
- Catastrophic terrorist attacks
- Widespread electricity failure

North Yorkshire Local Resilience Forum⁵¹

This is a multi-agency partnership that provides a structure to help agencies plan and prepare for major incidents and emergencies which may have a significant impact on the community. The LRF assists partners to meet their statutory duties under the Civil Contingencies Act 2004 (Contingency Planning) Regulations 2005 and accompanying statutory guidance entitled “Preparing for Emergencies). It is made up of Category 1, 2 and non-category responders. As a category one responder we are an active member of the Local Resilience Forum.

NYLRF also works in coordination with the voluntary sector and has its own register of trained public volunteers with the scheme Ready for Anything.

While emergencies are unlikely, it is useful to have an understanding of the types of risks faced in North Yorkshire. By understanding these risks we can ensure that we have either taken steps to mitigate the risk or if that cannot be done, steps to monitor and respond to it should it happen.

Over the Border Risk

Where we have identified High Risk premises, which have a potential to attract over the border assistance, we make Site Specific Risk Information (SSRI) available to those surrounding services which may be required to assist at the time of an incident. This is a reciprocal arrangement with our surrounding services.

⁵¹ [North Yorkshire Local Resilience Forum | North Yorkshire Local Resilience Forum \(emergencynorthyorks.gov.uk\)](https://www.emergencynorthyorks.gov.uk)

The main risks identified by the NYLRF are:-

- Fire - Fires in the home, workplace and community are among the biggest risks to the safety of family, friends, colleagues and neighbours
- Rain - Large amounts of rainfall can lead to surface, groundwater and fluvial flooding
- Pandemic - A pandemic is one of our highest risks. It occurs when a new virus spreads easily from person to person
- Wind - Most wind hazards are associated with strong winds or sudden gusts of strong wind. Gale force winds are responsible for most infrastructure damage and health impact on land.
- Heat wave - Prolonged extreme hot weather can have affects on health and certain infrastructure. Public Health England provides a heat watch service, according to forecasts provided by the Met Office
- Flooding can occur from the sea, rivers and from continuous and /or abnormal rainfall levels. The highest flooding risk is surface water flooding (where drainage systems are unable to cope with the volume of rainfall).
 - Issues associated with flooding are widespread and can include:
 - Risk to life.
 - Damage and disruption to homes, personal property, businesses, infrastructure.
 - Pollution of local environments.
 - Disruption to utilities and evacuation.
 - Short, medium and long-term homelessness.
 - Long term health and psychological impacts.
- Snow - The impacts of snow on the transport network, particularly on road and air transport can be mitigated by winter maintenance actions taken by the appropriate authorities (i.e. gritting). When accompanied by strong winds, snow can drift, which can cause large variations in snow depth and make it difficult to carry out successful mitigating action. Exposure to snow and cold temperatures can increase the chance of hypothermia, cold related injuries and health complications.
- Ice - Ice is simply water substance in a solid form. It occurs in the atmosphere and on the earth's surface and can take many different forms such as ice pellets, snow, hoar frost, rime, glaze and hail. Ice can form over the surface of garden ponds, lakes and even rivers during exceptionally cold periods. It can also form over road surfaces, cars, building and vegetation in the form of black ice, frost or snow.
- Utility Failure - There have been occurrences of a utility failure affecting large areas in the UK but such incidents are usually restored within 24 hours. Because of our reliance on utilities such as electricity, even localised losses of can have a significant impact on those affected.

North Yorkshire and the City of York host national conferences for political parties and other high-profile groups. Specific locations have historically been the target of protestors such as Menwith Hill (US Radar Station) and Kirby Misperton (Fracking site). Events and locations are assessed by North Yorkshire Police and Counter Terrorism teams. NYFRS have access to outcomes of assessments via National Interagency Liaison Officers (NILO).

CONTEST⁵² – Counter Terrorism

CONTEST is the United Kingdom's counter-terrorism strategy. The aim of the strategy is "to reduce the risk to the UK and its interests overseas from terrorism so that people can go about their lives freely and with confidence. The success of this strategy is not linked to total elimination of the terrorist threat, but to reducing the threat sufficiently to allow the citizens a normal life free from fear.

CONTEST is comprised of the 'four Ps' - Prevent, Pursue, Protect, and Prepare - which aim to reduce terrorism at all levels through: Preventing more people from being radicalised; Pursuing suspects operationally and legally; Protecting the public through security measures, and Preparing to manage the response to mitigate the impact of an inevitable attack.

CONTEST has a risk equation, that: risk = likelihood x vulnerability x impact.

- *Likelihood* encompasses Pursue and Prevent and is understood to prevail when terrorists are imprisoned and so unable to radicalise the next generation.
- *Vulnerability* covers Protecting the critical infrastructure and public of the UK - for example ensuring steel lockable cockpit doors on all civilian airliners to prevent hijackers from taking control of aircraft.
- *Impact* includes the Prepare arm. To manage the initial response and minimise periods of disruption all emergency services are specifically trained in terrorist response and special technology has been developed, such as decontamination trucks and increasingly resilient communication lines.

Prevent

The purpose of Prevent is to stop people from becoming terrorists or terrorist sympathisers. Prevent includes countering terrorist ideology and challenging those who promote it, supporting individuals who are especially vulnerable to becoming radicalised and working with sectors and institutions where the risk of radicalisation is assessed to be high. The deradicalisation programme is known as Channel.

Pursue

The purpose of Pursue is to stop terrorist attacks by detecting, prosecuting, and disrupting those who plot to carry out attacks against the UK or its interests overseas.[8]

Protect

The purpose of Protect is to strengthen protection against terrorist attacks in the UK or its interests overseas and thus reduce vulnerability. The work focuses on border security, the transport system, national infrastructure, and public places. The process works by first recognizing the threats and then identifying the measures to reduce risks. An example of 'Protect' are the large bollards placed strategically around busy city centres, and especially on bridges, to prevent the rise of vehicle-based attacks.

Prepare

The purpose of Prepare is to mitigate the impact of a terrorist attack in an event whereby that attack cannot be stopped. "Prepare" includes bringing a terrorist attack to an end quickly,

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https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/716907/140618_CCS207_CCS0218929798-1_CONTEST_3.0_WEB.pdf

preventing its spread, and increasing the UK's resilience to enable rapid recovery in its aftermath.

North Yorkshire Fire and Rescue Service are part of the North Yorkshire Contest Board and also have representation on the North Yorkshire Prevent Board.

Response to Terrorist Incidents

North Yorkshire Fire and Rescue Service have specially trained officers called NILO. (National Interagency Liaison Officers)

The role of the NILO is to liaise with FRS partner agencies in both the planning stage of events and/or directly at operational incidents. The NILO's key role is to proactively liaise with other agencies to gain vital information that may assist in keeping NYFRS crews safe. NILO response will primarily be within the NYFRS boundary, however this is a national role and deployment to other FRS regions may be required.

NILO's are the NYFRS 'Tactical Advisor' for incidents involving:

- Terrorism
- CBRNE incidents
- Firearms related incidents
- Civil disorder
- Crisis Management

Powers and responsibilities

The National Fire Chiefs Council (NFCC)⁵³ have produced a position statement on Marauding Terrorist Attacks (MTA).

Fire and rescue services have statutory powers to respond to terrorist incidents, set out in section 11 of the Fire and Rescue Services Act 2004. They also have duties under section 2 of the Civil Contingencies Act 2004 to plan, advise and assess for risks within the National Risk Assessment.

The National Framework for the Fire and Rescue Service in England 2018 also sets out the duties placed on fire and rescue services to respond to terrorist incidents. English fire and rescue services must show due regard to the framework, which requires arrangements be put in place to prevent and mitigate all foreseeable fire and rescue related risks, including terrorist attacks. Section 3.10 of the framework states that:

"Fire and rescue services must be able to respond to the threat of terrorism and be ready to respond to incidents within their areas and across England. Fire and rescue services should also be interoperable to provide operational support across the UK to terrorist events as required."

North Yorkshire Fire and Rescue Service does not have a dedicated response team, but all operational staff have received training on MTA. The service will liaise with North Yorkshire Police and other intelligence agencies via the National Interservice Liaison Officers to monitor the threat level. A review will be undertaken to determine if a more dedicated and specialist response is required.

⁵³ [NFCC_position_statement_MTA_15_01_2020_FINAL.pdf \(nationalfirechiefs.org.uk\)](#)

HS2

High Speed Two (HS2) is the planned new high speed rail network connecting London with the West Midlands and the north of England by 2033.

HS2 is being developed in stages⁵⁴. Phase one from London to Birmingham received royal assent in February 2017. Phase two, which includes the eastern leg to Leeds and a connection to the East Coast Main Line at Church Fenton in Selby District, is still in the planning stage.

HS2 phase 2b in North Yorkshire⁵⁵

The Secretary of State for Transport confirmed the majority of the government's preferred route for HS2 Phase 2b in November 2016. This includes the eastern leg to Leeds and a connection to the East Coast Main Line near Church Fenton.

This link will help ensure the eastern leg is fully integrated into the wider rail network. Based on current plans, the link will be used by direct HS2 services to York, Darlington, Durham and Newcastle from both Birmingham and London.

The North Yorkshire section extends for approximately 7km from the boundary with Leeds (near the junction of the M1/A1M) to the East Coast Main Line at Church Fenton, entirely within Selby District.

In November 2016, the Secretary of State for Transport issued safeguarding directions for Phase 2b. These require local planning authorities to consult the project's developer on all relevant planning applications within the area set out in the directions. The goal is not to prevent development on land that may be needed to build and operate the railway, but to ensure no conflict is created.

North Yorkshire Fire and Rescue Service will maintain active involvement with the HS2 working groups.

⁵⁴ [High Speed Two \(HS2\) Limited - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

⁵⁵ [High Speed Two rail information | North Yorkshire County Council](#)

Road user safety plan overview – Highways England

The Regional Road User Safety Plan sets out our commitment to improving road user safety throughout RIS2, supporting our long-term vision to move to zero harm whilst also delivering on a 50% reduction in Killed and Seriously Injured collisions by 2025.

To achieve the aims of the Plan and address the issues and concerns that have been identified from the data a number of interventions targeting all road user groups will be required.

The support of our partners is key to the delivery of our Plan and we will work together on interventions and campaigns where our priorities on the strategic road network are also evident on the local road network.

During RIS1 we worked with a number of partners in the region and delivered a number of initiatives around improving compliance across different road users and engaged with customers across the region on issues around tyres, vehicle checks, load security and commercial vehicle issues. We will build on these excellent partnerships over the next 5 years to spread our messages further and engage with more people.

Analysis of the STATS19 collision data has identified our delivery should be focussed on these priority groups identified within the Plan:

- Car occupants
- Goods vehicle occupants
- Motorcycle users
- Pedestrians

Safe systems delivery

This regional delivery plan identifies the activities and interventions that will be developed and delivered against each of the safe systems pillars, to help meet the targets identified above.

Over time this delivery plan will evolve with new interventions and initiatives put in place as our approach develops. During RIS2 we will look for opportunities to work closely with our partners in Major Projects to ensure that as new schemes are developed the aims and vision for road safety are considered. We will also work closely with the regional Health and Safety steering group to ensure that resources are shared, and any new opportunities are identified and developed.

We will also look to start some longer-term planning for the network, considering the improvements and investment required to improve the star rating of our network. For some parts of our network some significant investment will be required to improve on low star ratings,

and this may be beyond the scope of RIS2 and will require further investment in RIS3. We will start to plan for this now to ensure we can be clear on the longer-term investment needed across the network.

Road Investment Strategy 2 (RIS2): 2020 to 2025⁵⁶

The Government's five-year strategy for investment in and management of the strategic road network from April 2020 to March 2025.

- The long-term vision for what the strategic road network should look like in 2050, and the steps to help realise this
- The performance specification setting out the expectations for Highways England and the strategic road network, including metrics and indicators measuring the performance of both Highways England and the network against outcomes
- The investment plan of how money will be invested in operations, maintenance, renewals and enhancements of the road areas affected
- A statement of funds confirming that £27.4 billion will be provided over the period to Highways England to do this work

⁵⁶ [Government road safety investment strategy 2020-25](#)

Local Infrastructure Development

As discussed on page 7, the North Yorkshire Fire and Rescue Area covers 7 Borough and District councils and the upper tier authorities of NYCC and City of York. All have their own sites setting out proposed plans for their respective areas regarding infrastructure developments.

The links to each councils site are listed below:-

- [Major developments – City of York Council](#)
- [Planning and development – Harrogate Borough Council](#)
- [New Local Plan | Selby District Council](#)
- [Ryedale District Council - Adopted Local Development Plan](#)
- [Local Plan 2012 - 2028 \(richmondshire.gov.uk\)](#)
- [Craven District Council : Craven Local Plan \(cravendc.gov.uk\)](#)
- [The Local Plan | SCARBOROUGH.GOV.UK](#)
- [Local Plan \(hambleton.gov.uk\)](#)

Community Risk Profiling

Rationale about data determinants

To build a community risk profile we have used the following data sets. These have been selected based on the research carried out and published in Government and national articles. The data has been selected to provide an up to date, reliable and sustainable profile of community risk in North Yorkshire and the City of York.

The sources of the data are cited with a brief explanation of what the data set provides. The data has been modelled using Cadcorp software and the results have been presented as individual map layers at LSOA level or as heat maps. The rationale for using each data sets is also set out in this section.

Data Type	What do we need?	Why are we using this data in our model?	Source	Confirmed Data used in this model
Incident Data	Appliance Data (Vision) Incident Data (IRS)	This allows us to look at the types of incident we respond to, what time they occur, how we respond (resources used and time), causes of incident, fatalities and casualties etc.	Vision mobilising system and IRS (Incident Recording System)	5 year IRS data imported 5 year Vision incident data imported
Societal Data	Information about the population, gender, age, living alone, smoking, alcohol and drug misuse data. Mental health problems, care hours and vulnerability data.	We need to understand the size of population, gender and all influencing factors in terms of being more at risk of being involved in a fatal fire incident. Understand the amount of incidents that are related to smoking, Care hours/Living well - understand the level of vulnerable people that access support Alcohol & Drug misuse	NYCC for Living Well, Smoking Cessation Data and Blue Badge, CoYC as above but excluding Living Well Census Data/Local Insight Data NYP Data	Blue Badge Living Well (NYCC only) NYP Mental Health Incidents Local Insight data <i>NB Smoking Cessation data not used in this risk profile</i>

		Mental Health Problems		
IMD Data	Aim to use the IMD LSOA Dataset detailing the following 7 headings: Income 22.5%, Employment 22.5%, Education 13.5%, Health 13.5%, Crime 9.3%, Barriers to Housing 9.3% & Services & Living Environment 9.3%. Also considering using two further datasets: Income Deprivation affecting Children Index (IDACI) and Income Deprivation Affecting Older People Index (IDAOPI).	Provided nationally by LSOA and gives us local authority and population statistics mapped to societal risk data. It will give us the level of societal deprivation and allow us to correlate these to emergency incidents.	IMD	IMD Data
Deliberate and accidental Fire Data (1 hour plus)	Incidents where NYFRS have been in attendance over an hour - excluding Automatic Fire Alarms (AFAs)	We can calculate the number of deliberate fires recorded but question the accuracy, consistency and reliability of the data. We've considered the use of 'arson' as a crime but this is very low volume and we'd be looking at the number of people prosecuted for arson which will be low in North Yorkshire, so as an alternative we will calculate our Fire Service response (for all incident types where one pump was in attendance for over an hour - excluding AFAs).	Vision and IRS Data	IRS and Vision Datasets
Non-residential building risk score (fire protection data)	To identify certain types of building that are at higher risk - aimed to use OS data, National Gazetteer and RPLG codes. Heritage buildings dataset	Identify different types of buildings that constitute risk: Buildings of Height, Care Homes, Hospitals (require an evacuation	OS Address Based Premium Data National Heritage List for England (NHLE	Heritage Buildings OS Property type data and Height of building data

		strategy). Heritage as one of our risks in the past - loss to community if involved in a fire, fire risk and spread due to age and condition, related to Firefighter risk, economic risk (tourism).		
Demographic Data	NHS list (Exeter Data) of people over 65 by household who may be living with varying degrees of frailty. The number of households identified by this data are counted by LSOA.	Exeter Data isn't available to us for this version of RRM. We'll be using proxy indicators of frailty instead to include Blue Badge and Care Hours	NYCC and CoYC Local Insight	Blue Badge Data Local Insight Care Hours
Financial Data	Combined score of the IMD 'Income Deprivation Affecting Children' and Income. Deprivation Affecting Older people' indices. Possibility of accessing numbers of people accessing Universal Credit in either this model or future. This dataset would cater for those of 'working' age.	Linked to the Survey of English Homes Fire Safety, identifying those most at risk of fires.	IMD Local Insight	IMD Income and Local Insight Universal Credit Data
Health Data	Datasets such as for smokers, drinkers or health and disability.	No reliable data on drinking and smoking. Some data from IMD and NYCC regarding both smoking and disability.	IMD NYCC/CoYC	IMD Health Deprivation NYCC/CoYC Blue Badge Data
Property Type Data	Number of Commercial, Residential, Height of Buildings and Object of Interest at highest level but then broken down into their sub headings (Commercial/Residential/Object of Interest). Include Heights of Buildings attributes.	To ascertain how many of the 563 property types from the OS Address Base there are in North Yorkshire and use these in our risk profiles.	OS Address Based Data	OS Property type data and Height of building data
Tenure Data	Three types of residential property tenure: owner	We will be able to calculate the risks of tenure	NY Police have Mosaic but we have	Local Insight tenure datasets

	occupied, privately rented, council/housing association.	and use a vulnerability score for each.	access to NYCC data via the Local Insight datasets as an alternative to Mosaic. Local Insight has given us the latest data and analysis for North Yorkshire communities and services – this platform is one of the fastest growing digital tools in the social housing sector.	
Environmental Data	Flood layer mapping data	One of the regular risks identified in NYFRS - flood layers data will help us be more prepared for flooding before it happens linking in with those vulnerability datasets. This is overlaid onto historic incident data for 5 years which has been graded by incident density	Environment Agency	Current EA Flood Layer
Road Risk Data	Arterial Route map layer Model incidents attended over an hour Collision/Crash data (5 years from NYCC)		NYCC and CYC Collision Dataset NYFRS incident data	Collision Data 2015-2020
Tourism Data	Research ongoing regarding the impact of Tourism. It may be that we share this at station level for them to use in their local plans. Hospitality premises can be identified in OS dataset.			No usable data for this version of RRM although access to Tourism data can be given at station level.

NYFRS data held in CFRMIS and Vision such as VARY 1 records, for hoarding and other vulnerable persons details such as home oxygen users have not been used in this version of the RRM as they are not of sufficient size to be modelled. All data sets that are based on personalised data have been modelled at LSOA level.

NYFRS service systems such as CFRMIS (Community Risk Management Information System) and Vision use UPRN's. Currently the data within CFRMIS is not reliably aligned to the Addressbase Premium gazetteer information regarding UPRN's. This is currently being remedied and in future service systems will be aligned and frequently updated. The benefit of accurate UPRN's include the ability for risk information on premises and/or occupiers to be stored in one data base and accessed directly by another e.g. linking Vision (Mobilising system) to CFRMIS.

AddressBase Premium also uses Basic Land and Property Units⁵⁷ (BLPU). Our current version of CFRMIS does not use these as a building descriptor and relies on FSEC codes and the historic Home Office classification system. We can use the Address Based Premium (ABP) descriptor code. We can also access the building height information from the gazetteer and this is being developed for future versions of the risk profile.

Historic fire safety records and the associated level of calculated risk have not been included as not all premises that fall under the RRO have such a score. The Risk Based Inspection Program has been defined in this document and allows NYFRS to target its protection services to risk. The use of accurate UPRN means that when external requests or data is available it can be accurately cross referenced. Of significant interest to NYFRS is how this is being used by MHCLG regarding the building risk review programme following from the Grenfell Tower fire in 2017. We have been provided with a list of over 5 000 premises all with a UPRN and BLPU.

AddressBase Premium (Gazetteer)

AddressBase Premium is the most comprehensive dataset of streets, properties and their addresses for Great Britain. Updated on a six-weekly cycle, the AddressBase Premium dataset is derived from local government's NLPG (National Land and Property Gazetteer) as created and maintained by GeoPlace, Ordnance Survey's OS MasterMap® Address Layer 2 and the Royal Mail's PAF (Postcode Address File). Adhering to British Standard for addressing BS7666, every property includes its Unique Property Reference Number (UPRN) and for every street its Unique Street Reference Number (USRN). It contains information relating to the full life cycle of a property including its provisional, historic and alternate addresses. Every street has its start and end coordinates. In addition, every property or street is given geographical coordinates, enabling the data to be used within a GIS.

⁵⁷ <https://www.geoplace.co.uk/addresses-streets/data-in-use/faqs>

Modelling Software

North Yorkshire Fire and Rescue Service have invested in software supplied by Cadcorp⁵⁸.

Modules used are:

- Cadcorp SIS Desktop⁵⁹ – A desktop GIS that provides Fire Services with access to a wide range of functionality including thematic maps, hotspot maps, routing analysis and time based maps.
- Cadcorp Workload Modeller⁶⁰ – Workload Modeller is a specialist fire service add-in to SIS Desktop. Workload Modeller allows fire services to configure resource sets (shifts, appliances, stations) and see the impact that has on the availability to meet operational performance standards.
- Cadcorp Risk Modeller⁶¹ –Risk Modeller is designed to allow fire services to easily create aggregate risk maps. Users follow the steps of the wizard and can save settings so they can easily re-run the same risk methodology in the future.
- Cadcorp WebMap⁶² –. WebMap is used by Fire Services to share interactive maps and GIS functionality on the intranet or internet.

Modelling Validation

The data used in the modelling of risk is from validated sources such as the Office of National Statistics. It has been accessed through web sites such as Local Insights and is considered a trusted and reliable source. We have used some closed source data sets for example we have been provided with 'Blue badge' data from North Yorkshire County Council and the City Of York Council. All data has been used to provide an informed view of risk in the North Yorkshire Fire and Rescue area.

We have used a method of validation called 'Train and test'. We have modelled risk using factors that based on research are most likely to place a person or household on a journey that leads to a fire and rescue response. Having modelled that data to create a risk profile we have then applied another data set purposefully kept aside to test the hypothesis, for example our own historic incident attendance at fires.

NYFRS also have access to a validation service provided by Cadcorp. Similar validation is provided to other FRS's who use their software.

⁵⁸ <https://www.cadcorp.com/>

⁵⁹ <https://www.cadcorp.com/products/desktop/cadcorp-sis-desktop/>

⁶⁰ <https://www.cadcorp.com/products/specialised-applications/cadcorp-workload-modeller/>

⁶¹ <https://www.cadcorp.com/products/specialised-applications/cadcorp-risk-modeller/>

⁶² <https://www.cadcorp.com/products/web-mapping/cadcorp-sis-webmap/>

Presentation of data

The chosen style of presenting the data depends on what query or question is being asked by a decision maker. Data can be provided as an LSOA map as shown in this document and we can use an algorithm to show the combined score presented as relative risk by LSOA.

To make it easier to view and identify areas of particular interest we have also displayed some of the modelled outcomes as Heat maps and Scatter maps using GIS modelling to illustrate where we predict there to be the most significant issue for example around environmental events such as flooding.

The data sets are filed inside the modelling software and so that queries can be asked based on what a decision maker needs to know. They remain visible on the map layers.

If viewed electronically using Foxit reader, by hovering the cursor over any LSOA, the information underpinning the relative risk is displayed.

Currently data analysts are required to model data and provide the map layers. As and when future data sets require adding to the modelling software or permission is granted to use current data for strategic planning the necessary revisions to the model can be made.

Future work on the modelling aims to provide users with a self-serving platform whereby they can drill down into a more granular level to gain a more in depth understanding of the risk and therefore provide the most suitable type of intervention.

Quality Assurance

Throughout the risk modelling phase, the RRM, NYFRS have worked closely with outside organisations in particular NYCC, CYC and the NHS.

- *During the development of the RRM NYCC provided some datasets, as well as access to locally licenced platforms such as Local Insight, and other council-based expertise and guidance on datasets that are worthwhile using.*
- *NYCC provided some guidance specifically around definition and use of certain datasets such as IMD, as well as advice on engagement strategies for roll out.*

Independent scrutiny of the methodology used by the risk profiling team, the chosen data sets applied in the modelling and the resulting profile has been applied. NYCC have been provided feedback to the project team by John Kelly, Head of Data & Intelligence for North Yorkshire County Council.

- *As part of that NYCC were invited to peer review the RRM model – great progress had been made and there is a good developing understanding of risk across the county.*
- *NYFRS are building an excellent product that will underpin their ability to deliver strategic services across the area, and NYCC are proud to be working alongside their partner to ensure the product is robust and reliable.*

Identifying Risk Premises

NYFRS have a robust process for identifying new premises that could pose a risk to firefighters during an incident. The identification of specific premises/sites will be from a wide range of sources.

The list below is not exhaustive but details some of the sources of information whereby premises will be identified as requiring a Risk Inspection and collation of Site Specific Risk Information.

Internal Sources

- NYFRS Risk Profile and existing premises/sites
- Operational personnel
- Technical Fire Safety Officers
- NYFRS Community Fire Risk Management Information System (CFRMIS)
- Integrated Risk Management Plan (IRMP)
- Incident Debrief System
- Operational Monitoring

External Sources

- Police (Critical National Infrastructure and CBRN site specific)
- Health and Safety Executive
- Local Authority Emergency Planning Departments – Control of Major Accident Hazards (COMAH) sites
- Intelligence from other Cat 1 and 2 Responders
- Neighbouring FRA's (Risks within 10 kilometers of County Borders, section 13&16 agreements)
- Environment Agency
- Trading Standards
- BASIS
- Local Authority Building Control

A risk assessment process is undertaken assessing each premises against the following criteria:

- Likelihood Descriptors
- Impact Descriptors
- Risk Categorisation Matrix
- Risk Grading and Prioritisation
- Risk Treatment

The risk categorisation matrix (Appendix H) on a five level qualitative scale is then used to determine an overall risk level for each of the risk groups.

3.7 The overall risk level identified for each of the Risk Groups is translated into a premises/site risk grade and priority level by using the Risk Grading and Priority Matrix (Appendix I)

NYFRS have entered into a Service Level Agreement with its neighbouring brigades to share operational risk intelligence. This process will ensure that any section 13 and section 16 agreements are supported through the availability of risk information.

Appropriate information will also be disseminated to other Category 1 & 2 responders where a multi-agency response is likely. Where a site is identified as a Very High risk level then a Tactical Information Plan will be completed.

Site Specific Risk Information (SSRI)

SSRI's provide operational personnel with essential information to support the implementation of safe systems of work and the formulation of effective tactical plans. They will also include CAD plans where appropriate.

Tactical Information Plans (TIP's) provide additional information than SSRI's for a specific premises/site. The aim of a TIP is to provide Incident Commanders and respective Command Teams with information based on pre-planned scenarios to support the development and implementation of an effective tactical plan.

Station	Harrogate	Craven	York / Selby	Hambleton	Ryedale	Scarborough	Richmond
VH	5	2	8	9	4	9	1
H	28	12	27	2	12	20	2
M	89	28	145	4	41	106	40
L	44	23	213	45	84	65	40
VL	6		19	3	25	4	9

Likelihood Descriptors

THE LIKELIHOOD OF AN INCIDENT OCCURRING		
SEVERITY RATING	DESCRIPTOR	SCORE
Catastrophic	<ul style="list-style-type: none"> • Intelligence from National or local fire statistics or partner organisations indicate that a significant number of fires/emergencies/problems have occurred in the previous 5 years or less, that have required Fire and Rescue Service Attendance. • Levels of fire safety management, maintenance or security of the premises/site are very poor. • Specific aspects of construction, occupancy, use of contents give rise for serious concern. 	5
Significant	<ul style="list-style-type: none"> • Intelligence from National or local fire statistics or partner organisations indicate that a significant number of fires/emergencies/problems have occurred in the previous 10 years or less, that have required Fire and Rescue Service Attendance. • Levels of fire safety management, maintenance or security of the premises/site are poor. • Specific aspects of construction, occupancy, use of contents give rise for concern. 	4
Moderate	<ul style="list-style-type: none"> • Intelligence from fire statistics or partner organisations indicate that there is little evidence of fires or other emergencies/problems within similar sites or occupancies elsewhere within the area, or nationally during the last 10 years. • There is some evidence/indication of appropriate levels of fire safety management, maintenance or security of the premises/site. 	3
Minor	<ul style="list-style-type: none"> • Intelligence from fire statistics or partner organisations indicate that there is little evidence of fires or other emergencies/problems within similar sites or occupancies elsewhere within the area, or nationally during the last 10 years. • There is good evidence of appropriate levels of fire safety management, maintenance or security of the premises/site. • There are no aspects of construction, occupancy; use of contents would give rise for concern. 	2
Insignificant	<ul style="list-style-type: none"> • Intelligence from fire statistics or partner organisations indicate that there is little evidence of fires or other emergencies/problems within similar sites or occupancies elsewhere within the area, or nationally during the last 10 years. • There are excellent levels of fire safety management, maintenance or security of the premises/site. • There are no aspects of construction, occupancy, use of contents that give rise for concern. 	1

Fire Fighter Safety Descriptors

THE IMPACT ON FIRE SERVICE PERSONNEL AS A RESULT OF HAZARDS ARISING FROM THE INCIDENT			
SEVERITY RATING	DESCRIPTOR	RISK CONTROLS	SCORE
Catastrophic	<ul style="list-style-type: none"> Exposure to hazards is likely and could result in death or serious injury (which would result in over 3 days lost time). All emergency responders attending the emergency incident on the site could be affected. 	<ul style="list-style-type: none"> Complex and/or unique risk controls required in addition to SOPs and or GRAs to prevent exposure 	5
Significant	<ul style="list-style-type: none"> Exposure to hazards is likely and could result in death or serious injury (which would result in over 3 days lost time). Some of the emergency responders attending the emergency incident on the site could be affected. 	<ul style="list-style-type: none"> Complex and/or unique risk controls required in addition to SOPs and or GRAs to prevent exposure 	4
Moderate	<ul style="list-style-type: none"> Exposure to hazard resulting in death or serious injury is unlikely but could result in less serious injuries. All emergency responders attending the emergency incident on the site could be affected. 	<ul style="list-style-type: none"> Mainly SOPs and GRAs with the possibility of some additional risk controls to prevent exposure 	3
Minor	<ul style="list-style-type: none"> Exposure to hazard resulting in death or serious injury is unlikely but could result in less serious injuries. Some of the emergency responders attending the emergency incident on the site could be affected. 	<ul style="list-style-type: none"> SOPs and GRAs required to prevent exposure 	2
Insignificant	<ul style="list-style-type: none"> Exposure to hazard resulting in injury is unlikely and is unlikely to result in any injuries 	<ul style="list-style-type: none"> SOPs and GRAs required to prevent exposure 	1

THE IMPACT ON SOCIETY AS A RESULT OF THE HAZARDS ARISING FROM THE INCIDENT.			
SEVERITY RATING	DESCRIPTOR	RISK CONTROLS	SCORE
Catastrophic	<ul style="list-style-type: none"> • Very Large Numbers of people in the affected areas impacted with significant number of fatalities. • Large number of people requiring hospitalisation with serious injuries with long term effects. 	<ul style="list-style-type: none"> • Most Responders will be unfamiliar with the site • and/or the complex or unique risk controls, SOPS or GRA's required to prevent exposure 	5
Significant	<ul style="list-style-type: none"> • Significant number of people in affected area impacted with multiple fatalities, multiple serious or extensive injuries. • Significant hospitalisation and activation of MAJAX procedures across a number of hospitals. 	<ul style="list-style-type: none"> • Most Responders will be familiar with the site • and/or the complex or unique risk controls, SOPS or GRA's required to prevent exposure 	4
Moderate	<ul style="list-style-type: none"> • One or Two fatalities or a single family group number of fatalities with some casualties requiring hospitalisation and medical treatment. • Activation of MAJAX alert notification system procedures in one or more hospitals. 	<ul style="list-style-type: none"> • Mainly SOPS and GRAs with the possibility of some additional risk controls with which most responders will be familiar to prevent exposure 	3
Minor	<ul style="list-style-type: none"> • Small number of people affected. • No fatalities and a small number of minor injuries with first aid treatment. 	<ul style="list-style-type: none"> • Most responders will be familiar with the SOPS and GRAs required to prevent exposure 	2
Insignificant	<ul style="list-style-type: none"> • Insignificant number of injuries or impact on health. 	<ul style="list-style-type: none"> • Most responders will be familiar with the SOPS and GRAs required to prevent exposure 	1

Environmental Risk

THE ENVIRONMENTAL IMPACT ARISING FROM AN INCIDENT AT THE PREMISES			
SEVERITY RATING	DESCRIPTOR	RISK CONTROLS	SCORE
Catastrophic	<ul style="list-style-type: none"> • Serious long-term impact on the environment and/or permanent damage 	<ul style="list-style-type: none"> • Most Responders will be unfamiliar with the site • and/or the complex or unique risk controls, SOPS or GRA's required to prevent exposure 	5
Significant	<ul style="list-style-type: none"> • Significant impact on the environment with medium to long-term damage 	<ul style="list-style-type: none"> • Most Responders will be familiar with the site • and/or the complex or unique risk controls, SOPS or GRA's required to prevent exposure 	4
Moderate	<ul style="list-style-type: none"> • Limited impact on the environment with short term or long-term damage 	<ul style="list-style-type: none"> • Mainly SOPs and GRAs with the possibility of some additional risk controls with which most responders will be familiar to prevent exposure 	3
Minor	<ul style="list-style-type: none"> • Minor impact on the environment with no lasting damage 	<ul style="list-style-type: none"> • Most responders will be familiar with the SOPs and GRAs required to prevent exposure 	2
Insignificant	<ul style="list-style-type: none"> • Insignificant impact on the environment 	<ul style="list-style-type: none"> • Most responders will be familiar with the SOPs and GRAs required to prevent exposure 	1

Community Risk

THE IMPACT ON THE COMMUNITY ARISING FROM AN INCIDENT AT THE PREMISES			
SEVERITY RATING	DESCRIPTOR	RISK CONTROLS	SCORE
Catastrophic	<ul style="list-style-type: none"> Extensive damage to properties and built environment in affected area requiring major demolition. General and widespread displacement of more than 500 people for prolonged duration and extensive personal support required. Serious damage to infrastructure causing significant disruption to or loss of key services for prolonged period. Community unable to function without significant support 	<ul style="list-style-type: none"> Most Responders will be unfamiliar with the site and/or the complex or unique risk controls, SOPS or GRA's required to prevent exposure 	5
Significant	<ul style="list-style-type: none"> Significant damage that requires support for local responders with external resources. 100-500 people in danger and displaced for longer than one week. Local responders require external resources to deliver personal support. Significant impact on and possible breakdown of delivery of some local community service. 	<ul style="list-style-type: none"> Most Responders will be familiar with the site and/or the complex or unique risk controls, SOPS or GRA's required to prevent exposure 	4
Moderate	<ul style="list-style-type: none"> Damage that is confined to a specific location, or a number of locations but requires additional resources. Local disruption of <100 people for 1-3 days. Localised disruption to infrastructure and community services. 	<ul style="list-style-type: none"> Mainly SOPs and GRAs with the possibility of some additional risk controls with which most responders will be familiar to prevent exposure 	3
Minor	<ul style="list-style-type: none"> Minor damage to properties Minor displacement of a small number of people for <24 hours and minor personal support required. Minor localised disruption to community services or infrastructure for <24 hours. 	<ul style="list-style-type: none"> Most responders will be familiar with the SOPs and GRAs required to prevent exposure 	2
Insignificant	<ul style="list-style-type: none"> Insignificant number of person's displaced and insignificant personal support required. Insignificant disruption to community services including transport services and infrastructure. 	<ul style="list-style-type: none"> Most responders will be familiar with the SOPs and GRAs required to prevent exposure 	1

THE IMPACT OF DAMAGE TO PREMISES ARISING FROM AN INCIDENT AT THE PREMISES			
SEVERITY RATING	DESCRIPTOR	RISK CONTROLS	SCORE
Catastrophic	<ul style="list-style-type: none"> • Serious impact on the local and regional economy. • Long term potentially permanent loss of production with some structural change. • Extensive clean up and recovery costs. 	<ul style="list-style-type: none"> • Most Responders will be unfamiliar with the site • and/or the complex or unique risk controls, SOPS or GRA's required to prevent exposure 	5
Significant	<ul style="list-style-type: none"> • Significant impact on local economy. • Medium term loss of production. • Significant extra clean up and recovery costs. 	<ul style="list-style-type: none"> • Most Responders will be familiar with the site • and/or the complex or unique risk controls, SOPS or GRA's required to prevent exposure 	4
Moderate	<ul style="list-style-type: none"> • Limited impact on local economy. • Short term loss of production. • Possible additional clean up costs. 	<ul style="list-style-type: none"> • Mainly SOPs and GRAs with the possibility of some additional risk controls with which most responders will be familiar to prevent exposure 	3
Minor	<ul style="list-style-type: none"> • Negligible impact on local economy and costs easily absorbed. 	<ul style="list-style-type: none"> • Most responders will be familiar with the SOPs and GRAs required to prevent exposure 	2
Insignificant	<ul style="list-style-type: none"> • Insignificant impact on local economy 	<ul style="list-style-type: none"> • Most responders will be familiar with the SOPs and GRAs required to prevent exposure 	1

Heritage Risk⁶³

The term “heritage building” is a broad one; however, it is likely to be a building of significant historical and architectural interest likely to contain articles of historical value.

Such buildings may be publicly or privately owned, managed by charitable bodies, trusts, or other types of bodies. There are, therefore, no typical ownership and management arrangements for these types of premises.

A fire in any type of building can be disastrous, in the case of a heritage building there is a further dimension the loss of property that forms part of the nation’s cultural heritage which is irreplaceable.

Fire can not only cause the total destruction of a building and contents, but areas also not directly damaged by direct burning may be damaged by smoke dirt or debris or by the large volumes of water which may be used to extinguish the fire.

Following a fire the building may be structurally unstable, open to the elements, and prone to decay caused by the high residual moisture content in the fabric of the building.

The occurrence of fires in heritage buildings is not uncommon; there have been a number of high-profile fires in recent years. This is not to suggest that they are at a higher risk of fire than other types of building. However, when a fire does occur in a heritage building it exposes the vulnerability of this type of building and contents to fire and its aftermath

The form and construction of heritage buildings frequently have features that can assist in the rapid development and the hidden spread of fire. Examples are;

- Exposed timber floor structures
- Walls lined internally with combustible materials such as wood panelling or externally with weather boarding.
- Roofs of shingles or thatch
- Continuous and interconnecting voids behind panelling and wall linings
- Undivided roof voids through which fire can spread quickly and undetected
- Timbers built into chimney breasts or close to flues
- High fuel load

Heritage buildings do not, in general, incorporate constructional features designed to control the development and spread of fire and smoke, to protect escape routes, and to prevent premature structural failure that are found in modern buildings.

The form and layout of the building may hamper the fire and rescue service firefighting operations. Examples are:-

- Remote locations which will affect the time for the fire and rescue service to respond
- Inadequate water supplies to deal with a serious outbreak of fire
- Inadequate access for firefighting and aerial access vehicles to the site and to the building’s perimeter

⁶³[Protection of Heritage .pdf \(publishing.service.gov.uk\)](#)

The size of our heritage stock

Up to date records of all listed buildings can be accessed through the English Heritage Gateway.

The following table shows the breakdown of listed properties in North Yorkshire by area;

Area	Grade I	Grade II*	Grade II
Craven	23	53	1517
Hambleton	43	84	1635
Harrogate	49	114	2115
Richmondshire	43	83	1835
Ryedale	65	93	1864
Scarborough	26	85	1859
Selby	29	35	571
York	71	172	1368
Total	349	719	12764

Initially these figures seem quite high; however, it is important to point out that until all the properties have been identified and mapped it is difficult to establish the true size of the issue. A number of these listings will indeed have no inherent fire risk i.e. parts of the city wall in York, monuments and war memorials in town centres. Although these 'non fire risk' listings should have little impact on our fire risk planning for that area, an awareness of these listings and their locations may help with planning for other emergencies.

THE IMPACT ON HERITAGE AS A RESULT OF HAZARDS ARISING FROM THE INCIDENT			
SEVERITY RATING	DESCRIPTOR	RISK CONTROLS	SCORE
Catastrophic	<ul style="list-style-type: none"> Where there is a potential TOTAL loss/damage of an historical structure and/or contents that can have a serious economic and/or social impact on the community either locally, regionally, nationally or in some cases internationally. With some long term potential permanent impact and loss with extensive clean up and recovery costs. 	<ul style="list-style-type: none"> Most Responders will be unfamiliar with the site and/or the complex or unique risk controls, SOPS or GRA's required to prevent exposure 	5
Significant	<ul style="list-style-type: none"> Where there is a potential of a SIGNIFICANT loss/damage of an historical structure and/or contents that can have a significant economic and/or social impact on the community either locally, regionally, nationally or in some cases internationally. With significant potential long term impact and loss with extensive clean up and recovery costs. 	<ul style="list-style-type: none"> Most Responders will be familiar with the site and/or the complex or unique risk controls, SOPS or GRA's required to prevent exposure 	4
Moderate	<ul style="list-style-type: none"> Where there is a potential of limited loss of an historical structure and/or contents that can have an economic and/or social impact on the community either locally, regionally, or in some cases nationally. With a potential long term impact and loss with limited clean up and recovery costs. 	<ul style="list-style-type: none"> Mainly SOPs and GRAs with the possibility of some additional risk controls with which most responders will be familiar to prevent exposure 	3
Minor	<ul style="list-style-type: none"> Where there is a potential for loss of part of an historical structure and/or contents that can have an economic and/or social impact on the community either locally, regionally, or in some cases nationally. With a potential short term impact and loss with small clean up and recovery costs. 	<ul style="list-style-type: none"> Most responders will be familiar with the SOPs and GRAs required to prevent exposure 	2
Insignificant	<ul style="list-style-type: none"> Insignificant potential impact on structure and contents and therefore no impact on the community. 	<ul style="list-style-type: none"> Most responders will be familiar with the SOPs and GRAs required to prevent exposure 	1

Operational Competence (Operational Staff Only)

Dealing with emergencies is fundamental to the role of the Service. The maintenance of skills and competence are a priority for operational staff and are aligned to safe working practices in order to reduce risk to the Services staff and communities, given the highly risk critical environment our staff must operate in.

There are nine core operational areas which are considered essential to assure operational competence and effectiveness:

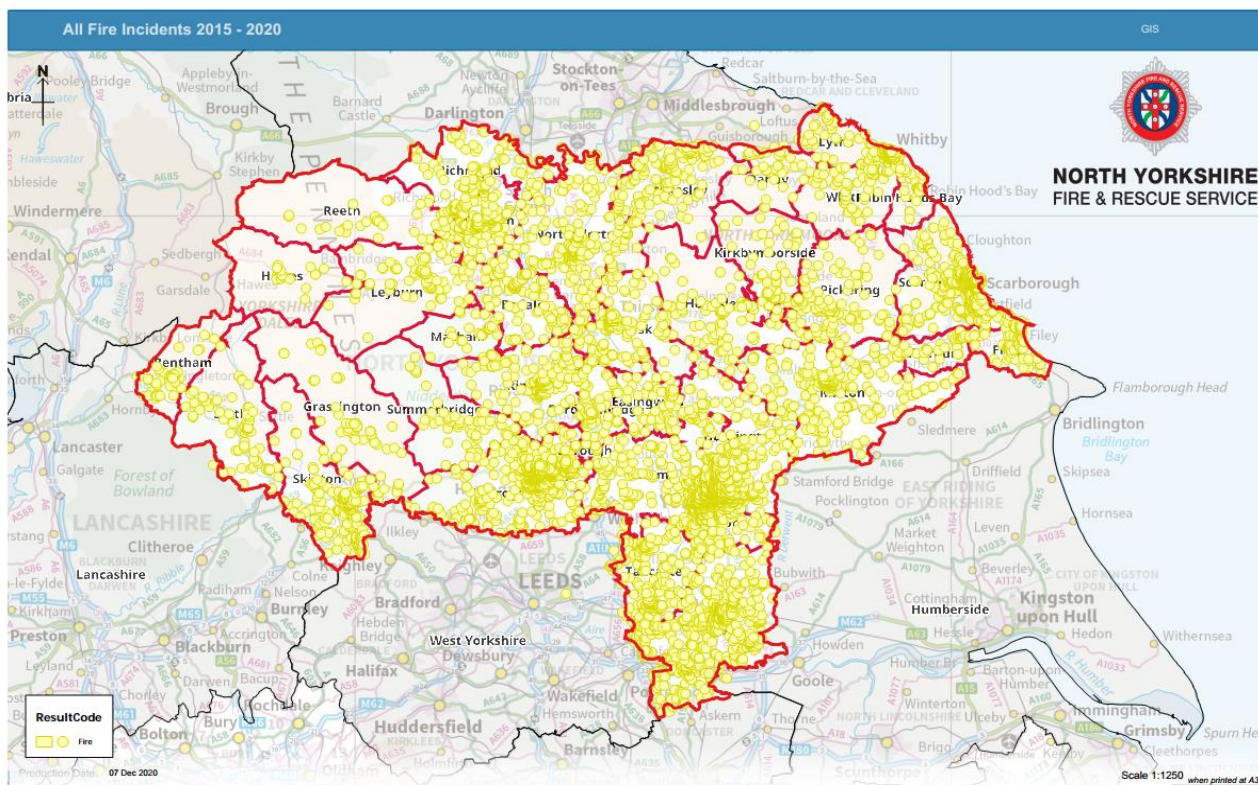
- Driving
- Command and Control
- Breathing Apparatus
- Hazardous Materials
- Working at Height
- Water Rescue
- Fire Service Pumps
- Extrication and Rescue
- Casualty Care



Historical incident activity

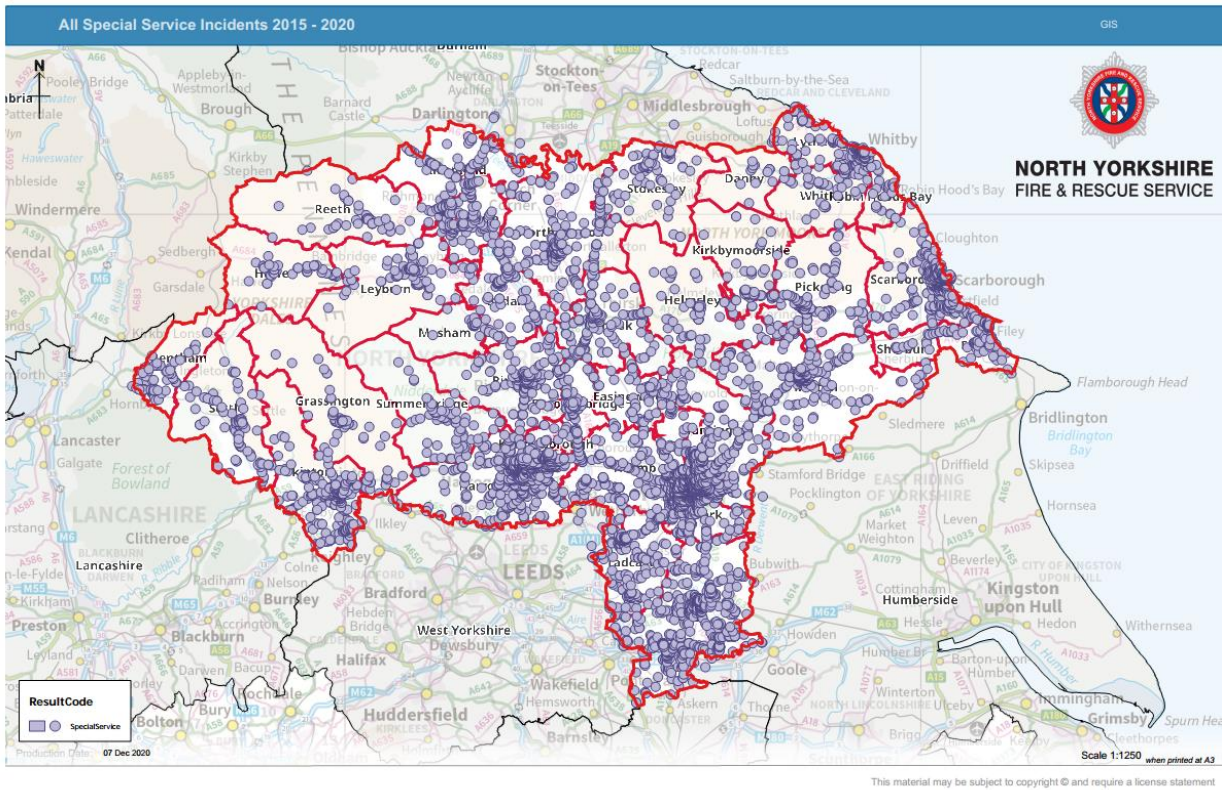
Five years of incident data has been exported from the mobilising system (Vision) and the Incident Recording System⁶⁴ (IRS). It has been sorted into incident types (for modelling) and providing location by incident type. The incident location data is input into Cadcorp and Cadcorp Calcinterior is used to calculate how many incidents of each type are in each LSOA. The totals are input into the LSOA risk spreadsheet.

All fire incidents 2015-20 plotted using NYFRS data

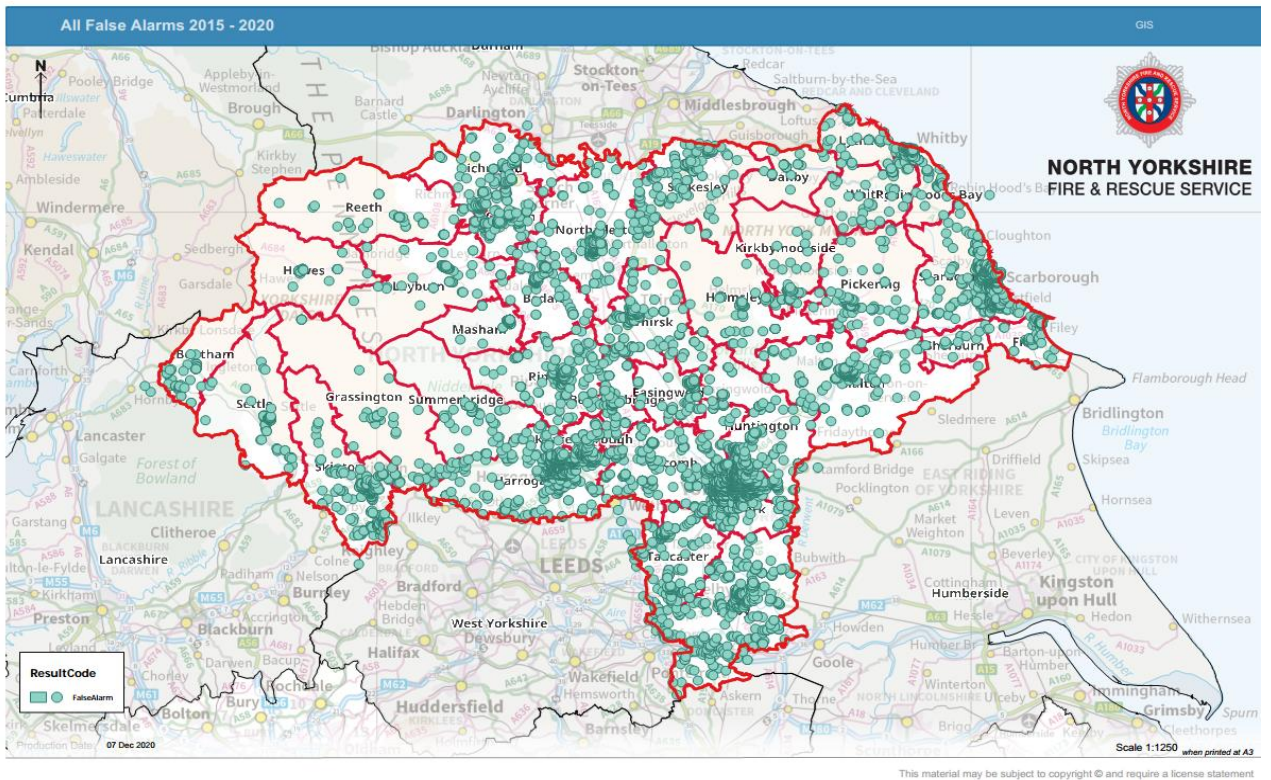


⁶⁴ <https://www.gov.uk/government/publications/data-protection-and-privacy-notice/fire-and-rescue-service-incident-recording-system-privacy-information-notice>

All Special Service Incidents 2015-20 plotted using NYFRS data



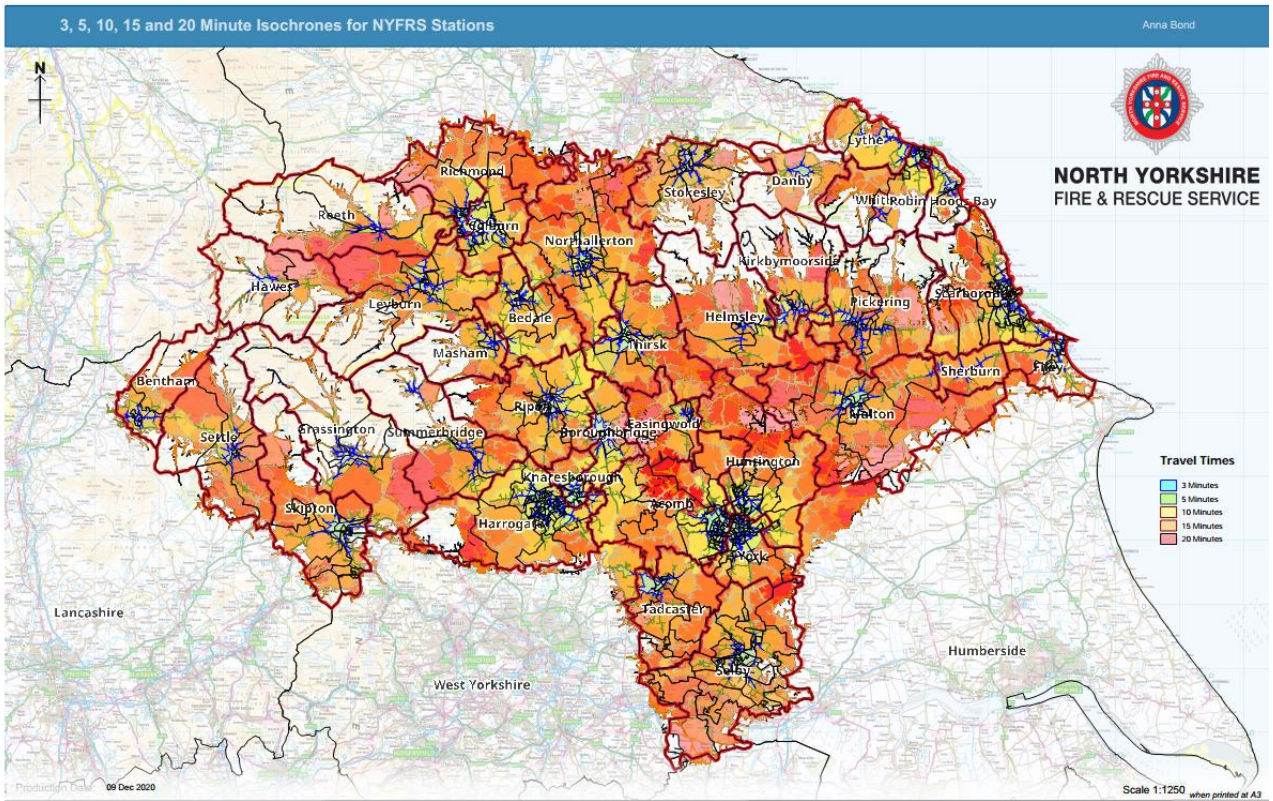
All false Alarms 2015-20 plotted based on NYFRS data



Isochrones - radius from station by time

An isochrone shows points of an equal value joined together. It's most commonly used to depict travel times, such as drawing a travel time perimeters around a start location.

3 – 20 minute Isochrones from NYFRS station location



Combined community risk maps

Population aged 65+

Shows the proportion of people of pensionable age (aged 65+) as a percentage of the total population. These population figures are taken from the Office for National Statistics (ONS) Mid Year Estimates.

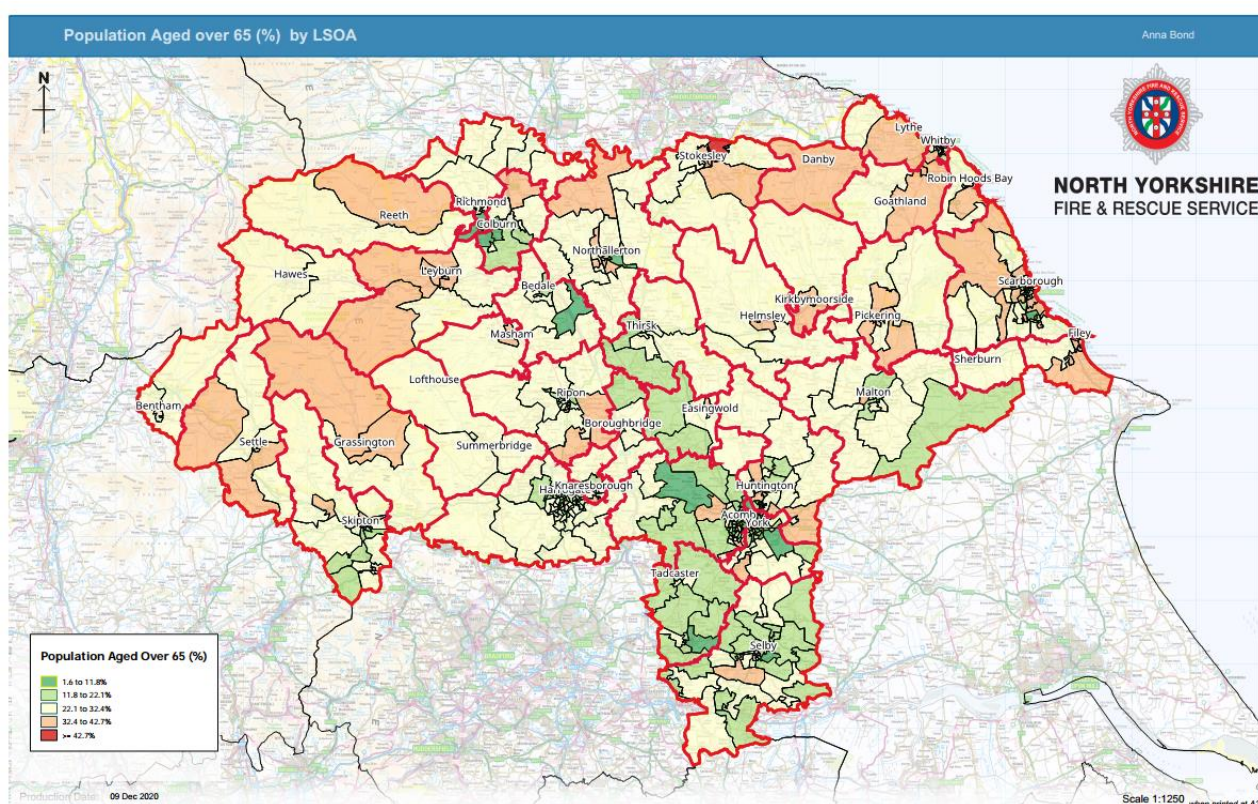
Rate calculated as = (Population aged 65+)/(Total population)*100

Date: 2019

How often updated: *Annually (published September 2020), with next update expected Sep-21*

Source: *Office for National Statistics (ONS)⁶⁵*

Percentage of population over 65 by LSOA

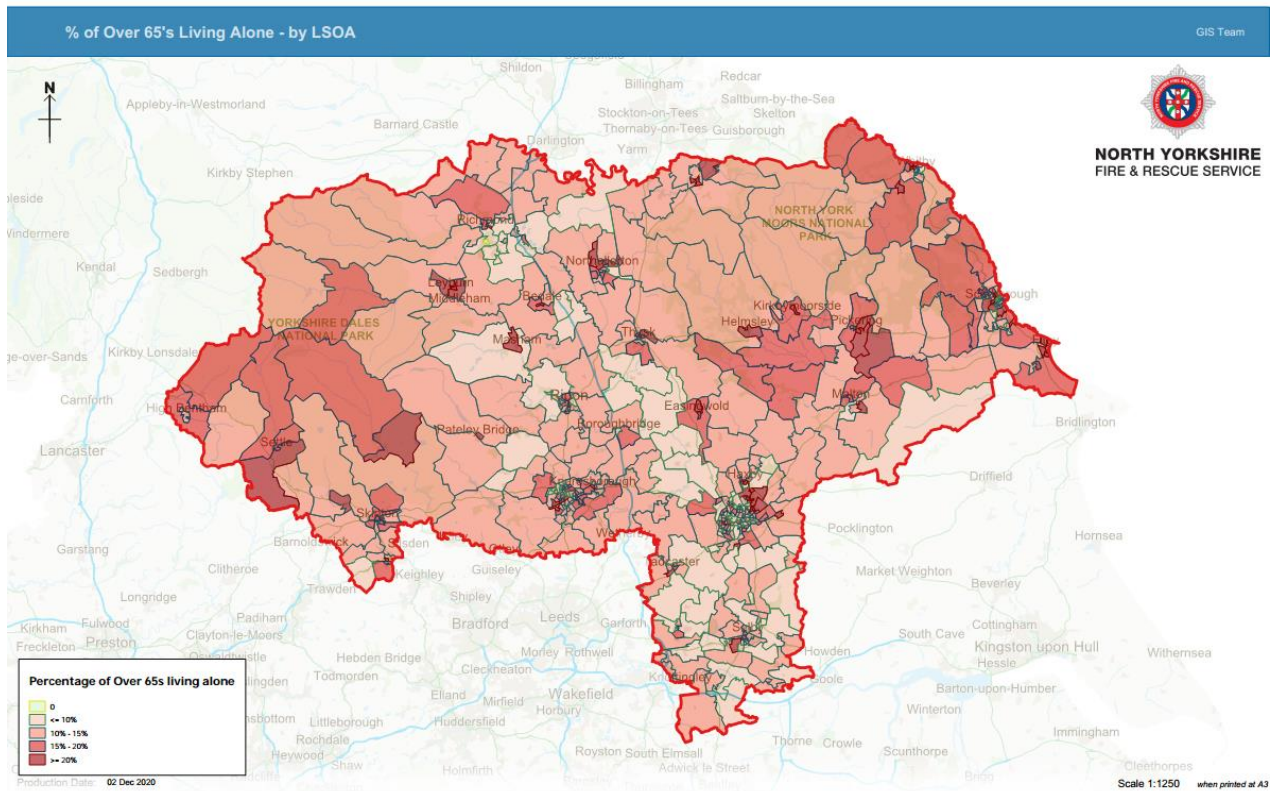


⁶⁵<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annual/midyearpopulationestimates/latest>

Persons living alone, aged 65+, in the North Yorkshire area.⁶⁶

Data on those living alone aged 65+ in each of the LSOA areas in North Yorkshire.

The data has been produced using the Nomis website. Nomis is maintained by Durham University on behalf of ONS.



Notes

⁶⁶ <https://www.nomisweb.co.uk/>

People with mental health issues (receiving Incapacity Benefit/Employment Support Allowance)

The figures for the number and proportion of people with mental health issues are based on the claimants of Incapacity Benefit who are claiming due to mental health related conditions. Incapacity Benefit is payable to persons unable to work due to illness or disability.

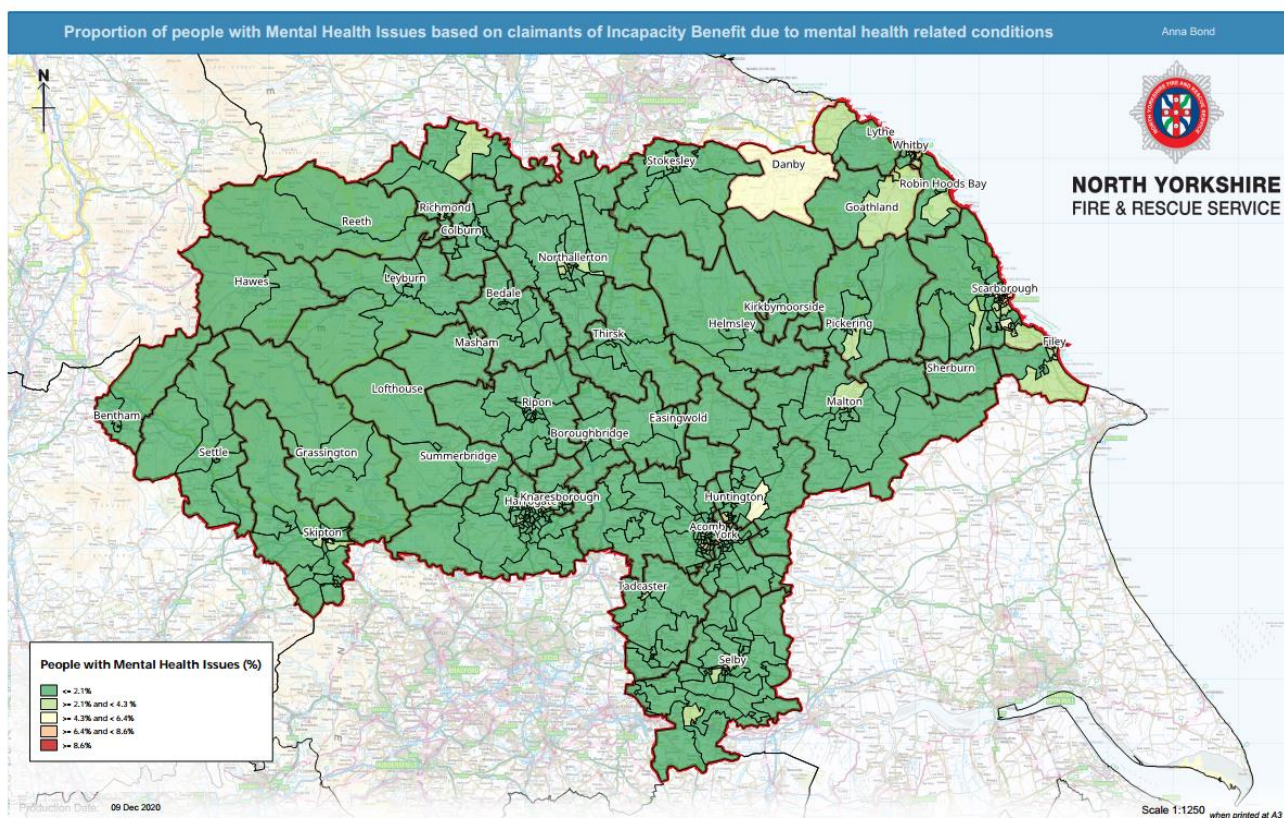
Note, since March 2016, ESA is being replaced by Universal Credit for new claimants. Rate calculated as = (Employment Support Allowance/Incapacity Benefit claimants, disease code mental)/(Population aged 16-64)*100

Date: Feb-20

How often updated: Quarterly (published August 2020), with next update expected Nov-20

Source: Department for Work and Pensions (DWP)⁶⁷

People with mental health issues receiving IB/ESA



⁶⁷ <https://www.gov.uk/government/organisations/department-for-work-pensions/about/statistics>

Provided with 50+ hours unpaid care a week

Shows the proportion of people providing unpaid care for 50 or more hours per week. Figures are based on self reported responses to the 2011 Census. A person is a provider of unpaid care if they give any help or support to family members, friends, neighbours or others because of long-term physical or mental health or disability, or problems related to old age. The figures include all people of all ages providing unpaid care.

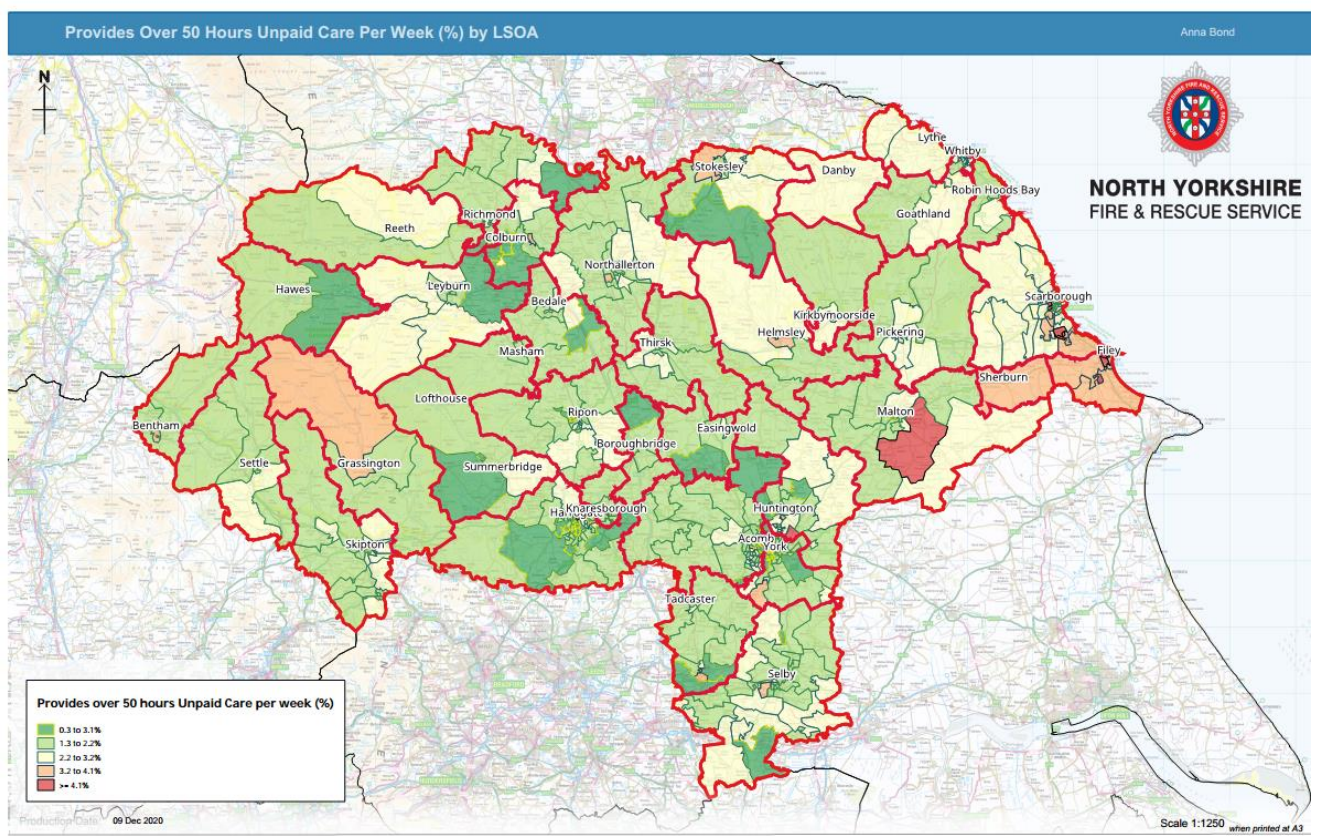
Rate calculated as = (Provides 50 or more hours unpaid care a week (census KS301))/(All usual residents (census KS301))*100

Date: 2011

How often updated: 10 yearly (published January 2013)

Source: Census 2011⁶⁸

Percentage of people receiving over 50 hours unpaid care per week by LSOA



Taken from Local Insight Data

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⁶⁸ [https://www.bing.com/search?q=\(https%3A%2F%2Fwww.nomisweb.co.uk%2Fcensus%2F2011%2FKS301ew&cvid=c5dc0a859c744063b689de7982a41676&FORM=ANAB01&PC=U531](https://www.bing.com/search?q=(https%3A%2F%2Fwww.nomisweb.co.uk%2Fcensus%2F2011%2FKS301ew&cvid=c5dc0a859c744063b689de7982a41676&FORM=ANAB01&PC=U531)

Owner occupied housing

Shows the proportion of housing that is Owner occupied. Owner occupied housing includes accommodation that is either owned outright, owned with a mortgage or loan, or shared ownership (paying part rent and part mortgage). The tenure of a household is derived from the response to the 2011 Census question asking whether the household owns or rents its accommodation and, if rented, from the response to the question asking who is the landlord.

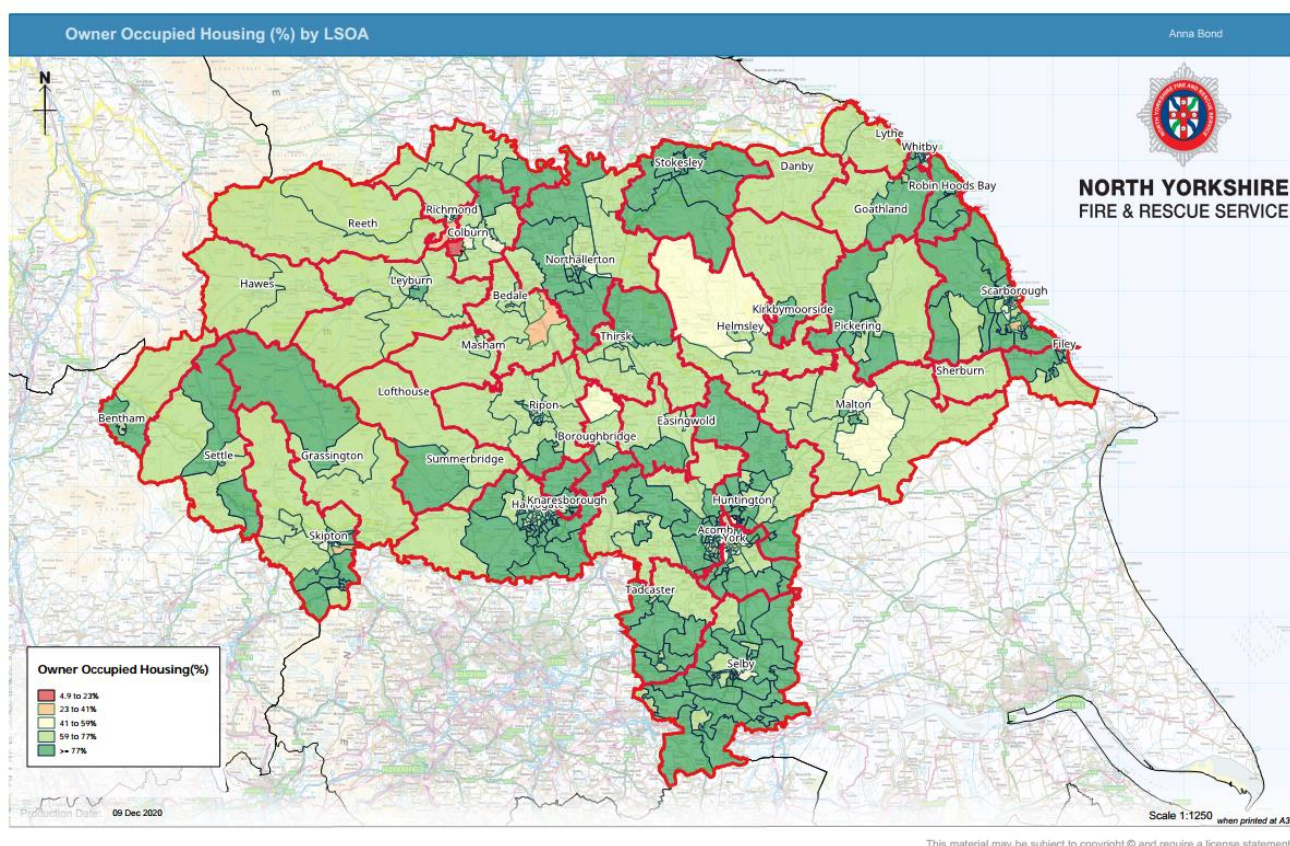
Rate calculated as = (Owner occupied households)/(All households (census KS402))*100

Date: 2011

How often updated: 10 yearly (published January 2013)

Source: Census 2011⁶⁹

Owner occupied housing by LSOA



⁶⁹ <https://www.nomisweb.co.uk/census/2011/ks402ew>

Social rented housing

Shows the proportion of housing that is rented from a Local Authority, Housing Associations or Registered Social Landlords. The tenure of a household is derived from the response to the 2011 Census question asking whether the household owns or rents its accommodation and, if rented, from the response to the question asking who is the landlord.

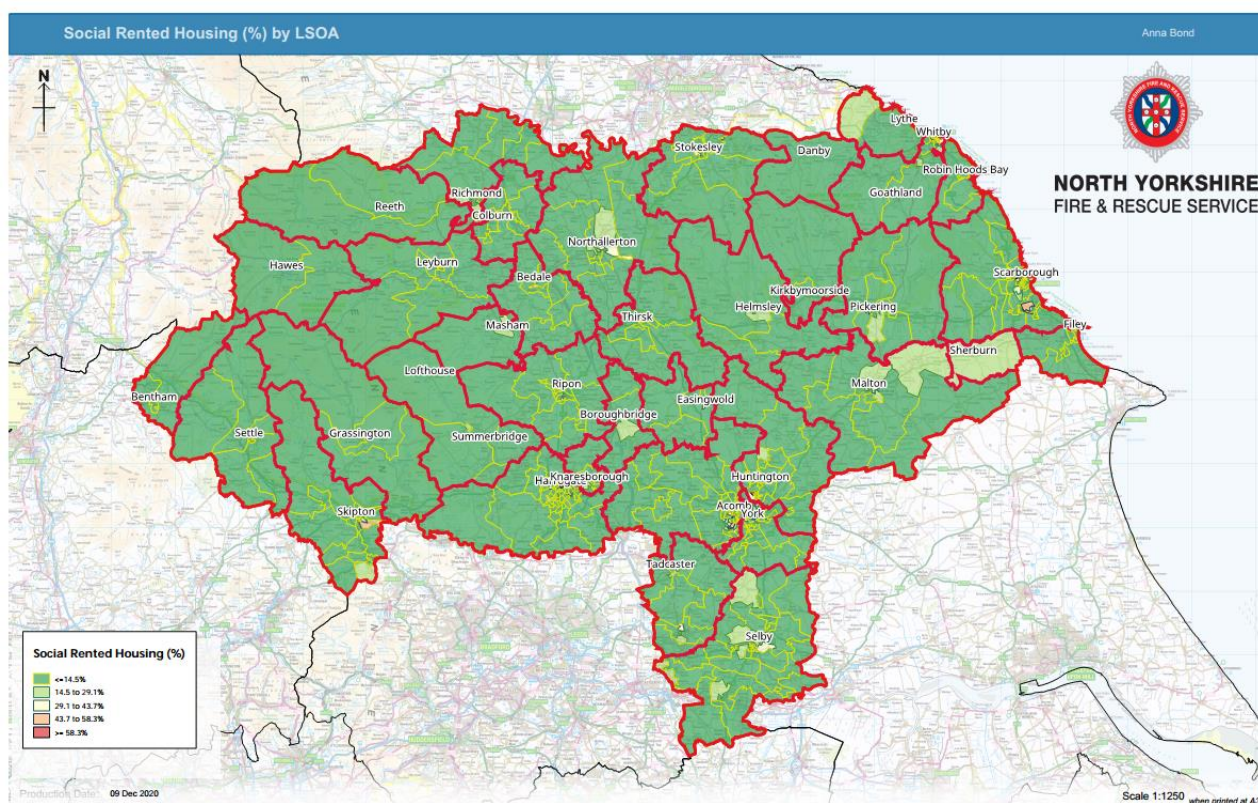
Rate calculated as = (Social rented households)/(All households (census KS402))*100

Date: 2011

How often updated: 10 yearly (published January 2013)

Source: Census 2011⁷⁰

Percentage of Social Rented Housing by LSOA



⁷⁰ <https://www.nomisweb.co.uk/census/2011/ks402ew>

Private rented housing

Shows the proportion of housing that is rented from a private landlord or rented through a letting agency. Private rented includes accommodation that is rented from a private landlord or letting agency, employer of a household member, relative or friend of a household member, or other non-Social rented. The tenure of a household is derived from the response to the 2011 Census question asking whether the household owns or rents its accommodation and, if rented, from the response to the question asking who is the landlord.

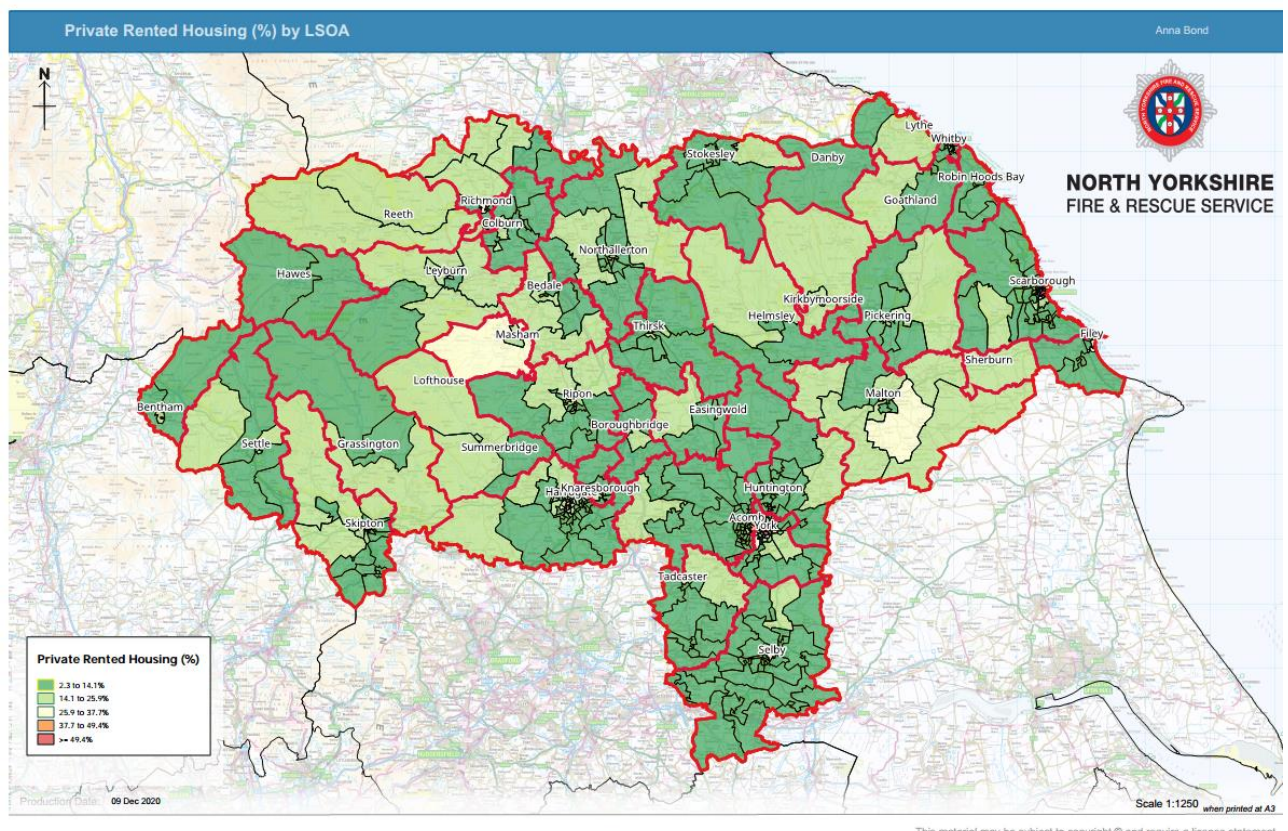
Rate calculated as = (Private rented: Private landlord or letting agency (census KS402))/(All households (census KS402))*100

Date: 2011

How often updated: 10 yearly (published January 2013)

Source: Census 2011⁷¹

Percentage Private Rented Housing by LSOA



⁷¹ <https://www.nomisweb.co.uk/census/2011/ks402ew>

Combined and Relative Risk Model

Fire Occurrence

Based on the research carried out and discussed in detail earlier on in this document, we have chosen the most relevant data sets available to model a combined risk score for those who are more likely to have an accidental dwelling fire.

This has been done with a data set focussing on over 65's with proxy indicators of frailty. We have used a social renter data set and IMD data already put into deciles which is the conventional norm for modelling.

The data has been modelled using Cadcorp software and has been applied with the following weightings.

The maximum amount of blue badge holders (proxy indicator for frailty) is 199 in any LSOA.

IMD Decile	% >65's living alone	Num of Blue Badge Holders	% Social Rented Housing	Weighting
1	>90	>=180	>90	10
2	80 - 90	160 - 180	80 - 90	9
3	70 - 80	140 - 160	70 - 80	8
4	60 - 70	120 - 140	60 - 70	7
5	50 - 60	100 - 120	50 - 60	6
6	40 - 50	80 - 100	40 - 50	5
7	30 - 40	60 - 80	30 - 40	4
8	20 - 30	40 - 60	20 - 30	3
9	10 - 20	20 - 40	10 - 20	2
10	<10	<20	<10	1

The scores by LSOA have then been presented on a map of North Yorkshire and City of York in the following bandings and shown in the legend on the map.

Zero

<12.00

>13.00 -<19.00

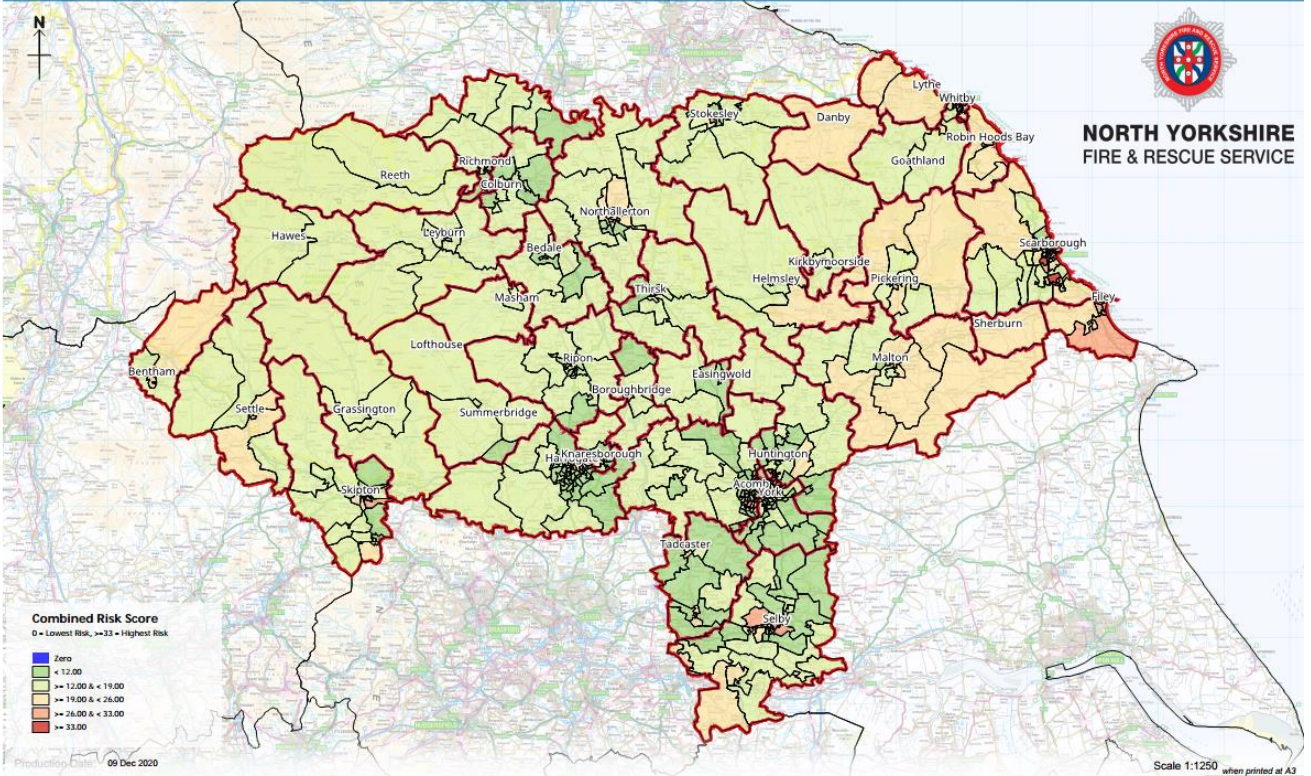
>19.00 < 26.00

>26.00 < 33.00

>36.00

The data used has the possibility of being broken down into other groups so we can show the relative risk for a range of other data determinants depending on the specific queries being made to support decision making.

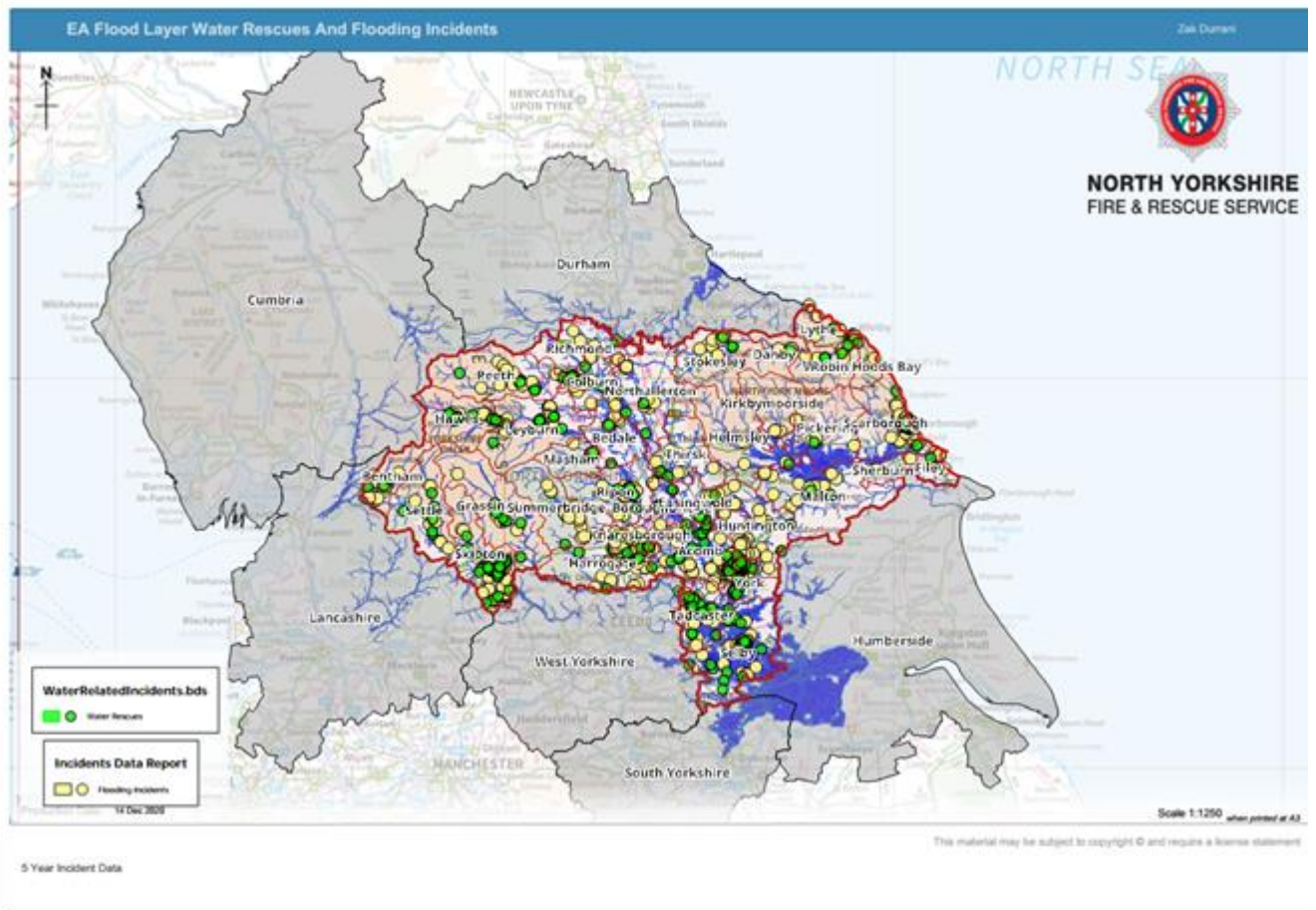
The map below shows the relative risk of the combined score by LSOA.



Weightings provided in a separate document

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Flood Risk



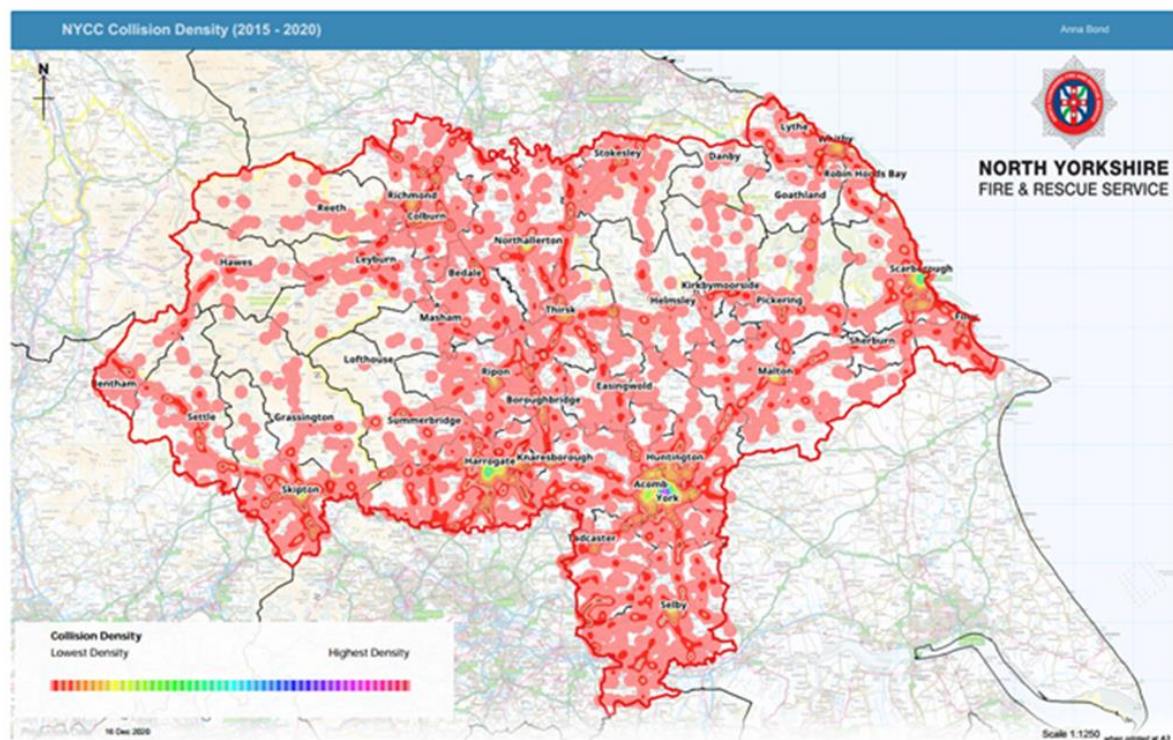
Road Risk

The risks can be categorised as: -

Geographical

North Yorkshire's road network is relatively large and remote. As well as a vast network of rural roads, there are a number of strategic routes traversing the county. Population densities are relatively low, with seasonal rises due to visitors, and associated increases in traffic volumes.

- The majority of fatal and serious RTCs occur towards the south and west of the county. Predominantly away from the strategic road network on either 'A' classification roads or smaller rural roads.
- There are identifiable 'KSI routes' which continue to have a higher than average incidence of KSIs particularly those routes which are popular with the motorcycling community.
- Some areas periodically give rise to a greater risk because of particular events such as modified car shows / cruises on the east coast
- North Yorkshire Police have reported that Drink driving tends to be centred on rural areas.
- North Yorkshire Police have reported that Organised Crime Group usage of the network tends to be related to the main trunk roads



NYCC Collision Data 2015-2020 as a heatmap

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Vehicles

In line with the national picture, by far the majority of KSIs involve cars, however there is a disproportionate representation of motorcycle users within the figures.

- North Yorkshire has a higher than average incident of KSIs involving motorcycle use – particularly those over 500cc.
- North Yorkshire has seen a year-on-year increase in the number of KSIs involving pedal cyclists – this has been particularly prevalent as the county has become increasingly popular for cyclists and has figured on international high profile sporting events.
- North Yorkshire is attractive for leisure activities and can attract high risk groups such as modified car owners who attend organised rallies.
- Being a predominantly rural county, there is a larger presence of agricultural vehicles which can present a risk to other road users. Particularly those who are more used to driving in an urban environment.
- Recent relaxation of the MOT rules and the fact that partner agencies such as the DVSA aren't currently enforcing means that the number of un-roadworthy vehicles on our roads may have increased.

Persons

Enforcement / education around the 'fatal five' is designed to influence driver / rider behaviour and rarely are fatal or serious injury RTCs devoid of any human interaction / causation factor.

- The highest proportion of persons killed or seriously injured on the roads in North Yorkshire are males aged between 16-35.
- North Yorkshire has a higher-than-average proportion of persons over 70 killed or seriously injured on our roads
- Certain age groups and vehicles pose a higher risk – such as males over 40 on high powered motorcycles.
- North Yorkshire has a high incidence of detections of persons driving whilst under the influence of drink or drugs.
- The rural nature of the County and the spread of police resources means that persons are more likely to take risks without a great fear of being caught. This is particularly relevant with regards to rural drink driving or high-speed driving / riding when the roads are quiet.

Intelligence

Relevant and timely intelligence is key to delivering an effective response to road safety.

- There is a lack of dedicated analytical capacity.
- RTC data, whilst comprehensive, is not always presented in a workable format to enable considered decisions regarding targeting activities.
- Information sharing between partner organisations can be slow and lacking in coordination.

Response

NYFRS has a pre-determined response to road traffic collisions with most incidents that occur on the road network being attended by two appliances.

Incidents on motorways attract an additional appliance and those involving larger vehicles are also attended by a Heavy Rescue Unit.

All operational staff have received training on how to deal with road traffic collisions including extrication techniques, medical training, incident command including working with other agencies based on the Joint Emergency Services Interoperability Protocols.⁷²

⁷² <https://www.jesip.org.uk/five-principles>

Prevention Services

Domestic Safety

Most deaths and injuries from fire occur in the home and this is, therefore, a major focus of our community safety work.

We adopt a person-centred prevention approach based upon:

Universal messaging to ensure that as many people as possible can understand and respond to fire safety messaging and make positive changes to their lives, build resilience and make informed decisions that keep them safe and well (lower risk households and individuals).

All age community engagement targeting community risks, for example addressing seasonal issues, emerging communities, fire risk associated with certain religious and cultural practices etc and working with low to medium risk households, individuals and communities with common characteristics.

Person centred engagement through full locality integration with strategic partners, adopting the principle that any fire and safety prevention approach must include risk reduction measures that should be developed around the health, behaviour and needs of persons, and not solely the type of premises or properties in which they reside (medium to high and very high-risk households and individuals).

Fire and safety risk are based upon numerous and changing factors which can be categorised under three headings as follows:

Person Factors - are integral to the person or people living in a property; things that are temporarily or permanently a part of them and cannot be changed for example

- Cognitive impairments – which would mean a person might not understand what to do in the event of a fire
- Mobility impairments – meaning a person's ability to escape from a property in an emergency would be hindered

Home factors - are those factors which are integral to the home itself, or its contents (physical environment). Or how the person interacts with others (social environment) such as the layout of the property and other people that occupy the property such as: -

- Hoarding or high levels of clutter – this can obstruct a person's ability to exit a property as well as provide high levels of fuel to feed a fire
- Returning home from hospital and there are fire concerns in the home, e.g. burn marks on bedding, furniture or carpets. Electrical faults, unsafe practices with cooking and heating the home, the occupier smokes and there is no fire alarms installed in the home

Behaviour Factors - are actions, activities or behaviours - things that people do (or don't do) such as

- Signs of carelessness with smoking materials – burn marks evident within the property
- Substance misuse – which may impair a person's ability to exit a property in an emergency

Road Safety

The overarching partnership body is the York and North Yorkshire Road Safety Partnership, of which we are a key member. This sets the overall approach to road safety in the City of York and North Yorkshire. The partnership road safety activity is co-ordinated by Road Safety Task Groups and we will remain an active member of these groups.

The Partnership aligns with the Department of Transport's Road Safety Statement 2019 which details its commitment to the idea that road deaths and casualties are not merely the result of poor driving, but of a transport system as a whole, from signage to road user education, from enforcement to infrastructure design and construction.

The partnership has an integrated approach in delivering road safety outcomes based on the following: -

- **Education** - Supporting people to become safer and more responsible throughout their lives through road safety training is an important aspect of our action plan. Equipping people with the knowledge and skills to walk, cycle, ride and drive more safely on our roads can improve an individual's general health and well-being.
- **Engagement** - Working in partnership with local communities and organisations to encourage safer road use and promote greater use of public transport and more active forms of travel. Sharing information, ideas, opinions and problems is important in achieving partnership aims and it essential to actively create opportunities to improve communication with road user groups, businesses and local communities.
- **Engineering** - Safer roads are an important part of a healthy environment and overall wellbeing. Actual or perceived dangers of a road can act as a barrier to people's ability to socialise, access and use local services and undertake physical activity. Well designed and maintained roads that are attractive, accessible and appropriate are also key in enabling people to make safer and healthier travel choices. Designing new road environments that provide facilities for people to walk, cycle, ride and drive, encourage sustainable modes of transport and protect our local communities.
- **Enforcement** – Promoting and encouraging drivers to choose the appropriate speed for the area and conditions and provide a Speed Management Protocol to investigate and address concerns around speed of traffic. Enforcement also extends to addressing the behaviours of road users such as using mobile phones, not wearing seatbelts and jumping red lights etc.

The partnership focuses on 3 focus areas in the DfT statement as the priority areas namely safer people, safer roads and safer vehicles.

To summarise the focus areas is set below.

Priority area	Summary
Safer People	<p>a) Young road users: first steps to greater safety Road safety skills are vital for young people, both for their own wellbeing and for that of others. As young people progress to become passengers who can influence the behaviour of drivers; it is important that they continue to develop the skills, knowledge and resilience, needed to manage and challenge dangerous situations.</p> <p>b) Young adults: dealing with growing independence Young drivers and passengers are overrepresented in crash and casualty statistics, but as passengers, they also have great potential to influence driver behaviour.</p> <p>c) Adults: staying within the law Adults need to put all the "road safe" learning from younger years into practice staying legal and safe on the road. There are a small number of people who represent a threat to themselves and others around them. High harm road users are at the top end of this group.</p> <p>d) Third-age adults Older road users' knowledge, experience and skills can deteriorate based on age, experience and declining cognitive and physical capability. As the UK's population ages, it is crucial that older people can maintain the skills and confidence required to remain safe and effective drivers.</p> <p>e) Pedestrians, agricultural, cyclists and equestrian, Recognising the dangers of the road and immediate environment needs to extend beyond the person being in a vehicle and to wider road safety awareness.</p>
Safer Roads	<p>a) Rural Roads The highest number of fatalities on our roads occur on rural roads, particularly among young car drivers aged 17-24.</p> <p>b) The Strategic Road Network England's Strategic Road Network (SRN) has some of the safest of all roads, there is still the need to continue to improve safety on them concentrating on driver behaviour changes with campaigns around – vehicle checks, tailgating, motorcycling and commercial vehicles.</p> <p>c) Urban areas and the environment Speed is an important factor in causing road deaths and casualties, and there is a public concern about the effects of speed and safety.</p> <p>d) Understanding Road Collisions Use and evidence-based approach based on reliable statistical information, analysed and evaluated to inform and direct targeted intervention work.</p>
Safer Vehicles	<p>a) Fleets and people who drive for work Employers have a major potential role to play in improving safety on the roads through ensuring that their staff are properly prepared and motivated to drive and ride safely, and that they are using safe vehicles.</p> <p>b) Safer Large Goods Vehicles To improve the safety of Large Goods Vehicles to reduce collision involvement with vulnerable road users, predominantly cyclists and pedestrians.</p> <p>c) Safer Motorcycles Ensuring that motorcyclists are equipped with the specialist skills necessary in order to stay safe on the road, understanding the risks, increasing protection and improving behaviour.</p>

	<p>d) Automated Vehicles The development of safer vehicles has had a significant, positive impact on crash survivability. Whilst road user behaviour accounts for most crash causation, the Safe System ethos identifies the need to make crashes survivable.</p>
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Water Safety

We provide key safety messages and interventions to help people understand the risks associated with water. North Yorkshire has an extensive network of inland waterways that are used by an increasingly diverse number of people including for leisure, work and as a place to reside. We also have many lakes and reservoirs which whilst enjoyed by many are a potentially hazardous environment. There is also the coastline environment which poses additional risks. We work with other recognised organisations such as: The Environment Agency, Boat Safe, Yorkshire Water, Mountain Rescue and landowners, to provide advice and education through recognised interventions to reduce or mitigate water related risk.

Early Intervention / Youth Diversion and Engagement

Public Health approaches start with the need of the public or population groups rather than with individuals. A Public Health approach means looking behind a problem to understand what is causing it. 'Social Determinants' such as education, debt, housing make people more or less likely to: be a victim of crime, have poor health outcomes, die prematurely, have contact with Police and other emergency services, enter the Criminal Justice System.

Early intervention strategies aim to mitigate the effects of problems once they have been identified. Early intervention is therefore usually targeted at those who are vulnerable or at a higher risk of a problem.

Community safety activities for young people will be delivered through a combination of educational visits and group courses. In addition to this there will be some interventions on an individual level to address 'fire setting' behavior. Most of our work with young people is delivered by specialist community safety staff although they may be supported by operational crews. In all cases trained staff will deliver courses and instruction to young people, targeting relevant issues and working closely with local agencies.

The core set of events aimed at young people will be:

- . Key Stage 1 school visits – Topic to suit local need
- Key Stage 2 school visits – Topic to suit local need
- LIFE courses (for individuals referred by partner agencies)
- BTEC schemes (run at schools)
- BTEC Young Firefighter schemes (run on fire stations)
- Prince's Trust course (for individuals aged 16-23 years referred by agencies to enable them to gain the skills required to enter local colleges)
- Firesetters programme (for individuals who have been engaging in fire setting).

Disruption

This theme is about working in partnerships to tackle the root causes of what makes people vulnerable to becoming victims of harm, these can arise from person / social factors / environmental factors. NYFRS is committed to supporting countywide strategic partnerships, aimed at removing or mitigating risks to the most vulnerable.

The definition used by NYFRS for vulnerability is:

‘A person or family, who is receiving or may need care, because they have a learning, physical or sensory disability, mental illness or age-related problem, and who is or may be unable to protect themselves against harm or exploitation’.

The emphasis has been on fire; however we are now increasingly more focused on a wider range of issues.

Safeguarding

To fulfil our Safeguarding commitment, we will pass on information to partner agencies, about vulnerable people or households that we come into contact with, when there is a significant risk of harm that could be avoided.

Where a person is in immediate danger, a child is at serious risk or a serious crime has been committed then a decision may be taken to pass information to another agency without the service users’ consent.

The referral is a prevention issue intended to prevent harm. The referral can come from any of our staff including protection (technical fire safety) or operational staff.

We have arrangements in place to allow other agencies to refer any individuals or households to us, when they think that there is a risk from fire. We will work with other agencies to increase their understanding of risk from fire so that their staff can identify when there is a need to make a referral to us. Safeguarding refers to anyone (child or adult) who is subjected to or at risk of harm or abuse including self-abuse.

PREVENT

The service supports the Governments Prevent Strategy (Counter Terrorism CONTEST strategy). The aim is to reduce the threat to the UK from terrorism by stopping people becoming terrorists or supporting terrorism. This has simply been expressed as the need to “prevent people from being drawn into terrorism”. Local district based PREVENT groups meet regularly and a representative from NYFRS with enough authority should attend.

Communication

Our universal messaging aims to ensure that as many people as possible can understand and respond to fire safety (BFS and Domestic), road and water safety messaging and make positive changes to their lives, build resilience, and make informed decisions that keep them safe and well (lower risk households and individuals).

Communications need to be consistent, current and in the agreed corporate format. Examples of communication include: Pre-prepared leaflets/posters and booklets, prepared corporate messages sent out by the Comms Officer, authorised use of social media such as twitter and public facing events such as meetings and public events.

Protection Services

Audits – Our primary method of measuring compliance will be through our Risk Based Inspection Programs which will take the majority of our time. Our largest resource is our operational personnel and they will carry out the majority of our audits, acting as our eyes and ears within the community. BFS staff will carry out fewer audits that are more complex, which normally take longer to deal with.

Advice – A competent and transparent service offering timely and accessible advice to those willing to comply is more likely to result in a safer and more prosperous community, as opposed to the rigid application of hard enforcement measures.

When advice is offered it will be targeted and transparent using the national guidance documents as a benchmark in terms of 'standards'. When dealing with businesses which do not possess the technical expertise to derive a range of acceptable outcomes, which satisfy the standard required, our officers will provide a level of advice that enables the business to understand what is required by the law, but will not extend into the field of 'consultancy'.

Working with others - We work with businesses in order to be proactive in the community, support compliance and provide best value by holding seminars and other targeted events where they will benefit most. We also work with other regulators and partners to help identify overlaps in legislation and collaborating, where possible, to negate duplication of effort and achieve shared outcomes. Further information on this can be found in the dedicated 'working with others' section of this document.

Complaints - Analysis has shown that responding to complaints from members of public or other partner agencies are more likely to result in fire safety deficiencies being identified than scheduled audits. Therefore, we will take every complaint seriously and apply a risk-based approach to each complaint. For example, persons in premises that are perceived to be in serious and imminent danger will demand the greatest urgency. Complaints will be assigned to officers with the appropriate level of competence and authority in relation to the nature of the complaint and type of premises.

Prosecutions - The appropriate use of statutory powers including enforcement, prohibition, prosecution, is important, both to secure compliance with the law and to ensure that those who have duties under it may be held to account for failures to safeguard health, safety and welfare.

Consultations – Fire services are a statutory consultee under legislation such as building regulations, planning and licensing and liaise directly with the relevant body responsible.



North Yorkshire Fire and Rescue Service Risk Based Audit Programme (RBIP)

The Risk Based Audit Programme forms part of the Service's overall integrated approach to risk management by prioritising the inspection and audit of premises. To achieve this, the level of compliance with the FSO within a premises is determined by the carrying out of an on-site audit which will, on completion, apply a risk rating which not only reflects the compliance with the FSO, but also the potential for the loss of life or serious injury linked to occupancy type.

Where premises have a very high heritage value, community value or unique services value or where excessive environmental damage or fire-fighting difficulties would be present in fire, the initial risk rating is re-assessed on an individual case by case basis and may be adjusted to acknowledge this fact, both at a local and national level.

Audits will be carried out on all known premises following a pre-determined inspection programme, based on the overall risk score that has been allocated.

In addition to this, audits will also be carried out following:

- Receipt of selected Building Regulations Completion Certificates/Final Notices
- Notification of a fire incident
- Notification from Operational Personnel of a serious risk to persons due to the lack of fire protection measures within a premises
- An application for a new licence under other statutory regulations or acts of parliament
- Following the receipt of a fire safety complaint.

To demonstrate that the Fire and Rescue Authority is meeting its legislative responsibilities, it is critical that at every stage the processes by which the levels of risk and the resulting enforcement activity have been determined are reasonable, recorded, transparent and auditable.

All Hospitals, Care Homes, Hostels, Boarding Schools, Licensed premises and Hotels will be included in the programmed audit process.

Our Risk information System is used to hold premises records and once aligned to Address Based Premium will allow for all buildings in the service area to be identified by UPRN and ABP value.

Outcomes from National enquiries such as Grenfell and the subsequent recommendations are considered in the application of the RBIP.

Summary

The aim of profiling community risk by the analysis of data has been to enable decision makers to have an up to date and accurate understanding of what, where, who, and why such risk exists. It is designed to be used in conjunction with strategic planning, tactical decision making and operational delivery of the services provided by North Yorkshire Fire and Rescue Service and to ensure the most appropriate and suitable offer of intervention is made.

The community risk profile has been designed to be a data and evidence led representation of those factors that lead to the need for a response from NYFRS. It is a dynamic and interactive tool that is expected to continue to be developed and refined. During the profiling exercise, the team have secured access to closed source data by working closely with other organisations who are considered data rich. This includes local and national organisations such as upper tier authorities, North Yorkshire Police and the NHS. Discussion with some of these are continuing in particular the NHS about a wider suite of data that can be made available to support and enrich the community risk profile.

North Yorkshire Fire and Rescue Service are now part of an Office of Data Analytics (nYODA) with NYCC, which is a pioneering concept within North Yorkshire. The outcomes from the community risk profiling are shared with NYCC and other organisations to enhance their understanding of risk. Of real significance is that what puts individuals, households, groups etc. more at risk of requiring our services, can be and often is, very similar to what increases the risk for other service providers.

This document sets out the philosophy and methodology applied to risk profiling. It includes examples of how risk can be calculated and presented. These examples are accurate based on the data used in this version, but it is important to ensure that if substantial time elapses (More than 1 Calendar year) from the publication of this document to when the profile is used consideration should be made to revision the modelled data including drawing down revised data sets.

The community risk profile has been produced independent of any resource options and has been designed to relate to the full suite of service provision to the communities of North Yorkshire and the City of York.

Bibliography