Operational Response Review 2019

Main Report

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Executive Summary

East Sussex Fire Authority provides fire and rescue services to the County of East Sussex and the City of Brighton & Hove. The Authority recognises that it can only plan for its future service provision effectively by having a comprehensive understanding of the varied, inherent, historic and foreseeable risks within the communities it serves.

Whether responding to emergencies, working to prevent them happening in the first place or providing support, East Sussex Fire Authority is committed to making effective use of its resources and delivering high performing services that are tailored to communities' needs, in order to increase efficiency and deliver value for money.

The Operational Response Review 2019 (ORR) has, therefore, been undertaken to gain a rich insight into whether the current operational response and resilience arrangements across the East Sussex Fire & Rescue Service area are sufficient to meet communities' needs and expectations, both now and in the future.

The ORR has been divided into four stages:
   i.   Develop a risk assessment methodology
   ii.   Create a comprehensive profile of risk across the service area
   iii. Model potential changes to ensure resource is allocated to risk
   iv.   Public consultation on any proposed changes to operational response

This report is the culmination of stages I and II, the outcomes of which are detailed in the main section of the report.

Introduction

The community expectations and financial pressures on the Fire Authority mean that we must continuously review the service we deliver to meet future needs. The Authority is committed to allocating resources and delivering services that are tailored to our communities' needs in order to increase efficiency and deliver value for money.

Integrated Risk Management Planning process

Integrated Risk Management Planning (IRMP) is about improving public safety, reducing the number of incidents and saving lives through a dynamic and holistic approach to risk assessment in order to deliver a Fire & Rescue Service focused on the changing needs and expectations of our communities with increased emphasis on prevention and community safety.

Every Fire Authority has responsibility for preparing an IRMP. The National Framework emphasises that the IRMP should be driving Fire and Rescue Service activities. Each Fire and Rescue Authority Integrated Risk Management Plan must:
- be easily accessible and publicly available
- reflect effective consultation throughout its development and at all review stages with the community, its workforce and representative bodies, and partners
- cover at least a three-year time span and be reviewed and revised as often as is necessary to ensure that Fire and Rescue Authorities are able to deliver the requirements set out in this Framework
- reflect up to date risk analyses and the evaluation of service delivery outcomes.

Scope

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   i.   Develop a risk assessment methodology
  ii.   Create a comprehensive profile of risk across the service area
 iii.   Model potential changes to ensure resource is allocated to risk
 iv.   Public consultation on any proposed changes to operational response.

This report is the culmination of stages I and II, the scope of which is described for each below

Stage I – Develop a risk assessment methodology
- Consider historical, current and foreseeable risks
- Consider data from both internal and external data sources
- Consider outcomes of staff/stakeholder engagement
- Undertake desktop/literature review of other FRS risk assessment methodologies
- Ensure risk assessment methodology allows for risks to be viewed at different levels (i.e. FRS-wide vs. individual station area) so comparisons can be made
- Ensure risk assessment methodology represents the full spectrum of risks – whether historic, inherent, perceived, actual or foreseeable.

- Create comprehensive station profiles that document the full spectrum of risks using agreed stage I risk methodology
- Produce service-wide profile that aggregates the twenty-four station risk profiles and provides context to findings – both local context and benchmarking with other Fire & Rescue Services
- Using historic ESFRS incident/mobilisations data, produce a modelled 'base case' that reflects the current operational response based on the current disposition of 24 fire stations, 33 pumping appliances, special appliances and crewing arrangements. This will provide benchmark when modelling potential changes in stage III.
- Report high level conclusions to inform direction of stage III.

Stage I – Risk Assessment Methodology

The Planning & Intelligence Team, as agreed by the Fire Authority, has developed a risk assessment methodology and produced a series of comprehensive station risk profiles against that methodology.

In order to produce a comprehensive risk assessment and profile of the East Sussex Fire & Rescue Service (ESFRS) area, a data cleansing and enrichment process was undertaken to assess data integrity of information held within the ESFRS Incident Recording System (IRS), including methods to check, validate, cleanse and amend incident data held by ESFRS, in order to ensure an appropriate level of confidence in the accuracy and veracity of the data and to subsequently enrich the data with additional information. The full technical process adopted is explained in the ORR Data Cleansing & Enrichment Process document (Appendix A).

Details of the rationale behind the approach taken in developing a risk assessment methodology are explained in full in the separate ORR Risk Methodology document (Appendix B). The report describes the methodology and approach that has been employed in order to produce a comprehensive risk assessment and profile of the East Sussex Fire & Rescue Service (ESFRS) area and illustrates:

- The processes adopted to assess data integrity of information held within the ESFRS Incident Recording System (IRS), including methods employed to check, validate, cleanse and amend incident data held by ESFRS, in order to ensure an appropriate level of confidence in the accuracy and veracity of the data
- How the incident data held by ESFRS has been enriched with additional and/or derived information in an open and transparent way
- The approach taken in the development of an ESFRS risk-assessment methodology, taking into consideration the outcomes of a desktop-review of other FRS methodologies, IRMPs and other research documents with examples of good practice
- The rationale for adopting the agreed risk assessment methodology and how that will be used to illustrate risks within the communities that ESFRS serve, along with the datasets considered as part of the Operational Response Review.

Stage II – Risk Profiles

The Planning & Intelligence Team have created a set of twenty four station profiles which seek to provide a comprehensive overview of the full spectrum of risks within each area. These can be found in Appendix C.

The following section is the service-wide profile that aggregates the twenty-four station risk profiles and provides context to findings – both local context and benchmarking with other Fire & Rescue Services.

Overview

East Sussex Fire & Rescue Service (ESFRS) area comprises the County of East Sussex and the City of Brighton & Hove and covers 1,805 square kilometres, with 88.7km of coastline from Portslade, through to Jury's Gap. It is bordered by Kent to the north and east, Surrey to the north-west, and West Sussex to the west and to the south by the English Channel.

Brighton & Hove is a diverse and dynamic city that attracts a rich mix of people and communities. Its seaside location near London makes it an attractive destination to more than 11 million visitors each year. Many areas of the city are prosperous but some parts are amongst the most deprived ten percent in the country. It has the highest percentage of overcrowded households outside of London and there are high numbers of flats across the coast.

The county of East Sussex contains five districts; Eastbourne, Hastings, Lewes, Rother and Wealden. Three are larger, rural, districts (from west to east): Lewes; Wealden; and Rother. Eastbourne and Hastings are mainly urban areas. There is a general impression of affluence in the county, however there are some extremes, as whilst people in some parts of the county are wealthy, in other areas such as Hastings and parts of central Eastbourne, there are high numbers of benefit claimants and people on low incomes. The county has a higher proportion of older people than anywhere else in the region and the highest percentage of people over 85 of any county in England. The number of older people is also forecast to grow over the next 20 years.

The chalk uplands of the South Downs occupies the coastal strip between Brighton and Eastbourne. There are two river gaps: the Rivers Ouse and Cuckmere. The Seven Sisters, where the Downs meet the sea, are the remnants of dry valleys cut into the chalk; they end at Beachy Head, 162m above sea level. To the east of Beachy Head lie the marshlands of the Pevensey Levels, formerly flooded by the sea but now enclosed within a deposited beach. At Bexhill the land begins to rise again where the sands and clays of the Weald meet the sea; these culminate in the sandstone cliffs east of Hastings. Further east are the Pett Levels, more marshland, beyond which is the estuary of the River Rother. On the far side of the estuary are the dunes of Camber Sands. The Weald occupies the northern borderlands of the county. Between the Downs and Weald is a narrow stretch of lower lying land; many of the rivers and streams occupying this area originate in the Weald. The High Weald is heavily wooded in contrast to the South Downs; the Low Weald less so. Part of the Weald is the Ashdown Forest. The location of settlements in East Sussex has been determined both by its history and its geography. The original towns and villages tended to be where its economy lay: fishing along the coast and agriculture and iron mining on the Weald. Industry today tends to be geared towards tourism, and particularly along the coastal strip. Here towns such as Bexhill-on-Sea, Eastbourne, and Hastings lie. Newhaven and Rye are ports, although the latter is also of historical importance. Peacehaven and Seaford are more dormitory towns than anything else. Away from the coast lie former market towns such as Hailsham, Heathfield and Uckfield; Crowborough is a centre for the Ashdown Forest. Lewes, the County town of East Sussex; and Battle, with its Norman Conquest beginnings, and Wadhurst are the other three towns of significance.

There are no motorways, very few dual carriageways and many rural roads. As a result, road conditions are poor for the volume of traffic and this increases the risk of road traffic collisions.

Stations and resources

There are 24 fire stations distributed across the service area as shown in the map below. At each of these stations, there is at least 1 pumping appliance and on some stations, additional specialist vehicles. There are currently 33 pumping appliances deployed across the 24 stations. There are 3 main types of firefighting appliances used by ESFRS as follows:

Extended Rescue Pump (P1)

A multi-purpose appliance that carries both firefighting and rescue equipment including dedicated hydraulic rescue tools, water safety and rescue equipment, oxygen, etc. It carries 1800 litres of water, a pump can deliver 2250 litres of water per minute with additional 1-7 Foam capability. It is also equipped with a variety of ladders including a 12 metre extension ladder.

Water Tender (P4)

A multi-purpose appliance that carries both firefighting and rescue equipment. It carries 1800 litres of water and a pump that can deliver 2250 litres of water per minute.

Maxicab (P5)

An extended rescue pump able to carry a crew of 8 firefighters, equipped with rescue and firefighting equipment, 12 metre extension ladder, holding 1800 litres of water, a 2250 litres per minute pump and 1-7 foam capability.

In addition to the above 3 main types of pumping appliances, ESFRS have an additional five Landrovers (M1). Although these are technically a specialist vehicle due to their 4x4 capability, they also hold between 375-800 litres of water and have a lightweight pump. Additionally, Eastbourne has a Combined Aerial Rescue Pump (P6) – which is a hybrid vehicle – with the body of a 'Hydraulic Platform' mounted on to a heavy duty chassis, but also with the equipment and locker stowage of a typical front line fire appliance.
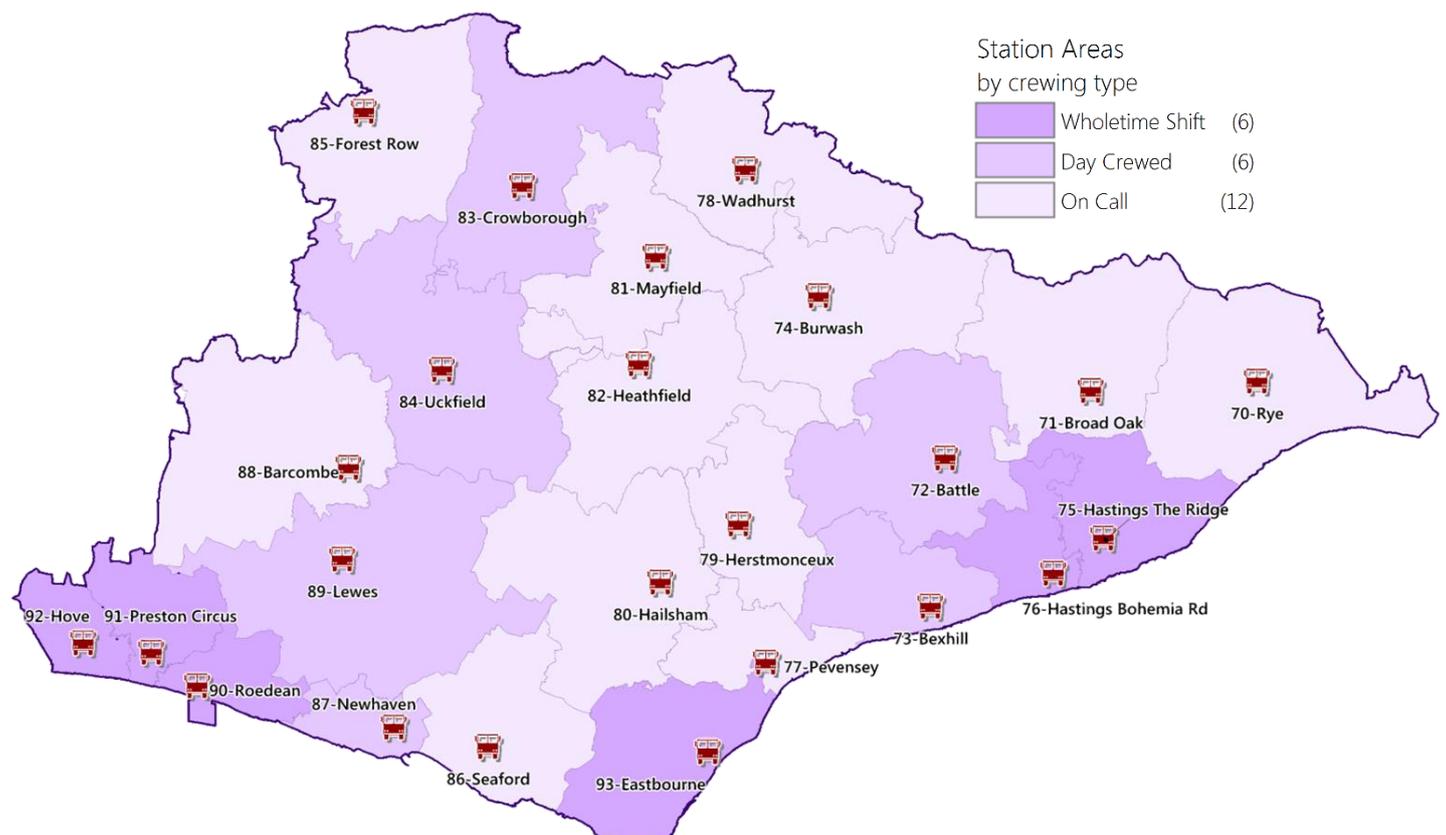
Below is a breakdown of all ESFRS pumping appliances, their location and crewing type.

Callsign	Station No.	Station Name	District	Appliance Type	Crewing Type
FJE70P1	70	Rye	Rother	Extended Rescue Pump Ladder	On Call
FJE70P4	70	Rye	Rother	Water Tender	On Call
FJE71P1	71	Broad Oak	Rother	Extended Rescue Pump Ladder	On Call
FJE72P1	72	Battle	Rother	Extended Rescue Pump Ladder	Day Crewed
FJE72P4	72	Battle	Rother	Water Tender	On Call
FJE73P1	73	Bexhill	Rother	Extended Rescue Pump Ladder	Day Crewed
FJE73P4	73	Bexhill	Rother	Water Tender	On Call
FJE74P1	74	Burwash	Rother	Extended Rescue Pump Ladder	On Call
FJE75M1	75	Hastings The Ridge	Hastings	L4T (4x4 with Hosereel)	Wholetime Shift
FJE75P1	75	Hastings The Ridge	Hastings	Extended Rescue Pump Ladder	Wholetime Shift
FJE76P1	76	Hastings Bohemia Rd	Hastings	Extended Rescue Pump Ladder	Wholetime Shift
FJE77P1	77	Pevensey	Wealden	Extended Rescue Pump Ladder	On Call
FJE78M1	78	Wadhurst	Wealden	L4T (4x4 with Hosereel)	On Call
FJE78P5	78	Wadhurst	Wealden	(Maxi-Cab) Extended Rescue Pump Ladder	On Call
FJE79P1	79	Herstmonceux	Wealden	Extended Rescue Pump Ladder	On Call
FJE80P1	80	Hailsham	Wealden	Extended Rescue Pump Ladder	On Call
FJE81P1	81	Mayfield	Wealden	Extended Rescue Pump Ladder	On Call
FJE82M1	82	Heathfield	Wealden	L4T (4x4 with Hosereel)	On Call
FJE82P5	82	Heathfield	Wealden	(Maxi-Cab) Extended Rescue Pump Ladder	On Call
FJE83M1	83	Crowborough	Wealden	L4T (4x4 with Hosereel)	Day Crewed
FJE83P1	83	Crowborough	Wealden	Extended Rescue Pump Ladder	Day Crewed
FJE83P4	83	Crowborough	Wealden	Water Tender	Day Crewed
FJE84P1	84	Uckfield	Wealden	Extended Rescue Pump Ladder	Day Crewed
FJE84P4	84	Uckfield	Wealden	Water Tender	On Call
FJE85P1	85	Forest Row	Wealden	Extended Rescue Pump Ladder	On Call
FJE86M1	86	Seaford	Lewes	L4T (4x4 with Hosereel)	On Call
FJE86P5	86	Seaford	Lewes	(Maxi-Cab) Extended Rescue Pump Ladder	On Call
FJE87P1	87	Newhaven	Lewes	Extended Rescue Pump Ladder	Day Crewed
FJE87P4	87	Newhaven	Lewes	Water Tender	Day Crewed
FJE88P1	88	Barcombe	Lewes	Extended Rescue Pump Ladder	On Call
FJE89P1	89	Lewes	Lewes	Extended Rescue Pump Ladder	Day Crewed
FJE89P4	89	Lewes	Lewes	Water Tender	On Call
FJE90P1	90	Roedean	Brighton & Hove	Extended Rescue Pump Ladder	Wholetime Shift
FJE91P1	91	Preston Circus	Brighton & Hove	Extended Rescue Pump Ladder	Wholetime Shift
FJE91P4	91	Preston Circus	Brighton & Hove	Water Tender	Wholetime Shift
FJE92P1	92	Hove	Brighton & Hove	Extended Rescue Pump Ladder	Wholetime Shift
FJE93P4	93	Eastbourne	Eastbourne	Water Tender	Wholetime Shift
FJE93P6	93	Eastbourne	Eastbourne	Aerial Rescue Pump	Wholetime Shift

Each fire station operates in one of three main ways based on the staffing arrangement (crewing type) at that station; Wholetime Shift, Day-Crewed and On-Call. These crewing types are explained below:

Wholetime Shift (WTS) is where operational firefighters are on the fire station 24 hours a day, 7 days a week.
Day-crewed (DC) is where operational firefighters are on the fire station during the daytime only. For ESFRS, this is between 08:30 and 18:30. Outside of these times, firefighters are still available to attend incidents, but are alerted via a pager when an emergency call is received (see 'on-call' below).
On-call (OC) means that operational firefighters respond to an alerter when an emergency call is received and they are contracted to provide a certain amount of availability per week and must live or work within five minutes of the fire station.

In addition to the above 33 pumping appliances and 5 Landrovers, there are other vehicles on certain stations that carry out particular, special functions. The following table shows the number, type and disposition of the specialist vehicles that ESFRS deploy.

Callsign	Station No.	Station Name	District	Appliance Type
FJE72R4	72	Battle	Rother	Rope Rescue Unit
FJE72R5	72	Battle	Rother	Technical Rescue Unit
FJE73C1	73	Bexhill	Rother	Command Support Unit
FJE73R4	73	Bexhill	Rother	Rope Rescue Unit
FJE76A1	76	Hastings Bohemia Rd	Hastings	Aerial Ladder Platform
FJE83B1	83	Crowborough	Wealden	Boat
FJE83M2	83	Crowborough	Wealden	Animal Rescue Uni Mog
FJE83T1	83	Crowborough	Wealden	Swift Water Rescue Support Vehicle
FJE84T1	84	Uckfield	Wealden	General Purpose Lorry
FJE84T1	84	Uckfield	Wealden	Dual Purpose Truck
FJE84W1	84	Uckfield	Wealden	Water Carrier
FJE87S2	87	Newhaven	Lewes	Foam Tender
FJE87S3	87	Newhaven	Lewes	Maritime Response Team 1
FJE87S4	87	Newhaven	Lewes	Maritime Response Team 2
FJE89C1	89	Lewes	Lewes	Command Support Unit
FJE89R5	89	Lewes	Lewes	Technical Rescue Unit
FJE91A1	91	Preston Circus	Brighton & Hove	Aerial Ladder Platform
FJE92C1	92	Hove	Brighton & Hove	Prime Mover with Strategic Command Pod
FJE92T3	92	Hove	Brighton & Hove	HVP Support Vehicle
FJE92T5	92	Hove	Brighton & Hove	Prime Mover 1 (No Sled Attached)
FJE92T6	92	Hove	Brighton & Hove	Prime Mover 2 (No Sled Attached)
FJE92W2	92	Hove	Brighton & Hove	Prime Mover with Double Hose Box Module
FJE92W4	92	Hove	Brighton & Hove	Prime Mover with HVP module
FJE93H9	93	Eastbourne	Eastbourne	Incident response unit

Population Demographics

The UK population in mid-2017 was estimated to be around 66 million, with 27.2 million households and 19 million families. The population is projected to keep growing and reach almost 73 million by 2041. The UK population is ageing, in 2017 around 18.2% were over 65, up from 15.9% in 2007. By 2027 the proportion of over 65s will grow to 20.7%. These trends are expected to be reflected, and some amplified in East Sussex and Brighton & Hove.

The estimated population within the East Sussex Fire & Rescue Service area is 840,414 as at 2017 (ONS 2017 mid-year estimates). The dispersion of the population across the 6 districts are shown on the map below.

It can be seen that just over a third of the population live in the City of Brighton and Hove, another third of the population are shared between the towns of Eastbourne and Hastings and the remaining third of the population within the rural local authority districts of Lewes, Rother & Wealden.

840,414 People

158,941 (19%)

94,997 (11%)

92,813 (11%)

288,155 (34%)

102,257 (12%)

103,251 (12%)
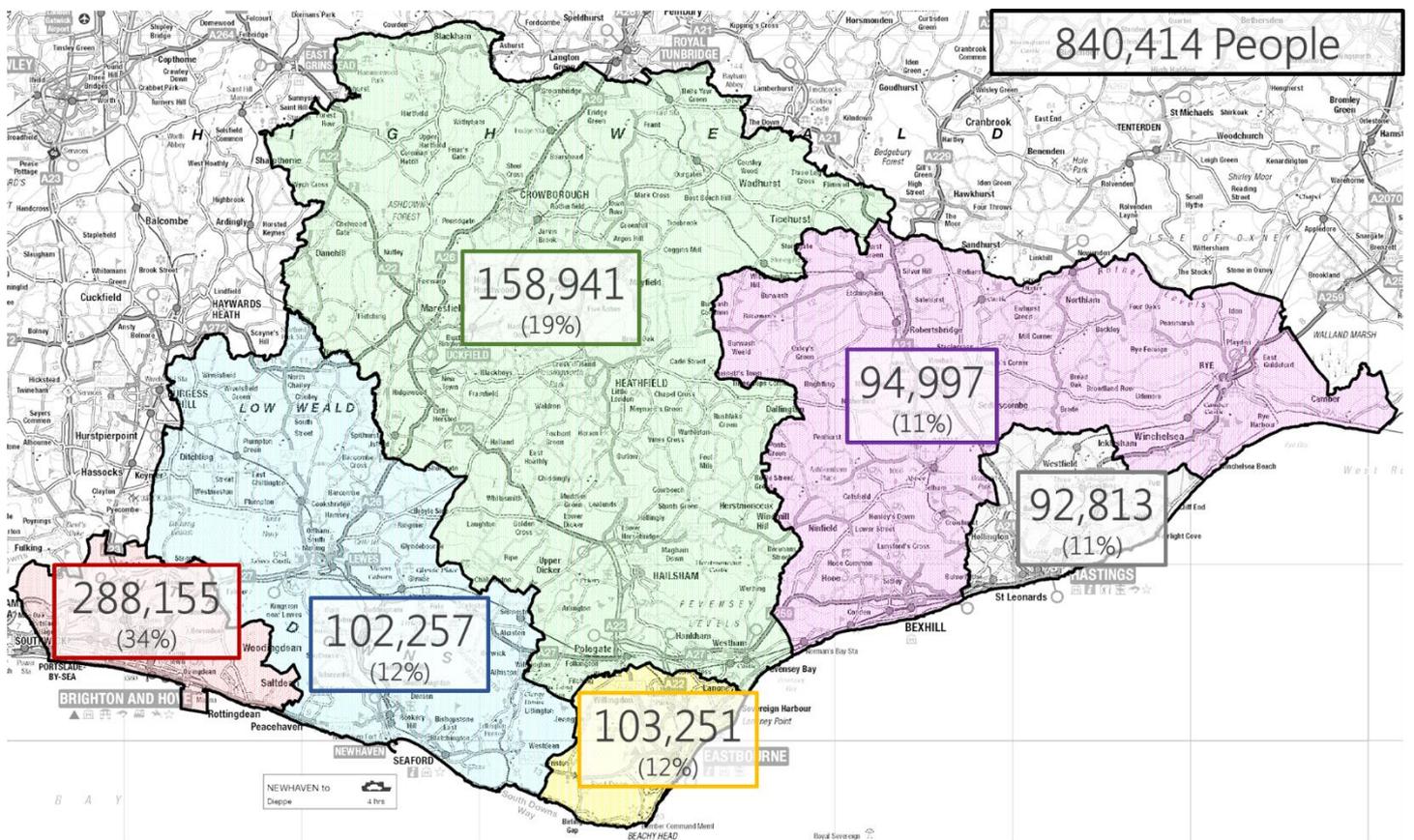
Age and gender estimates

ESFRS Age / Gender Breakdown (2017)
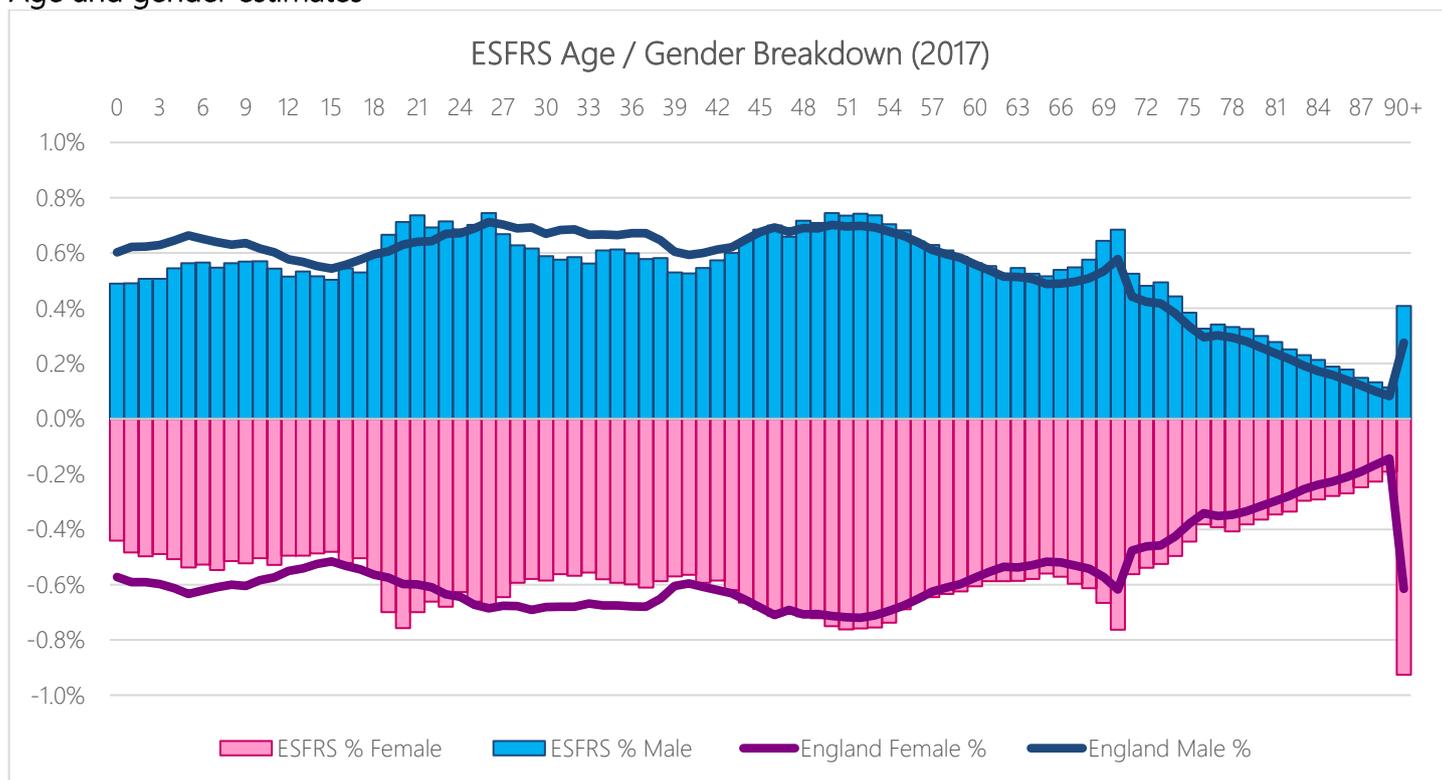
The table below shows the distribution of the age of the population within the ESFRS area compared with the rest of England. It can be seen that there are proportionally more people aged 50+ in the ESFRS area compared to the whole of England but a lower proportion of 25-49 year olds. ESFRS also has a slightly greater percentage of 18-24 year olds compared to England as a whole and these will predominately be based in the City of Brighton and Hove since the distribution of age isn't even over the service area.

In Brighton & Hove there is a significantly higher than average population of full time students aged 16+, with 32,920 in 2011 representing 14.1% of the resident population, compared to 7.5% in England and 8.2% in the South East. Brighton & Hove also has a significantly higher number of adults aged 20-44, and a proportionally lower amount of children and older residents.

Conversely in East Sussex, Rother has a higher proportion of older people with 32% over 65. Eastbourne 25%, Lewes 25% and Wealden 26% all have similar levels of over 65s. Brighton & Hove 13% and Hastings 19% have much lower proportions of over 65s.

	2017 population estimates - % Within Area								Total
	0 to 9	10 to 17	18 to 24	25 to 49	50 to 64	65 to 79	80 to 89	Over 90	Total
ESFRS	87,510 (10.4%)	69,516 (8.3%)	79,643 (9.5%)	261,272 (31.1%)	163,673 (19.5%)	126,538 (15.1%)	41,043 (4.9%)	11,219 (1.3%)	840,414
England	6,882,327 (12.4%)	4,984,630 (9.0%)	4,828,279 (8.7%)	18,524,533 (33.3%)	10,369,150 (18.6%)	7,308,601 (13.1%)	2,226,666 (4.0%)	495,244 (0.9%)	55,619,430

Household Population Projections

The 2016-based household projections provide statistics on the potential future number of households in England and its local authorities up to 2041. They show the household numbers that would result if the assumptions based in previous demographic trends in population and household formation were to be realised in practice.

Household projections are not forecasts. They do not attempt to predict the impact of future government or local policies, changing economic circumstances or other factors that may influence household growth, such as the number of houses built. Household projections are not a prediction or forecast of how many houses should be built in the future. Instead, they show how many additional households would form if the population of England keeps growing as it did between 2011 and 2016 and keeps forming households as it did between 2001 and 2011. Therefore, household projections should be used as a starting point for calculating the future housing needs of a local area.

Over the past 10 years (from 2009 to 2019, the predicted growth in household population rose by 9% from 764,983 to 837,167. In the next 10 years, there is predicted to be an additional 7% up to 2029 and a further 5% to 2039. This indicates that the overall rate of growth is predicted to decrease over the next 20 years.

Furthermore, the predicted growth in the population is different for each area across the East Sussex Fire & Rescue Service area. It can be seen that the population growth in each of the six local authority areas across the service area is set to increase by a greater percentage than England as a whole, although only marginally in Brighton & Hove and Hastings. The household population projections for Eastbourne, the other large town within the ESFRS area, show a 26% increase in the household population over the 25 year period to 2041. The areas with the greatest predicted growth are in Wealden and Rother.

Area	Households in mid-2016	Households in mid-2041	Predicted Growth
Brighton and Hove	125,126	147,157	22,031 (18%)
Eastbourne	46,559	58,500	11,941 (26%)
Hastings	42,367	50,281	7,914 (19%)
Lewes	43,850	54,473	10,623 (24%)
Rother	42,497	54,345	11,848 (28%)
Wealden	66,935	86,555	19,620 (29%)
ESFRS Area	367,332	451,309	83,977 (23%)
England	22,884,532	26,854,971	3,970,439 (17%)

Furthermore, the age distribution of the population is set to change as the projected increase in the household population over the 25 year period from mid-2016 to mid-2041 demonstrates the changing age profile of an increasingly ageing population across the ESFRS area.

The table below shows that over the next 25 years, the proportion of 45-54 year olds will actually reduce by 3%. However, the predicted growth in the 55+ year olds is set to increase, and this rate increases the older the age group so that, 75-84 year olds and 85+ year olds are predicted to increase by 90% and 100% respectively.

Age Group	Households in mid-2016	Households in mid-2041	Predicted Growth
Under 25	12,992	13,177	185 (1%)
25 to 34	43,320	46,347	3,027 (7%)
35 to 44	57,507	57,977	470 (1%)
45 to 54	76,338	73,834	-2,504 (-3%)
55 to 64	60,973	72,653	11,680 (19%)
65 to 74	57,195	73,736	16,541 (29%)
75 to 84	39,447	74,372	34,925 (89%)
Over 85	19,560	39,213	19,653 (100%)

Exeter Data

In addition to population estimates by age-group, ESFRS hold specific records of GP-registered 65+ years. This data is provided annually to all Fire & Rescue Services in England by the NHS through a national Information Sharing Agreement, and enables FRSs to prioritise resources to target those most at risk. This data is often referred to as the 'Exeter Data'.

The following table summarises the numbers of 80+yrs across the service area and the proportion that fall inside the attendance standard isochrones. It can be seen that 97% of 80+ year olds are within the attendance standards isochrones, day or night.

No. of GP-registered 80+ year olds by Station Admin Area

Station Area	No. of persons 80+yrs (not in care home)	Within Attendance Standard (Day)	%	Within Attendance Standard (Night)	%
Barcombe	1,041	755	72.5	762	73.2
Battle	733	696	95.0	717	97.8
Bexhill	4,982	4,964	99.6	4,981	100.0
Broad Oak	676	652	96.4	652	96.4
Burwash	552	436	79.0	533	96.6
Crowborough	1,860	1,703	91.6	1,772	95.3
Eastbourne	8,839	8,828	99.9	8,828	99.9
Forest Row	516	409	79.3	413	80.0
Hailsham	2,960	2,696	91.1	2,696	91.1
Hastings Bohemia Rd	3,243	3,227	99.5	3,239	99.9
Hastings The Ridge	1,766	1,704	96.5	1,704	96.5
Heathfield	1,194	1,117	93.6	1,118	93.6
Herstmonceux	246	235	95.5	235	95.5
Hove	4,436	4,436	100.0	4,436	100.0
Lewes	1,736	1,648	94.9	1,667	96.0
Mayfield	514	507	98.6	508	98.8
Newhaven	2,096	2,091	99.8	2,094	99.9
Pevensey	890	890	100.0	890	100.0
Preston Circus	4,088	4,086	100.0	4,086	100.0
Roedean	3,023	3,023	100.0	3,023	100.0
Rye	1,030	976	94.8	976	94.8
Seaford	2,737	2,718	99.3	2,718	99.3
Uckfield	1,549	1,272	82.1	1,335	86.2
Wadhurst	665	662	99.5	662	99.5
ESFRS	51,372	49,731	96.8	50,045	97.4

Population Density

Population density is the number of inhabitants per hectare. For the calculation of population density, the land-area concept (which excludes inland water bodies like lakes or rivers) is used.

Brighton & Hove is a densely populated city with large amounts of terraced housing, flats and houses of multiple occupancy (HMOs), this is also the case for Hastings. On the other end of the spectrum are the rural areas of Wealden and Rother, which both contain a few small towns and villages, these areas are mostly countryside and farmland. Lewes district is a smaller rural area, and contains Lewes town, Newhaven and Seaford. Eastbourne is a large town, and contains large areas of sub-urban housing.

Overall, it can be seen that between the 2011 Census and the 2017 mid-year estimate, the population density has increased by 0.2 persons per hectare across the service area. However, this is reflected differently within each station area as demonstrated in the table below.

The City of Brighton and Hove is the most densely populated region of the ESFRS area by far and, in particular, Hove and Preston Circus. However, between 2011 and 2017, the rise in population within Preston Circus station area has been significant, given the relatively small size of the station area compared to other station areas and therefore represents the biggest increase in population density out of all other areas. Hove station area is the most densely populated station area across ESFRS and also ranks 2nd in the overall increase in population density over the time period.

Eastbourne on the other hand, although it ranks as the 2nd largest station area in terms of total population, has a much lower population density due to the size of the station area which includes a not insignificant amount of green space.

Herstmonceux sits at the other end of the spectrum as the station area with the lowest population density, with 0.7 persons per hectare compared to Hove's 42.8 persons per hectare.

One can also see that there is a significant difference in the geographical size of each station area Lewes District contains both the smallest station area (Newhaven) which is 2,034 hectares in size, as well as the largest station area (Lewes), which is 14,452 hectares in size, both of which are covered by a day-crewed appliance.

Station Area	Area Hectares	All usual residents (2011)	Population Estimate (2017)	Density 2011	Density 2017	Change 2011-17	Rank 2017
Barcombe	11,689	13,992	14,649	1.2	1.3	0.1	16
Battle	9,481	9,993	10,605	1.1	1.1	0.1	19
Bexhill	4,963	45,521	47,472	9.2	9.6	0.4	7
Broad Oak	9,322	7,367	7,757	0.8	0.8	0.0	23
Burwash	10,145	8,465	8,711	0.8	0.9	0.0	22
Crowborough	10,247	26,038	27,416	2.5	2.7	0.1	12
Eastbourne	6,490	108,354	112,267	16.7	17.3	0.6	5
Forest Row	8,853	8,128	8,487	0.9	1.0	0.0	20
Hailsham	10,907	32,719	36,556	3.0	3.4	0.4	11
Hastings Bohemia Rd	3,305	64,307	65,830	19.5	19.9	0.5	4
Hastings The Ridge	5,143	32,263	33,764	6.3	6.6	0.3	8
Heathfield	9,614	16,426	16,910	1.7	1.8	0.1	15
Herstmonceux	5,265	3,670	3,505	0.7	0.7	0.0	24
Hove	2,323	96,126	99,360	41.4	42.8	1.4	1
Lewes	14,452	25,381	26,230	1.8	1.8	0.1	14
Mayfield	7,717	6,266	6,664	0.8	0.9	0.1	21
Newhaven	2,034	32,108	34,318	15.8	16.9	1.1	6
Pevensey	3,410	10,089	11,768	3.0	3.5	0.5	10
Preston Circus	3,561	125,953	136,264	35.4	38.3	2.9	2
Roedean	2,492	53,927	55,359	21.6	22.2	0.6	3
Rye	10,169	10,962	11,708	1.1	1.2	0.1	18
Seaford	6,428	25,247	26,165	3.9	4.1	0.1	9
Uckfield	13,009	27,094	29,015	2.1	2.2	0.1	13
Wadhurst	8,105	9,644	9,634	1.2	1.2	0.0	17
ESFRS Area	179,122	800,040	840,414	4.5	4.7	0.2	--

Population Health

The general health across the service area is good, with over 80% classed as good or very good. 6% of the population are deemed to have bad or very bad health.

The table below illustrates that general health varies across the ESFRS area, with the proportion of persons that are described as having bad or very bad health ranging from approximately 3% to 8% between station areas. The station area with the greatest proportion of persons with bad/very bad health is Hastings Bohemia Road, followed closely by its neighbouring station, Bexhill. The station area with the lowest proportions are Mayfield, Forest Row and Wadhurst.

Station area	General Health - Persons (2011) - % Within Area					
	Very good health	Good health	Fair health	Bad health	Very bad health	Total
Barcombe	7,296 (52.1%)	4,628 (33.1%)	1,550 (11.1%)	382 (2.7%)	136 (1%)	13,992
Battle	4,765 (47.7%)	3,452 (34.5%)	1,291 (12.9%)	375 (3.8%)	110 (1.1%)	9,993
Bexhill	16,652 (36.6%)	16,899 (37.1%)	8,534 (18.7%)	2,661 (5.8%)	775 (1.7%)	45,521
Broad Oak	3,295 (44.7%)	2,677 (36.3%)	1,019 (13.8%)	292 (4%)	84 (1.1%)	7,367
Burwash	4,153 (49.1%)	2,973 (35.1%)	1,030 (12.2%)	240 (2.8%)	69 (0.8%)	8,465
Crowborough	13,028 (50%)	9,126 (35%)	2,959 (11.4%)	716 (2.7%)	209 (0.8%)	26,038
Eastbourne	46,495 (42.9%)	38,525 (35.6%)	16,693 (15.4%)	5,085 (4.7%)	1,556 (1.4%)	108,354
Forest Row	4,413 (54.3%)	2,679 (33%)	770 (9.5%)	221 (2.7%)	45 (0.6%)	8,128
Hailsham	13,764 (42.1%)	11,739 (35.9%)	5,309 (16.2%)	1,499 (4.6%)	408 (1.2%)	32,719
Hastings Bohemia Rd	25,915 (40.3%)	23,109 (35.9%)	10,341 (16.1%)	3,778 (5.9%)	1,164 (1.8%)	64,307
Hastings The Ridge	13,121 (40.7%)	12,013 (37.2%)	4,982 (15.4%)	1,676 (5.2%)	471 (1.5%)	32,263
Heathfield	7,846 (47.8%)	5,833 (35.5%)	2,060 (12.5%)	549 (3.3%)	138 (0.8%)	16,426
Herstmonceux	1,853 (50.5%)	1,217 (33.2%)	443 (12.1%)	129 (3.5%)	28 (0.8%)	3,670
Hove	47,281 (49.2%)	32,206 (33.5%)	11,682 (12.2%)	3,810 (4%)	1,147 (1.2%)	96,126
Lewes	12,409 (48.9%)	8,794 (34.6%)	3,132 (12.3%)	835 (3.3%)	211 (0.8%)	25,381
Mayfield	3,282 (52.4%)	2,101 (33.5%)	682 (10.9%)	168 (2.7%)	33 (0.5%)	6,266
Newhaven	13,558 (42.2%)	11,534 (35.9%)	4,894 (15.2%)	1,621 (5%)	501 (1.6%)	32,108
Pevensey	4,318 (42.8%)	3,565 (35.3%)	1,605 (15.9%)	457 (4.5%)	144 (1.4%)	10,089
Preston Circus	64,071 (50.9%)	42,517 (33.8%)	13,456 (10.7%)	4,597 (3.6%)	1,312 (1%)	125,953
Roedean	24,498 (45.4%)	18,177 (33.7%)	7,552 (14%)	2,855 (5.3%)	845 (1.6%)	53,927
Rye	4,365 (39.8%)	4,056 (37%)	1,850 (16.9%)	548 (5%)	143 (1.3%)	10,962
Seaford	10,183 (40.3%)	9,419 (37.3%)	4,149 (16.4%)	1,172 (4.6%)	324 (1.3%)	25,247
Uckfield	13,578 (50.1%)	9,349 (34.5%)	3,107 (11.5%)	814 (3%)	246 (0.9%)	27,094
Wadhurst	5,231 (54.2%)	3,077 (31.9%)	1,003 (10.4%)	269 (2.8%)	64 (0.7%)	9,644
ESFRS	365,370 (45.7%)	279,665 (35%)	110,093 (13.8%)	34,749 (4.3%)	10,163 (1.3%)	800,040

The proportion of people whose day-to-day activities are limited is 19% with 9% of the population stating that day-to-day activities are limited a lot. This is to be expected, as the service area caters for a larger proportion of elderly age groups and this is likely to increase.

It can also be seen from the table below that there is a significant variation in the proportion of the population whose day-to-day activities are limited a lot across the station areas.

Bexhill station area has the greatest proportion of the population whose day-to-day activities are limited a lot (13% of the population) and this makes sense, seeing as the general age of the population in Bexhill is disproportionately older. This is followed closely by Hastings Bohemia Road where 11% of the population demonstrate that day-to-day activities are limited a lot.

The station areas with the lowest proportions are Forest Row, Mayfield and Wadhurst.

Station area	Day-to-day activities limited - Persons (2011) - % Within Area			
	Limited a lot	Limited a little	Not limited	Total
Barcombe	920 (6.6%)	1,247 (8.9%)	11,825 (84.5%)	13,992
Battle	819 (8.2%)	1,087 (10.9%)	8,087 (80.9%)	9,993
Bexhill	5,891 (12.9%)	6,478 (14.2%)	33,152 (72.8%)	45,521
Broad Oak	577 (7.8%)	835 (11.3%)	5,955 (80.8%)	7,367
Burwash	575 (6.8%)	843 (10%)	7,047 (83.2%)	8,465
Crowborough	1,593 (6.1%)	2,336 (9%)	22,109 (84.9%)	26,038
Eastbourne	10,500 (9.7%)	12,362 (11.4%)	85,492 (78.9%)	108,354
Forest Row	390 (4.8%)	706 (8.7%)	7,032 (86.5%)	8,128
Hailsham	3,176 (9.7%)	3,963 (12.1%)	25,580 (78.2%)	32,719
Hastings Bohemia Rd	7,065 (11%)	7,515 (11.7%)	49,727 (77.3%)	64,307
Hastings The Ridge	3,133 (9.7%)	3,677 (11.4%)	25,453 (78.9%)	32,263
Heathfield	1,115 (6.8%)	1,608 (9.8%)	13,703 (83.4%)	16,426
Herstmonceux	226 (6.2%)	377 (10.3%)	3,067 (83.6%)	3,670
Hove	7,445 (7.7%)	8,739 (9.1%)	79,942 (83.2%)	96,126
Lewes	1,739 (6.9%)	2,448 (9.6%)	21,194 (83.5%)	25,381
Mayfield	321 (5.1%)	561 (9%)	5,384 (85.9%)	6,266
Newhaven	3,211 (10%)	3,488 (10.9%)	25,409 (79.1%)	32,108
Pevensey	956 (9.5%)	1,197 (11.9%)	7,936 (78.7%)	10,089
Preston Circus	8,044 (6.4%)	10,079 (8%)	107,830 (85.6%)	125,953
Roedean	5,180 (9.6%)	5,621 (10.4%)	43,126 (80%)	53,927
Rye	1,047 (9.6%)	1,379 (12.6%)	8,536 (77.9%)	10,962
Seaford	2,491 (9.9%)	3,273 (13%)	19,483 (77.2%)	25,247
Uckfield	1,743 (6.4%)	2,402 (8.9%)	22,949 (84.7%)	27,094
Wadhurst	531 (5.5%)	805 (8.3%)	8,308 (86.1%)	9,644
ESFRS	68,688 (8.6%)	83,026 (10.4%)	648,326 (81%)	800,040

Diversity

Brighton & Hove is by far the area's most ethnically diverse district, with 11% of the population belonging to an ethnic minority, i.e. not 'White British'. This is twice as diverse as any of the districts within East Sussex. There is more diversity in the urban areas with Hastings 6.2% and Eastbourne 5.9%, than the rural areas - Rother 2.9% and Wealden 2.5%.

Residents by ethnicity (count) 2011						% Ethnic Minority (non White)
Local Authority Area	Asian/Asian British	Black/African/ Caribbean/Black British	Mixed/multiple ethnic groups	White	Other ethnic group	
Brighton and Hove	11,278	4,188	10,408	243,512	3,983	10.9%
Eastbourne	2,795	783	1,791	93,508	535	5.9%
Hastings	2,126	1,065	1,948	84,631	484	6.2%
Lewes	1,400	416	1,275	94,159	252	3.4%
Rother	1,103	305	1,031	87,951	198	2.9%
Wealden	1,719	343	1,428	145,173	252	2.5%
ESFRS	20,421	7,100	17,881	748,934	5,704	6.4%

Office for National Statistics; 2011 census

Distribution of BME Population
% BME by OA

0-1		8-9	
1-5		9-10	
5-7		10-15	
7-8		15+	
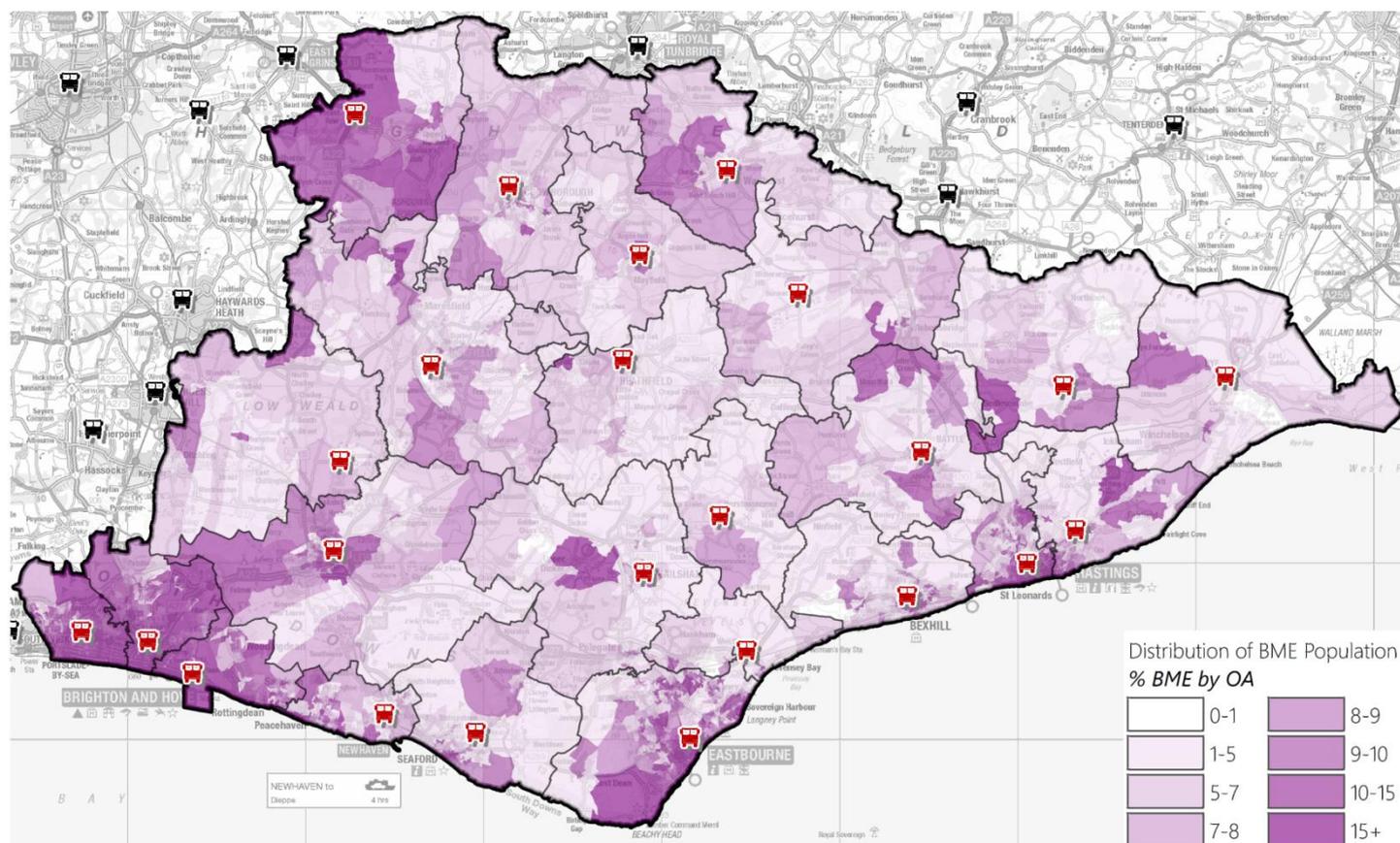
Economy

The East Sussex Growth Strategy highlights emerging high growth and innovative sub-sectors including - engineering and advanced manufacturing; health and social care; and digital, media and creative-services.

Brighton & Hove is still largely a city region of potential, rather than of achievement. It now has one of the best qualified resident populations in England, but its productivity per worker, although much improved, is still modest compared to the South East average. It has one of the highest business density rates in England, but output per business is poor, reflecting its historic reliance on local markets and low value sectors of the economy.

Brighton & Hove have the highest proportion of full time employees (36%), Rother has the lowest with 29%. Brighton & Hove have the highest proportion of full time students (6%) and Rother has the lowest with 2%. Hastings has the highest proportion of long term sick/disabled with 7% and also has the highest proportion of persons looking after home or family (5%). Rother has the highest proportion of retired persons with 23% and Brighton & Hove have the lowest with 9%. Hastings has the highest proportion of unemployed persons with 5%.

Overall, it can be seen that across the service area, a third of the 16-74 year old resident population are full time employees, with 15% retired. 10% are students – the majority of these being found within the City of Brighton & Hove.

Economic Activity - All usual residents aged 16 to 74 (2011)			ESFRS
Economically active	Part-time	Employee	82,644 (14.1%)
		Self-employed without employees	22,199 (3.8%)
		Self-employed with employees	2,591 (0.4%)
	Full-time	Employee	201,532 (34.4%)
		Self-employed without employees	40,181 (6.9%)
		Self-employed with employees	12,514 (2.1%)
		Un-employed	21,321 (3.6%)
		Full-time student	22,823 (3.9%)
Economically inactive		Retired	86,361 (14.8%)
		Student (including full-time students)	35,446 (6.1%)
		Looking after home or family	22,914 (3.9%)
		Long-term sick or disabled	24,201 (4.1%)
		Other	10,583 (1.8%)
Total			585,310

Tourism

Tourism is an integral element of the local area, located within the South Downs National Park, East Sussex is also home to many seaside resorts, and beautiful landscapes. Furthermore, Brighton & Hove is a diverse and dynamic city that attracts a rich mix of people and communities. Its seaside location near London makes it an attractive destination to more than 11 million visitors each year. The influx of visitors during the summer months has a considerable detrimental impact on the inadequate road network, traffic congestion in popular areas in the tourist season can be substantial.

Brighton & Hove saw 11.45 million visits in 2014, of which 1.45 million were overnight visits, and 10 million were day trips. It's estimated that total tourist expenditure was £858 million for 2015. Most overnight visits last 2-3 nights. East Sussex attracted 23.7 million visits in 2015, a 28% increase since 2005. 2.4 million (10%) were overnight visits and 21.3 million (90%) were day trips. The tourism sector contributed a total of £1.4b to the local economy in 2015. Overnight visitors stayed on average for 5.1 nights

AirBnb represents one of the largest emerging issues for fire services across the UK, and globally. The online holiday accommodation platform has experienced monumental growth, figures for 2016/17 state there are 168,000 listings in the UK, and 18,600 listings in the South East. These properties pose a potential fire risk, as they aren't regulated in the same way as other traditional accommodation, and therefore aren't subject to the same legislation. But they represent an extremely significant, and growing proportion of the tourism accommodation sector.

During 2016/17 the South East region experienced: 645,000 inbound guests, a 92% increase from 2016 to 2017; 18% of guest arrivals were families; 11% of users chose to stay within the South East; 74% of guest arrivals were from other parts of the UK.

During 2017 Brighton experienced: 140,000 guest arrivals; 36 nights average occupancy for a listing; £3,700 average earned by host; Approx. 2,700 listings; Approx. 1,665 entire property, 1,028 private room, 15 shared room.

AirBnb listings (approx. location) in Brighton
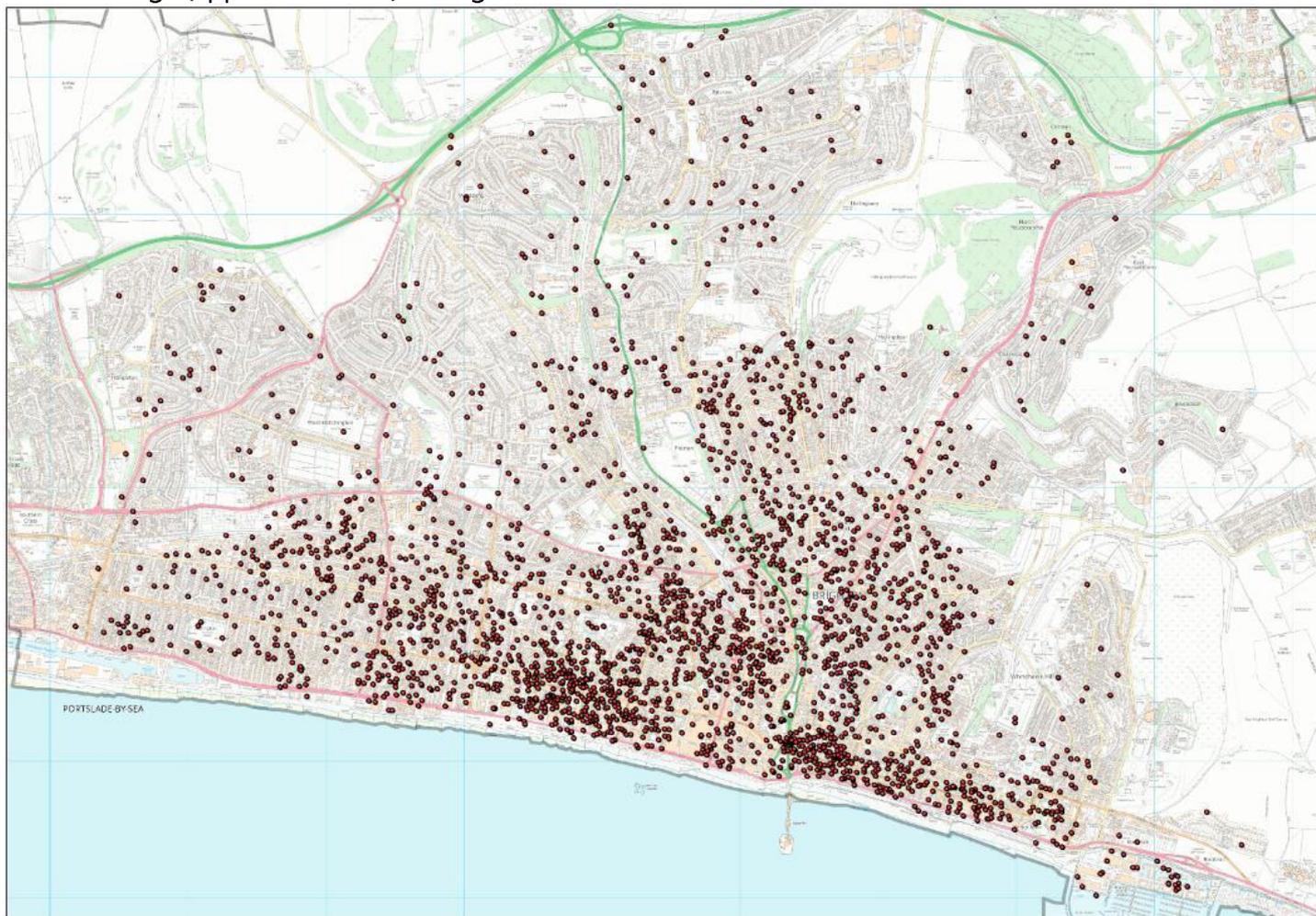
Tomslee.net 2017 data

Household Demographics

Census 2011 Household Breakdown

A quarter of households across the service area are detached, and a further 23% are semi-detached. Flats comprise approximately a third of all households.

There are higher numbers of detached dwellings in the rural areas such as Rother, Wealden and Lewes. The proportion of flats is higher in the urban areas, in Brighton & Hove and Hastings there are high levels of converted or shared housing.

It can be seen from the table below that around a quarter of all housing stock in Hove station area are converted flats, with a further quarter purpose-built flats and where only 9% of dwellings are detached. Preston Circus station area, also, has a high proportion of converted and purpose built flats, comprising 43% of all dwellings within the area. Roedean has the greatest proportion of purpose-built flats in its station area, with 28% of its housing stock classified as such; however, Preston Circus has the greatest number of purpose-built flats in its area overall.

Hastings The Ridge has the highest proportion of terraced housing out of all station areas – approximately 30%, as does Lewes station area. However, Hastings Bohemia Road has a much smaller proportion of terraced housing compared with the east of Hastings, but a greater proportion of purpose-built and converted flats compared with The Ridge.

Eastbourne has a greater number of purpose-built flats in its station area than Hove.

Although caravans as an unshared dwelling only represent 0.3% of all households in the 2011 census, the greatest proportion of these are located in the Hailsham station area – 39% of all across ESFRS area, followed by Newhaven which has a further 17%.

Broad Oak represents the station area with the greatest proportion of detached dwellings, with just over 58%.

	Households (2011) by Type (% Within Area)								
	Unshared Dwelling							Shared Dwelling	Total
Station Area	Detached House / Bungalow	Semi-detached House / Bungalow	Terraced House / Bungalow	Flat - Purpose Built	Flat - Converted	Flat - commercial building	Caravan / other temporary structure	Shared Dwelling	Total
Barcombe	2,781 (50.4%)	1,542 (27.9%)	768 (13.9%)	321 (5.8%)	66 (1.2%)	31 (0.6%)	10 (0.2%)	2 (0%)	5,521
Battle	1,910 (46.5%)	1,034 (25.2%)	648 (15.8%)	382 (9.3%)	74 (1.8%)	48 (1.2%)	14 (0.3%)	0 (0%)	4,110
Bexhill	8,039 (37.5%)	4,233 (19.7%)	2,253 (10.5%)	4,335 (20.2%)	2,098 (9.8%)	412 (1.9%)	24 (0.1%)	66 (0.3%)	21,460
Broad Oak	1,863 (57.6%)	812 (25.1%)	395 (12.2%)	86 (2.7%)	39 (1.2%)	23 (0.7%)	19 (0.6%)	0 (0%)	3,237
Burwash	1,628 (48.3%)	951 (28.2%)	547 (16.2%)	137 (4.1%)	64 (1.9%)	28 (0.8%)	16 (0.5%)	0 (0%)	3,371
Crowborough	5,177 (49.3%)	2,781 (26.5%)	1,060 (10.1%)	1,109 (10.6%)	256 (2.4%)	84 (0.8%)	18 (0.2%)	10 (0.1%)	10,495
Eastbourne	9,751 (19.8%)	10,926 (22.2%)	11,541 (23.5%)	12,055 (24.5%)	3,817 (7.8%)	625 (1.3%)	43 (0.1%)	437 (0.9%)	49,195
Forest Row	1,603 (49.1%)	919 (28.1%)	330 (10.1%)	260 (8%)	89 (2.7%)	46 (1.4%)	15 (0.5%)	4 (0.1%)	3,266
Hailsham	4,501 (31.8%)	5,219 (36.9%)	2,300 (16.3%)	1,352 (9.6%)	171 (1.2%)	114 (0.8%)	483 (3.4%)	3 (0%)	14,143
Hastings Bohemia Rd	5,778 (19.4%)	5,919 (19.9%)	5,512 (18.5%)	6,462 (21.7%)	5,225 (17.6%)	485 (1.6%)	74 (0.2%)	298 (1%)	29,753
Hastings The Ridge	3,771 (26.6%)	2,935 (20.7%)	4,212 (29.7%)	1,941 (13.7%)	1,052 (7.4%)	177 (1.2%)	58 (0.4%)	53 (0.4%)	14,199
Heathfield	3,449 (50.2%)	1,832 (26.7%)	696 (10.1%)	675 (9.8%)	106 (1.5%)	87 (1.3%)	21 (0.3%)	4 (0.1%)	6,870
Herstmonceux	804 (52.3%)	445 (28.9%)	158 (10.3%)	42 (2.7%)	26 (1.7%)	11 (0.7%)	52 (3.4%)	0 (0%)	1,538
Hove	3,967 (8.9%)	9,957 (22.4%)	6,893 (15.5%)	10,911 (24.5%)	10,824 (24.4%)	682 (1.5%)	3 (0%)	1,212 (2.7%)	44,449
Lewes	2,177 (20.1%)	3,392 (31.3%)	3,205 (29.6%)	1,504 (13.9%)	333 (3.1%)	19 (1.8%)	14 (0.1%)	18 (0.2%)	10,834
Mayfield	1,462 (55.2%)	637 (24.1%)	289 (10.9%)	148 (5.6%)	78 (2.9%)	29 (1.1%)	5 (0.2%)	0 (0%)	2,648
Newhaven	4,435 (31.8%)	3,960 (28.4%)	2,683 (19.3%)	2,079 (14.9%)	418 (3%)	126 (0.9%)	212 (1.5%)	21 (0.2%)	13,934
Pevensey	2,105 (47%)	1,556 (34.8%)	441 (9.9%)	246 (5.5%)	62 (1.4%)	34 (0.8%)	31 (0.7%)	2 (0%)	4,477
Preston Circus	3,886 (7.3%)	10,047 (18.9%)	13,989 (26.3%)	12,419 (23.4%)	10,640 (20%)	1,150 (2.2%)	10 (0%)	959 (1.8%)	53,100
Roedean	5,305 (21.1%)	4,101 (16.3%)	4,500 (17.9%)	6,936 (27.6%)	3,449 (13.7%)	361 (1.4%)	20 (0.1%)	495 (2%)	25,167
Rye	1,711 (33.3%)	1,506 (29.3%)	1,129 (21.9%)	552 (10.7%)	98 (1.9%)	109 (2.1%)	39 (0.8%)	0 (0%)	5,144
Seaford	5,388 (46.6%)	2,339 (20.2%)	1,494 (12.9%)	1,688 (14.6%)	457 (4%)	162 (1.4%)	4 (0%)	25 (0.2%)	11,557
Uckfield	4,830 (43.6%)	3,124 (28.2%)	1,851 (16.7%)	912 (8.2%)	209 (1.9%)	108 (1%)	42 (0.4%)	1 (0%)	11,077
Wadhurst	1,668 (42.8%)	1,171 (30%)	662 (17%)	261 (6.7%)	85 (2.2%)	44 (1.1%)	9 (0.2%)	0 (0%)	3,900
ESFRS	87,989 (24.9%)	81,338 (23%)	67,556 (19.1%)	66,813 (18.9%)	39,736 (11.2%)	5,167 (1.5%)	1,236 (0.3%)	3,610 (1%)	353,445

It is predicted that 15% of the population across the ESFRS area are lone pensioners which are a key cohort for Fire & Rescue Services as they represent a potential fire risk factor, as do lone parents with dependent children when considering household composition.

It can be seen from the table below that, overall, the station area with the most lone pensioners is Eastbourne, by far, with 8,604 in its area, representing 18% of households in the area. The next is Bexhill which has considerably fewer lone pensioners (4,837) but this comprises the greatest proportion of lone pensioners in a station area compared to the rest of the service (23%).

Almost three out of four households which are composed of all full-time students reside in Preston Circus station area, as you would expect, followed by Roedean, Eastbourne and Hove.

The greatest numbers of single parent families reside in Preston Circus, Eastbourne and Hastings Bohemia Road, representing the areas where 40% of lone parents with dependent children reside.

	Household Composition - Households (2011)			
	Lone Pensioner (65+)	All full-time students	Lone parent with dependent children	All Households
Barcombe	731 (13.2%)	1 (0%)	247 (4.5%)	5,521
Battle	669 (16.3%)	0 (0%)	268 (6.5%)	4,110
Bexhill	4,837 (22.5%)	1 (0%)	1,173 (5.5%)	21,460
Broad Oak	523 (16.2%)	0 (0%)	125 (3.9%)	3,237
Burwash	426 (12.6%)	0 (0%)	148 (4.4%)	3,371
Crowborough	1,382 (13.2%)	1 (0%)	530 (5.1%)	10,495
Eastbourne	8,604 (17.5%)	268 (0.5%)	3,255 (6.6%)	49,195
Forest Row	415 (12.7%)	0 (0%)	197 (6%)	3,266
Hailsham	2,520 (17.8%)	2 (0%)	825 (5.8%)	14,143
Hastings Bohemia Rd	4,009 (13.5%)	44 (0.1%)	2,233 (7.5%)	29,753
Hastings The Ridge	1,872 (13.2%)	13 (0.1%)	1,292 (9.1%)	14,199
Heathfield	1,011 (14.7%)	1 (0%)	333 (4.8%)	6,870
Herstmonceux	212 (13.8%)	0 (0%)	72 (4.7%)	1,538
Hove	5,647 (12.7%)	201 (0.5%)	3,101 (7%)	44,449
Lewes	1,662 (15.3%)	9 (0.1%)	680 (6.3%)	10,834
Mayfield	390 (14.7%)	0 (0%)	70 (2.6%)	2,648
Newhaven	2,073 (14.9%)	6 (0%)	1,042 (7.5%)	13,934
Pevensey	721 (16.1%)	1 (0%)	209 (4.7%)	4,477
Preston Circus	5,273 (9.9%)	2,358 (4.4%)	3,770 (7.1%)	53,100
Roedean	3,790 (15.1%)	316 (1.3%)	1,824 (7.2%)	25,167
Rye	1,043 (20.3%)	0 (0%)	258 (5%)	5,144
Seaford	2,283 (19.8%)	1 (0%)	541 (4.7%)	11,557
Uckfield	1,421 (12.8%)	1 (0%)	571 (5.2%)	11,077
Wadhurst	589 (15.1%)	0 (0%)	216 (5.5%)	3,900
ESFRS	52,103 (14.7%)	3,224 (0.9%)	22,980 (6.5%)	353,445

Brighton & Hove has one of the largest private rented sectors in the country comprised of 34,000 homes (28%), with 2 in 7 of the city's households now renting privately. However, high rental costs, poorer than average housing quality and pockets of overcrowding (the highest outside London) result in additional housing challenges for the city. There are also high levels of rental households in Hastings with 43% renting, of which 13% rent from 'other social landlords' which is the highest in the county.

The overall households tenure across the ESFRS area is shown below and it can be seen that just over a third of households are rented, with a third of rented households being social rented. Again, these types of households are significant to Fire & Rescue Services as they are a potential fire risk factor.

It can be seen that there are 22,903 social rented households across the ESFRS area, and 52% of these are within the 3 City station areas, which is disproportionately high considering that approximately a third of the population across the ESFRS area reside within the City of Brighton & Hove.

30% of households in Preston Circus station area are privately rented from a landlord or letting agency, and this proportion is the highest across all station areas. Preston Circus station area also contains the greatest number of these properties – a total of 15,980, which represents 22% of all privately rented properties across the ESFRS area. Eastbourne has a further 10,035 properties that are privately rented (14% of all across ESFRS area) and representing 1 in 5 properties in Eastbourne. In Hastings Bohemia Road station area, 29% of households are privately rented from a landlord or letting agency.

Broad Oak and Seaford represent station areas in which over 48% of households within the area are owned outright – the ESFRS average is 33%.

	Household Tenure - Households (2011)								
	Owned		Shared ownership	Social rented:		Private rented:		Living rent free	Total
	Outright	Mortgage or loan		Rented from council	Other	Private landlord or letting agency	Other		
Barcombe	2,272 (41.2%)	1,966 (35.6%)	44 (0.8%)	442 (8%)	142 (2.6%)	473 (8.6%)	83 (1.5%)	99 (1.8%)	5,521
Battle	1,681 (40.9%)	1,331 (32.4%)	16 (0.4%)	91 (2.2%)	357 (8.7%)	492 (12%)	70 (1.7%)	72 (1.8%)	4,110
Bexhill	9,923 (46.2%)	5,613 (26.2%)	116 (0.5%)	362 (1.7%)	1,592 (7.4%)	3,352 (15.6%)	257 (1.2%)	245 (1.1%)	21,460
Broad Oak	1,573 (48.6%)	933 (28.8%)	13 (0.4%)	70 (2.2%)	300 (9.3%)	227 (7%)	49 (1.5%)	72 (2.2%)	3,237
Burwash	1,382 (41%)	1,242 (36.8%)	11 (0.3%)	51 (1.5%)	277 (8.2%)	306 (9.1%)	40 (1.2%)	62 (1.8%)	3,371
Crowborough	4,192 (39.9%)	4,015 (38.3%)	132 (1.3%)	490 (4.7%)	357 (3.4%)	1,028 (9.8%)	129 (1.2%)	152 (1.4%)	10,495
Eastbourne	17,350 (35.3%)	14,100 (28.7%)	320 (0.7%)	3,404 (6.9%)	2,659 (5.4%)	10,035 (20.4%)	797 (1.6%)	530 (1.1%)	49,195
Forest Row	1,314 (40.2%)	1,122 (34.4%)	9 (0.3%)	165 (5.1%)	57 (1.7%)	442 (13.5%)	46 (1.4%)	111 (3.4%)	3,266
Hailsham	6,009 (42.5%)	4,838 (34.2%)	126 (0.9%)	866 (6.1%)	626 (4.4%)	1,323 (9.4%)	179 (1.3%)	176 (1.2%)	14,143
Hastings Bohemia Rd	7,795 (26.2%)	8,263 (27.8%)	157 (0.5%)	475 (1.6%)	3,690 (12.4%)	8,560 (28.8%)	513 (1.7%)	300 (1%)	29,753
Hastings The Ridge	4,860 (34.2%)	4,159 (29.3%)	54 (0.4%)	322 (2.3%)	1,706 (12%)	2,764 (19.5%)	186 (1.3%)	148 (1%)	14,199
Heathfield	2,874 (41.8%)	2,563 (37.3%)	63 (0.9%)	287 (4.2%)	113 (1.6%)	787 (11.5%)	83 (1.2%)	100 (1.5%)	6,870
Herstmonceux	711 (46.2%)	518 (33.7%)	14 (0.9%)	56 (3.6%)	40 (2.6%)	145 (9.4%)	30 (2%)	24 (1.6%)	1,538
Hove	10,830 (24.4%)	14,462 (32.5%)	303 (0.7%)	2,941 (6.6%)	1,856 (4.2%)	12,872 (29%)	631 (1.4%)	554 (1.2%)	44,449
Lewes	4,043 (37.3%)	3,199 (29.5%)	66 (0.6%)	1,286 (11.9%)	285 (2.6%)	1,579 (14.6%)	170 (1.6%)	206 (1.9%)	10,834
Mayfield	1,216 (45.9%)	958 (36.2%)	6 (0.2%)	75 (2.8%)	70 (2.6%)	224 (8.5%)	25 (0.9%)	74 (2.8%)	2,648
Newhaven	4,780 (34.3%)	5,064 (36.3%)	120 (0.9%)	899 (6.5%)	663 (4.8%)	2,099 (15.1%)	182 (1.3%)	127 (0.9%)	13,934
Pevensey	2,062 (46.1%)	1,714 (38.3%)	14 (0.3%)	77 (1.7%)	40 (0.9%)	465 (10.4%)	49 (1.1%)	56 (1.3%)	4,477
Preston Circus	11,487 (21.6%)	15,749 (29.7%)	539 (1%)	4,810 (9.1%)	3,025 (5.7%)	15,980 (30.1%)	886 (1.7%)	624 (1.2%)	53,100
Roedean	6,611 (26.3%)	6,640 (26.4%)	207 (0.8%)	4,180 (16.6%)	1,429 (5.7%)	5,337 (21.2%)	377 (1.5%)	386 (1.5%)	25,167
Rye	2,161 (42%)	1,298 (25.2%)	28 (0.5%)	137 (2.7%)	695 (13.5%)	596 (11.6%)	116 (2.3%)	113 (2.2%)	5,144
Seaford	5,575 (48.2%)	3,370 (29.2%)	53 (0.5%)	605 (5.2%)	289 (2.5%)	1,420 (12.3%)	118 (1%)	127 (1.1%)	11,557
Uckfield	4,145 (37.4%)	4,431 (40%)	95 (0.9%)	612 (5.5%)	387 (3.5%)	1,108 (10%)	104 (0.9%)	195 (1.8%)	11,077
Wadhurst	1,527 (39.2%)	1,426 (36.6%)	34 (0.9%)	200 (5.1%)	229 (5.9%)	366 (9.4%)	39 (1%)	79 (2%)	3,900
ESFRS	116,373 (32.9%)	108,974 (30.8%)	2,540 (0.7%)	22,903 (6.5%)	20,884 (5.9%)	71,980 (20.4%)	5,159 (1.5%)	4,632 (1.3%)	353,445

It can be also be seen that, overall, overcrowding isn't a huge issue for East Sussex Fire & Rescue Service, although in the City of Brighton & Hove, the percentage of households with spare bedrooms are a lot fewer – around 20% of homes have 2 or more spare bedrooms. Conversely, in the rural areas of Rother and Wealden, the percentage of homes with 2 or more spare rooms increases up to over 55%.

The table below demonstrates that across the ESFRS area, there are 4% of households where the occupancy rating is -1 or less indicating overcrowding, which represents a total of 14,179 households. 27% of these are within the Preston Circus station area, 17% in Hove and 10% in Roedean. Therefore, around 54% of overcrowded households are within the City of Brighton and Hove, which is disproportionately high, given that around 34% of the population are within the City of Brighton & Hove.

There are 5 station areas where >50% of their households have an occupancy rating of +1 or more, with Mayfield ranking 1st with 55.4% of its households under-occupied by 2 or more spare bedrooms.

| | Occupancy Rating *(Spare Bedrooms)* - Households (2011) | | | | | |
| | *Under-occupied* | | *Standard* | *Overcrowded* | | Total |
	+2 or more	+1	0	-1	-2 or less	
Barcombe	2,832 (51.3%)	1,704 (30.9%)	887 (16.1%)	91 (1.6%)	7 (0.1%)	5,521
Battle	1,764 (42.9%)	1,451 (35.3%)	796 (19.4%)	82 (2%)	17 (0.4%)	4,110
Bexhill	6,986 (32.6%)	8,572 (39.9%)	5,373 (25%)	482 (2.2%)	47 (0.2%)	21,460
Broad Oak	1,637 (50.6%)	1,082 (33.4%)	458 (14.1%)	47 (1.5%)	13 (0.4%)	3,237
Burwash	1,700 (50.4%)	1,042 (30.9%)	569 (16.9%)	55 (1.6%)	5 (0.1%)	3,371
Crowborough	5,188 (49.4%)	3,080 (29.3%)	1,996 (19%)	207 (2%)	24 (0.2%)	10,495
Eastbourne	14,371 (29.2%)	18,314 (37.2%)	14,721 (29.9%)	1,629 (3.3%)	160 (0.3%)	49,195
Forest Row	1,695 (51.9%)	898 (27.5%)	578 (17.7%)	79 (2.4%)	16 (0.5%)	3,266
Hailsham	4,420 (31.3%)	6,094 (43.1%)	3,237 (22.9%)	343 (2.4%)	49 (0.3%)	14,143
Hastings Bohemia Rd	8,009 (26.9%)	10,184 (34.2%)	10,504 (35.3%)	950 (3.2%)	106 (0.4%)	29,753
Hastings The Ridge	4,792 (33.7%)	5,126 (36.1%)	3,848 (27.1%)	386 (2.7%)	47 (0.3%)	14,199
Heathfield	3,002 (43.7%)	2,380 (34.6%)	1,360 (19.8%)	118 (1.7%)	10 (0.1%)	6,870
Herstmonceux	686 (44.6%)	558 (36.3%)	269 (17.5%)	24 (1.6%)	1 (0.1%)	1,538
Hove	9,884 (22.2%)	14,115 (31.8%)	18,104 (40.7%)	2,166 (4.9%)	180 (0.4%)	44,449
Lewes	4,077 (37.6%)	3,688 (34%)	2,750 (25.4%)	301 (2.8%)	18 (0.2%)	10,834
Mayfield	1,466 (55.4%)	786 (29.7%)	360 (13.6%)	31 (1.2%)	5 (0.2%)	2,648
Newhaven	3,944 (28.3%)	5,635 (40.4%)	3,882 (27.9%)	425 (3.1%)	48 (0.3%)	13,934
Pevensey	1,630 (36.4%)	2,023 (45.2%)	765 (17.1%)	53 (1.2%)	6 (0.1%)	4,477
Preston Circus	10,981 (20.7%)	15,783 (29.7%)	22,522 (42.4%)	3,470 (6.5%)	344 (0.6%)	53,100
Roedean	5,730 (22.8%)	8,236 (32.7%)	9,771 (38.8%)	1,298 (5.2%)	132 (0.5%)	25,167
Rye	2,027 (39.4%)	1,851 (36%)	1,122 (21.8%)	119 (2.3%)	25 (0.5%)	5,144
Seaford	4,628 (40%)	4,086 (35.4%)	2,607 (22.6%)	207 (1.8%)	29 (0.3%)	11,557
Uckfield	5,208 (47%)	3,386 (30.6%)	2,238 (20.2%)	225 (2%)	20 (0.2%)	11,077
Wadhurst	1,892 (48.5%)	1,214 (31.1%)	712 (18.3%)	75 (1.9%)	7 (0.2%)	3,900
ESFRS	108,549 (30.7%)	121,288 (34.3%)	109,429 (31%)	12,863 (3.6%)	1,316 (0.4%)	353,445

Mosaic Public Sector Household Breakdown

ESFRS utilises a variety of tools and data to provide insights into the risks of fires and other emergencies. One such dataset is Mosaic data. Mosaic Public Sector, published by Experian, is a socio-demographic classification system covering the whole of the United Kingdom. It provides an accurate and comprehensive view of citizens and their needs by describing them in terms of demographics, lifestyle, culture and behaviour. Over 850 million pieces of information across 450 different data points are condensed using the latest analytical techniques to identify 15 summary groups and 66 detailed types that are easy to interpret and understand. Importantly, Mosaic Public Sector enables insight into the preferred channel through which individuals communicate – whether digitally, or by phone or mail etc.

There are 363,652 households dispersed across the ESFRS area which are broken down by the 15 summary Mosaic Lifestyle Groups.

Mosaic Lifestyle Group	ESFRS	%
A - Country Living	30,907	8.5
B - Prestige Positions	27,774	7.6
C - City Prosperity	21,862	6.0
D - Domestic Success	27,215	7.5
E - Suburban Stability	24,684	6.8
F - Senior Security	39,762	10.9
G - Rural Reality	17,553	4.8
H - Aspiring Homemakers	24,898	6.8
I - Urban Cohesion	14,427	4.0
J - Rental Hubs	50,913	14.0
K - Modest Traditions	10,777	3.0
L - Transient Renters	13,853	3.8
M - Family Basics	20,841	5.7
N - Vintage Value	26,701	7.3
O - Municipal Challenge	11,485	3.2
Total	363,652	100

The predominant Mosaic groups describe: 'Educated young people privately renting in urban neighbourhoods' and 'Elderly people with assets who are enjoying a comfortable retirement'. The top 3 Mosaic Types across the ESFRS area are:

F24 - Bungalow Haven: Seniors appreciating the calm of bungalow estates designed for the elderly.

J45 - Bus-Route Renters: Singles renting affordable private flats away from central amenities and often on main roads.

A03 - Wealthy Landowners: Prosperous owners of country houses including the rural upper class, successful farmers and second-home owners.

Combining mosaic with dwelling fire incident data has enabled ESFRS to identify which types of people have had fires and which types are more or less likely to have a fire in the home as well as identifying where these people live and how we can communicate fire safety messages to them effectively.

It can be seen below that, overwhelmingly, the mosaic lifestyle group 'J – Rental Hubs' is responsible for approximately 22% of all dwelling fires over the 9 year review period – 1 in 5 dwelling fires. These household types are predominately located along the coastal connurbations, particularly within the City of Brighton & Hove.
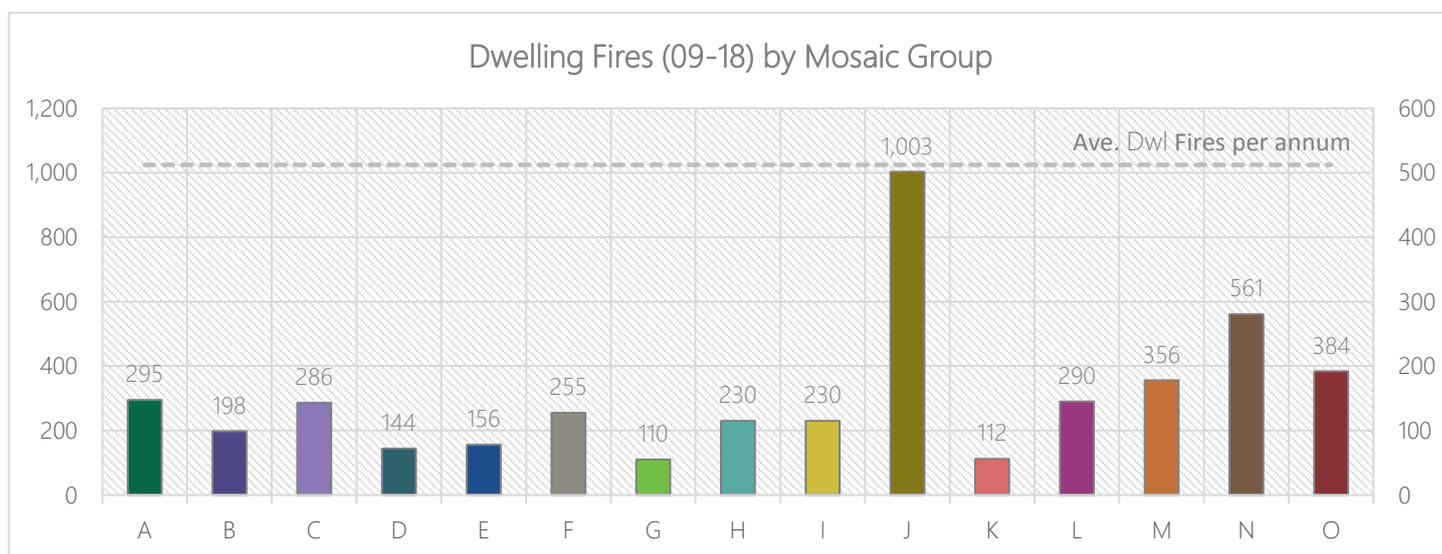
The graph above shows the mosaic groups that have the most dwelling fires, which are:

Group J – Rental Hubs
Approximately 1 in 5 dwelling fires are found in this category. These are educated young people, privately renting in urban neighbourhoods. Within this group, there are two prominent lifestyle types that contribute to numbers of dwelling fires. These are J45 – Bus Route Renters, which are singles renting affordable private flats away from central amenities and often on main roads, and J41 - Central Pulse which are youngsters renting city centre flats in vibrant locations close to jobs and night life. These dwelling fires typically do not result in people sustaining injuries and often out on arrival or dealt with using small means.

Group N – Vintage Value
The second highest contributor to dwelling fires are Vintage Value households, which are elderly people reliant on support to meet financial or practical needs and, in particular, N58 – Aided Elderly, which are supported elders in specialised accommodation including retirement homes and complexes of small homes, and N60 – Dependent Greys, which are ageing social renters with high levels of need in centrally located developments on small units. This segment represents where our life-risk dwelling fires occur and where our Home Safety Visit methodology is typically targeted.

Group O – Municipal Challenge
These are urban renters of social housing facing an array of challenges – low income, few employment options, living in low cost housing in challenged neighbourhoods. Within this group there are both younger and older generations; there are: O63 - Streetwise Singles, which are hard pressed in low cost social flats, searching for opportunities; O64 – High Rise Renters, which rent social flats in high-rise blocks, where levels of need are significant and O66 – Inner City Stalwarts, who are long-term renters of inner city social flats who have witnessed many changes, living in diverse neighbourhoods.
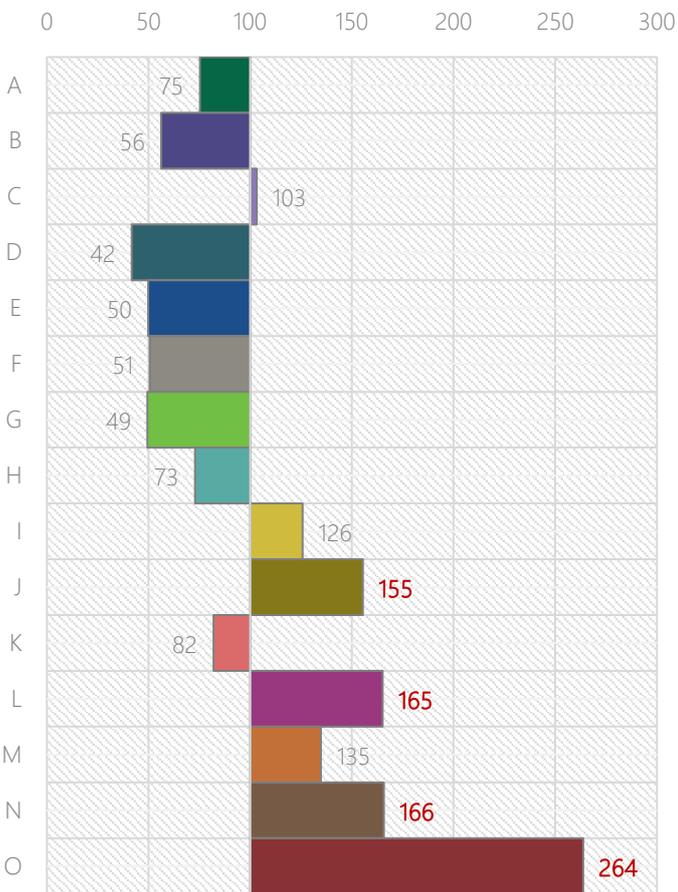
Additionally, by comparing the households which have historically had a fire in the home with the base population, one can determine which mosaic lifestyle groups are over and under-represented i.e. have greater or fewer fires than one would expect, all other things being equal. It can be seen from the chart to the left there are a number of lifestyle groups which are over-represented in ESFRS i.e. they are having proportionally more dwelling fires than one would expect (bar is facing to the right).

Group J (Rental Hubs) comprise 14% of the population, but 21.8% of dwelling fires have been matched to this group, meaning this group is having around 55% more dwelling fires than would be expected.

Conversely, Group F (Senior Security), the next biggest group in ESFRS make up 10.9% of the population but historically only make up 5.5% of all dwelling fires, which means they have 50% fewer dwelling fires than would be expected. Group O (Municipal Challenge) have 2.6x more dwelling fires as one would expect.

Furthermore, by comparing the households which have historically had a fire in the home with the households which have historically received a Home Safety Visit, one can determine which household types have been over and under-targeted. It can be seen from the chart to the right that there are a number of lifestyle groups which are over-represented in ESFRS i.e. these types of households have received more HSVs than one would expect – given the number/proportion of dwelling fires they have.

Group F (Senior Security) has been heavily targeted for Home Safety Visits historically, due to this group being a predominately elderly lifestyle group. However, it can be seen here that this group has been over-targeted almost 4.5x as much as it needed to be, given the number of fires this lifestyle group have – we saw previously that this group are having 50% fewer dwelling fires than one would expect.

Conversely, it can be seen here that Group J (Rental Hubs), which represent the group that has the most dwelling fires overall, have received proportionally fewer HSVs than one would expect given this group's ADF historicity.
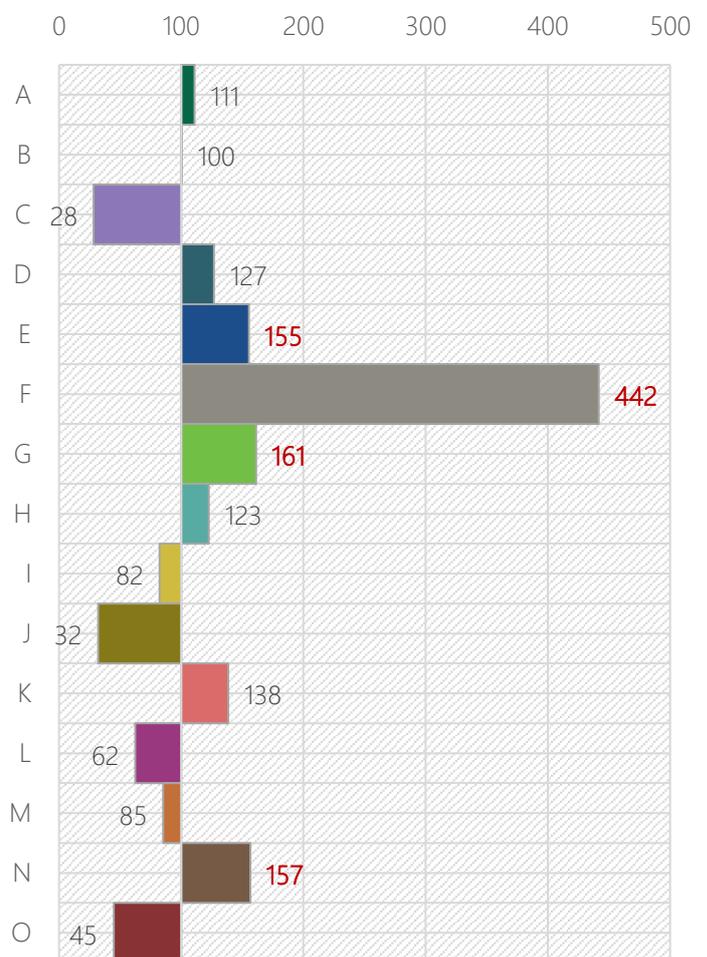
ESFRS have developed a scoring mechanism for each mosaic lifestyle type in order to create an 'initial fire risk rating' for each households across the service area, based on the socio-demographic lifestyle type of that household. It is based on a combination of the number of fires and propensity to having a fire within each mosaic type. Those that have historically had a higher prevalence of and/or higher likelihood to having a fire are ranked higher. The risk rating is a relative risk where the top septile of households are designated 'very high' fire risk and so on. This is a useful way to show socio-demographic risk, in the absence of additional risk information that ESFRS glean from other sources.

It can be seen that across the service area, 18% of households are designated as very high risk, with a further 22% high risk households. Around 17% of households are low or very low. Naturally, these proportions change on a station-by-station basis, with some station areas having no very high-risk households, while other areas have almost 30%.

No. of Households by Initial Fire Risk Rating

Station Area	Very High	High	Above Average	Average	Below Average	Low	Very Low	All Households
Barcombe	240	1,355	1,055	176	1,777	999	344	5,946
Battle	312	712	1,037	217	1,462	358	233	4,331
Bexhill	6,583	1,901	1,807	5,338	2,982	3,670	865	23,146
Broad Oak	11	641	1,260	109	1,215	79	210	3,525
Burwash	0	768	1,069	43	1,384	72	245	3,581
Crowborough	809	1,415	1,379	914	2,752	3,326	598	11,193
Eastbourne	12,161	9,210	5,083	9,252	6,969	7,074	1,767	51,516
Forest Row	97	1,170	570	128	927	420	125	3,437
Hailsham	1,177	2,077	2,352	3,617	1,855	3,637	1,492	16,207
Hastings Bohemia Rd	6,526	6,257	2,759	4,438	2,874	3,557	1,549	27,960
Hastings The Ridge	1,720	3,015	2,372	3,133	2,010	1,780	738	14,768
Heathfield	622	1,650	1,515	462	1,750	908	469	7,376
Herstmonceux	0	491	310	101	515	18	162	1,597
Hove	8,918	13,899	4,326	4,968	6,660	3,589	766	43,126
Lewes	1,385	1,896	1,164	1,076	3,587	1,735	295	11,138
Mayfield	33	1,054	690	45	712	180	70	2,784
Newhaven	1,895	1,419	2,112	2,557	1,857	3,482	1,413	14,735
Pevensey	146	132	715	1,184	1,193	983	1,036	5,389
Preston Circus	13,513	18,854	3,185	6,579	6,187	3,059	547	51,924
Roedean	7,473	5,985	1,565	2,522	4,504	2,842	519	25,410
Rye	364	646	1,120	255	2,567	233	954	6,139
Seaford	2,044	875	1,112	2,595	2,775	2,431	448	12,280
Uckfield	706	2,345	2,343	728	2,822	2,376	748	12,068
Wadhurst	98	1,093	864	83	1,292	509	137	4,076
ESFRS Area	66,833	78,860	41,764	50,520	62,628	47,317	15,730	363,652

Mosaic households outside of attendance standards isochrones.
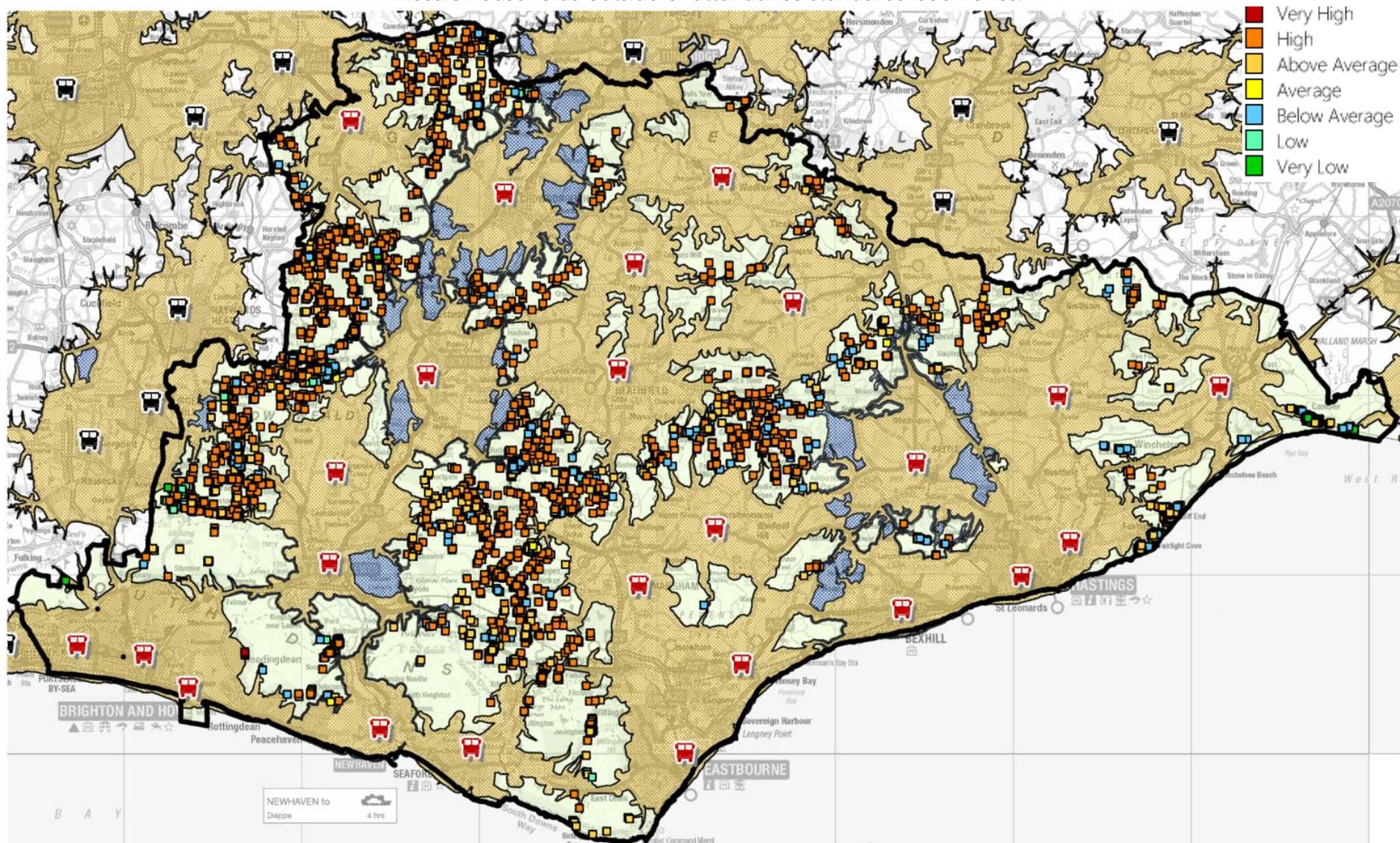
Out of the 363,652 households, 97.3% are within the ESFRS attendance standard isochrones, rising to 97.8% of households with the attendance standard coverage at night time. The map below illustrates the 2.2% of households that fall outside of the attendance standards isochrones (7,971 households).

Of these 7,971 households, 5 (0.1%) are classed as very high risk and 2,957 (37.1%) are high risk. 24% of the 7.971 households have previously had a home safety visit.

Barcombe station area has the lowest proportion of households within its attendance standards isochrones – approximately a third are outside – located along the 'Ditchling Strip'. Forest Row and Uckfield rank 2nd and 3rd.

It should be noted that, although some stations are shown to have 100% coverage of all households within the attendance standards isochrones, this is very much dependent upon the time of day, day of week, month of year, weather, driving conditions, congestion and a multitude of other factors. For example, much of the City of Brighton & Hove is heavily congested and therefore real/actual response times will vary significantly – a 3am vs a 3pm journey time will be significantly different. That being said, these give a broad indication as to the coverage of each station, with the larger, more rural areas representing areas with a lower likelihood of reaching all households within the attendance standards.

No. of Mosaic Households by Station Admin Area

Station Admin Area	No. of Mosaic Households	Within Attendance Standard (Day)	%	Within Attendance Standard (Night)	%
Barcombe	5,946	3,896	65.5	3,937	66.2
Battle	4,331	4,058	93.7	4,231	97.7
Bexhill	23,146	23,046	99.6	23,140	100.0
Broad Oak	3,525	3,392	96.2	3,394	96.3
Burwash	3,581	2,971	83.0	3,468	96.8
Crowborough	11,193	10,321	92.2	10,736	95.9
Eastbourne	51,516	51,431	99.8	51,431	99.8
Forest Row	3,437	2,848	82.9	2,864	83.3
Hailsham	16,207	15,305	94.4	15,305	94.4
Hastings Bohemia Rd	27,960	27,874	99.7	27,936	99.9
Hastings The Ridge	14,768	14,410	97.6	14,410	97.6
Heathfield	7,327	6,875	93.8	6,881	93.9
Herstmonceux	1,597	1,489	93.2	1,489	93.2
Hove	43,126	43,124	100.0	43,124	100.0
Lewes	11,138	10,547	94.7	10,713	96.2
Mayfield	2,833	2,774	97.9	2,788	98.4
Newhaven	14,735	14,682	99.6	14,708	99.8
Pevensey	5,389	5,388	100.0	5,388	100.0
Preston Circus	51,924	51,919	100.0	51,919	100.0
Roedean	25,410	25,400	100.0	25,400	100.0
Rye	6,139	5,706	92.9	5,706	92.9
Seaford	12,280	12,109	98.6	12,109	98.6
Uckfield	12,068	10,118	83.8	10,564	87.5
Wadhurst	4,076	4,039	99.1	4,040	99.1
Grand Total	363,652	353,722	97.3	355,681	97.8

Holiday Parks

Across the service area, there are a total of 36 major holiday parks, 14 of which reside in the district of Rother – with Rye station area having 8 of those. It can be seen that, aside from Rye station area, all holiday parks are within the attendance standards isochrones, though some will have extended travel times. In the Rye station area, 74% of the holiday units are outside of the attendance standards – this is due to the fact that the two largest holiday parks are located in the village of Camber which sits outside of the isochrones (Camber Sands and Pontins) and these two sites account for 25% of the total holiday units across the service area.

Station Admin Area	Total Number of Units	Within Attendance Standard (Day)	%	Within Attendance Standard (Night)	%
Battle	72	72	100	72	100
Bexhill	250	250	100	250	100
Broad Oak	275	275	100	275	100
Eastbourne	466	466	100	466	100
Hailsham	76	76	100	76	100
Hastings Bohemia Rd	1,715	1,715	100	1,715	100
Hastings The Ridge	1,249	1,249	100	1,249	100
Heathfield	121	121	100	121	100
Herstmonceux	117	117	100	117	100
Newhaven	330	330	100	330	100
Pevensey	193	193	100	193	100
Rye	2,729	719	26	719	26
Seaford	318	318	100	318	100
ESFRS	7,911	5,901	75	5,901	75

A unit includes Caravans, lodges, bungalows, chalets, cottages and touring (caravan) pitches.

Index of Multiple Deprivation 2015 (IMD)

The Index of Multiple Deprivation 2015 is the official measure of relative deprivation for small areas (or neighbourhoods) in England. The small areas used are called Lower-layer Super Output Areas (LSOAs), of which there are 32,844 in England. They are designed to be of a similar population size with an average of 1,500 residents each and are a standard way of dividing up the country.

The Index of Multiple Deprivation ranks every LSOA in England from 1 (most deprived area) to 32,844 (least deprived area). It is common to describe how relatively deprived a LSOA is by saying whether it falls among the most deprived 10 percent, 20 percent or 30 percent of small areas in England (although there is no definitive cut-off at which an area is described as 'deprived'). To help with this, deprivation 'deciles' are published alongside ranks. Deciles are calculated by ranking the 32,844 LSOAs in England from most deprived to least deprived and dividing them into 10 equal groups. These range from the most deprived 10 percent of small areas nationally to the least deprived 10 percent of small areas nationally.

The charts below show the distribution of incidents (Apr 2013 – Mar 2018) across LSOAs in the ESFRS area, broken down by the national IMD decile (where '1' represents ESFRS areas that fall within the top 10% most deprived areas nationally).

It can be seen that there is a strong positive correlation between the number of incidents, irrespective of type, and how deprived an area is (R^2=0.8229) i.e. more incidents in more deprived areas. However, the distribution of all critical incidents over the 5 year period do not have this correlation. In fact, the greatest proportion of incidents occur within the 6th to 8th deciles. The reason for this is due to the skewing of critical special service incidents, in particular, the location of RTCs. These incident types are more independent of the deprivation in an area – in fact, Wealden District, which represents an area with particular RTC risk is, on the whole, an area with very little deprivation. However, it can be seen that, by splitting out the critical incidents into fires and special services, the critical fire incidents show a positive correlation with deprivation, although not quite as strong as all incident types (R^2=0.7615). Accidental Dwelling Fires (ADFs) have a strong positive correlation, and deliberate incidents have the strongest correlation of all with deprivation (R^2=0.8669).

All Incident Types
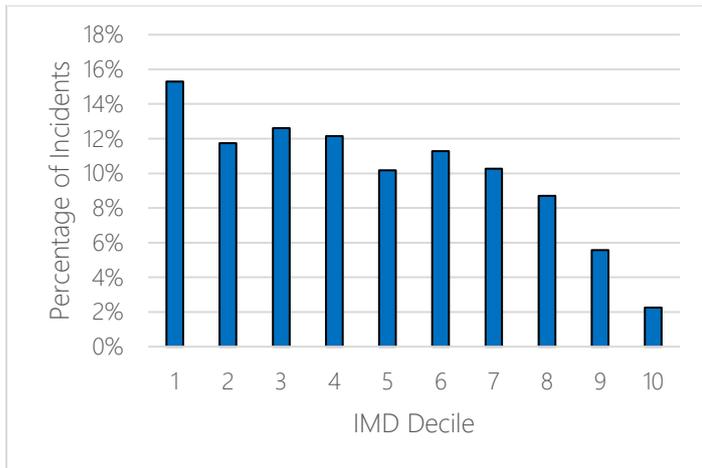
All Critical Incident Types
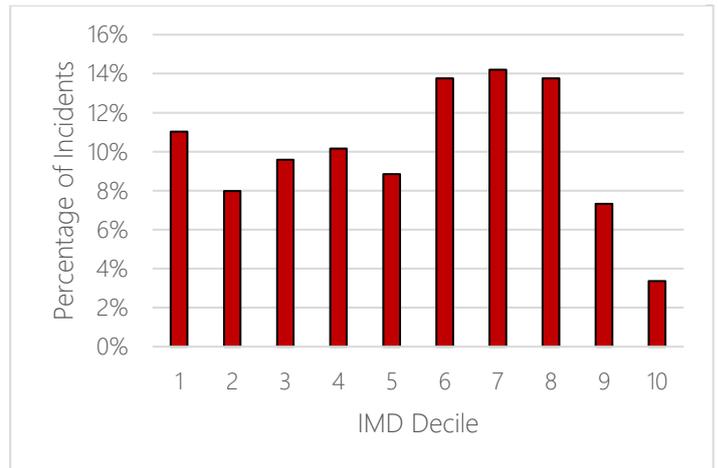
Critical Fire Incidents
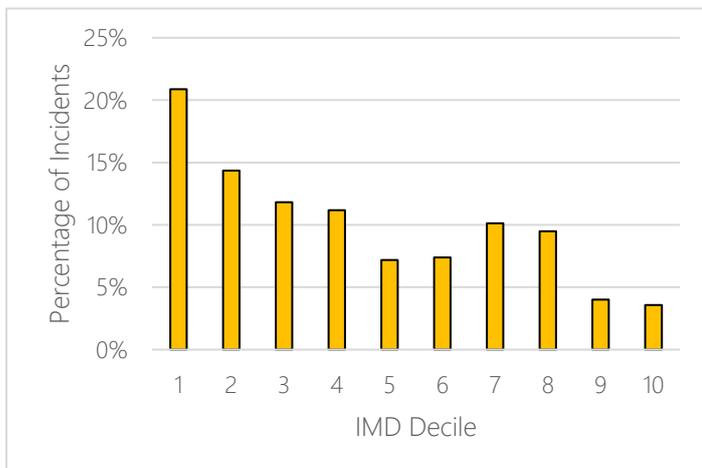
Critical Special Service Incidents
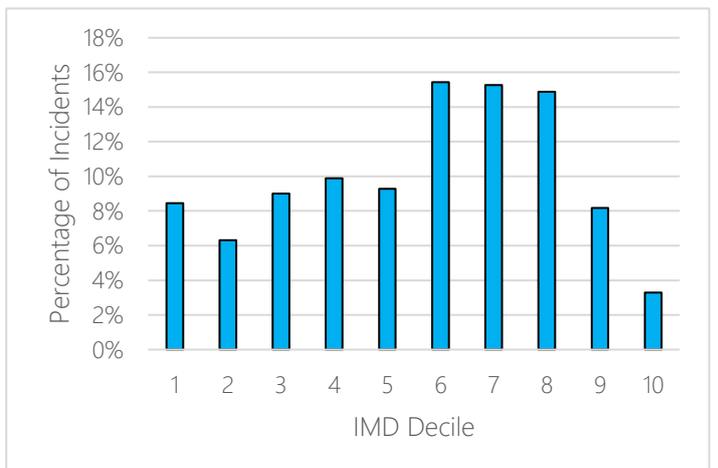
Accidental Dwelling Fires
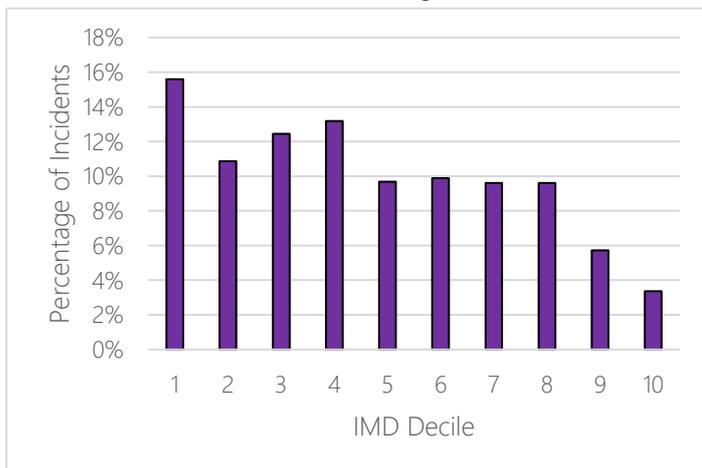
Deliberate Incidents
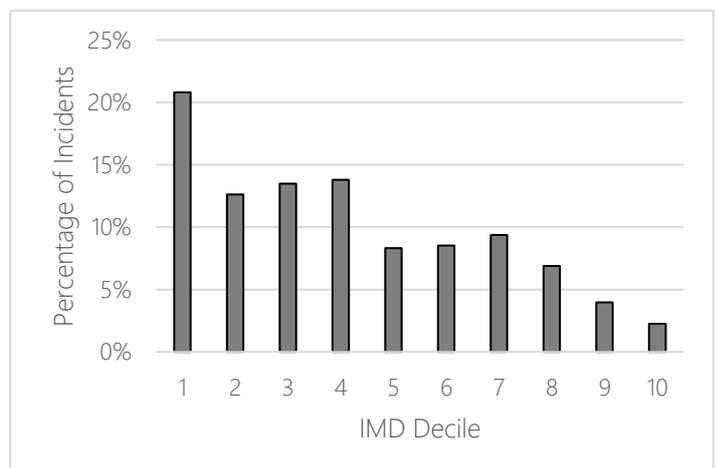
Incidents

Context

<u>National</u>

Fire & Rescue Services (FRSs) across England attended 564,827 incidents in 2017/18. This was a one percent increase compared with the previous year but a 29 percent decrease compared with ten years prior (2007/08). The total number of incidents was on a downward trend for around a decade, though they have increased in recent years mainly driven by increases in non-fire incidents attended. However, the small increase in 2017/18 was mainly driven by an increase in fires attended.

FRSs attended 167,150 fires in 2017/18. This was a three percent increase compared with the previous year but a 43 percent decrease compared with ten years ago in 2007/08. The increase in fires is driven by an increase in secondary fires with primary fires showing a small decrease.

FRSs attended 225,625 fire false alarms in 2017/18. This was a one percent increase compared with the previous year but a 32 percent decrease compared with ten years ago.

FRSs attended 172,052 non-fire incidents in 2017/18. This was a one percent decrease compared with the previous year (174,560). For around a decade, there had been a general decline in the number of non-fire incidents. However, recent years have shown large increases, largely due to a rise in medical incidents attended. The recent decrease in non-fire incidents is mainly due to a decline in emergency medical responding linked to many of the trials stopping in September 2017.

Of all incidents attended by FRSs in 2017/18, fires accounted for 30 percent and non-fire incidents 30 percent. The remaining 40 percent were fire false alarms, which continue to be the largest incident type. In 2007/08 these percentages were 37 percent (fires attended), 21 percent (non-fire incidents) and 42 percent (fire false alarms).

The number of fire-related fatalities had been on a general downward trend since comparable figures first became available in 1981/82, when there were 755 fire-related fatalities, though the numbers have fluctuated due to the relatively small numbers involved. In 2017/18, however, there were 334 fire-related fatalities (including 71 from the Grenfell Tower fire) compared with 263 in the previous year (an increase of 27%).

There were 3,306 non-fatal casualties requiring hospital treatment in 2017/18 (including 77 from the Grenfell Tower fire). This was a six percent increase compared with the previous year (3,128) but a 13 percent decrease compared with five years ago (3,811 in 2012/13).

Family Group (FG2)

Fire & Rescue Services are clustered together for comparisons purposes and these clusters are called 'Family Groups'. A Family Group is a group of other fire services within the UK which are similar to East Sussex FRS in terms of size, budget and resources, allowing for comparisons of similar performance. ESFRS are within Family Group 2 (FG2) which comprises the following FRSs: Bedfordshire, Berkshire, Buckinghamshire, Cambridgeshire, Dorset & Wiltshire, Durham, East Sussex, Norfolk, Northamptonshire, Oxfordshire, Suffolk and West Sussex. It can be seen from the table and chart below that the decreasing trend in incidents nationally, also applies to within the FG2 and it can be seen that ESFRS had 11.3 incidents per 1,000 population in 2017/18 compared with 16 incidents per 1000 population in 2009/10. That being said, ESFRS remains one of the FRSs in FG2 with the greatest number of incidents. The ESFRS year-on-year trend is in-line with the FG2 average.

Total Incidents per 1,000 population	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Bedfordshire	10.71	10.21	9.80	8.49	8.72	9.21	8.79	9.76	9.04
Berkshire	10.85	9.16	8.20	6.99	7.05	6.46	7.86	9.62	8.60
Buckinghamshire	9.82	9.98	9.29	8.47	8.73	7.99	10.30	10.15	9.75
Cambridgeshire	11.59	10.95	10.59	8.72	8.27	7.80	8.16	8.51	8.44
Dorset & Wiltshire	11.42	11.06	10.23	9.39	9.53	8.65	8.28	8.43	8.93
Durham	13.96	12.89	11.82	9.75	11.06	10.07	11.86	14.64	12.68
East Sussex	15.97	14.35	12.73	11.60	11.77	10.73	10.79	11.04	11.31
Norfolk	11.96	10.98	9.30	7.52	8.38	8.37	8.14	8.30	8.27
Northamptonshire	11.69	10.70	9.79	10.09	10.08	9.73	10.24	8.27	7.62
Oxfordshire	9.11	8.67	8.31	7.58	8.11	7.62	8.60	10.49	9.50
Suffolk	9.42	9.15	7.86	6.55	7.08	6.62	6.63	6.82	6.30
West Sussex	13.27	12.11	12.08	11.65	11.41	10.31	10.19	10.44	10.87
FG2	10.70	10.88	10.02	8.93	9.18	8.60	9.05	9.54	9.22

Total Incidents per 1,000 population
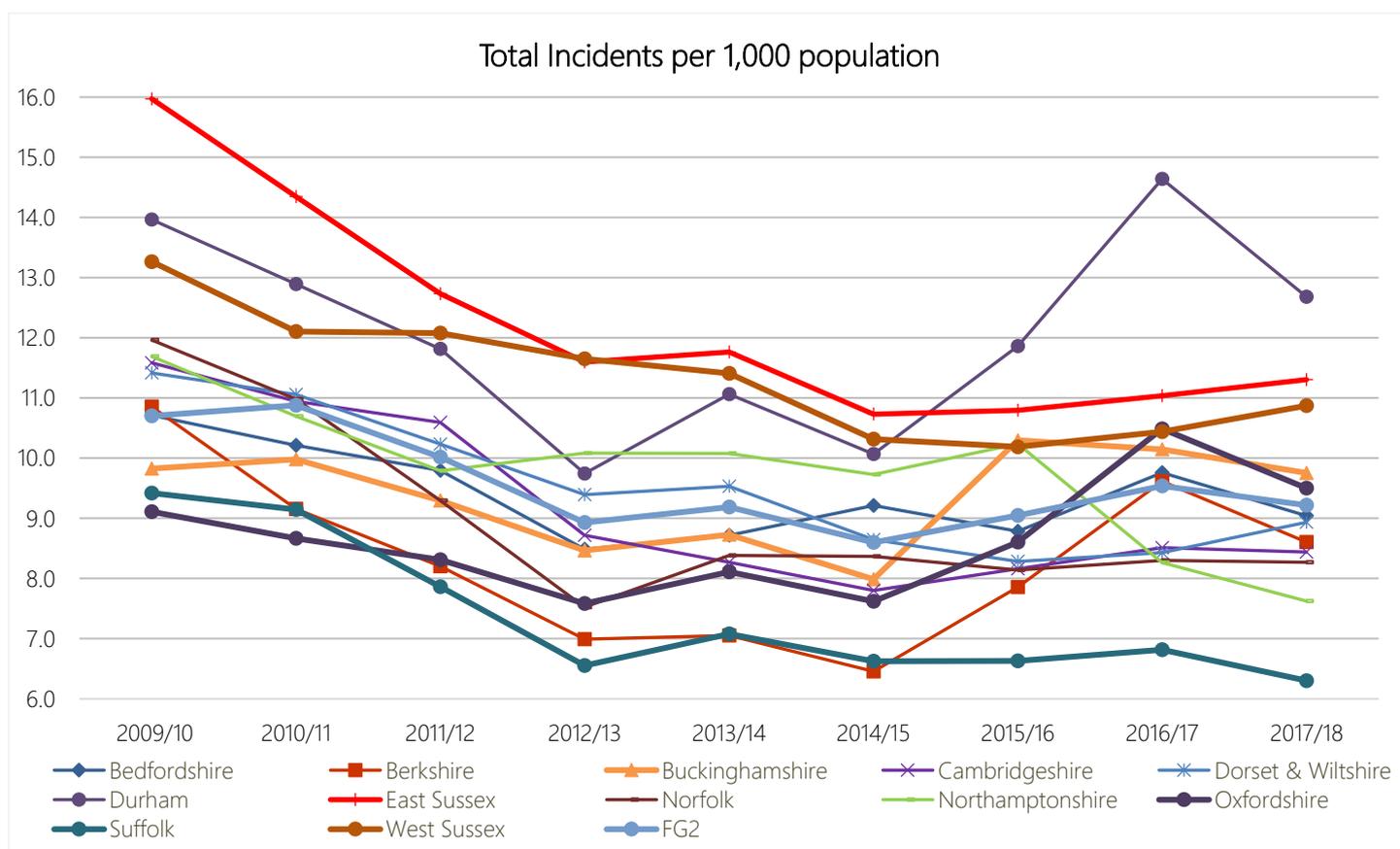
The table below shows Home Office data of total incidents attended between April 2013 and March 2018 (5 years) broken down by incident type across Fire & Rescue Service areas within Family Group 2.

Incident Type	Bedfordshire	Berkshire	Buckinghamshire	Cambridgeshire	Dorset & Wiltshire	Durham	East Sussex	Norfolk	Northamptonshire	Oxfordshire	Suffolk	West Sussex	% ESFRS	% FG2	% over/under ave.
Primary Fires	5,294	4,589	5,057	4,682	9,345	4,799	5,858	6,328	5,454	4,062	4,125	5,295	13	14	-11
Secondary Fires	4,759	4,120	4,719	4,624	5,779	11,281	3,694	3,860	4,134	2,793	3,876	3,673	8	13	-37
Chimney Fires	204	341	443	346	1,374	376	718	794	415	704	632	680	2	2	1
False Alarm Apparatus	8,090	8,940	9,902	10,586	22,692	5,559	15,819	7,005	3,745	9,241	8,051	16,360	34	28	24
False Alarm Malicious	718	545	535	410	744	408	597	274	313	296	314	593	1	1	2
False Alarm Good Intent	3,231	6,070	4,155	7,436	8,164	5,141	5,975	4,270	4,789	3,555	3,252	6,267	13	14	-6
Road Traffic Collision (RTC)	2,068	2,116	2,513	2,194	3,585	1,644	2,362	6,453	2,590	2,088	1,529	2,538	5	7	-27
Other Transport incident	64	42	98	89	212	47	136	127	114	59	105	88	0	0	13
Medical Incident - First responder	167	75	66	75	232	205	90	740	146	1,281	44	163	0	1	-73
Medical Incident - Co-responder	43	1,834	3,305	162	2,101	4,441	70	168	7,226	1,133	199	200	0	5	-97
Flooding	648	947	945	434	1,413	495	2,001	821	544	693	237	1,525	4	2	84
Rescue or evacuation from water	60	105	48	79	141	39	45	193	56	119	77	48	0	0	-56
Effecting entry / exit	1,292	1,531	1,122	604	1,682	437	1,814	1,056	509	866	395	1,661	4	3	38
Lift Release	440	790	447	185	1,052	165	1,708	254	320	462	99	945	4	2	145
Other rescue / release of persons	181	325	230	299	527	180	446	457	289	183	284	398	1	1	16
Animal assistance incidents	305	274	300	570	711	275	1,045	691	274	292	392	467	2	1	84
Removal of objects from people	181	201	381	217	465	398	407	285	197	126	111	280	1	1	23
Hazardous Materials incident	153	235	220	138	260	96	138	243	172	284	89	73	0	0	-35
Spills and Leaks (not RTC)	146	148	214	90	487	190	497	399	281	250	38	378	1	1	57
Making Safe (not RTC)	101	242	207	104	510	178	838	333	163	187	75	621	2	1	132
Suicide/ attempts	103	79	89	93	103	115	69	131	84	79	57	79	0	0	-37
Evacuation (no fire)	20	26	37	36	53	18	13	21	42	29	25	40	0	0	-64
Water provision	2	2	1	1	6	2	8	2	9	1	0	4	0	0	107
Assist other agencies	586	396	317	398	1,211	483	772	1,140	527	301	251	969	2	2	3
Advice Only	100	169	155	79	268	83	190	111	157	43	32	251	0	0	14
Stand By	12	4	4	28	79	14	6	9	25	4	25	46	0	0	-77
No action (not false alarm)	140	222	381	247	490	475	322	152	143	208	134	429	1	1	-5
Malicious False Alarm	10	10	6	0	18	2	1	8	2	7	1	2	0	0	-85
Good Intent false alarm	387	635	403	97	605	265	258	294	398	330	173	634	1	1	-43
Total	29,505	35,013	36,300	34,303	64,309	37,811	45,897	36,619	33,118	29,676	24,622	44,707	100	100	0

Chart axis: -100, -50, 0, 50, 100, 150

Categories (top to bottom):
- Primary Fires
- Secondary Fires
- Chimney Fires
- False Alarm Apparatus
- False Alarm Malicious
- False Alarm Good Intent
- Road Traffic Collision (RTC)
- Other Transport incident
- Medical Incident - First responder
- Medical Incident - Co-responder
- Flooding
- Rescue or evacuation from water
- Effecting entry / exit
- Lift Release
- Other rescue / release of persons
- Animal assistance incidents
- Removal of objects from people
- Hazardous Materials incident
- Spills and Leaks (not RTC)
- Making Safe (not RTC)
- Suicide/ attempts
- Evacuation (no fire)
- Water provision
- Assist other agencies
- Advice Only
- Stand By
- No action (not false alarm)
- Malicious False Alarm
- Good Intent false alarm

It can be seen that, compared with FG2, ESFRS have 11% fewer primary fires than expected (however, ESFRS have 11% more ADFs than expected compared to FG2) as well as over a third fewer secondary fires.

RTCs are also under-represented compared with FG2. 7% of all incidents over the last 5 years in FG2 were RTCs, but in ESFRS, this proportion was 5%, which equates to 27% fewer RTCs than expected.

Rescues/evacuations from water, too, are under-represented with ESFRS attending 56% fewer than expected.

Conversely, there are a number of over-represented incident types in ESFRS compared with FG2. The largest over-represented incident type is lift-releases, with ESFRS attending 145% more than the norm. Making Safe (not RTC) incidents are also high – 132% more than would be expected. Animal rescue incidents are 84% higher than would be expected and false alarm apparatus are slightly over-represented with 25% more than would be expected, as are flooding incidents (84% over-representation).

Comparison of FG2 appliance workload

Incident data has been supplied by Her Majesty's Inspectorate of Constabulary and Fire & Rescue Services (HMICFRS) for the most recent year (2018/19) to allow Fire & Rescue Services to benchmark incident attendance against other FRSs in their family group. The following charts illustrate where ESFRS appliances sit in terms of the number of incidents they have attended over a 9 month period between April 2018 and December 2018 (Q4 2018/19 data was not available to the HMICFRS at the time of release).

The chart below shows the numbers of incidents attended by all 'primary' on-call appliances within FG2, where 'primary' means the on-call pumping appliance that is typically turned out to an incident if there is more than one on-call appliance at a station. It excludes on-call appliances that sit on wholetime shift and day-crewed stations as these tend to be 'secondary' pumps and these are considered separately.

Incidents attended by on-call (primary) pumping appliances
9 months (April 2018 - Dec 2018)
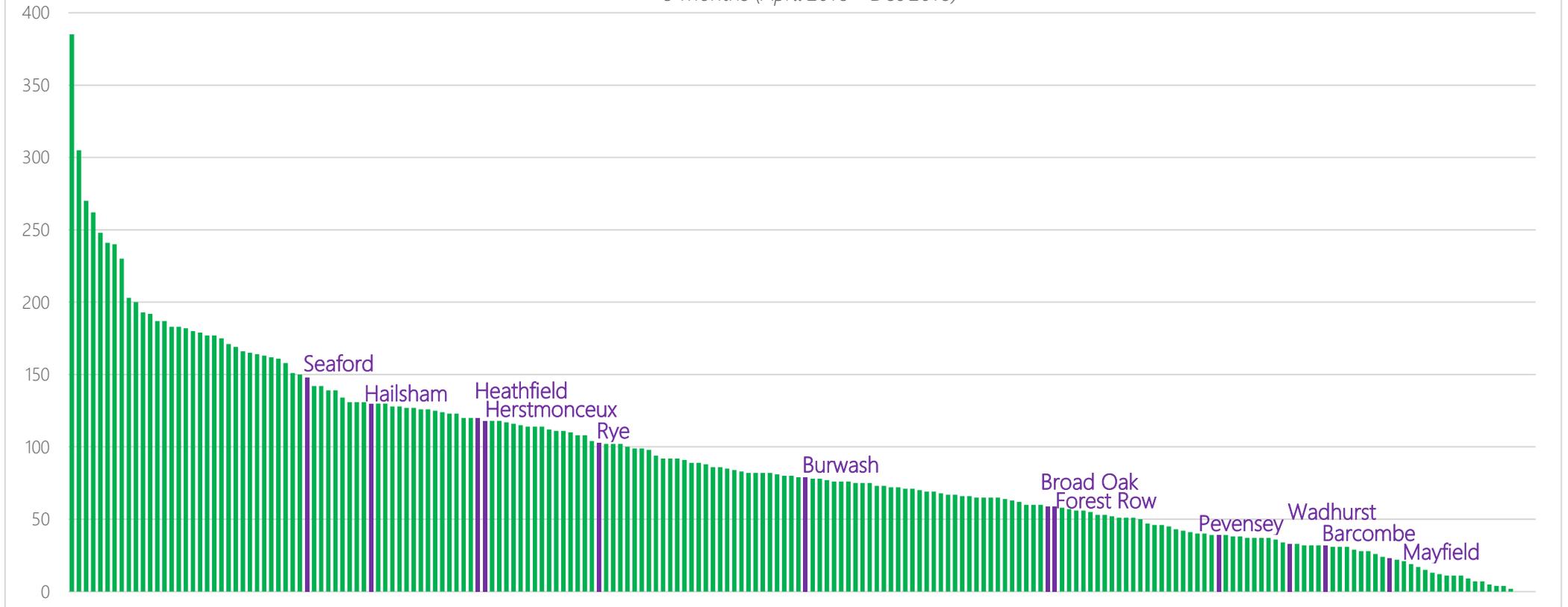
The chart above illustrates the large variance in the workload of on-call appliances across the family group, with 3 on-call pumping appliances not attending a single incident over the 9 month period, while another attends 385 incidents. The 12 primary on-call appliances within ESFRS are spread throughout the overall distribution. The median number of incidents attended in the 9-month period by on-call appliances is 79. Burwash represents the average on-call station in terms of workload, having attended 78 incidents in that period. It can be seen that Burwash ranks 6 out of 12 ESFRS appliances, with 5 appliances 'busier' and 6 appliances 'quieter'. It can be seen that Seaford is the busiest on-call appliance, attending 148 incidents in the period, but this is still under half as many incidents as the busiest on-call stations in FG2. Historically, Hailsham was the busiest on-call appliance in ESFRS. The Rural Review 2009 demonstrated that Hailsham mobilised approximately 490 times per year but now, due to reductions in incidents and due to its availability decreasing significantly, it now mobilises to incidents 272 times per year. It can be also seen in the chart that Herstmonceux is the 4th busiest on-call appliance in ESFRS, well above the FG2 average, attending 118 incidents in the 9 month period. This is due to the fact that Herstmonceux has improved its availability since the Rural Review and now picks up a much larger number of calls due to Hailsham's unavailability – therefore moving from 4th least busy appliance in the Rural Review period (April 2004 – March 2009), to 4th busiest appliance in this review period (April 2013 – March 2018).

Incidents attended by on-call (secondary) pumping appliances
9 months (April 2018 - Dec 2018)
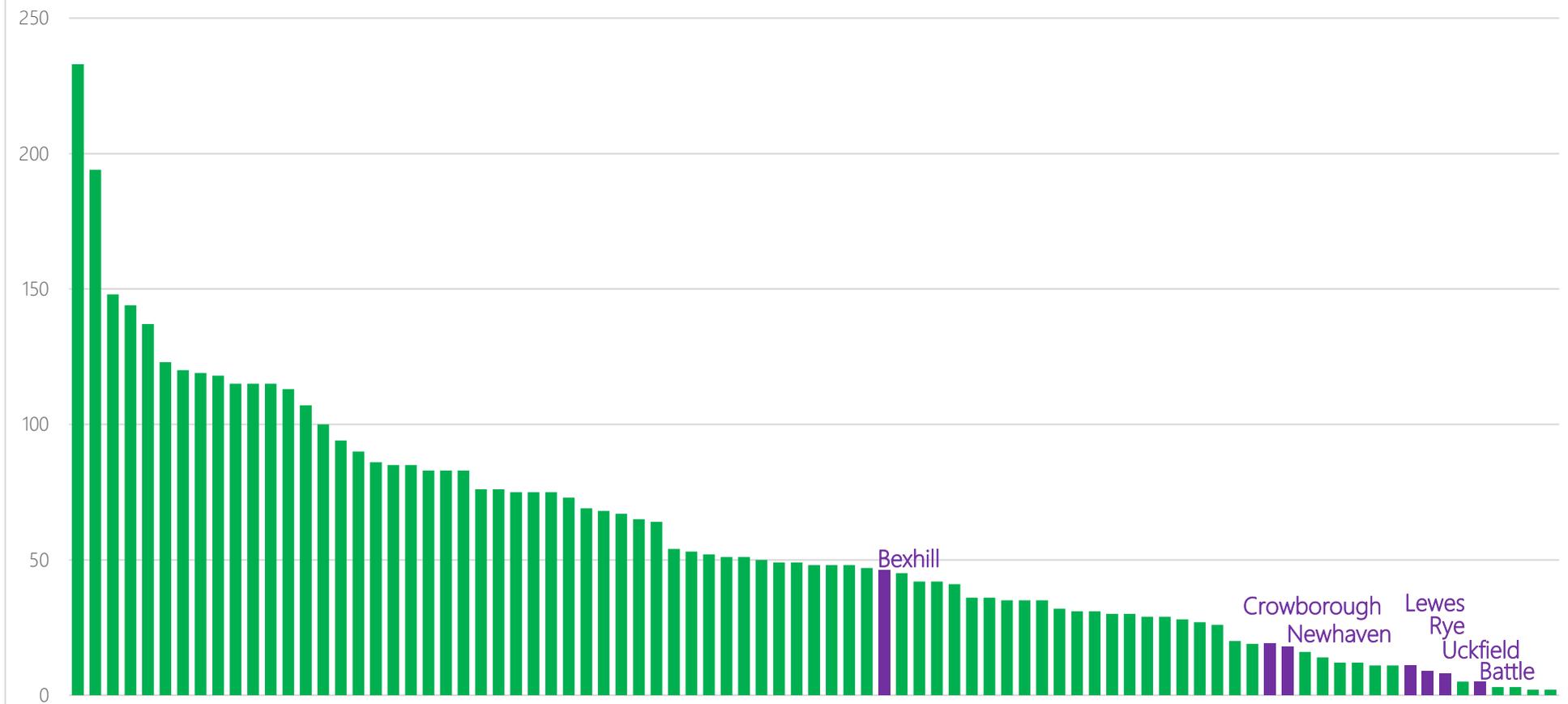
The chart above illustrates the attendances by 'secondary' on-call appliances over the 9-month period from April 2018 to December 2018. These are appliances that are either the secondary (or tertiary) appliance sitting wholetime shift or day-crewed stations, as well as those stations which have more than one on-call appliance (such as Rye).

It can be seen that, again, across the family group there is a large variation in the number of incidents to which these appliances attend. The median is 48 incidents – to which Bexhill's P4 appliance is the closest ESFRS appliance to the average, attending 46 incidents in that period. The other 6 ESFRS appliances have very few attendances compared with the average, and are clustered at the far end.

Incidents attended by day-crewed pumping appliances
9 months (April 2018 - Dec 2018)
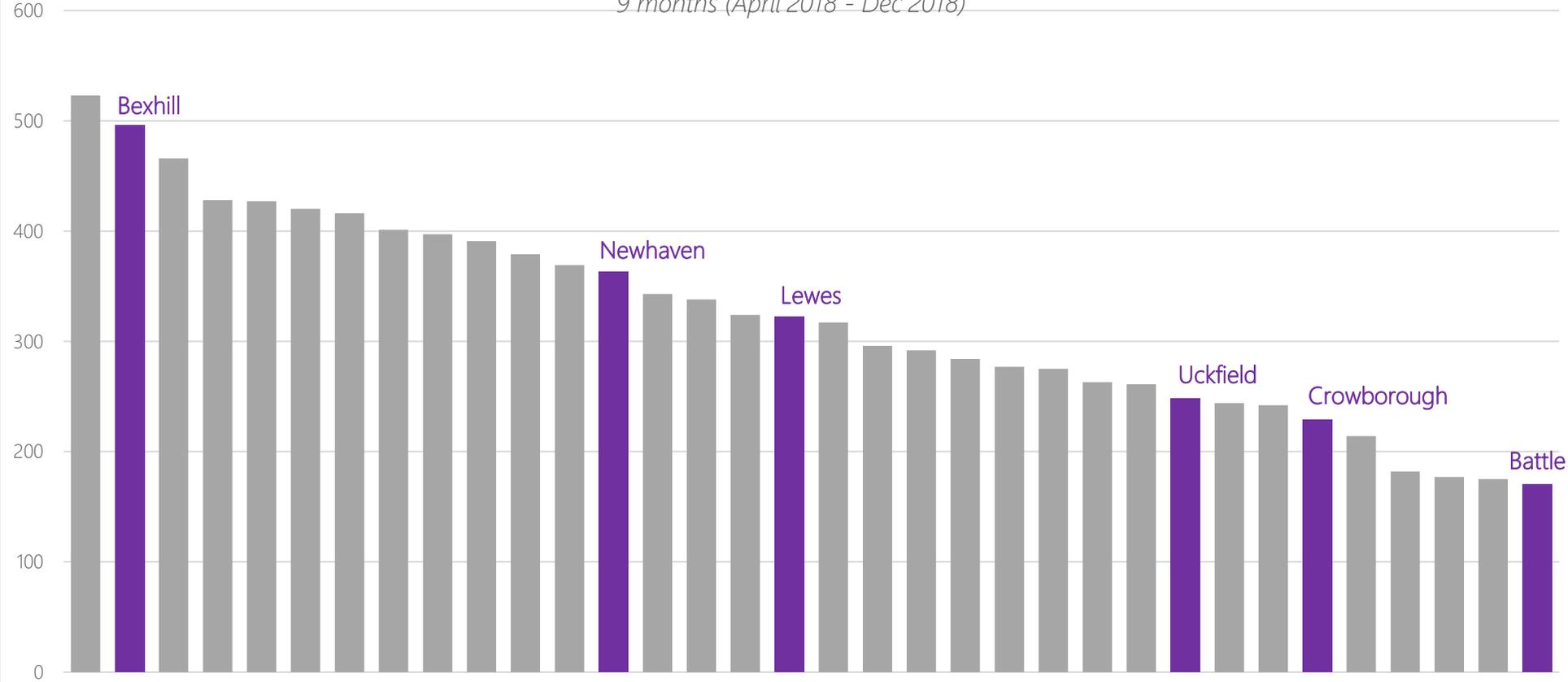
The chart above illustrates the number of incidents attended by day-crewed appliances across FG2 over a 9-month period. There is a large variation in the number of incidents attended between the busiest and quietest appliances and the 6 ESFRS day-crewed appliances are spread evenly throughout the entire distribution – with Bexhill sitting as the 2nd busiest day-crewed station and Battle sitting as the quietest day-crewed station. The median number of attendances is 320 incidents, and Lewes is the closest, having attended 322 incidents.

Incidents attended by wholetime shift pumping appliances
9 months (April 2018 - Dec 2018)
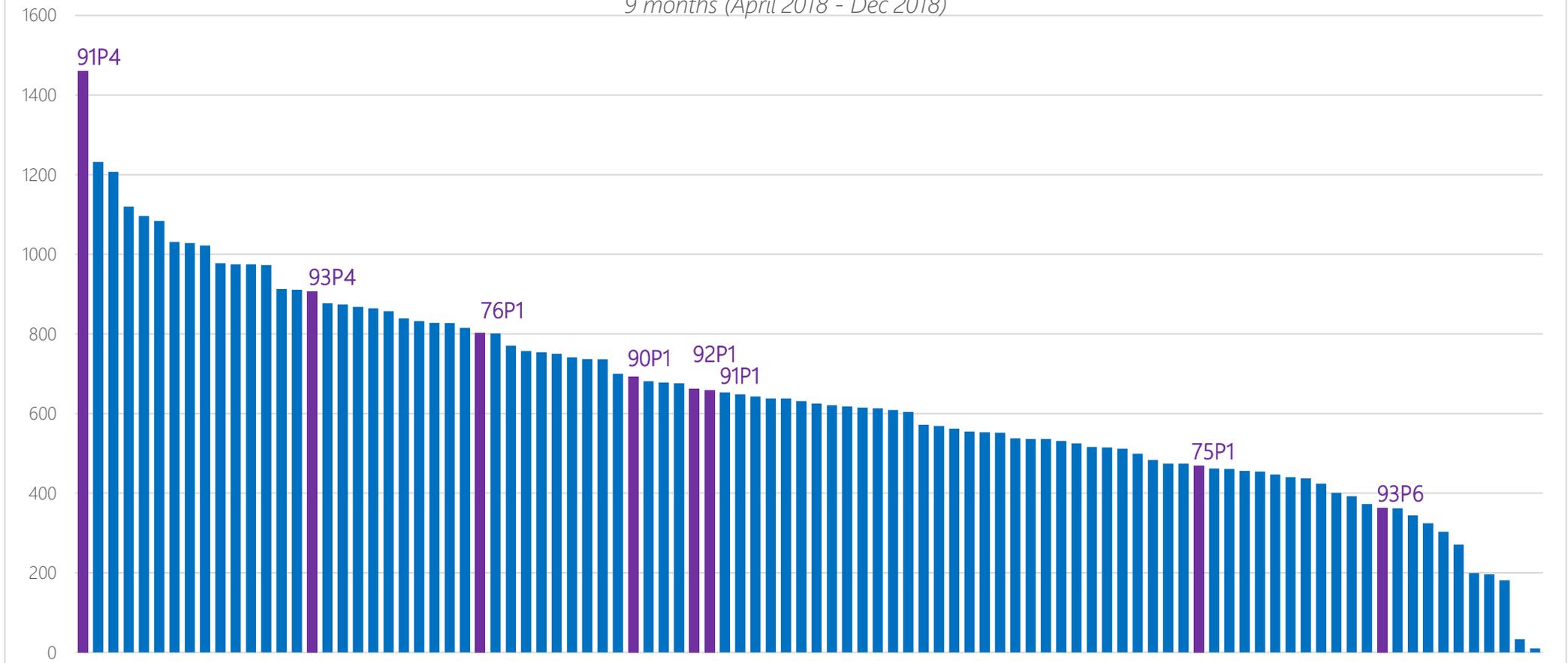
The chart above illustrates the number of incidents attended by wholetime shift appliances across FG2 over a 9-month period. Again, there is a large variation in the number of incidents attended between the busiest and quietest appliances and the 8 ESFRS wholetime shift appliances are spread throughout the entire distribution. The median number of incidents attended by a wholetime shift appliance across FG2 is 628. Preston Circus's P1 is the closest to this average, having attended 659 incidents over the 9-month period. It can be seen that 6 out of the 8 ESFRS shift appliances are attending greater than the average, with Preston Circus's P4 appliance attending the most incidents by a significant margin.

Incidents by station area

Having set the national and regional (FG2) context above, the following section provides the local context, with incident analysis across the East Sussex Fire & Rescue Service area, broken down by station area.

The analysis of historical incidents has been split into two sections in order to identify both the geographic location of the incident and each fire appliance's incident activity. This section deals with historical incidents that have occurred within the geographical ESFRS area – irrespective of which appliance(s) were mobilised to the incident. This helps identify the types of incidents to which we have responded within each station area.

All Incidents within each OA-aligned Station Area, by financial year

| OA-aligned Station Admin Area	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	5Yr Average
Barcombe	153	134	133	139	160	126	113	108	96	121
Battle	202	135	145	127	133	108	116	128	148	127
Bexhill	623	552	524	438	509	450	491	495	519	493
Broad Oak	91	71	74	70	64	76	50	56	68	63
Burwash	118	101	81	93	101	94	90	89	88	92
Crowborough	243	248	226	202	206	212	185	224	239	213
Eastbourne	1,578	1,458	1,268	1,208	1,080	1,080	1,104	1,238	1,207	1,142
Forest Row	132	122	83	83	91	84	57	61	77	74
Hailsham	410	355	271	287	281	300	273	312	290	291
Hastings Bohemia Rd	1,314	1,256	1,086	1,019	1,030	935	964	963	976	974
Hastings The Ridge	488	459	439	364	390	295	353	336	363	347
Heathfield	228	201	131	111	118	143	136	145	131	135
Herstmonceux	49	40	28	43	26	29	19	27	32	27
Hove	1,208	1,181	1,175	995	975	887	952	948	969	946
Lewes	376	317	315	282	347	280	305	312	377	324
Mayfield	70	42	57	57	54	43	57	49	53	51
Newhaven	350	349	324	308	379	267	334	314	371	333
Pevensey	86	62	65	68	69	65	74	84	73	73
Preston Circus	2,576	2,368	2,094	1,937	1,899	1,820	1,765	1,735	1,829	1,810
Roedean	1,217	1,059	893	802	890	812	772	883	886	849
Rye	186	177	151	134	135	141	122	126	135	132
Seaford	199	220	186	191	208	202	192	210	204	203
Uckfield	380	351	260	225	226	205	243	225	231	226
Wadhurst	128	113	88	76	88	60	84	85	77	79
Outside ESFRS	354	304	279	257	313	376	364	252	298	321
Total Incidents	12,759	11,675	10,376	9,516	9,772	9,090	9,215	9,405	9,737	9,444

Over 9 years (Apr 2009 – Mar 2018), incidents within the ESFRS area have decreased by 23.7%, although this percentage decrease is not uniform across all station areas – with some areas reducing by as much as 43%

and others increasing by 6%. It is worth pointing out that the last 4 years have seen a year-on-year increase in the numbers of incidents, as shown in the table above.

It can also be seen that, on average, there are 3,605 incidents a year across the 3 station areas that cover Brighton & Hove, which equates to 40% of all incidents in the ESFRS area. This is more than would be expected (by about 20%), given that the numbers of households across this area represent 33% of the population. Hastings is the area that has the greatest proportion of incidents compared to the proportion of households in its area (25%). The remaining areas, including Eastbourne, have fewer incidents than one would expect, given the size of the base population in those areas, as shown below:

Stations areas	% Incidents	% Households	Index	% over/under ave.
Brighton & Hove	40%	33%	121	21
Eastbourne	13%	14%	89	-11
Hastings	15%	12%	125	25
Lewes	10%	12%	83	-17
Rother	10%	11%	87	-13
Wealden	13%	18%	73	-27
ESFRS area	100%	100%	100	0

By comparing the average number of incidents occurring within each station area by the crewing arrangement of the local station, it can be seen there is overlap in between each duty system i.e. there are some day-crewed station areas that have more incidents than some wholetime shift areas, and there are some on-call areas which are busier than some day-crewed areas.

Average No. of Incidents per year in station area
Red: WTS, Blue: DC, Green: OC
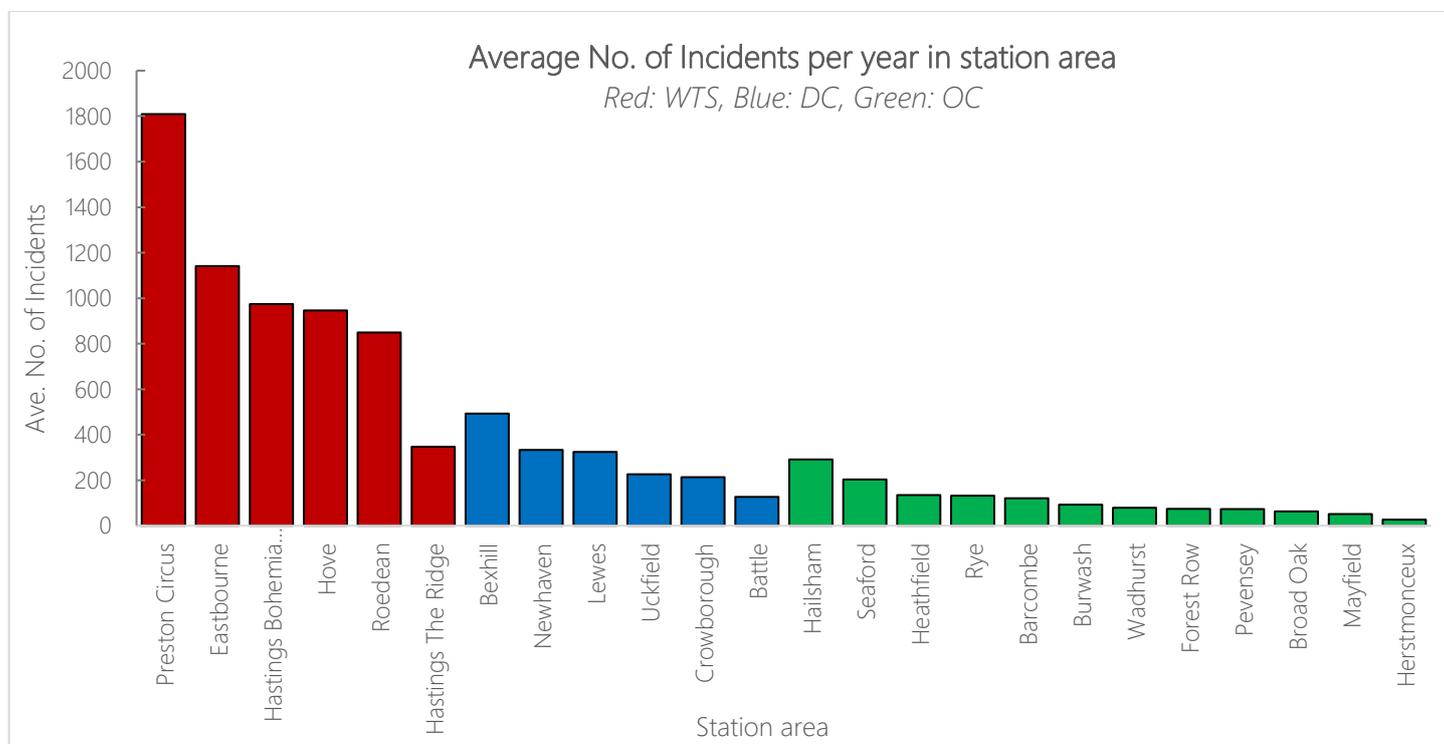
The table below shows the average number of critical incidents that have occurred within each of the 24 station areas across a 5 year period between April 2013 and March 2018. The station areas have been sorted by the numbers of critical incidents in descending order. The top 9 station areas represent the areas that are

having a greater % of critical incidents than the ESFRS average (i.e. 100/24 station areas is 4.167, therefore, anything over this is having a greater proportion of critical incidents). These 9 station areas hold two thirds (67%) of all critical incidents and are comprised of 5 wholetime shift, 3 day-crewed and 1 on-call station.

Overall, 53% of critical incidents occurred within wholetime shift areas, 26% in day-crewed station areas and 21% in on-call station areas.

Average No. of Critical Incidents per Year by Station Area

OA-aligned Station Admin Area	5Yr Average	Duty System	% of all Critical
Preston Circus	67	WTS	14.4%
Hastings Bohemia Rd	46	WTS	9.9%
Hove	41	WTS	8.8%
Eastbourne	39	WTS	8.4%
Roedean	29	WTS	6.2%
Bexhill	25	DC	5.4%
Lewes	25	DC	5.4%
Crowborough	23	DC	4.9%
Hailsham	20	OC	4.3%
Uckfield	18	DC	3.9%
Hastings The Ridge	18	WTS	3.9%
Battle	14	DC	3.0%
Newhaven	14	DC	3.0%
Heathfield	12	OC	2.6%
Seaford	9	OC	1.9%
Barcombe	8	OC	1.7%
Broad Oak	8	OC	1.7%
Burwash	8	OC	1.7%
Forest Row	8	OC	1.7%
Rye	7	OC	1.5%
Outside ESFRS	7	-	1.5%
Mayfield	5	OC	1.1%
Pevensey	5	OC	1.1%
Wadhurst	5	OC	1.1%
Herstmonceux	2	OC	0.4%
ESFRS	466	-	100.0%

Incidents by time of day

The following chart shows the distribution of incidents by time of day over the last 9 years. The shape of these distributions follows a typical distribution. However, it can be seen that there appears to be a greater reduction in the number of incidents during the day-time over the past 9 years, compared to the night time.

Total Incidents by Hour of Day
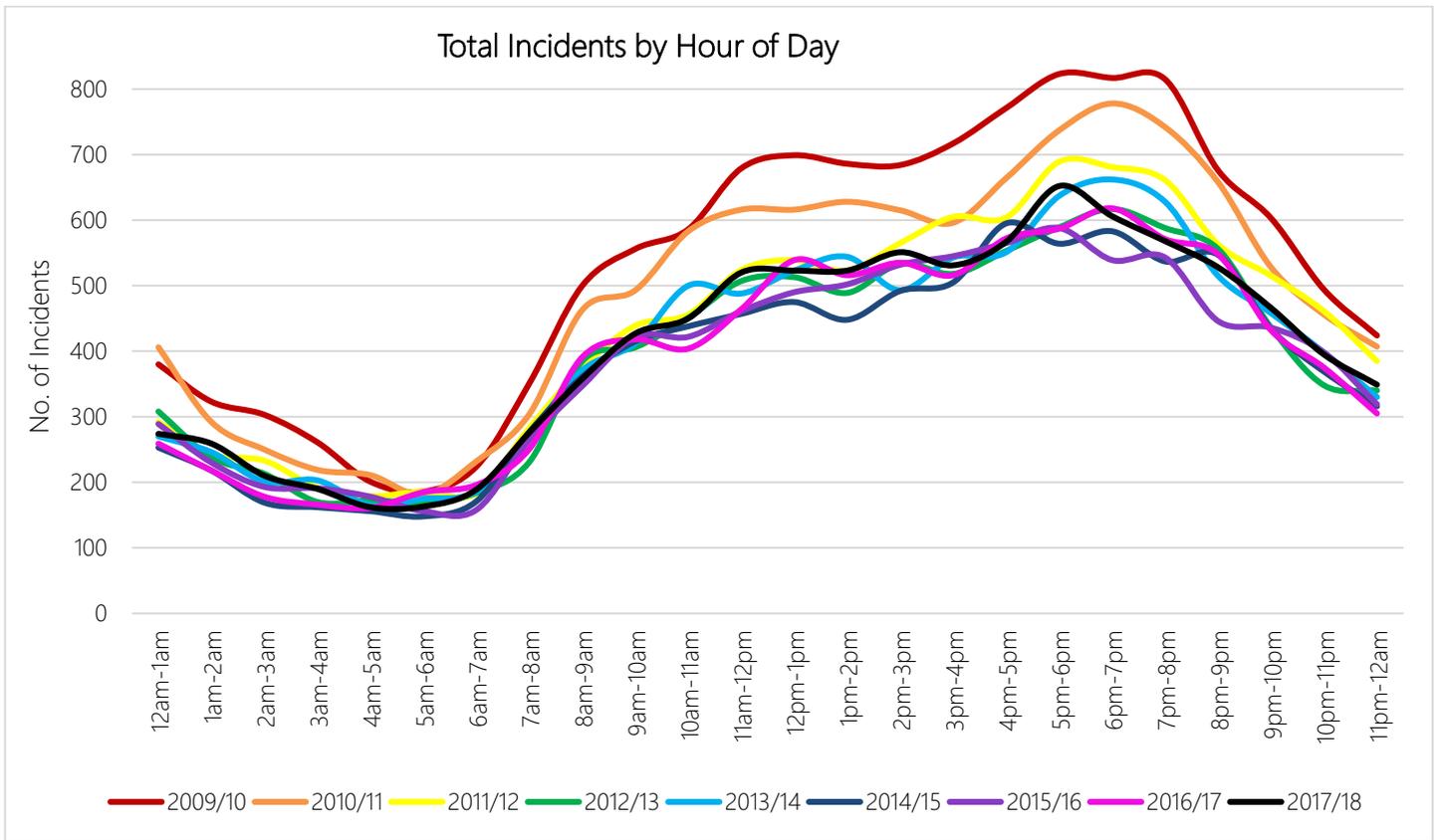
A similar chart, shown below, shows the average number of incidents by hour of day, based on 5 years of incident data. Again, it can be seen that during the daytime hours – particularly between 4pm-8pm, there has been a greater reduction in the numbers of incidents compared with the average over 9 years. It can be seen that fire incidents increase from 7am and peak between 5pm-8pm, before diminishing to their lowest during the hours of 6am-7am. Special service calls are highest between 11am-5pm. False alarms are highest between 5pm-8pm.

Incidents by Hour of Day
Ave. # over 5yrs (Apr 13 - Mar 18)
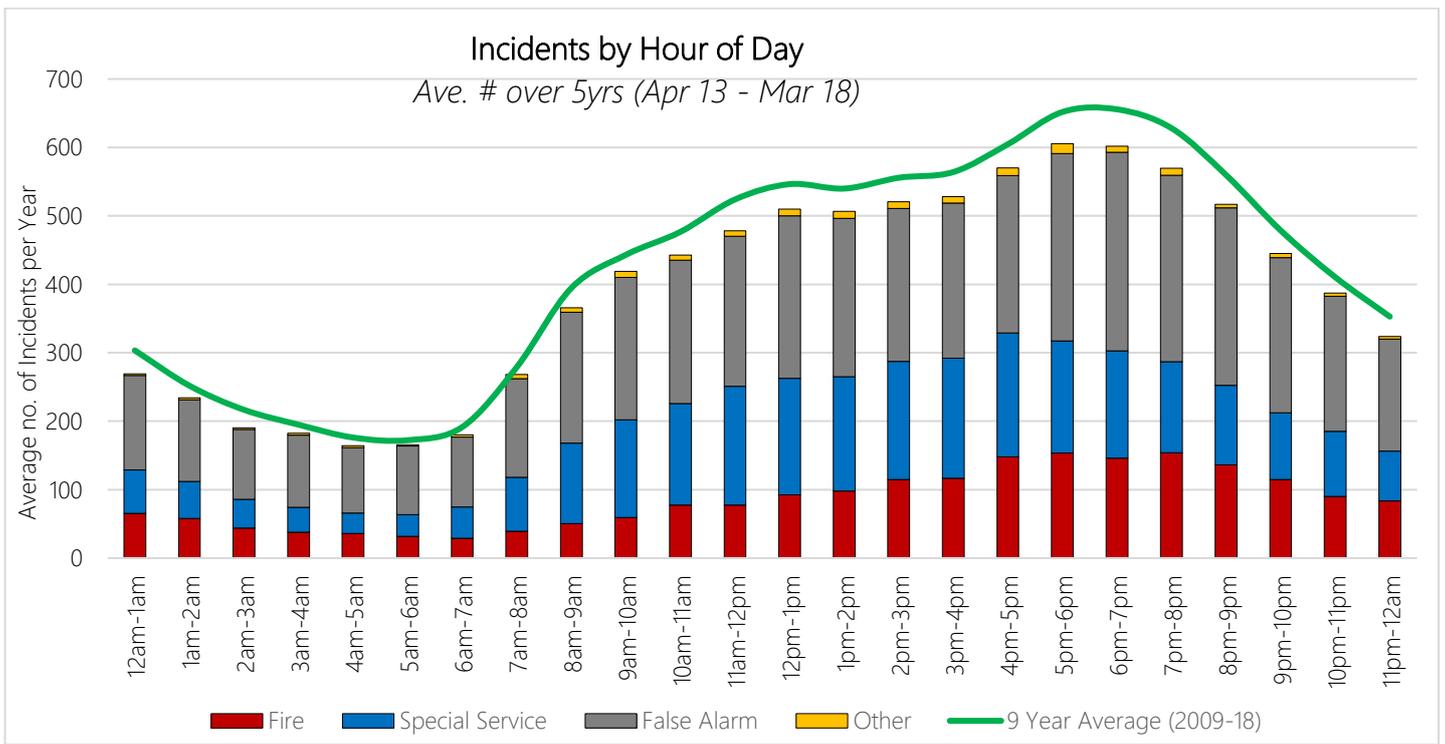
Incidents by type

The following table illustrates the types of incidents that have occurred across the ESFRS area over the past 9 years. Overall, 22.3% of all incidents are fires, 80% of incidents fall into 1 of 8 incident types. These are (in descending order): False alarm apparatus/good intent, secondary fire, dwelling fire, RTC, flooding, effecting entry/exit and lift release.

Incident Type	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	Total	5yr Ave.	%
Primary Fire - Dwelling	648	571	579	600	567	566	596	582	554	5,263	573	6.3
Primary Fire - Non Residential	268	230	216	193	185	194	194	210	196	1,886	196	2.1
Primary Fire - Other Residential	93	61	78	63	64	63	48	49	39	558	53	0.6
Primary Fire - Vehicle	398	368	310	340	280	227	238	252	249	2,662	249	2.7
Primary Fire - Outdoor	132	99	90	56	74	68	89	79	83	770	79	0.9
Chimney Fire	214	202	173	237	179	162	123	134	117	1,541	143	1.6
Secondary Fire	1,142	1,013	1,151	634	740	740	653	739	803	7,615	735	8.1
Fire - Classification Not Recorded	0	0	2	1	0	5	5	6	12	31	6	0.1
Special Service - Advice Only	29	17	12	20	40	25	29	25	29	226	30	0.3
Special Service - Animal assistance incidents	229	234	235	223	255	180	215	200	192	1,963	208	2.3
Special Service - Assist other agencies	97	103	100	81	79	98	134	187	261	1,140	152	1.7
Special Service - Effecting Entry/Exit	355	368	333	359	356	326	371	347	395	3,210	359	3.9
Special Service - Evacuation (no fire)	5	4	1	1	6	1	1	4	1	24	3	0.0
Special Service - Flooding	387	388	337	370	394	373	395	352	424	3,420	388	4.2
Special Service - Hazardous Materials	31	29	16	35	23	17	28	30	33	242	26	0.3
Special Service - Lift Release	593	493	393	411	368	323	325	335	355	3,596	341	3.7
Special Service - Making Safe (not RTC)	175	86	127	125	321	89	194	117	104	1,338	165	1.8
Special Service - Medical Incident	15	20	15	16	13	12	20	20	33	164	20	0.2
Special Service - No action (not false alarm)	110	94	88	79	74	48	70	69	60	692	64	0.7
Special Service - Other rescue/release of persons	149	133	115	80	93	77	68	85	115	915	88	1.0
Special Service - Other Transport	7	29	20	22	27	28	23	29	28	213	27	0.3
Special Service - Removal of objects from people	55	62	65	42	50	45	59	53	50	481	51	0.6
Special Service - Removal of people from objects	0	0	0	16	25	21	19	34	42	157	28	0.3
Special Service - Rescue or evacuation from water	8	4	5	10	13	8	9	4	7	68	8	0.1
Special Service - RTC	599	526	454	477	420	456	480	472	500	4,384	466	5.1
Special Service - Spills and Leaks (not RTC)	161	128	136	106	109	99	91	96	90	1,016	97	1.1
Special Service - Stand By	3	2	2	5	0	1	2	2	1	18	1	0.0
Special Service - Suicide	16	14	23	21	9	15	11	16	17	142	14	0.1
Special Service - Unknown	12	11	4	5	16	1	7	14	33	103	14	0.2
Special Service - Water provision	3	2	1	0	1	0	1	0	5	13	1	0.0
False Alarm - Apparatus	4,396	4,359	3,474	3,294	3,283	3,031	3,074	3,200	3,202	31,313	3,158	34.6
False Alarm - Good Intent	1,815	1,496	1,387	1,157	1,255	1,267	1,150	1,256	1,267	12,050	1,239	13.6
False Alarm - Malicious	256	193	140	170	132	118	108	130	110	1,357	120	1.3
False Alarm - Unknown	2	5	15	9	8	30	21	25	29	144	23	0.2
Other	2	27	0	1	0	0	0	0	3	33	1	0.0
Grand Total	12,405	11,371	10,097	9,259	9,459	8,714	8,851	9,153	9,439	88,748	9,123	100

False Alarms by Property Type

When ESFRS mobilise to an incident, the incident to which it mobilises is either a fire, special service or an alarm. Approximately 40% of all calls are initially classified as an alarm and the vast majority of these end up as false alarms (around 97%) – and we can see from the above table that 50% of all calls end up as a type of false alarm.

Approximately 3% of Automatic Fire Alarms (AFAs) turn out to be fires. 0.195% of all AFAs turn out to be fires with victims of any kind of injury (with 91% of these injuries being 'slight').

In addition to the above table, which breaks down fires by property type, special services by special service type and false alarms by false alarm type, the following table further breaks down false alarms by property type. It can be seen that 49% of false alarms are to dwellings with a further 9.6% of false alarms to other residential premises. Therefore, across the ESFRS area 42% of false alarms are non-residential.

Station Admin Area	Dwelling	Non-Residential	Other Residential	Outdoor	Outdoor Structure	Road Vehicle	Unknown	Total
Barcombe	146 (45.2%)	44 (13.6%)	24 (7.4%)	19 (5.9%)	3 (0.9%)	20 (6.2%)	67 (20.7%)	323
Battle	141 (48.5%)	47 (16.2%)	63 (21.6%)	25 (8.6%)	4 (1.4%)	8 (2.7%)	3 (1%)	291
Bexhill	607 (49%)	231 (18.6%)	222 (17.9%)	149 (12%)	2 (0.2%)	20 (1.6%)	8 (0.6%)	1,239
Broad Oak	39 (38.6%)	30 (29.7%)	6 (5.9%)	18 (17.8%)	1 (1%)	3 (3%)	4 (4%)	101
Burwash	122 (56.2%)	33 (15.2%)	39 (18%)	17 (7.8%)	1 (0.5%)	3 (1.4%)	2 (0.9%)	217
Crowborough	235 (48.1%)	138 (28.2%)	65 (13.3%)	40 (8.2%)	1 (0.2%)	5 (1%)	5 (1%)	489
Eastbourne	1663 (54%)	847 (27.5%)	316 (10.3%)	171 (5.6%)	19 (0.6%)	29 (0.9%)	34 (1.1%)	3,079
Forest Row	81 (52.9%)	24 (15.7%)	7 (4.6%)	27 (17.6%)	1 (0.7%)	3 (2%)	10 (6.5%)	153
Hailsham	333 (48.5%)	181 (26.3%)	46 (6.7%)	83 (12.1%)	4 (0.6%)	27 (3.9%)	13 (1.9%)	687
Hastings Bohemia Rd	1393 (57.8%)	611 (25.4%)	138 (5.7%)	179 (7.4%)	26 (1.1%)	37 (1.5%)	25 (1%)	2,409
Hastings The Ridge	320 (44%)	184 (25.3%)	37 (5.1%)	146 (20.1%)	14 (1.9%)	13 (1.8%)	14 (1.9%)	728
Heathfield	193 (64.3%)	38 (12.7%)	42 (14%)	16 (5.3%)	1 (0.3%)	7 (2.3%)	3 (1%)	300
Herstmonceux	27 (56.3%)	9 (18.8%)	1 (2.1%)	8 (16.7%)	0 (0%)	3 (6.3%)	0 (0%)	48
Hove	1306 (55.6%)	641 (27.3%)	189 (8%)	115 (4.9%)	17 (0.7%)	41 (1.7%)	39 (1.7%)	2,348
Lewes	290 (38.6%)	277 (36.8%)	62 (8.2%)	70 (9.3%)	5 (0.7%)	36 (4.8%)	12 (1.6%)	752
Mayfield	51 (69.9%)	8 (11%)	1 (1.4%)	9 (12.3%)	0 (0%)	2 (2.7%)	2 (2.7%)	73
Newhaven	374 (42.5%)	309 (35.1%)	54 (6.1%)	114 (13%)	5 (0.6%)	10 (1.1%)	14 (1.6%)	880
Pevensey	59 (42.1%)	15 (10.7%)	1 (0.7%)	41 (29.3%)	5 (3.6%)	10 (7.1%)	9 (6.4%)	140
Preston Circus	1916 (40.5%)	1819 (38.4%)	567 (12%)	228 (4.8%)	54 (1.1%)	93 (2%)	57 (1.2%)	4,734
Roedean	1096 (48.9%)	776 (34.6%)	160 (7.1%)	123 (5.5%)	24 (1.1%)	34 (1.5%)	28 (1.2%)	2,241
Rye	117 (43.8%)	80 (30%)	12 (4.5%)	43 (16.1%)	5 (1.9%)	4 (1.5%)	6 (2.2%)	267
Seaford	296 (57.5%)	85 (16.5%)	69 (13.4%)	46 (8.9%)	0 (0%)	12 (2.3%)	7 (1.4%)	515
Uckfield	219 (44.2%)	134 (27.1%)	49 (9.9%)	58 (11.7%)	1 (0.2%)	22 (4.4%)	12 (2.4%)	495
Wadhurst	103 (55.1%)	51 (27.3%)	11 (5.9%)	17 (9.1%)	1 (0.5%)	1 (0.5%)	3 (1.6%)	187
ESFRS	11127 (49%)	6612 (29.1%)	2181 (9.6%)	1762 (7.8%)	194 (0.9%)	443 (2%)	377 (1.7%)	22,696

Critical Incidents

The following table shows the number of critical incidents that occurred across the ESFRS area over the past 9 years. This equates to an average of 477 incidents per year which result in a rescue or some form of injury (special service rescues (excl. RTCs) with no injury are not included in the calculation). Given that approximately 9,123 incidents occur across the service area each year, this represents that around 5.2% of incidents have some form of life risk. Over the last 3 years, there has been an increase in the number of critical incidents per year. Given that the overall number of incidents have been decreasing, the proportion of incidents per year that are critical have been rising for the past 5 years (from 4.5% to 5.6%) – and for the past 4 years, have been higher than 9 years ago.

Critical Incidents	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	Total
Life-risk Fire	154	130	123	94	100	93	105	91	85	975
Life-risk RTC	301	252	237	253	230	235	219	215	238	2,180
Life-risk Special Serv.	124	128	113	92	94	92	112	181	205	1,141
Total	579	510	473	439	424	420	436	487	528	4,296

The table below shows the actual numbers of fatalities, casualties and rescues recorded against each critical incident type over the past 9 years. It can be seen that 4,296 critical incidents have resulted in 5,424 injuries and/or rescues over the past 9 years (603 fatalities, casualties, rescues per year), thus each critical incident gives rise to 1.26 casualties.

Casualty Severity	Fire	RTC	Other SS.	Total
Fatal Injury	46	127	127	300
Serious Injury	90	622	371	1,083
Slight Injury	421	1600	434	2,455
First Aid/Prec. Check	418	394	250	1,062
Rescue (No Injury)	261	242	21	524
Total Life-Risk	1236	2985	1203	5,424

The chart below illustrates the combined numbers of fatalities, casualties and rescues that have occurred within each station area over the past 9 year period from April 2009 to March 2018.

It can be seen that Hastings Bohemia Road station area has had the most life-risk fire incidents, surpassing Preston Circus and, given the population differences between the two station areas is significant. Hailsham station area has the same number of life-risk RTCs as Hastings Bohemia Road, and more than 3 wholetime shift station areas and 4 day-crewed station areas. Crowborough is another area that has had a lot of life-risk RTC incidents to which ESFRS has responded.

Total combined fatalities, casualties & rescues by Critical Incident Type
(Apr 2009 - Mar 2018)

Life-risk Fire   Life-risk RTC   Life-risk Other SS
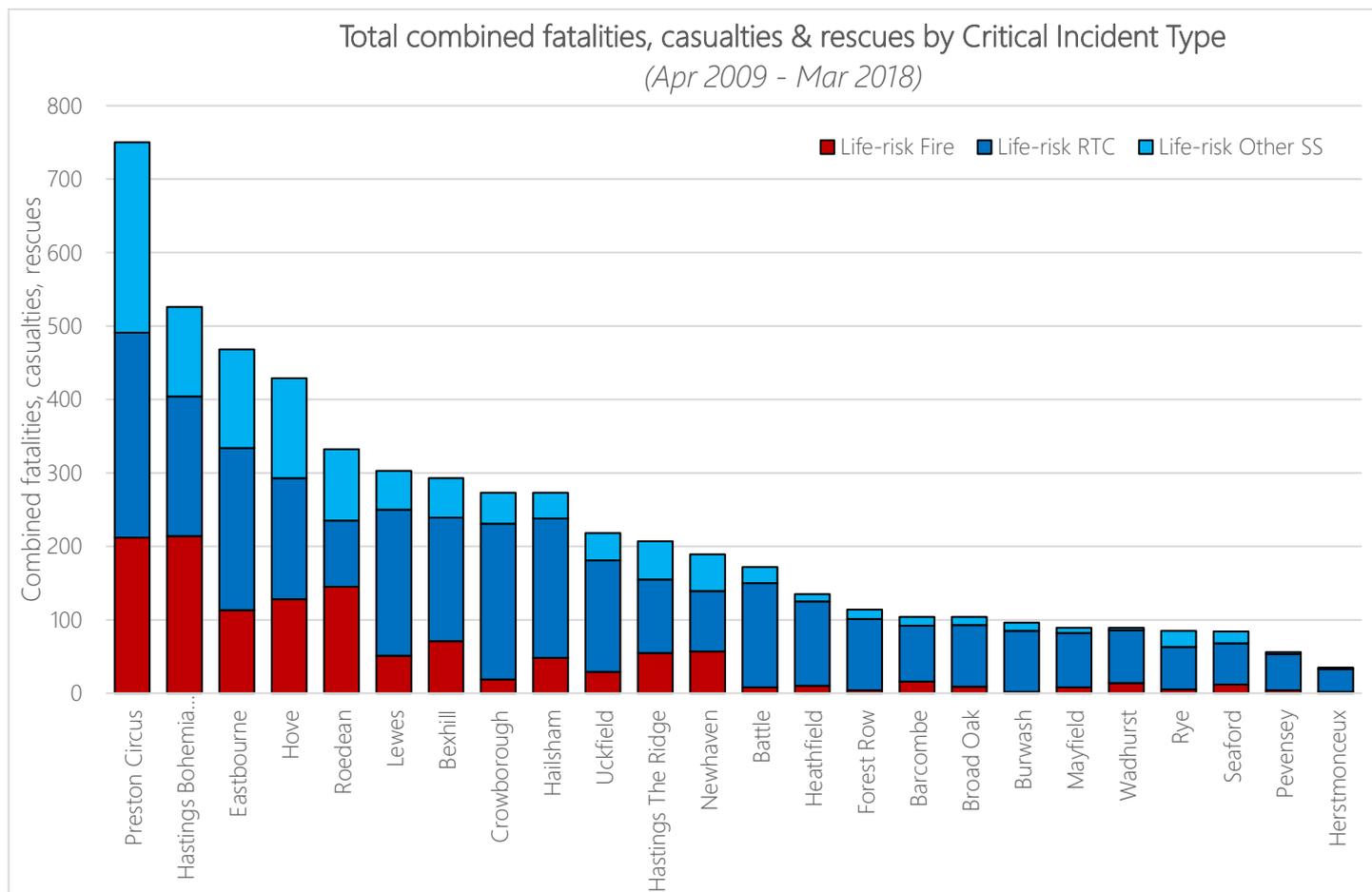
Incidents outside Attendance Standards Isochrones

Over the five year period between April 2013 and March 2018, there were a total of 45,616 incidents, of which 24,375 (53.4%) occurred during the day time (between 08:30 and 18:30). Over the same period, there were a total of 2,295 critical incidents, of which 1,364 (59.4%) were during the day.

	No. of Incidents	No. of 'Daytime' Incidents	No. of 'Night time' Incidents	'Daytime' Incidents within Attendance Standard (Day)	%	'Night time' Incidents within Attendance Standard (Night)	%
All Incidents	45,616	24,375	21,241	23,649	97.0	20,777	97.8
Critical Incidents	2,295	1,364	931	1,298	95.2	896	96.2

It can be seen from the table below that, overall, 97% of all daytime incidents were found to be within the attendance standards isochrones, rising to 97.8% of incidents at night time. This equates to 726 incidents during the day which fell outside of the isochrones, and 464 at night time.

| Station Admin Area	No. of Incidents	No. of 'Daytime' Incidents	No. of 'Night time' Incidents	'Daytime' Incidents within Attendance Standard (Day)	%	'Night time' Incidents within Attendance Standard (Night)	%
Barcombe	603	338	265	220	65.1	167	63.0
Battle	633	300	333	281	93.7	323	97.0
Bexhill	2,464	1,328	1,136	1,320	99.4	1,136	100.0
Broad Oak	314	197	117	176	89.3	112	95.7
Burwash	462	255	207	229	89.8	195	94.2
Crowborough	1,066	603	463	563	93.4	450	97.2
Eastbourne	5,709	3,184	2,525	3,157	99.2	2,502	99.1
Forest Row	370	214	156	165	77.1	135	86.5
Hailsham	1,456	839	617	777	92.6	581	94.2
Hastings Bohemia Rd	4,868	2,554	2,314	2,541	99.5	2,312	99.9
Hastings The Ridge	1,737	949	788	931	98.1	767	97.3
Heathfield	673	385	288	346	89.9	270	93.8
Herstmonceux	133	67	66	64	95.5	58	87.9
Hove	4,731	2,489	2,242	2,489	100.0	2,241	100.0
Lewes	1,621	929	692	864	93.0	651	94.1
Mayfield	256	140	116	134	95.7	111	95.7
Newhaven	1,665	863	802	856	99.2	799	99.6
Pevensey	365	211	154	210	99.5	154	100.0
Preston Circus	9,048	4,582	4,466	4,572	99.8	4,461	99.9
Roedean	4,243	2,171	2,072	2,163	99.6	2,069	99.9
Rye	659	349	310	303	86.8	259	83.5
Seaford	1,016	555	461	530	95.5	443	96.1
Uckfield	1,130	653	477	555	85.0	417	87.4
Wadhurst	394	220	174	203	92.3	164	94.3
Grand Total	45,616	24,375	21,241	23,649	97.0	20,777	97.8

The following table shows that, overall, 95.2% of all <u>critical</u> incidents during the day time were found to be within the attendance standards isochrones, rising to 96.2% of critical incidents at night time. This equates to 66 incidents during the day which fell outside of the isochrones, and 35 at night time.

Station Admin Area	No. of Critical Incidents	No. of 'Daytime' Critical Incidents	No. of 'Night time' Critical Incidents	'Daytime' Critical Incidents within Attendance Standard (Day)	%	'Night time' Critical Incidents within Attendance Standard (Night)	%
Barcombe	39	26	13	16	61.5	8	61.5
Battle	68	40	28	40	100.0	27	96.4
Bexhill	127	90	37	90	100.0	37	100.0
Broad Oak	42	28	14	28	100.0	14	100.0
Burwash	41	30	11	30	100.0	11	100.0
Crowborough	116	71	45	63	88.7	40	88.9
Eastbourne	196	120	76	118	98.3	75	98.7
Forest Row	38	24	14	16	66.7	10	71.4
Hailsham	100	70	30	64	91.4	27	90.0
Hastings Bohemia Rd	231	130	101	129	99.2	101	100.0
Hastings The Ridge	92	55	37	52	94.5	37	100.0
Heathfield	60	34	26	29	85.3	25	96.2
Herstmonceux	12	7	5	7	100.0	5	100.0
Hove	207	128	79	128	100.0	79	100.0
Lewes	127	83	44	77	92.8	40	90.9
Mayfield	27	12	15	12	100.0	15	100.0
Newhaven	70	44	26	44	100.0	26	100.0
Pevensey	26	15	11	15	100.0	11	100.0
Preston Circus	335	179	156	178	99.4	156	100.0
Roedean	147	64	83	64	100.0	83	100.0
Rye	34	25	9	22	88.0	8	88.9
Seaford	45	27	18	22	81.5	17	94.4
Uckfield	88	51	37	43	84.3	28	75.7
Wadhurst	27	11	16	11	100.0	16	100.0
Grand Total	2,295	1,364	931	1,298	95.2	896	96.2

The tables above also shows that Barcombe, Forest Row and Uckfield are the top 3 station areas that have the greatest proportion of incidents that sit outside of the attendance standards isochrones. This also applies to the proportion of critical incidents that sit outside of the attendance standards isochrones. However, it can also be seen in the above table that Seaford also has a relatively high proportion of daytime critical incidents that sit outside the isochrones – 18.5% (whereas typically, around only 5% are outside in area).

The maps below illustrate the dispersion of all incidents over the last 5 years which do not fall within the isochrones during the day and night.

All Incidents by Type that occurred during 'daytime' (08:30 – 18:30) between 2013-18, outside isochrones
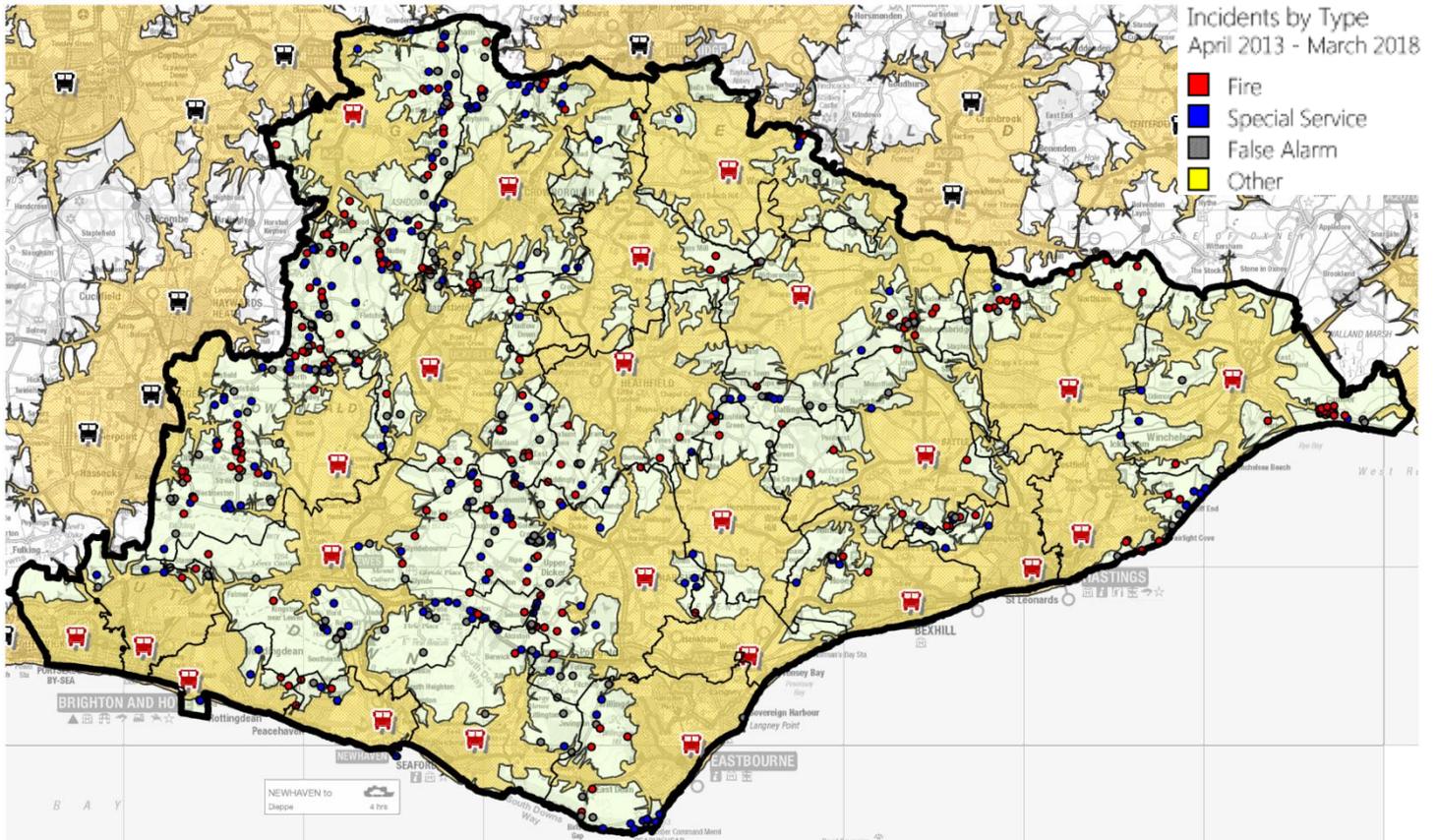

The following map now only shows critical incidents that occurred across the ESFRS during the day that fall outside of the isochrones. 95.2% of critical incidents during the day were found to be within the isochrones with 4.8% falling outside, equating to 66 incidents.

Critical Incidents by Type that occurred during 'daytime' (08:30 – 18:30) between 2013-18, outside isochrone
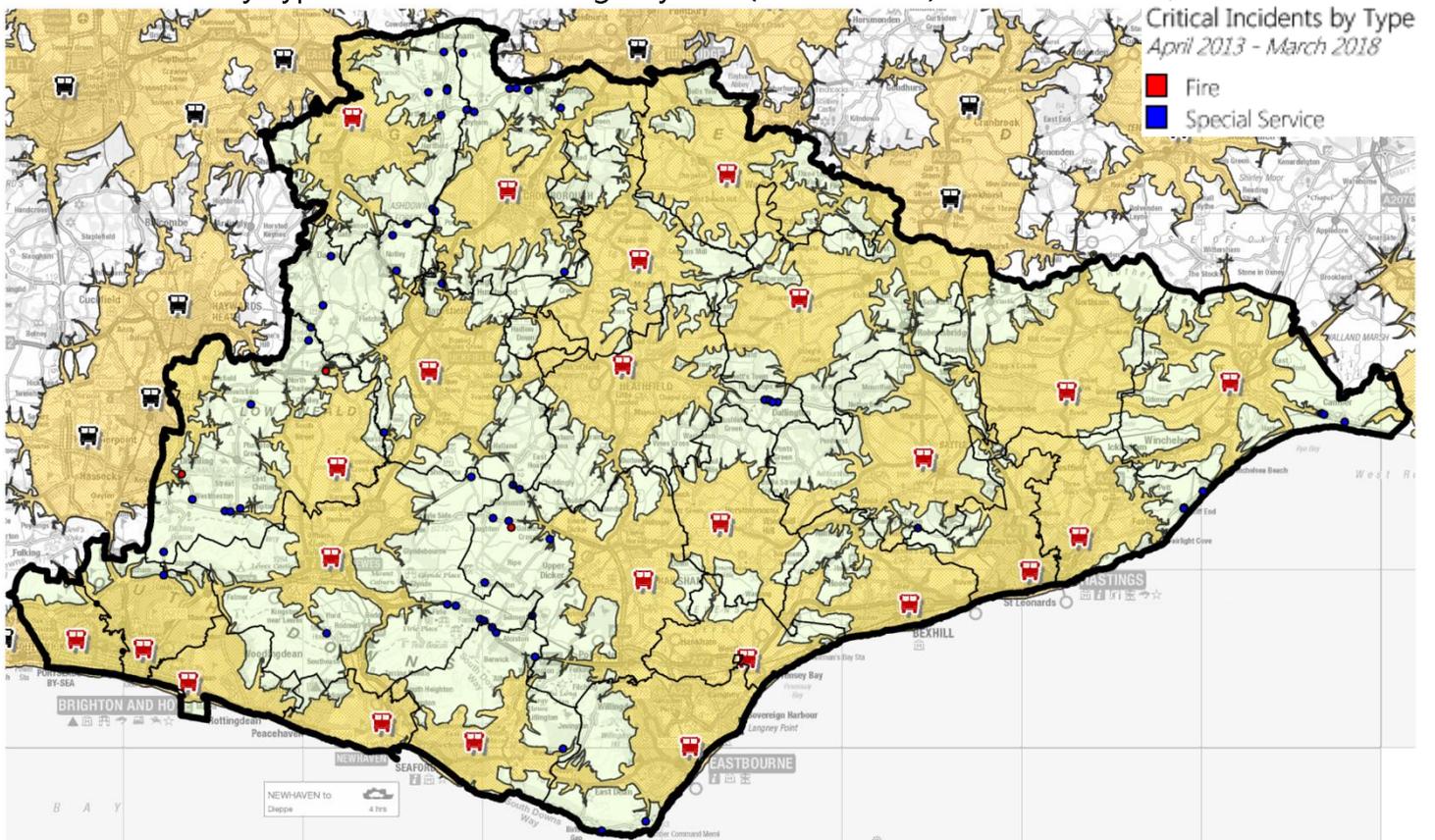
All Incidents by Type that occurred during 'night time' (18:30 – 08:30) between 2013-18, outside isochrone
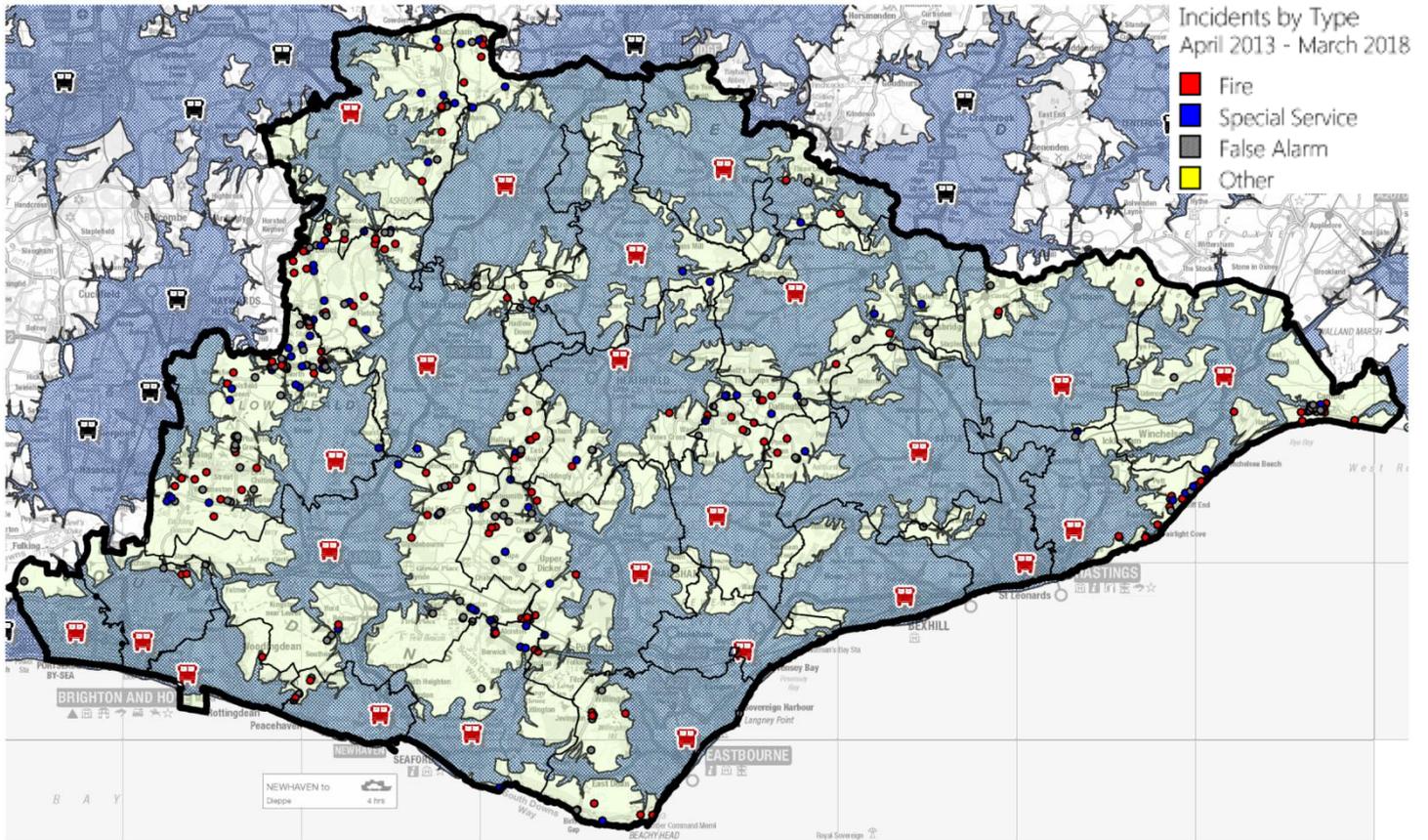

Critical Incidents by Type that occurred during 'night time' (18:30 –08:30) between 2013-18 outside isochrone
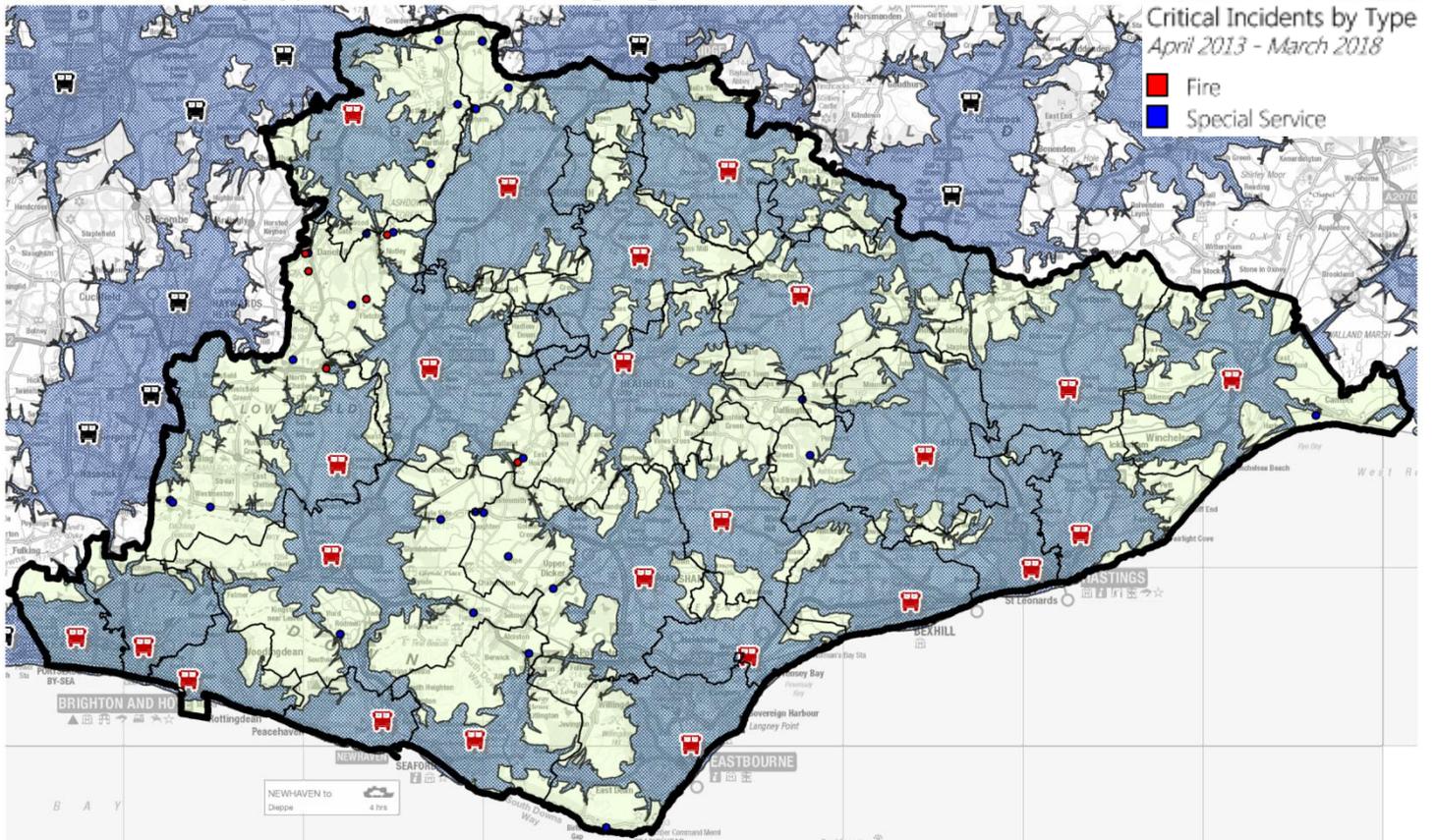
Attendance time distribution

The chart below shows the distribution of response times by minute intervals. These distributions are based on 5 years of data (Apr 2013 – Mar 2018) and help understand the range of response times to all types of incidents that have occurred across the ESFRS area, broken down by each station area's duty system.

It can be seen that, for the first arriving appliance across the ESFRS area, the distribution peaks at the 6 minute interval. On-call area attendance times have a much wider distribution of attendance times compared to wholetime shift and day-crewed areas, with attendance times peaking between the 11 minute interval. Day-crewed attendance times are distributed widely as attendances have not been separated out by when the response is an on-station response vs. an on-call response.
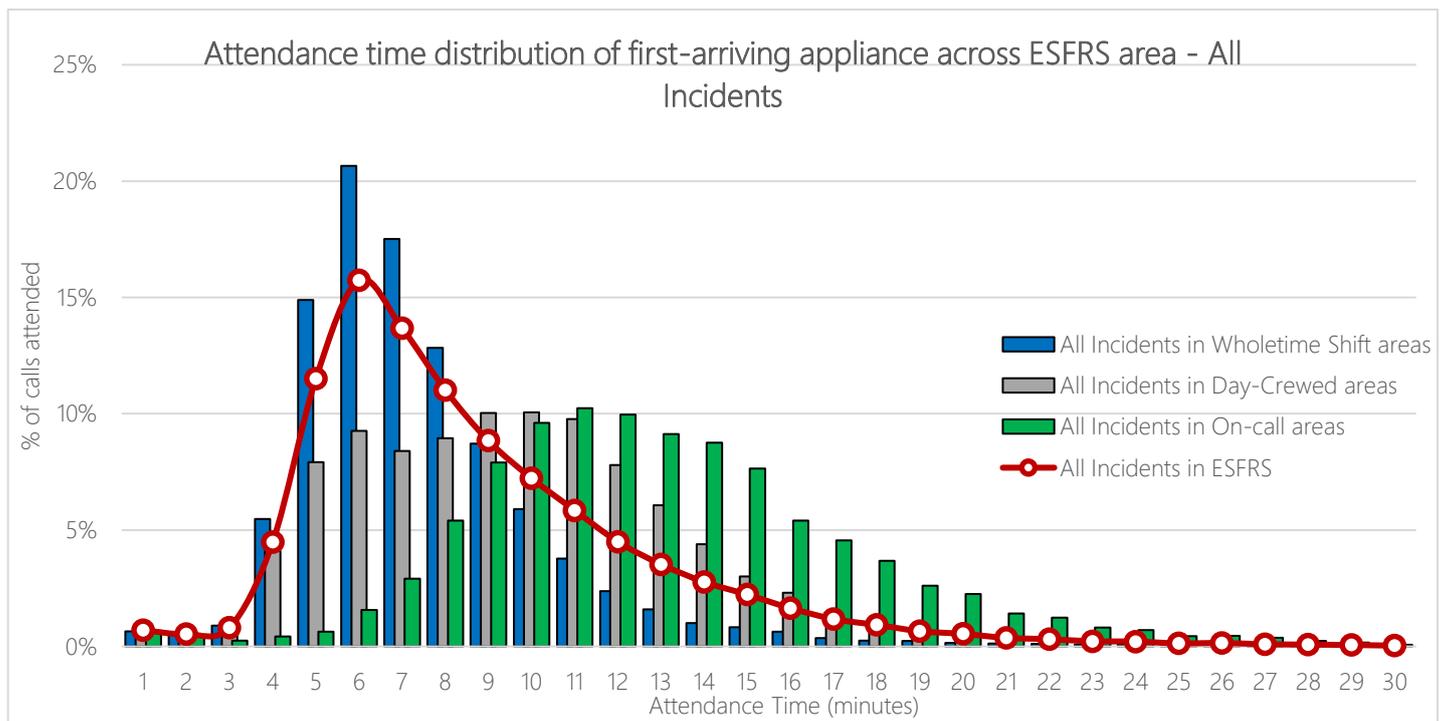

The following chart depicts similar information, but for critical incidents only. It can be seen that attendance times to critical incidents continue to peak at 6 minutes in wholetime shift station areas; however, in on-call areas, attendance times peak at around 12-13 minutes, which is a little longer compared with all incidents. This indicates that the location of critical incidents are further away from the fire station and have increased travel times, especially for special service RTC calls.

Attendance time distribution of first-arriving appliance across ESFRS area - Critical Incidents
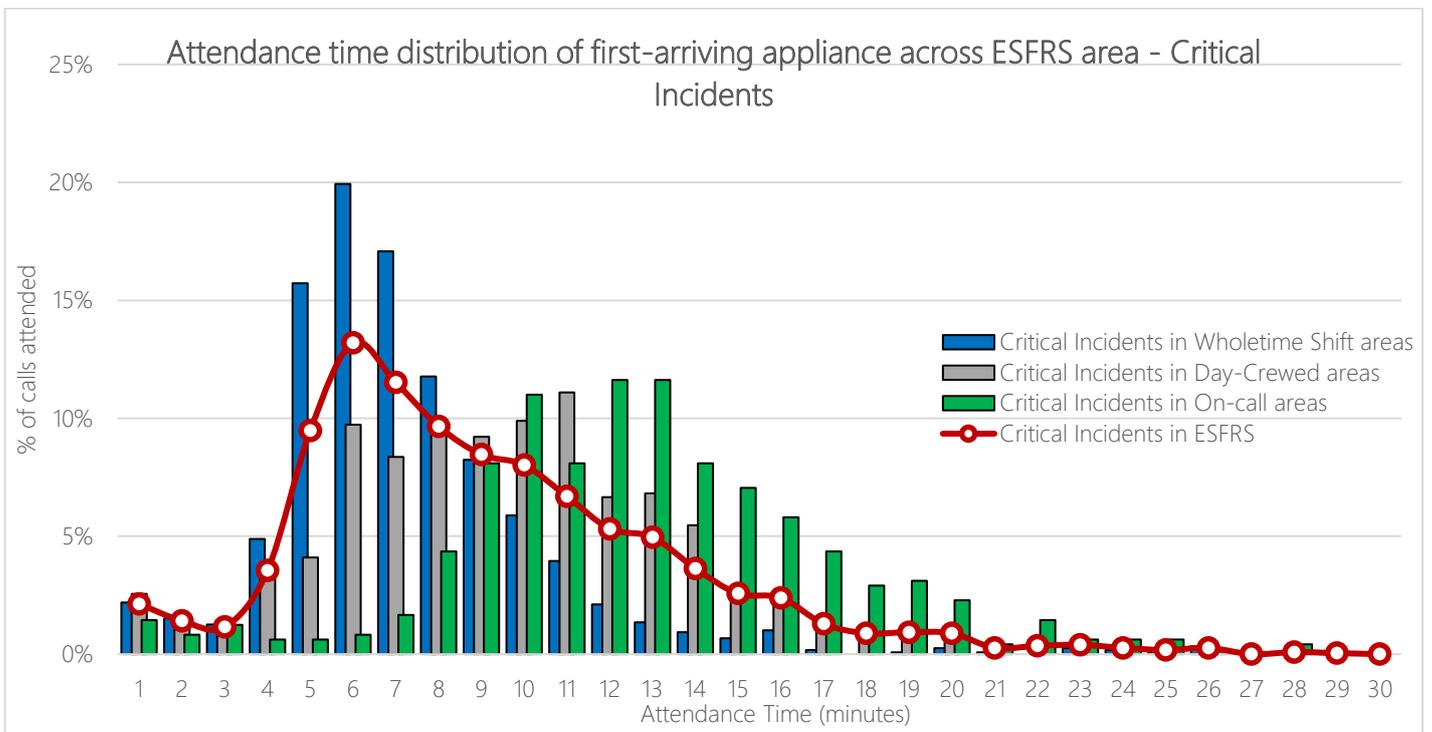
The chart below shows the distribution of response times to all incidents by minute intervals for the second appliance (where applicable) across a five year period (Apr 2013 – Mar 2018). It can be seen that, for wholetime shift station areas, the attendance time distribution peaks at the 7 minute interval for the 2nd appliance – just 1 minute behind the first arriving pumping appliance. For on-call station areas, the distribution peaks at 15 minutes, which is 4 minutes behind the peak for the first arriving appliance.

Attendance time distribution of second-arriving appliance across ESFRS area - All Incidents
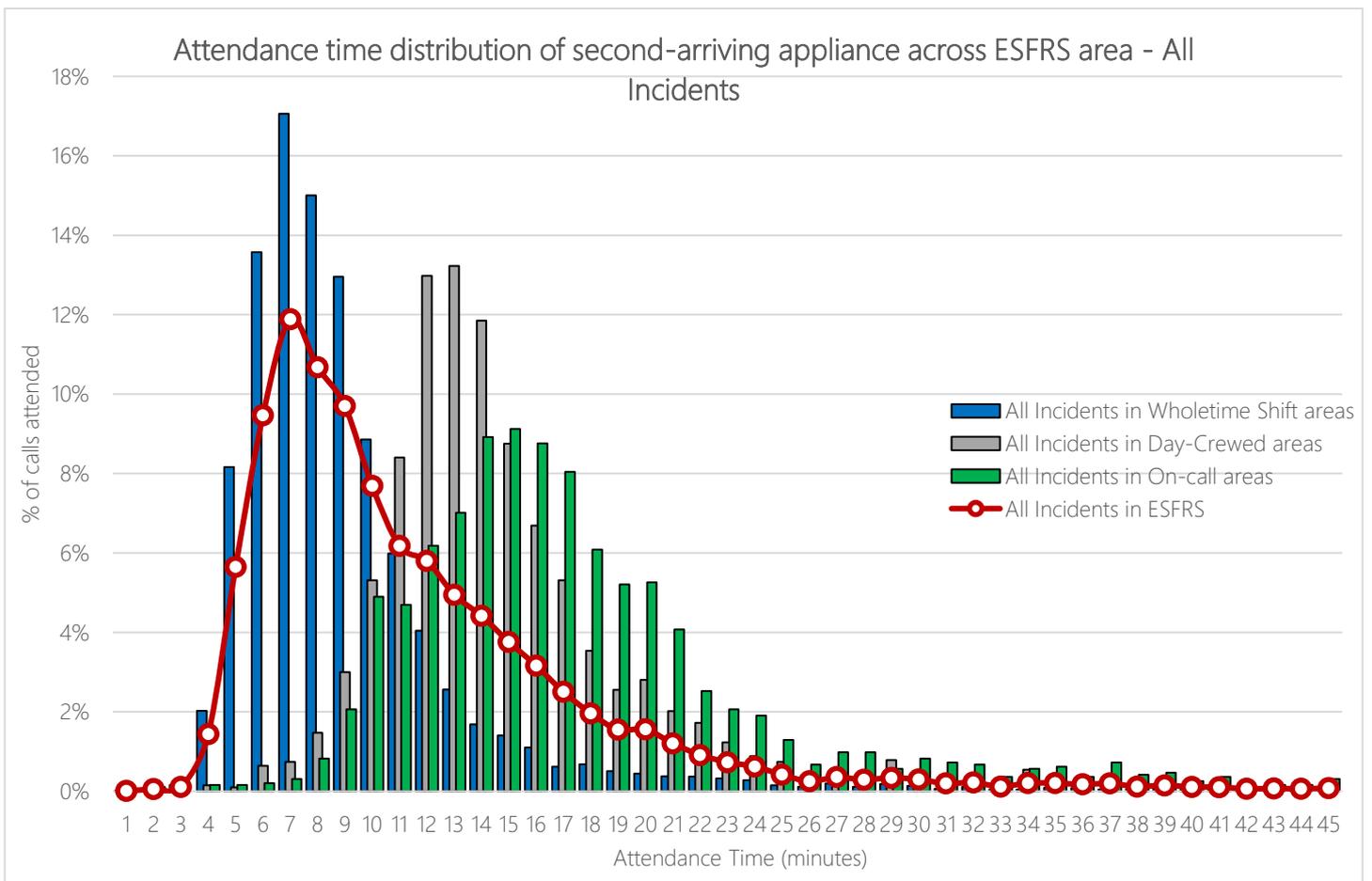
The chart below shows the distribution of attendance times to critical incidents across the service area for the 2nd appliance over a five year period (April 2013 – March 2018). Compared to the distribution for all incidents, critical incident attendances on wholetime shift stations peak at 8 minutes (compared to 6 minutes for all incident types) and in on-call areas, critical attendances peak at 17 minutes compared to 12-13 minutes for all incident types.
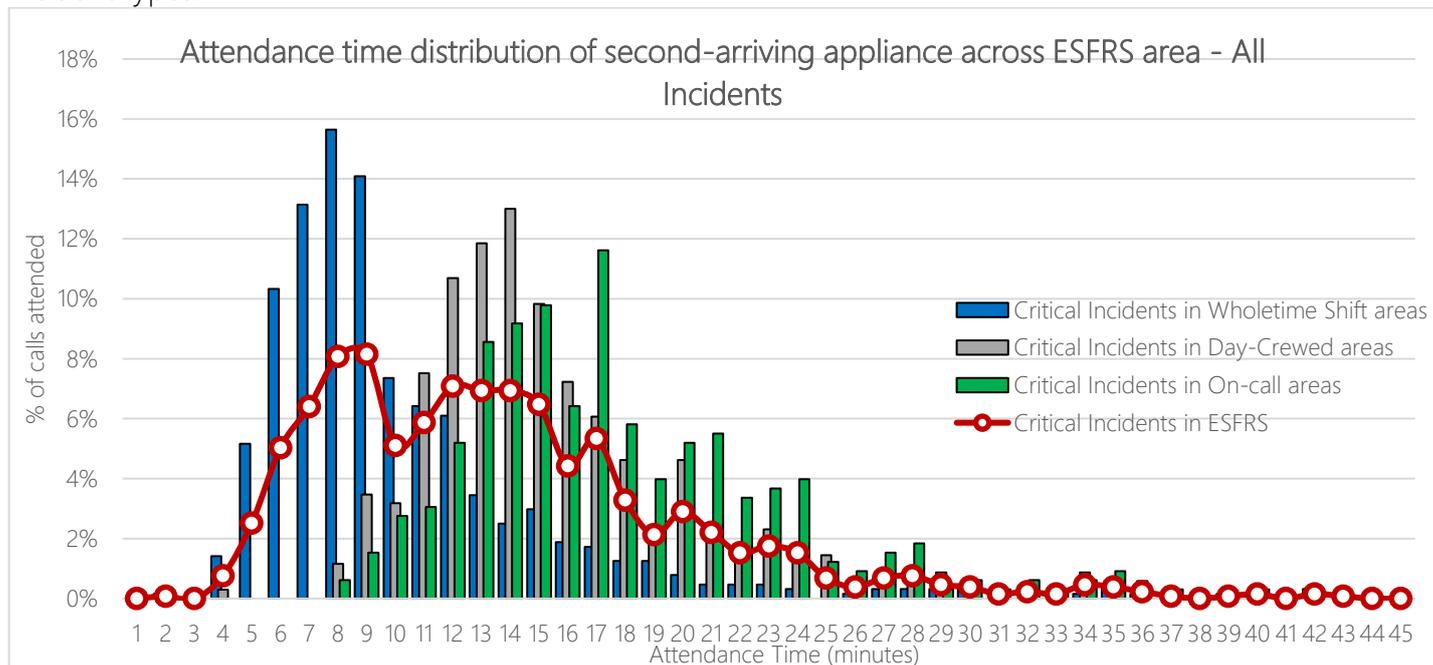

The map below shows, for each station area, the average attendance time of the first arriving pumping appliance (mm:ss), based on incidents between April 2013 and March 2018. The times in red denote average attendance time to critical incidents in the same period. Attendance times of +30 minutes were trimmed and not used in calculating the average. This doesn't take into account the split between day-crewed stations.
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Average attendance time of first arriving appliance, by station area (April 2013 – March 2018)

It can be seen from the map above that attendance times in the north of the ESFRS area are typically longer, particularly in the north-eastern area where adjacent stations are all on-call stations. The three urban conurbations of Brighton & Hove, Eastbourne and Hastings represent the areas with the quickest response times, although it is clear that the first arriving appliance in the Eastbourne area is considerably longer than the other wholetime shift station areas in the City and in Hastings. Furthermore, given this is a 5 year average, it is probable that the average attendance times in each area has risen when considering a year-on-year change, especially as on-call appliance availability has decreased over the same period.

The following map shows similar information, this time illustrating the attendance time of the 2nd arriving appliance at an incident. Again, it can be seen that the north-east of the ESFRS area is where attendance times are likely to be the longest due to a wide geographical area being covered by adjacent on-call appliances.

Average attendance time of second arriving appliance, by station area (April 2013 – March 2018)

The table below shows the proportion of incidents that were attended by a single appliance and, if there was a 2nd pump attendance, the average delay between the arrival of the first and second appliances across each station area for all incident types. Lag times of 1hr+ were not used in the calculations.

It can be seen that, overall, 72% of all incidents within the ESFRS area over the past 5 years were attended by a single fire appliance, although this does range from between 66% to 82% across the 24 station areas. Day-crewed station areas have had a greater proportion of incidents where only 1 pump attended, compared to wholetime shift and on-call areas – having 76% of single-pump incidents which is higher than the ESFRS average of 72%.

The overall delay between the arrival of the first and second pumping appliances in the ESFRS area is 03:21 based on 5 years of incidents. The variance across all 24 station areas is significant ranging from 01:49 at Preston Circus, to 09:54 at Broad Oak. It must be noted that, for some of the on-call areas, the count of incidences of a 2-pump attendance are low, and therefore the average lag time will be more volatile, even after taking a trim mean. However, it can be seen that, overall, wholetime shift station areas have a lag time of 2:24 and on-call areas have a lag time of 05:29 – a difference of almost 3 minutes.

Station Area	% of Incidents where only 1 pump attended	Average Lag Time (mm:ss) (trim <1hr)
Barcombe	66%	04:42
Battle	71%	06:03
Bexhill	76%	05:01
Broad Oak	73%	09:54
Burwash	67%	07:24
Crowborough	74%	05:43
Eastbourne	71%	01:52
Forest Row	69%	05:42
Hailsham	71%	05:07
Hastings Bohemia Rd	73%	03:53
Hastings The Ridge	74%	04:33
Heathfield	66%	05:23
Herstmonceux	74%	09:20
Hove	68%	01:57
Lewes	74%	05:11
Mayfield	66%	05:50
Newhaven	82%	05:37
Pevensey	72%	04:12
Preston Circus	69%	01:49
Roedean	73%	02:38
Rye	71%	06:07
Seaford	69%	03:37
Uckfield	74%	05:28
Wadhurst	75%	06:34
ESFRS	72%	03:21

| Duty System	% of Incidents where only 1 pump attended	Average Lag Time (mm:ss) (trim <1hr)
On-call	70%	05:29
Day-crewed	76%	05:23
Wholetime Shift	71%	02:24
Grand Total	72%	03:21

Incident Density by Output Area

The following maps show, by output area, the average number of incidents within that area per year (based on a 5 year average). An Output Area (OA) is a geographic area, designed specifically for statistical purposes by the Office of National Statistics and used to aggregate Census information. An OA contains approximately 130 households, so output areas in rural communities can cover a large geographic area but an inner-city output area might only cover a street or a cluster of densely populated high-rise premises.

The maps seek to demonstrate the areas where there have been the most incidents across the ESFRS area over the past five years. The darker the shade, the more incidents have occurred in the area. The ranges have been calculated statistically using the 'natural breaks' algorithm.

Please note, due to different ranges between the 'all incident map' and the 'critical incident map' direct colour comparisons should not be made.

Whilst it appears that critical incidents do not occur within the main urban conurbations but are directed inland into the more rural areas, this isn't quite accurate. Remembering that each output area contains approximately a similar number of households, care has to be taken to ensure one's eye is not drawn to large coloured areas. That being said, since critical incidents are heavily weighted towards RTC life risk, the areas that are highlighted in the more rural areas tend to be the areas through which the main 'A' roads pass through such as the A22, A27, A259, A21 etc.

Incident Density Map
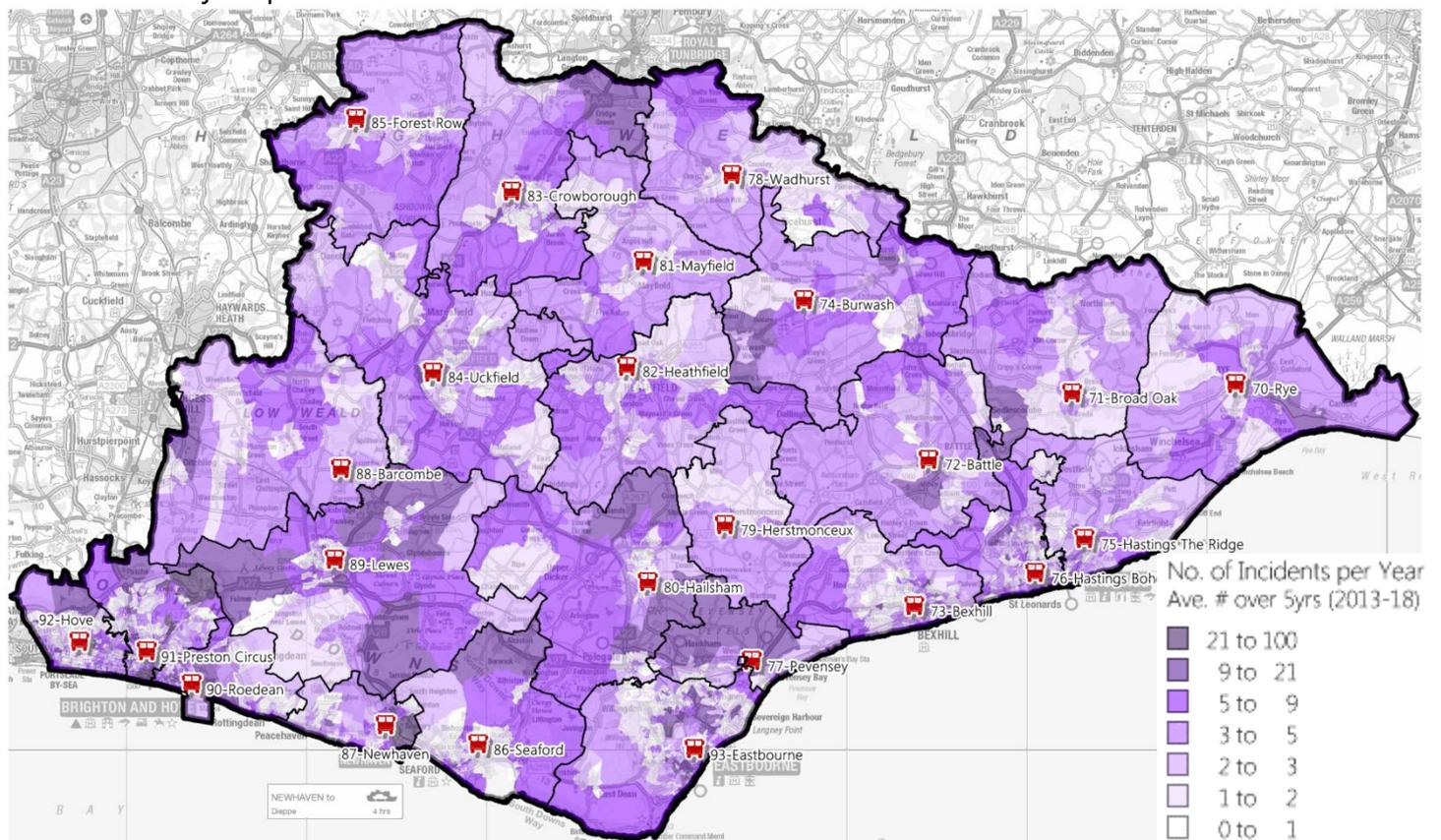
Critical Incident Density Map
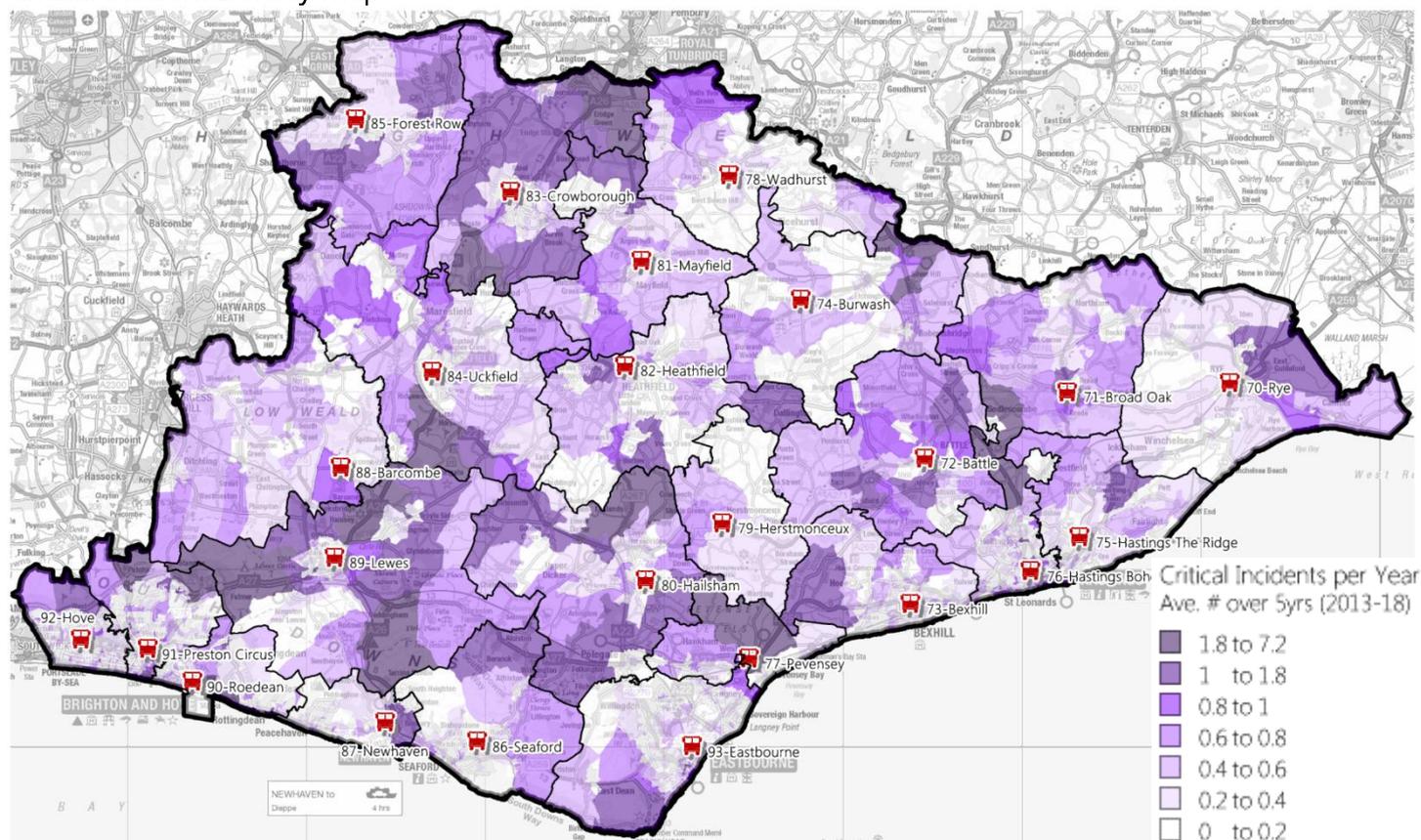
Level 3+ Incidents

The following table illustrates the number of level 3 and 4 incidents that have occurred over the past 9 years across the ESFRS area. A level 3 incident is where between 7-9 pumping appliances are in attendance at the incident, whereas a level 4 incident represents where 10 or more pumping appliances attended. These incidents denote where significant resource was required in order to deal with a particular incident.

Over the last nine years, there have been 27 level 4 incidents (3 per year) and 66 level 3 incidents (7 per year. Each station profile gives details of the numbers of level 3+ incidents within its own station area over the past 9 years.

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	Grand Total
Level 3 (7-9 pumps)	13	7	6	8	6	8	2	7	9	66
Level 4 (10+ pumps)	4	4	3	2	5	1	5	0	3	27
ESFRS Total	17	11	9	10	11	9	7	7	12	93

FSEC Predictive Risk

<u>Dwelling Fires</u>

The following map shows the predicted dwelling fatality rate by output area, produced by the Fire Service Emergency Cover Toolkit (FSEC). FSEC calculates the predicted risk of sustaining fatal injuries in a dwelling fire taking into account fire factors in census demographics, historical incident activity and response times. The map shows where the risk is higher and/or lower than the national average. It can be seen that the majority of the ESFRS area is predicted to have a well below average risk of sustaining fatal injuries in a dwelling fire compared with the national average. Around 3% of output areas have been designated as an above average or well above average risk, the majority of these being within the attendance standards isochrones. A fuller description for each area is found in the individual station profiles.
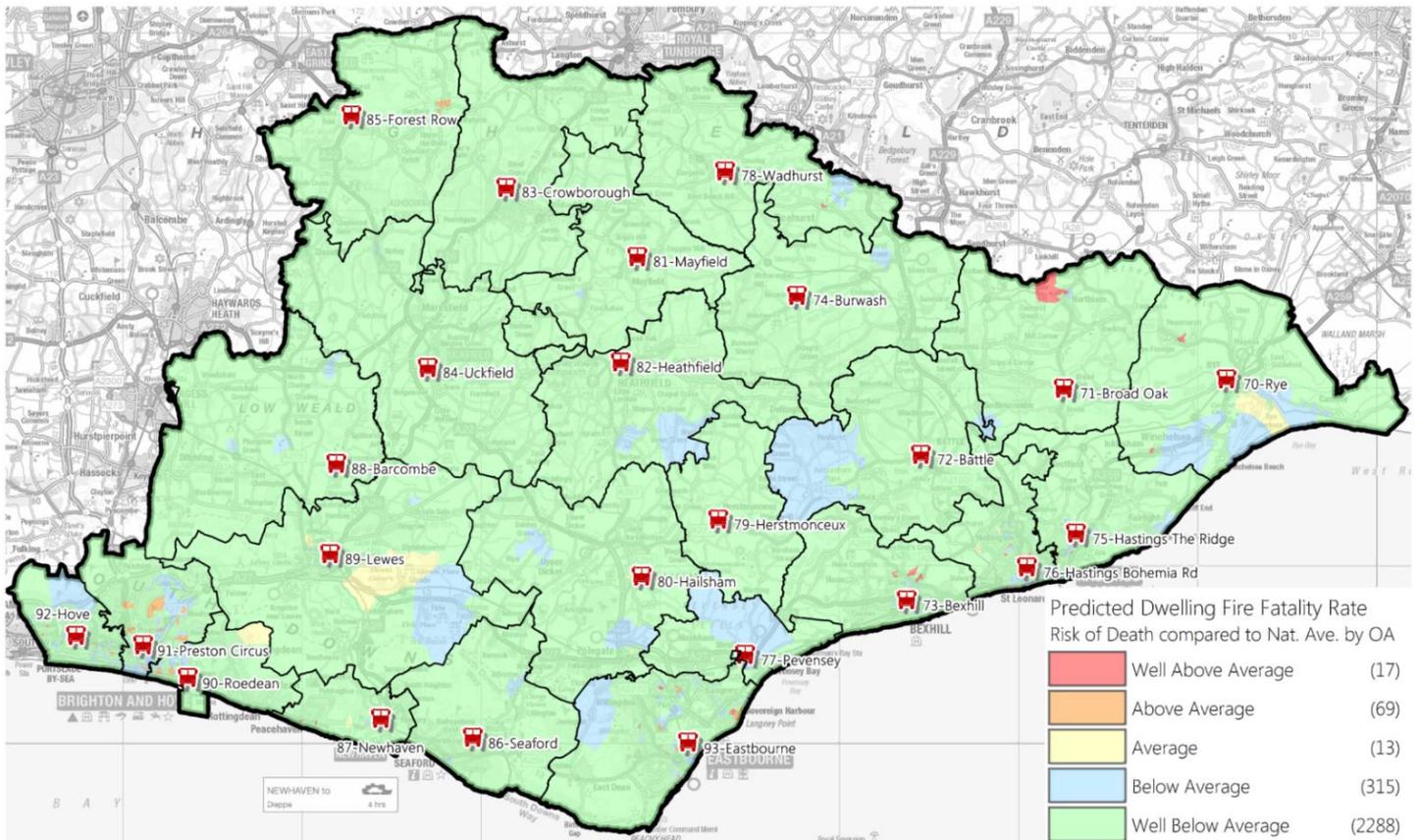
Road Traffic Collisions

The following map shows the predicted RTC fatality rate by output area, produced by the Fire Service Emergency Cover Toolkit. A fuller breakdown is captured in individual station profiles, but it can be seen that, aside from the main urban connurbations, there are significant number of areas in the more rural areas of the ESFRS area, within Lewes, Rother and Wealden districts. The majority of these areas tend to be areas through which the main 'A' roads traverse, along with some 'B' roads which are notorious for road traffic collisions.
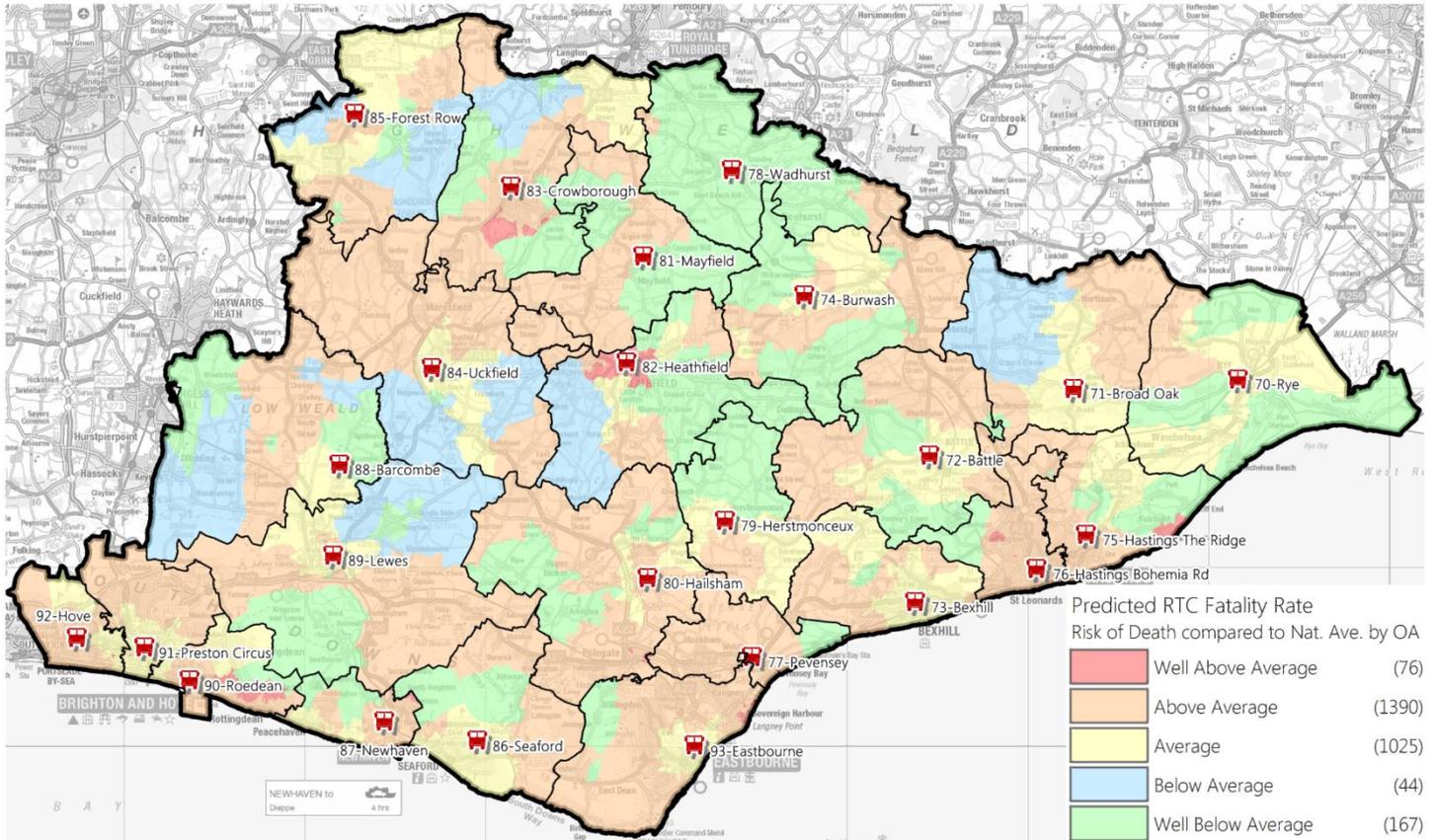
Incidents by fire appliance

Whilst the previous section dealt with incidents within each station area irrespective of which appliances were mobilised, this section deals with the appliances which have mobilised irrespective of the geographical location of the incident.

Average turn-out times of ESFRS pumping appliances

The table below shows the average turn-out times of each of the 33 pumping appliances across the service area. Average turn-out times have been calculated using a trim mean. Any turn-out time quicker than 30 seconds or longer than 12 minutes were not used in the calculation. On the whole, turn-out times have been increasing over the past 9 years and are quite lengthy. Pevensey has the greatest variance in turn-out times – difference of 2 minutes 39 seconds. Barcombe has a quick turn-out time for an on-call station, whereas Eastbourne approximately 40 seconds slower than other shift appliances.

DC	(grey)
OC	(green)
WTS	(blue)

Day-Crewed and On-Call P4s (ave. 24hrs)

Callsign	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	9-yr Average		Variance
FJE72P4	06:49	06:35	06:23	05:12	05:12	06:07	06:11	05:55	07:14	06:03		02:02
FJE73P4	06:54	06:20	06:22	06:19	06:43	07:21	07:29	06:52	07:18	06:44		01:11
FJE83P4	06:59	05:58	06:27	06:54	06:33	07:05	06:16	07:16	05:36	06:34		01:41
FJE84P4	07:13	06:48	08:03	07:31	07:10	07:42	06:48	06:33	07:18	07:16		01:30
FJE87P4	07:01	06:33	06:21	07:06	07:01	07:01	06:48	07:21	06:41	06:50		01:00
FJE89P4	05:50	06:40	06:41	06:07	06:12	07:06	07:34	06:04	05:47	06:24		01:46
FJE70P4	06:08	06:28	05:59	06:35	06:19	06:10	06:05	06:16	04:28	06:10		02:07

On-Call P1s and Day-Crewed P1s (when on-call)

Callsign	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	9-yr Average		Variance
FJE70P1	05:08	05:11	05:01	04:46	04:42	04:53	04:58	04:54	06:09	05:04		01:27
FJE71P1	04:51	04:42	04:33	04:35	04:58	05:24	04:25	04:44	05:31	04:52		01:06
FJE72P1	05:25	05:26	04:51	04:55	04:27	05:24	05:00	05:11	05:57	05:12		01:29
FJE73P1	05:32	05:06	04:45	05:06	05:43	06:26	06:03	05:54	05:40	05:34		01:41
FJE74P1	05:43	05:28	05:32	05:10	05:00	05:15	05:23	05:50	05:56	05:31		00:56
FJE77P1	04:30	04:46	03:46	04:04	04:58	06:25	06:04	06:19	06:05	04:55		02:39
FJE78P5	03:57	04:07	04:03	04:31	04:22	04:50	04:54	05:18	05:52	04:26		01:55
FJE79P1	06:05	06:08	06:55	06:14	06:34	06:22	06:48	06:18	05:23	06:15		01:32
FJE80P1	04:51	04:41	04:41	04:52	04:55	05:32	05:26	05:28	06:13	05:05		01:32
FJE81P1	06:19	05:57	05:49	06:21	06:04	06:30	06:53	06:57	07:07	06:21		01:18
FJE82P5	06:13	06:13	06:25	06:02	05:57	06:04	06:23	06:18	06:28	06:13		00:31
FJE83P1	05:11	04:52	04:47	04:52	05:42	05:40	05:32	05:29	05:57	05:20		01:10
FJE84P1	05:32	05:19	06:09	06:01	05:43	05:51	06:00	05:53	05:23	05:44		00:50
FJE85P1	04:54	04:57	04:41	05:04	05:07	05:41	06:26	06:06	05:57	05:20		01:45
FJE86P5	05:05	04:51	04:55	05:19	04:36	05:05	05:12	04:45	04:47	04:57		00:43
FJE87P1	05:26	05:01	04:44	05:06	05:24	05:51	05:48	05:58	05:33	05:26		01:15
FJE88P1	04:21	04:04	03:59	04:20	04:16	03:54	03:36	03:57	03:58	04:04		00:45
FJE89P1	06:07	06:01	06:09	05:39	05:51	06:14	06:47	05:58	05:48	06:03		01:08

Day-Crewed P1s (on-station) i.e.08:30-18:30 (Battle: 09:00-18:00 weekdays, 09:00-16:00 weekends)

Callsign	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	9-yr Average		Variance
FJE72P1	02:15	02:13	02:23	02:06	02:00	02:35	01:46	01:59	02:06	02:10		00:49
FJE73P1	01:52	01:48	01:49	01:55	01:55	02:04	02:14	01:57	01:55	01:56		00:26
FJE83P1	01:44	01:53	01:58	01:43	01:50	02:25	02:13	01:54	02:15	01:59		00:42
FJE84P1	01:57	01:49	01:42	01:24	01:25	01:45	01:41	01:34	01:54	01:42		00:32
FJE87P1	01:24	01:25	01:17	01:14	01:23	01:59	01:45	01:48	02:06	01:35		00:52
FJE89P1	02:05	01:55	01:49	01:41	01:44	02:15	02:26	02:10	02:19	02:03		00:44

Wholetime Shift ('day-time' response - 07:00 - 00:00)

Callsign	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	9-yr Average		Variance
FJE75P1	01:36	01:22	01:23	01:16	01:18	01:19	01:24	01:24	01:37	01:24		00:21
FJE76P1	01:30	01:21	01:14	01:09	01:11	01:13	01:16	01:26	01:44	01:21		00:35
FJE90P1	01:25	01:17	01:12	01:08	01:06	01:26	01:06	01:17	01:29	01:17		00:23
FJE91P1	01:33	01:24	01:10	01:07	01:04	01:12	01:20	01:15	01:36	01:18		00:32
FJE91P4	01:37	01:23	01:17	01:17	01:17	01:24	01:23	01:28	01:40	01:25		00:23
FJE92P1	01:32	01:25	01:17	01:10	01:12	01:18	01:14	01:23	01:30	01:21		00:21
FJE93P1	01:41	01:40	01:36	01:39	01:37	01:48	01:38	02:15	01:56	01:40		00:39
FJE93P4	01:38	01:37	01:37	01:36	01:38	01:46	01:40	01:37	01:54	01:40		00:18
FJE93P6	-	-	-	-	02:09	02:03	01:55	01:45	02:06	01:57		00:24

Wholetime Shift ('night-time' response - 00:00 - 07:00)

Callsign	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	9-yr Average		Variance
FJE75P1	02:04	01:52	01:48	01:44	01:52	01:48	01:57	02:03	02:20	01:56		00:36
FJE76P1	01:51	01:50	01:34	01:34	01:34	01:36	01:41	01:46	02:13	01:44		00:39
FJE90P1	01:52	01:43	01:42	01:41	01:34	01:54	01:33	01:41	01:55	01:44		00:22
FJE91P1	02:01	01:50	01:39	01:37	01:33	01:41	01:41	01:39	02:02	01:45		00:29
FJE91P4	02:13	01:56	01:53	01:52	01:50	01:58	01:52	02:06	02:18	02:00		00:27
FJE92P1	02:04	01:54	01:48	01:41	01:41	01:49	01:50	02:00	02:09	01:54		00:28
FJE93P1	02:19	02:25	02:13	02:14	02:08	02:23	02:23	02:41	02:57	02:18		00:49
FJE93P4	02:20	02:21	02:15	02:22	02:21	02:28	02:16	02:15	02:22	02:20		00:13
FJE93P6	-	-	-	-	-	02:33	02:26	02:17	02:36	02:29		00:20

Appliance mobilisations

The following table shows the number of mobilisations each pumping appliance has mobilised to an incident. Over the past 9 years the number of incidents attended by ESFRS have reduced by 24%, although over the last 5 years, this is only a 3.6% reduction. The number of mobilisations each pumping appliance has made over the 9 years has varied dramatically, with some pumps decreasing by as much as 81%, whilst others have increased by as much as 96%.

Mobilisations to Incidents per year by Appliance

Appliance	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	% increase / decrease
FJE70P1	221	220	189	164	169	172	140	128	143	-35
FJE70P4	87	63	69	74	53	47	32	32	28	-68
FJE71P1	138	130	112	89	80	103	72	92	98	-29
FJE72P1	382	290	244	267	257	235	225	237	263	-31
FJE72P4	55	45	47	50	51	26	25	16	13	-76
FJE73P1	673	610	566	499	578	506	550	553	596	-11
FJE73P4	225	215	220	164	211	156	90	79	70	-69
FJE74P1	67	81	64	66	78	107	110	123	131	96
FJE75P1	1,127	1,055	945	872	841	749	676	628	630	-44
FJE76P1	1,540	1,404	1,265	1,180	1,192	1,121	1,103	1,047	1,068	-31
FJE77P1	197	168	162	146	113	63	79	83	99	-50
FJE78P5	215	158	159	114	109	80	99	56	59	-73
FJE79P1	107	95	86	141	139	136	75	101	144	35
FJE80P1	522	446	342	370	319	297	259	306	180	-66
FJE81P1	109	83	66	89	109	65	63	47	44	-60
FJE82P5	209	202	149	124	157	194	155	129	145	-31
FJE83P1	369	333	310	310	271	297	262	304	315	-15
FJE83P4	118	107	101	75	53	80	46	38	54	-54
FJE84P1	567	464	369	361	327	312	365	328	327	-42
FJE84P4	201	147	92	76	95	95	45	38	39	-81
FJE85P1	134	144	95	106	96	111	65	73	99	-26
FJE86P5	216	258	202	210	238	232	199	237	190	-12
FJE87P1	453	436	426	429	442	365	417	415	477	5
FJE87P4	88	90	122	77	114	91	59	46	61	-31
FJE88P1	165	130	148	133	185	152	113	113	104	-37
FJE89P1	452	409	390	388	423	357	397	402	473	5
FJE89P4	70	42	26	47	53	39	40	34	51	-27
FJE90P1	1,374	1,193	1,024	931	998	907	851	950	995	-28
FJE91P1	1,997	1,864	1,555	1,478	1,444	1,370	1,052	817	881	-56
FJE91P4	2,254	2,177	2,025	1,788	1,767	1,593	1,510	1,890	1,929	-14
FJE92P1	1,024	979	941	798	827	752	651	1,060	1,107	8
FJE93P6	1,158	1,032	880	862	782	864	675	468	512	-56
FJE93P4	1,388	1,187	1,016	1,011	918	922	850	1,198	1,215	-12
All ESFRS Incidents	12,759	11,675	10,376	9,516	9,772	9,090	9,215	9,405	9,737	-24

The following table shows the average number of mobilisations that each pumping appliance has made, broken down by the station area to which it was mobilised. This includes incidents where the pumping appliance may not have arrived at the incident due to being stood-down en-route.

Average mobilisations to **ALL** incidents by appliance callsign (5yr average Apr 2013-March 2018)

Home Station of Appliance	Appliance Callsign	Barcombe	Battle	Bexhill	Broad Oak	Burwash	Crowborough	Eastbourne	Forest Row	Hailsham	Hastings Bohemia Rd	Hastings The Ridge	Heathfield	Herstmonceux	Hove	Lewes	Mayfield	Newhaven	Pevensey	Preston Circus	Roedean	Rye	Seaford	Uckfield	Wadhurst	Outside ESFRS	Grand Total
Bar	88P1	60	-	-	-	-	1	0	0	0	-	0	1	-	3	50	-	1	-	6	2	-	1	4	-	4	133
Bat	72P1	0	113	8	17	36	-	2	-	1	32	7	6	5	0	0	0	-	-	1	0	2	-	0	8	4	243
Bat	72P4	-	16	0	1	4	-	-	-	-	3	1	0	0	-	0	-	-	-	0	-	0	-	-	0	0	26
Bex	73P1	0	5	462	0	0	-	11	-	1	51	13	-	1	1	-	-	-	3	1	0	0	-	-	-	8	557
Bex	73P4	-	1	110	-	-	-	1	-	-	7	1	-	0	-	-	-	-	0	-	-	-	-	-	-	1	121
BOak	71P1	-	3	2	37	2	-	-	-	-	16	7	-	0	0	-	-	-	-	-	-	14	-	0	0	7	89
Bur	74P1	-	1	0	1	57	0	-	-	0	2	1	19	0	-	-	1	-	-	0	-	1	-	0	20	5	110
Crow	83P1	1	-	0	-	1	196	-	16	1	0	-	2	-	-	1	21	-	-	-	0	-	-	23	16	11	290
Crow	83P4	0	0	0	0	0	40	1	2	0	1	0	0	0	-	0	3	0	0	-	-	0	0	2	1	1	54
Ebne	93P4	0	0	3	-	-	0	870	1	74	1	1	1	1	1	2	0	3	34	1	1	1	11	1	0	14	1,021
Ebne	93P6	-	0	2	-	-	-	591	1	28	2	0	0	0	2	1	0	1	15	1	1	0	5	0	-	11	660
FRow	85P1	1	-	-	-	-	4	-	50	-	-	-	0	-	0	-	1	-	-	-	-	-	0	10	0	22	89
Hail	80P1	0	1	2	-	0	0	25	0	200	1	0	13	7	-	1	1	0	11	1	1	-	3	0	-	3	272
Has_B	76P1	0	27	81	4	3	0	3	-	1	850	121	1	-	0	-	0	0	0	2	1	2	-	0	0	8	1,106
Has_R	75P1	-	8	13	6	0	0	2	-	-	357	291	-	-	0	-	-	-	-	1	1	19	-	0	0	6	705
Heath	82P5	-	0	0	-	17	2	0	0	7	0	-	98	1	1	1	16	-	0	0	1	-	7	2	1	2	156
Hercx	79P1	-	3	3	0	0	0	5	-	73	4	1	5	17	0	1	-	-	0	0	-	-	1	0	0	4	119
Hove	92P1	1	-	0	-	-	-	0	-	0	0	0	-	-	687	6	-	1	0	101	15	-	0	0	-	66	879
Lew	89P1	39	0	1	1	0	2	3	1	10	1	0	0	0	8	288	1	5	0	21	7	1	4	9	-	6	410
Lew	89P4	1	-	0	-	-	-	-	-	1	-	-	-	-	1	35	-	1	-	2	1	-	1	0	-	0	43
May	81P1	-	0	-	-	2	10	-	-	0	-	-	19	-	-	-	21	0	0	-	0	-	-	1	9	2	66
New	87P1	0	-	-	-	-	-	3	0	1	0	-	-	-	4	16	-	308	-	6	18	-	59	0	-	7	423
New	87P4	0	-	-	-	-	-	1	-	-	-	-	-	-	1	2	-	60	-	1	2	-	5	-	-	1	74
Pev	77P1	-	0	6	-	-	-	32	-	6	3	-	0	3	0	0	-	-	34	0	1	-	0	0	-	2	87
PCircus	91P1	1	-	0	-	-	1	-	0	1	1	0	0	-	62	15	-	3	-	896	100	-	0	0	-	31	1,113
PCircus	91P4	3	-	1	-	-	0	1	0	-	2	0	-	0	144	34	0	5	-	1,258	252	0	0	0	-	36	1,738
Roe	90P1	0	-	0	-	-	0	0	-	0	-	0	0	-	16	3	-	31	-	131	748	0	1	0	-	8	940
Rye	70P1	-	-	-	16	-	-	0	-	0	3	5	-	0	0	0	-	-	-	-	-	116	-	-	-	9	150
Rye	70P4	-	-	0	3	-	-	0	-	-	3	1	-	0	-	-	-	-	-	-	-	28	-	-	-	2	38
Sea	86P5	-	-	-	0	-	-	13	-	4	0	-	-	-	0	2	-	21	0	1	4	-	170	-	-	4	219
Uck	84P1	22	0	-	-	2	26	-	13	12	-	-	27	-	0	10	6	-	-	2	1	-	-	204	-	5	332
Uck	84P4	3	-	-	-	-	2	0	1	1	-	-	2	-	-	1	1	-	-	-	-	-	-	51	-	0	62
Wad	78P5	-	0	-	0	11	7	-	-	0	0	-	0	-	-	-	-	4	-	0	0	0	-	0	50	6	81

Mobilisations to own station area vs. other area

The following table demonstrates the number and proportion of times per year each pumping appliance was mobilised to attend an incident in its own area vs. another FRS area, based on incidents between April 2013 and March 2018. It can be seen that there is a great variance in the proportion of calls that are on each pump's own station area – some mobilising to 90% of their calls on their own area (Eastbourne), to some mobilising to only 14% of calls to their own area (Herstmonceux). However, this does include incidents where the appliance may not have arrived at the incident due to being stood-down en-route.

Home Station of Appliance	Appliance Callsign	All Incidents						Critical Incidents					
		# per yr own area	%	# per yr other ESFRS area	%	# per yr outside ESFRS area	%	# per yr own area	%	# per yr other ESFRS area	%	# per yr outside ESFRS area	%
Barcombe	FJE88P1	60	45	70	52	4	3	3	25	8	71	<1	4
Battle	FJE72P1	113	47	126	52	4	2	13	34	24	64	1	3
Battle	FJE72P4	16	60	10	39	<1	1	2	53	2	47	-	0
Bexhill	FJE73P1	462	83	87	16	8	1	24	71	9	28	<1	1
Bexhill	FJE73P4	110	91	10	8	1	1	8	86	1	14	-	0
Broad Oak	FJE71P1	37	42	45	50	7	8	5	51	4	41	<1	8
Burwash	FJE74P1	57	52	48	44	5	4	5	43	6	54	<1	4
Crowborough	FJE83P1	196	68	83	29	11	4	22	64	12	35	<1	1
Crowborough	FJE83P4	40	73	13	24	1	3	6	70	3	30	-	0
Eastbourne	FJE93P4	870	85	136	13	14	1	28	69	13	31	<1	0
Eastbourne	FJE93P6	591	90	58	9	11	2	34	83	7	17	<1	0
Forest Row	FJE85P1	50	56	17	19	22	25	5	64	2	31	<1	5
Hailsham	FJE80P1	200	74	69	25	3	1	15	63	9	37	-	0
Hastings BohemiaRd	FJE76P1	850	77	248	22	8	1	42	61	26	38	<1	1
Hastings The Ridge	FJE75P1	291	41	407	58	6	1	17	35	31	65	-	0
Heathfield	FJE82P5	98	63	56	36	1	1	9	57	6	43	-	0
Herstmonceux	FJE79P1	17	14	98	82	4	3	2	14	10	86	-	0
Hove	FJE92P1	687	78	126	14	66	8	35	72	12	24	2	4
Lewes	FJE89P1	288	70	116	28	6	2	23	46	26	53	<1	1
Lewes	FJE89P4	35	81	8	19	<1	0	4	80	1	20	-	0
Mayfield	FJE81P1	21	32	43	65	2	3	2	30	5	70	-	0
Newhaven	FJE87P1	308	73	109	26	7	2	13	50	13	50	<1	1
Newhaven	FJE87P4	60	81	13	18	<1	1	4	67	2	30	<1	4
Pevensey	FJE77P1	34	39	52	59	2	2	2	29	4	71	-	0
Preston Circus	FJE91P1	896	81	185	17	31	3	52	72	19	26	1	2
Preston Circus	FJE91P4	1,258	72	444	26	36	2	37	55	29	43	2	2
Roedean	FJE90P1	748	80	184	20	8	1	27	68	12	31	<1	2
Rye	FJE70P1	116	77	25	17	9	6	7	62	3	31	<1	7
Rye	FJE70P4	28	74	8	21	2	5	3	63	2	33	<1	4
Seaford	FJE86P5	170	77	46	21	4	2	6	53	6	47	-	0
Uckfield	FJE84P1	204	62	122	37	5	2	16	46	18	53	<1	1
Uckfield	FJE84P4	51	82	11	18	<1	0	7	76	2	24	-	0
Wadhurst	FJE78P5	50	63	24	30	6	8	4	39	5	59	<1	2

Appliance performance

The table(s) below show the performance over 5 years of each pumping appliance when it is the first arriving appliance at an incident. Attendance times are calculated from time of call to time of arrival of the first fire appliance. ESFRS attendance standards for the first-arriving fire appliance are:

- On-station response: 10 minutes 70% of occasions
- On-call response: 15 minutes 70% of occasions

It can be seen that over the last 5 years, 73.6% of incidents were attended within 10 minutes, and 92.5% were attended within 15 minutes.

Proportion of Incidents attended within X minutes by appliance (Apr 2013 - Mar 2018)

Home Station of Appliance	First arriving pumping appliance	< 5 mins	< 8 mins	< 10 mins	< 13 mins	< 15 mins	< 20 mins	Total Incidents
Rye	FJE70P1	1.6	11.5	31.5	59.2	77.0	94.1	100.0
Rye	FJE70P4	2.9	23.5	38.2	61.8	79.4	94.1	100.0
Broad Oak	FJE71P1	6.1	15.4	26.1	51.4	65.0	87.1	100.0
Battle	FJE72P1	12.9	34.2	48.6	71.3	81.2	94.8	100.0
Battle	FJE72P4	11.1	44.4	66.7	77.8	83.3	100.0	100.0
Bexhill	FJE73P1	13.1	46.2	66.6	89.7	95.2	98.4	100.0
Bexhill	FJE73P4	4.3	23.7	38.7	64.5	78.5	96.8	100.0
Burwash	FJE74P1	2.4	14.7	22.3	49.1	65.7	90.6	100.0
Hastings The Ridge	FJE75P1	21.9	66.9	82.3	94.0	96.6	98.6	100.0
Hastings Bohemia Rd	FJE76P1	24.8	78.3	91.1	96.7	97.9	99.0	100.0
Pevensey	FJE77P1	3.0	11.3	30.4	56.5	74.3	93.0	100.0
Wadhurst	FJE78P5	4.8	20.7	35.4	64.3	80.6	93.9	100.0
Herstmonceux	FJE79P1	2.7	10.0	19.0	40.8	66.2	89.7	100.0
Hailsham	FJE80P1	1.8	12.8	31.6	64.3	80.6	95.9	100.0
Mayfield	FJE81P1	11.6	15.2	23.9	46.4	55.1	79.7	100.0
Heathfield	FJE82P5	3.7	10.3	28.7	58.0	76.4	92.1	100.0
Crowborough	FJE83P1	14.6	38.2	54.9	76.2	84.4	94.0	100.0
Crowborough	FJE83P4	5.0	17.5	27.5	75.0	82.5	95.0	100.0
Uckfield	FJE84P1	12.3	30.1	46.9	69.5	80.7	94.4	100.0
Uckfield	FJE84P4	2.1	12.8	27.7	55.3	68.1	87.2	100.0
Forest Row	FJE85P1	2.2	11.1	26.8	48.1	60.5	87.9	100.0
Seaford	FJE86P5	2.9	21.8	57.6	85.1	91.5	97.7	100.0
Newhaven	FJE87P1	13.0	37.1	60.2	85.0	93.0	98.2	100.0
Newhaven	FJE87P4	11.8	26.5	47.1	75.0	92.6	95.6	100.0
Barcombe	FJE88P1	6.0	20.2	28.8	51.3	67.8	92.3	100.0
Lewes	FJE89P1	14.7	38.8	55.7	79.0	88.8	97.4	100.0
Lewes	FJE89P4	17.1	46.3	61.0	78.0	85.4	95.1	100.0
Roedean	FJE90P1	28.8	77.7	89.9	96.7	98.0	99.3	100.0
Preston Circus	FJE91P1	29.4	78.2	89.4	96.3	98.0	99.2	100.0
Preston Circus	FJE91P4	22.2	71.9	86.0	94.4	96.6	98.4	100.0
Hove	FJE92P1	17.8	74.3	88.8	94.9	96.7	98.3	100.0
Eastbourne	FJE93P4	14.0	56.0	76.4	90.3	94.0	97.8	100.0
Eastbourne	FJE93P6	15.4	62.9	83.5	94.5	97.0	99.1	100.0
	% Incs Attended	18.1	57.6	73.6	87.5	92.5	97.6	100.0

The table below shows the same information but just for critical incidents. It can be seen that over the last 5 years, 67.6% of incidents were attended within 10 minutes, and 90.8% were attended within 15 minutes.

Proportion of Critical Incidents attended within X minutes by appliance (Apr 2013 - Mar 2018)

Home Station of Appliance	First arriving pumping appliance	< 5 mins	< 8 mins	< 10 mins	< 13 mins	< 15 mins	< 20 mins	Total Incidents
Rye	FJE70P1	7.7	12.8	33.3	56.4	84.6	94.9	100.0
Rye	FJE70P4	0.0	100.0	100.0	100.0	100.0	100.0	100.0
Broad Oak	FJE71P1	7.1	21.4	42.9	60.7	71.4	92.9	100.0
Battle	FJE72P1	4.6	19.4	37.0	72.2	85.2	94.4	100.0
Battle	FJE72P4	50.0	50.0	50.0	100.0	100.0	100.0	100.0
Bexhill	FJE73P1	13.5	58.6	73.9	94.6	98.2	98.2	100.0
Bexhill	FJE73P4	0.0	16.7	33.3	50.0	83.3	100.0	100.0
Burwash	FJE74P1	12.0	24.0	28.0	40.0	48.0	88.0	100.0
Hastings The Ridge	FJE75P1	25.0	63.9	83.3	93.5	96.3	98.1	100.0
Hastings Bohemia Rd	FJE76P1	28.1	77.9	90.8	96.3	96.8	98.2	100.0
Pevensey	FJE77P1	0.0	0.0	33.3	83.3	83.3	100.0	100.0
Wadhurst	FJE78P5	4.5	13.6	27.3	59.1	77.3	100.0	100.0
Herstmonceux	FJE79P1	5.0	5.0	35.0	45.0	70.0	85.0	100.0
Hailsham	FJE80P1	7.9	14.5	39.5	77.6	92.1	98.7	100.0
Mayfield	FJE81P1	0.0	25.0	50.0	75.0	87.5	100.0	100.0
Heathfield	FJE82P5	5.8	9.6	23.1	59.6	73.1	92.3	100.0
Crowborough	FJE83P1	15.4	33.8	52.3	76.9	86.2	96.9	100.0
Crowborough	FJE83P4	0.0	0.0	0.0	33.3	33.3	100.0	100.0
Uckfield	FJE84P1	12.5	25.0	43.3	70.2	82.7	96.2	100.0
Uckfield	FJE84P4	0.0	16.7	16.7	50.0	66.7	100.0	100.0
Forest Row	FJE85P1	0.0	4.5	27.3	45.5	63.6	95.5	100.0
Seaford	FJE86P5	3.6	17.9	46.4	82.1	89.3	92.9	100.0
Newhaven	FJE87P1	12.5	41.3	68.8	86.3	93.8	97.5	100.0
Newhaven	FJE87P4	33.3	33.3	33.3	66.7	100.0	100.0	100.0
Barcombe	FJE88P1	10.5	31.6	52.6	78.9	89.5	94.7	100.0
Lewes	FJE89P1	7.5	36.7	46.7	73.3	85.8	98.3	100.0
Lewes	FJE89P4	33.3	33.3	33.3	66.7	66.7	100.0	100.0
Roedean	FJE90P1	28.4	73.1	85.1	96.3	97.0	98.5	100.0
Preston Circus	FJE91P1	28.4	73.9	87.9	95.3	98.1	99.2	100.0
Preston Circus	FJE91P4	27.1	75.7	85.0	92.5	95.3	98.1	100.0
Hove	FJE92P1	20.8	76.8	89.3	91.7	93.5	95.8	100.0
Eastbourne	FJE93P4	13.3	51.0	69.4	88.8	91.8	94.9	100.0
Eastbourne	FJE93P6	11.5	52.7	79.4	93.1	94.7	99.2	100.0
	% Incs Attended	17.3	51.1	67.6	84.4	90.8	97.1	100.0

Appliance Availability

The following table shows the percentage availability of each pumping appliance per year over the last 9 years. Please note, this excludes where the appliance was unavailable due to mechanical reasons; it is based on unavailability due to staffing. On the whole, availability of appliances has decreased over the years; however the variance between individual pumping appliances is wide, with some appliances reducing their availability by as much as 47% (Wadhurst) across the 9 years, with others improving their availability by as much as 30% (Herstmonceux) over the same period. 2014/15 shows a dip in availability due to industrial strike action. This has an impact on the workload of neighbouring appliances and the number of standby moves that are made and where they are made from and to. The least available 'primary' pump is 81P1 (Mayfield) which, in 2017/18 was only available 45% of the time.
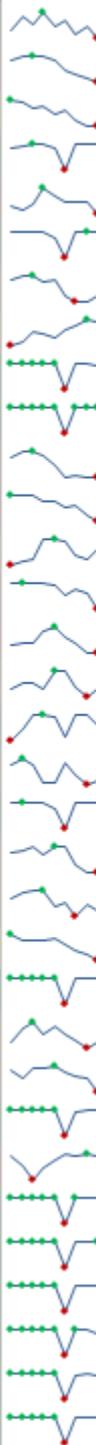
Appliance Callsign	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18		% increase / decrease
FJE70P1	99.7	99.9	99.8	100.0	99.7	99.8	99.6	99.7	99.5		-0.2%
FJE70P4	81.5	87.6	87.8	87.4	80.6	68.5	63.8	57.6	51.1		-37.3%
FJE71P1	95.3	93.7	91.5	92.1	88.4	90.2	86.5	83.5	83.3		-12.7%
FJE72P1	99.6	99.8	99.9	99.9	99.6	97.8	99.9	99.9	99.9		0.4%
FJE72P4	43.4	38.8	46.1	66.3	55.5	47.0	46.9	47.5	31.7		-26.9%
FJE73P1	100.0	100.0	99.9	100.0	99.5	98.2	99.9	100.0	100.0		0.0%
FJE73P4	76.4	80.8	82.7	74.3	77.7	60.5	52.4	53.8	60.7		-20.6%
FJE74P1	48.5	56.3	70.8	68.4	62.0	73.3	77.5	88.9	84.1		73.5%
FJE75P1	100.0	100.0	100.0	100.0	100.0	98.2	100.0	99.9	99.8		-0.2%
FJE76P1	100.0	100.0	100.0	100.0	100.0	98.4	100.0	100.0	100.0		0.0%
FJE77P1	84.3	91.9	94.0	86.0	69.6	52.7	55.5	52.0	50.2		-40.4%
FJE78P5	97.7	96.0	95.6	87.4	85.6	75.8	79.6	61.9	51.5		-47.3%
FJE79P1	62.6	68.0	69.7	91.6	92.4	88.5	74.1	70.2	81.3		29.8%
FJE80P1	100.0	100.0	99.6	99.6	94.3	81.2	88.5	81.5	56.8		-43.1%
FJE81P1	53.7	57.5	56.8	69.8	74.9	63.8	55.6	45.2	45.2		-15.9%
FJE82P5	78.0	82.0	82.6	77.8	90.2	89.0	79.0	72.8	78.3		0.4%
FJE83P1	99.3	99.6	99.9	99.9	99.9	99.4	99.9	99.9	99.7		0.4%
FJE83P4	77.1	82.9	76.0	59.1	59.2	77.6	66.2	56.3	61.8		-19.8%
FJE84P1	100.0	100.0	100.0	100.0	99.6	98.4	100.0	100.0	100.0		0.0%
FJE84P4	83.5	85.8	90.1	80.8	90.9	88.9	67.6	58.7	58.0		-30.5%
FJE85P1	82.9	89.0	90.9	92.1	74.4	78.6	63.0	75.5	70.8		-14.6%
FJE86P5	99.1	97.6	97.6	97.4	98.1	96.3	94.8	94.1	92.4		-6.8%
FJE87P1	100.0	100.0	100.0	100.0	100.0	97.1	100.0	99.9	99.8		-0.2%
FJE87P4	65.1	74.6	78.8	69.8	76.1	71.0	66.4	60.8	64.9		-0.4%
FJE88P1	80.2	74.2	81.7	82.0	85.1	79.7	74.7	72.9	60.7		-24.3%
FJE89P1	100.0	100.0	100.0	100.0	100.0	98.2	99.8	99.9	100.0		0.0%
FJE89P4	39.3	33.6	24.9	32.0	37.1	41.0	39.1	41.0	39.4		0.2%
FJE90P1	100.0	100.0	100.0	100.0	100.0	97.8	100.0	99.9	100.0		0.0%
FJE91P1	100.0	100.0	100.0	100.0	100.0	98.6	100.0	100.0	100.0		0.0%
FJE92P1	100.0	100.0	100.0	100.0	100.0	98.3	100.0	100.0	99.9		-0.1%
FJE93P6	100.0	100.0	100.0	100.0	100.0	99.0	100.0	100.0	99.8		-0.2%
FJE93P4	100.0	100.0	100.0	100.0	100.0	98.0	99.8	99.9	99.8		-0.2%
FJE91P4	100.0	100.0	100.0	100.0	100.0	97.3	99.9	99.8	99.8		-0.2%

Over-border appliances in ESFRS area

In addition to all incidents that are captured within the ESFRS IRS database, the following section contains details of our neighbouring FRS IRS data (Kent / West Sussex), where they have attended incidents within the ESFRS area, but where ESFRS did not attend.

The following table shows the total number of over-border mobilisations into the ESFRS area, where ESFRS did not attend between April 2009 and March 2018.

It can be seen that Barcombe has seen the greatest number of additional attendances from over-border West Sussex appliances into its area over the last 9 years. In fact, given that 1,162 incidents occurred within Barcombe's station area over the last 9 years where ESFRS attended, this equates to a further 23% of incidents that occur in Barcombe that ESFRS do not attend. Similarly, in Forest Row, over-border attendances into ESFRS where ESFRS did not attend account for an additional 9% of incidents, and 6% in Wadhurst.

Station area	West Sussex	Kent	Total
Barcombe	339	-	339
Broad Oak	-	8	8
Burwash	-	4	4
Crowborough	-	68	68
Eastbourne	1	1	2
Forest Row	74	10	84
Hailsham	-	1	1
Heathfield	1	1	2
Hove	112	-	112
Lewes	24	-	24
Mayfield	-	5	5
Newhaven	-	1	1
Preston Circus	10	1	11
Roedean	7	-	7
Rye	-	9	9
Uckfield	3	1	4
Wadhurst	-	55	55
ESFRS	571	165	736

Standby / cover moves

The following section provides details of standby moves between April 2009 and March 2018. Please note, the figures do not represent actual incidents where we have attended (e.g. standby no action). Rather, the figures below constitute the non-emergency cover moves that are made as part of SCC fire cover and policy decisions.

It can be seen from the chart below that the number of standby moves has been increasing year-on-year over the past 9 years, but has accelerated over the last 3 years in particularly, so that ESFRS now undertake almost 200% more cover moves than 9 years ago.

Total Standby moves by Year
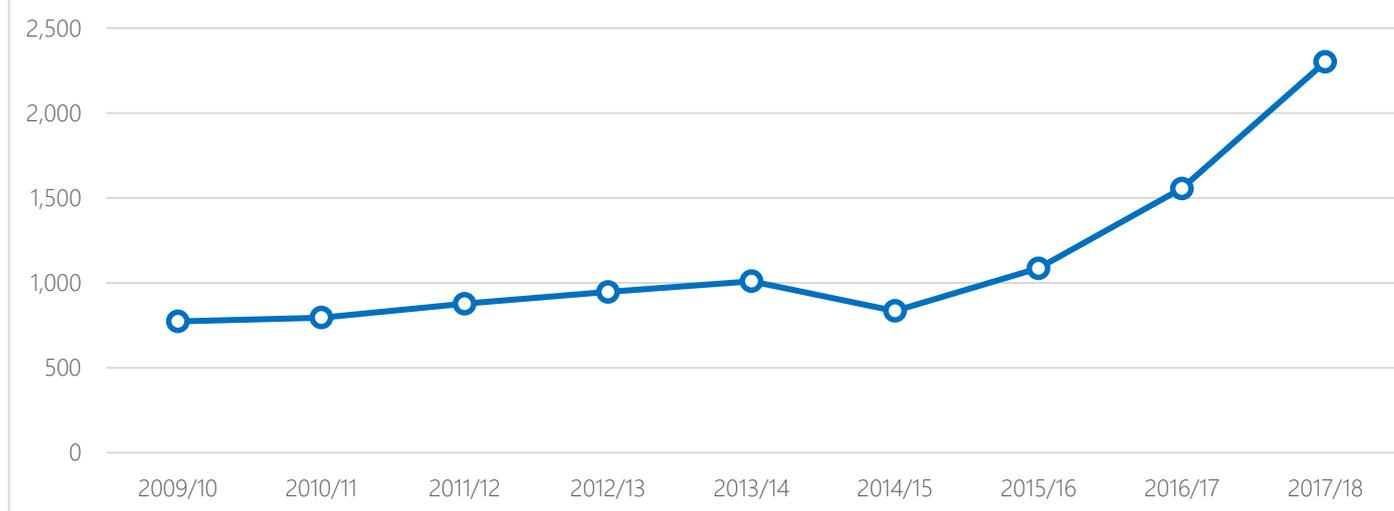
Callsign	2015/16	2016/17	2017/18	3Yr Total
70P1	27 (2.5%)	6 (0.4%)	6 (0.3%)	39 (0.8%)
70P4	17 (1.6%)	30 (1.9%)	39 (1.7%)	86 (1.7%)
71P1	180 (16.6%)	223 (14.3%)	313 (13.6%)	716 (14.5%)
72P1	54 (5%)	37 (2.4%)	34 (1.5%)	125 (2.5%)
72P4	2 (0.2%)	11 (0.7%)	7 (0.3%)	20 (0.4%)
73P1	84 (7.7%)	101 (6.5%)	177 (7.7%)	362 (7.3%)
73P4	8 (0.7%)	9 (0.6%)	21 (0.9%)	38 (0.8%)
74P1	22 (2%)	47 (3%)	69 (3%)	138 (2.8%)
75P1	1 (0.1%)	4 (0.3%)	4 (0.2%)	9 (0.2%)
76P1	0 (0%)	2 (0.1%)	2 (0.1%)	4 (0.1%)
77P1	61 (5.6%)	73 (4.7%)	86 (3.7%)	220 (4.5%)
78P5	17 (1.6%)	7 (0.4%)	16 (0.7%)	40 (0.8%)
79P1	42 (3.9%)	67 (4.3%)	120 (5.2%)	229 (4.6%)
80P1	32 (2.9%)	62 (4%)	66 (2.9%)	160 (3.2%)
81P1	29 (2.7%)	24 (1.5%)	25 (1.1%)	78 (1.6%)
82P5	32 (2.9%)	33 (2.1%)	46 (2%)	111 (2.2%)
83P1	21 (1.9%)	25 (1.6%)	31 (1.3%)	77 (1.6%)
83P4	3 (0.3%)	6 (0.4%)	5 (0.2%)	14 (0.3%)
84P1	40 (3.7%)	48 (3.1%)	83 (3.6%)	171 (3.5%)
84P4	4 (0.4%)	1 (0.1%)	7 (0.3%)	12 (0.2%)
85P1	13 (1.2%)	44 (2.8%)	51 (2.2%)	108 (2.2%)
86P5	50 (4.6%)	96 (6.2%)	128 (5.6%)	274 (5.5%)
87P1	27 (2.5%)	115 (7.4%)	154 (6.7%)	296 (6%)
87P4	2 (0.2%)	12 (0.8%)	20 (0.9%)	34 (0.7%)
88P1	70 (6.4%)	165 (10.6%)	194 (8.4%)	429 (8.7%)
89P1	9 (0.8%)	22 (1.4%)	54 (2.3%)	85 (1.7%)
89P4	0 (0%)	10 (0.6%)	10 (0.4%)	20 (0.4%)
90P1	0 (0%)	8 (0.5%)	14 (0.6%)	22 (0.4%)
91P1	14 (1.3%)	11 (0.7%)	15 (0.7%)	40 (0.8%)
91P4	76 (7%)	231 (14.8%)	409 (17.8%)	716 (14.5%)
92P1	66 (6.1%)	9 (0.6%)	21 (0.9%)	96 (1.9%)
93P4	14 (1.3%)	12 (0.8%)	36 (1.6%)	62 (1.3%)
93P6	1 (0.1%)	0 (0%)	1 (0%)	2 (0%)
ESFRS	1,086	1,556	2,301	4,943

Taking the last 3 years, the table to the left shows the number of standby moves each pumping appliance has done over the last 3 years.

It can be seen that FJE91P4 (Preston Circus) and FJE71P1 (Broad Oak) do the most standby moves per year, both having undertaken 716 standby cover moves over the 3 years. That being said, the proportion of standby moves carried out by 91P4 has significantly increased over the 3 year period and in 2017/18, comprised around 18% of all standby cover moves undertaken by the service. This is significant in that 91P4 is also the busiest appliance to be mobilised to incidents – both in terms of ESFRS appliances, but also compared to FG2 wholetime shift appliances.

Broad Oak did a similar number of standby cover moves over the same period; however, this too is significant as 71P1 is an on-call appliance in a remote rural area.

A full breakdown of the station areas to which the appliances are standing by at can be found in the individual station profiles.

Special appliances

The following table shows the number of times, over the past 9 years, each special appliance has been mobilised to attend an incident. This equates to an average of 1,071 total mobilisations of special appliances per year. It can be seen that, for many of the special appliances, a large proportion of mobilisations did not result in an attendance at the incident. 25% of all special appliance mobilisations did not book in attendance at the incident, but this proportion varies significantly by each special appliance.

Callsign	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	9 Yr. Total	5 Yr Ave.	% Did Not Arrive
FJE72R4	35	27	30	41	36	16	31	28	42	286	31	169 (59.1%)
FJE72R5	29	24	39	46	46	25	38	45	43	335	39	200 (59.7%)
FJE73C1	0	0	17	24	34	24	27	32	32	190	30	106 (55.8%)
FJE73R4	15	7	2	8	3	1	7	7	9	59	5	29 (49.2%)
FJE75M1	51	36	58	22	26	20	27	18	27	285	24	51 (17.9%)
FJE76A1	215	224	254	217	228	181	181	184	156	1,840	186	219 (11.9%)
FJE78M1	42	30	19	10	9	5	5	4	4	128	5	39 (30.5%)
FJE82M1	30	31	37	27	29	36	16	15	13	234	22	46 (19.7%)
FJE83B1	0	0	0	3	2	0	0	0	0	5	0	1 (20.0%)
FJE83M1	150	132	137	107	120	79	92	85	63	965	88	457 (47.4%)
FJE83M2	129	102	116	98	105	70	81	80	54	835	78	404 (48.4%)
FJE83T1	0	0	0	2	2	0	0	0	0	4	0	2 (50.0%)
FJE83T3	0	0	0	0	0	0	0	0	1	1	0	1 (100.0%)
FJE84T1	13	17	22	13	14	14	11	11	13	128	13	41 (32.0%)
FJE84W1	16	18	25	15	20	18	16	12	17	157	17	45 (28.7%)
FJE86M1	100	83	67	63	93	59	22	27	19	533	44	71 (13.3%)
FJE87S2	7	8	6	6	5	2	0	1	5	40	3	24 (60.0%)
FJE87S3	1	1	1	0	1	0	1	1	0	6	1	2 (33.3%)
FJE87S4	0	1	0	0	0	0	1	1	0	3	0	2 (66.7%)
FJE87T5	0	0	0	0	0	0	0	0	0	0	0	0
FJE89C1	0	0	24	26	49	29	48	41	61	278	46	140 (50.4%)
FJE89R5	46	34	37	52	49	27	48	52	57	402	47	191 (47.5%)
FJE91A1	398	430	414	386	418	341	308	334	318	3,347	344	264 (7.9%)
FJE92C1	0	1	0	2	2	3	2	0	3	13	2	12 (92.3%)
FJE92T3	3	0	0	4	4	2	3	1	2	19	2	7 (36.8%)
FJE92T5	2	0	0	4	3	0	1	0	1	11	1	6 (54.5%)
FJE92T6	1	0	0	3	2	0	1	0	0	7	1	2 (28.6%)
FJE92W2	0	0	0	3	2	0	2	0	0	7	1	4 (57.1%)
FJE92W4	2	0	0	4	4	1	1	1	2	15	2	7 (46.7%)
FJE93A1	199	138	173	121	113	3	33	15	35	830	40	163 (19.6%)
FJE93H9	0	1	0	1	0	0	1	1	1	5	1	1 (20.0%)

The table below shows the number of mobilisations to each station area that the special appliances have been mobilised. The colours represent the station areas that each appliance has turned out to the most (shaded red), which may not be the local station area at which the appliance is based. The individual station profiles break this down further, by illustrating the proportion of times each special appliance was mobilised but then did not arrive. This is important, for example, as it may be the case that a special appliance is often mobilised to a particular station area, but the majority of occasions does not book in attendance. This would therefore not necessarily indicate that the special appliance was in the wrong location.

Mobilisations to Incidents (Apr 2009 – Mar 2018)

| Callsign	Barcombe	Battle	Bexhill	Broad Oak	Burwash	Crowborough	Eastbourne	Forest Row	Hailsham	Bohemia Rd	The Ridge	Heathfield	Herstmonceux	Hove	Lewes	Mayfield	Newhaven	Pevensey	Preston Circus	Roedean	Rye	Seaford	Uckfield	Wadhurst	Outside ESFRS	All Mobilisations
FJE72R4	3	9	20	10	6	8	21	3	12	31	24	10	7	6	7	6	12	6	23	9	22	8	7	6	10	286
FJE72R5	5	12	27	16	11	4	25	3	13	41	17	13	7	10	9	6	9	8	28	7	28	5	8	9	14	335
FJE73C1	4	7	10	3	3	1	22	0	6	74	11	2	1	2	3	5	2	0	15	5	4	1	1	7	1	190
FJE73R4	0	3	3	1	0	2	6	0	3	6	8	2	0	0	5	1	4	1	2	2	2	3	0	0	5	59
FJE75M1	0	9	12	10	1	0	0	0	1	53	189	0	0	0	0	0	0	2	1	0	3	0	0	1	3	285
FJE76A1	1	10	173	3	4	1	89	0	2	1,270	243	4	0	11	1	2	0	0	3	5	6	0	0	3	9	1,840
FJE78M1	0	0	0	2	11	12	0	9	0	1	2	3	0	0	0	4	0	0	2	0	0	0	2	69	11	128
FJE82M1	0	0	1	0	11	8	0	8	4	1	12	144	3	0	2	14	3	1	2	0	1	0	9	5	5	234
FJE83B1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	5
FJE83M1	34	19	17	19	39	85	39	63	55	16	21	21	15	1	49	23	8	21	8	4	26	14	75	18	275	965
FJE83M2	30	20	18	20	38	36	40	19	59	17	20	19	15	1	50	16	8	23	6	4	26	12	57	14	267	835
FJE83T1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	4
FJE83T3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
FJE84T1	12	11	4	0	0	10	0	7	16	4	5	6	0	0	16	4	1	0	1	2	1	1	10	3	14	128
FJE84W1	15	11	5	0	1	10	1	9	19	5	6	7	0	1	19	4	1	0	2	2	1	3	17	3	15	157
FJE86M1	1	0	0	0	0	1	12	0	8	1	2	0	0	2	17	0	21	1	16	5	0	441	1	0	4	533
FJE87S2	1	2	3	0	0	0	5	1	0	2	0	0	0	3	8	0	6	0	1	1	0	0	5	0	2	40
FJE87S3	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	6
FJE87S4	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3
FJE89C1	3	0	5	0	0	6	4	6	4	5	4	1	0	45	13	1	13	0	90	55	1	12	7	0	3	278
FJE89R5	15	2	7	5	3	21	27	5	19	10	1	7	1	33	50	7	22	1	72	24	5	18	26	3	18	402
FJE91A1	2	0	1	0	0	2	8	0	0	3	1	0	0	914	65	0	23	1	1,467	796	0	9	4	0	51	3,347
FJE92C1	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	6	4	0	0	0	0	0	13
FJE92T3	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2	0	1	1	0	1	0	0	12	19
FJE92T5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	8	11
FJE92T6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	0	4	7
FJE92W2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	5	7
FJE92W4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	1	0	1	1	0	10	15
FJE93A1	0	0	12	0	0	4	534	0	10	65	19	2	0	49	3	1	1	6	70	34	0	10	1	0	9	830
FJE93H9	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	1	5

Prevention – Home Fire Safety

Between January 2005 and February 2019, a total of 128,078 HSVs have been undertaken across the ESFRS area. This figure includes re-visits to the same property over the years. This equates to 93,049 unique households which have had a Home Safety Visit (HSV), which is approximately 25.5% of all households within ESFRS. There were 79 HSVs that were undertaken in areas outside of ESFRS – mainly in Hassocks in Southwick.

Station Admin Area	No. of HSVs	Within Attendance Standard (Day)	%	Within Attendance Standard (Night)	%
Barcombe	1,518	1,021	67.3	1,030	67.9
Battle	2,033	1,898	93.4	1,971	97.0
Bexhill	8,891	8,871	99.8	8,891	100.0
Broad Oak	1,075	1,053	98.0	1,053	98.0
Burwash	1,000	790	79.0	981	98.1
Crowborough	3,716	3,443	92.7	3,572	96.1
Eastbourne	19,304	19,279	99.9	19,279	99.9
Forest Row	835	634	75.9	635	76.0
Hailsham	6,090	5,414	88.9	5,414	88.9
Hastings Bohemia Rd	10,510	10,492	99.8	10,508	100.0
Hastings The Ridge	5,788	5,686	98.2	5,686	98.2
Heathfield	1,924	1,770	92.0	1,770	92.0
Herstmonceux	490	468	95.5	468	95.5
Hove	13,599	13,599	100.0	13,599	100.0
Lewes	5,037	4,836	96.0	4,898	97.2
Mayfield	902	895	99.2	898	99.6
Newhaven	7,747	7,734	99.8	7,742	99.9
Pevensey	1,649	1,648	99.9	1,648	99.9
Preston Circus	13,773	13,772	100.0	13,772	100.0
Roedean	10,482	10,472	99.9	10,472	99.9
Rye	2,003	1,854	92.6	1,854	92.6
Seaford	4,801	4,770	99.4	4,770	99.4
Uckfield	3,768	3,258	86.5	3,372	89.5
Wadhurst	1,064	1,062	99.8	1,062	99.8
	127,999	124,719	97.4	125,345	97.9

Over the last five years (April 2013 – Mar 2018), an average of 10,114 HSVs were undertaken each year. 97.4% of HSVs have been undertaken in households that are within the attendance standards isochrones. This is in-line with the proportion of households that sit within the attendance standards (97.3%). It can be seen from the chart and map below that, for some station areas, such as Barcombe, the proportion of HSVs undertaken to households within the attendance standards was a lot lower than the average, indicating that significant parts of the area are not captured within the attendance standards isochrones, but shows that the households living in rural isolation outside of our attendance standards have been targeted due to the increased response times to those communities. Eastbourne station area has undertaken the most HSVs by a significant proportion – 15% of all HSVs undertaken.
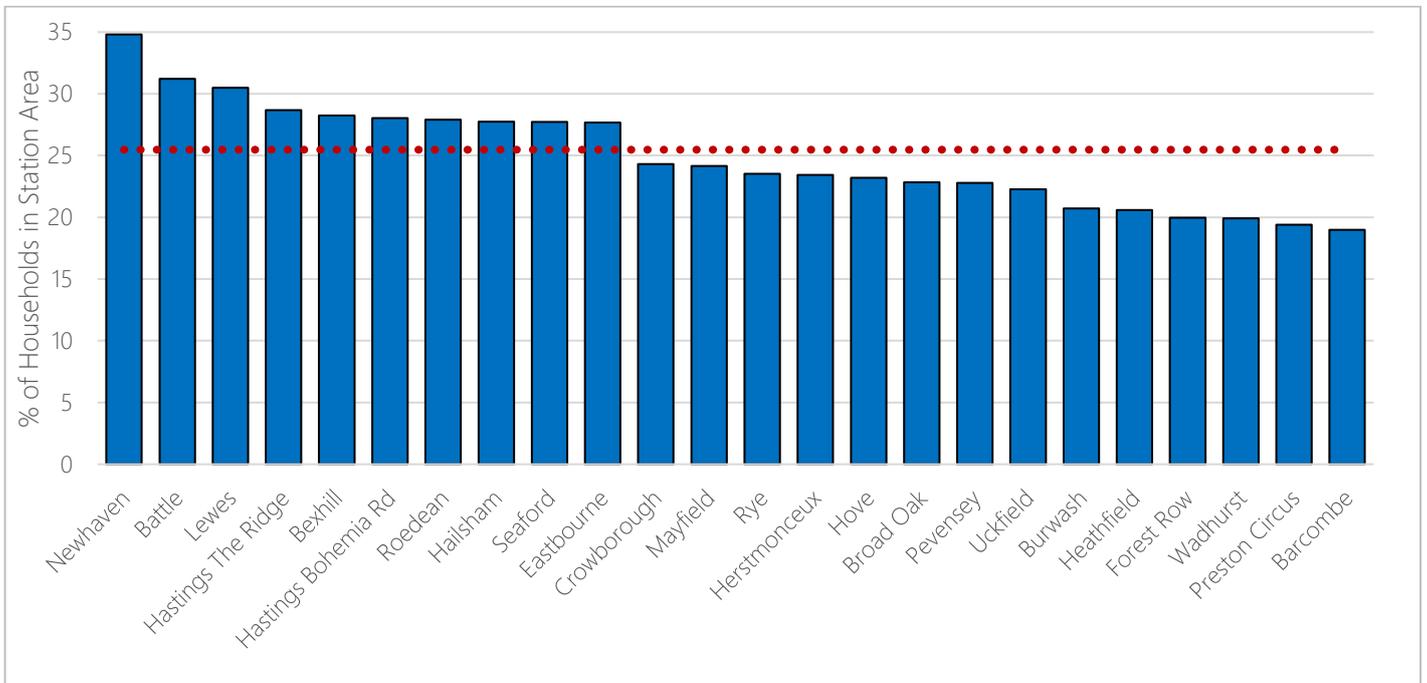
HSVs undertaken in Households outside of attendance standards isochrones (Jan 2005 – Feb 2019)
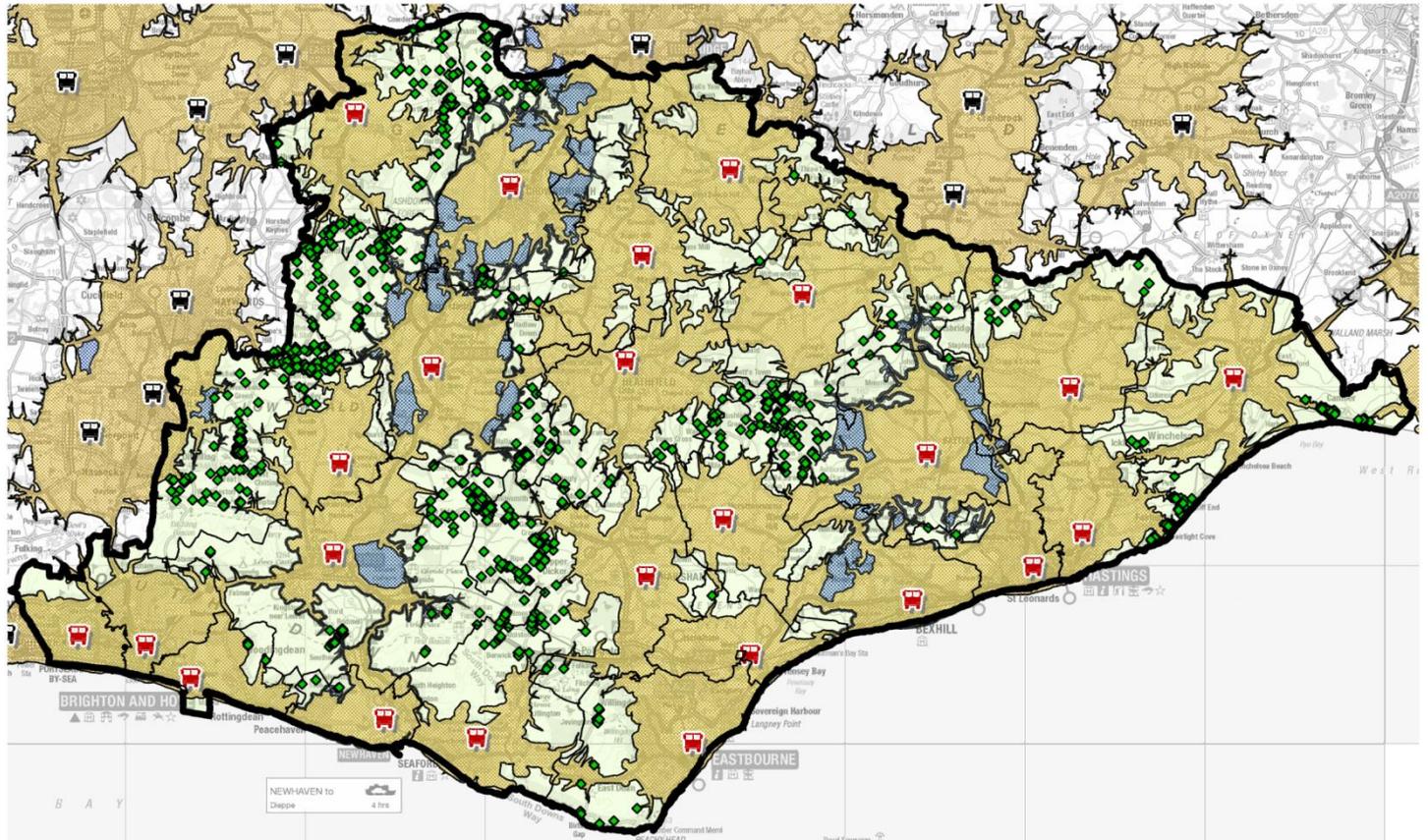
Protection - Business Safety

The map below shows all addressable objects designated as commercial (based on the primary classification of the property), as found in AddressBase Premium (ABP). AddressBase Premium is the most current, comprehensive and accurate geographic dataset available of addresses, properties and land areas where services are provided. Properties that have been demolished and those yet to be built have been excluded from this dataset.

Commercial Property Types (AddressBase Premium Epoch 62) outside attendance standard isochrones.
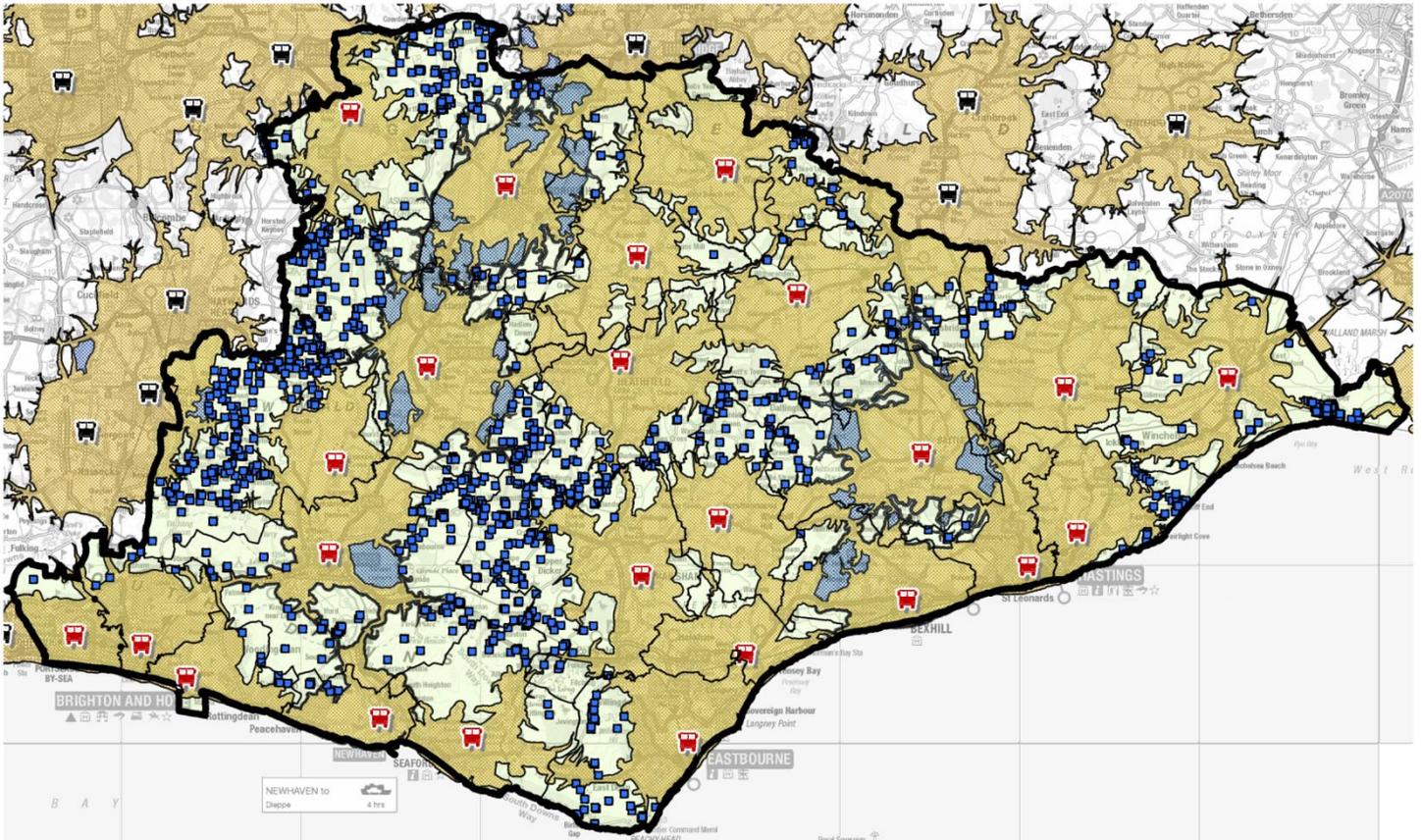
It can be seen from the tables below that, overall, 93.4% of commercial properties are within the attendance standards isochrones. This equates to 3,318 entities that sit outside of the isochrones.

Barcombe, Rye, Burwash and Uckfield station areas have the lowest proportions of their commercial properties within the attendance standards isochrones - having less than 80% within the standards, and this is reflected in the map above.

It can also be seen that 35% of commercial properties outside of the attendance standards are classified as 'Leisure - Applicable to recreational sites and enterprises'. On closer inspection, the vast majority turned out to be 'Holiday / campsites' and the majority of these were all based in Camber. Another 20% of commercial properties were classed as 'Industrial Applicable to manufacturing, engineering, maintenance, storage / wholesale distribution and extraction sites' – these were primarily workshops/light industrial or warehouse/storage depots.

No. of Commercial Properties by Station Admin Area

Station Admin Area	Total No. of Properties	Within Attendance Standard (Day)	%	Within Attendance Standard (Night)	%
Barcombe	1,056	648	61.4	681	64.5
Battle	908	842	92.8	875	96.4
Bexhill	2,763	2,749	99.5	2,761	99.9
Broad Oak	538	455	84.6	455	84.6
Burwash	532	404	75.9	486	91.2
Crowborough	1,446	1,294	89.5	1,352	93.5
Eastbourne	4,829	4,772	98.8	4,772	98.8
Forest Row	660	528	80.0	531	80.4
Hailsham	2,136	1,881	88.1	1,881	88.1
Hastings Bohemia Rd	4,705	4,695	99.8	4,700	99.9
Hastings The Ridge	2,142	2,070	96.6	2,070	96.6
Heathfield	1,167	1,016	87.1	1,016	87.1
Herstmonceux	293	275	93.6	275	93.6
Hove	5,051	5,049	100.0	5,049	100.0
Lewes	2,155	1,898	88.1	1,947	90.3
Mayfield	333	317	95.2	318	95.5
Newhaven	1,460	1,447	99.1	1,450	99.3
Pevensey	804	804	100.0	804	100.0
Preston Circus	7,906	7,902	99.9	7,902	99.9
Roedean	2,492	2,484	99.7	2,484	99.7
Rye	3,712	2,780	74.9	2,780	74.9
Seaford	1,009	971	96.2	971	96.2
Uckfield	1,768	1,318	74.5	1,431	80.9
Wadhurst	667	617	92.4	617	92.4
ESFRS	50,533	47,215	93.4	47,607	94.2

ABP Epoch 62 where BLPU_State is 'In use', 'Unoccupied' or 'Not Applicable' and Logical Status is 'Approved', Primary_Classification is 'Commercial' and Distinct UPRN is 'Y'.

Commercial Property Type	% of Properties
Agricultural	4.52%
Ancillary Building	0.56%
Animal Centre	1.98%
Community Services	1.50%
Education	1.01%
Emergency / Rescue Service	0.17%
Hotel / Motel / Boarding / Guest House	4.66%
Industrial Applicable to manufacturing, engineering, maintenance, storage / wholesale distribution and extraction sites	19.76%
Information	0.03%
Leisure - Applicable to recreational sites and enterprises	35.44%
Medical	0.28%
Office	5.53%
Retail	3.34%
Storage Land	1.43%
Transport	1.84%
Utility	10.71%
Unknown	7.23%

Property Types with higher societal life risk (FSEC A through G).

Hospital	Care Home	Hostel	Hotel
44	521	15	216

Based on ABP Epoch 62 Classification.
HMOs, Purpose-Built Flats and Houses Converted to flats are not shown here as not all are classified in this way in ABP

The following table illustrates the total number of Business Safety Audits that have been undertaken across the ESFRS area. An average of 542 Business Safety Audits are completed per year with 21% being undertaken in care homes.

Business Safety Audits by Property Type (% within area)

All audits in CRM up to 04/2019 (Excludes 'In Progress')

Property Type	ESFRS
A - Hospitals & Prisons	180 (2.4%)
B - Care Home	1,595 (21.4%)
D - Purpose Built Flats > 3 Stories	398 (5.4%)
E - Hostel	139 (1.9%)
F - Hotel	1,379 (18.5%)
G - House Converted to Flats	240 (3.2%)
H - Other Sleeping Accom.	1,009 (13.6%)
J - Further Education	31 (0.4%)
K - Public Building	25 (0.3%)
L - Licensed Premises	890 (12%)
M - School	148 (2%)
N - Shop	562 (7.6%)
P - Other Public Premises	231 (3.1%)
R - Factory/Warehouse	147 (2%)
S - Office	216 (2.9%)
T - Other Workplace	87 (1.2%)
W - Land & Sea	16 (0.2%)
Z - Single Private Dwelling	143 (1.9%)
Total	7,436

Business Safety Audits by Year

Station Area	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Ave. per Yr	%
ESFRS	743	528	369	390	682	2,712	542	100.0

Developments

Residential

Details of residential development site allocations have been provided from the local planning offices as shown in the tables below. The proposed housing development totals are a subset to the total number of dwellings portrayed in the adopted local plans as these represent the current totals of 'allocated' or 'approved' dwellings, and more will be allocated/approved in the future, still within each local plan's lifespan.

Adopted Local Plans	Number of dwellings over plan period
Brighton & Hove City Plan, March 2016	13,200 (2010-2030) 660 p.a.
Eastbourne: Core Strategy Local Plan, adopted Feb 2013	5,022 (2006-2027) 239 p.a.
Hastings: Hastings Planning Strategy, adopted Feb 2014	3,400 (2011-2028) 200 p.a.
Lewes: Joint Core Strategy, adopted Jun 2016	6,900 (2010-2030) 345 p.a.
Rother: Core Strategy, adopted Sep 2014	5,700 (2011-2028) 335 p.a.
Wealden Local Plan, published for representations with subsequent submission Aug 2018	14,228 (2013-2028) 950 p.a.
Long term proposed additional growth	

Proposed housing developments

Local Authority	# of sites	# of dwls	% of ESFRS
Brighton & Hove	8	6,687	26.6
Eastbourne	298	3,413	13.6
Hastings	30	2,430	9.7
Lewes	69	3,691	14.7
Rother	71	4,002	15.9
Wealden	32	4,943	19.6
ESFRS	508	25,166	100.0

Details of each residential development site have been provided by the local planning office as well as the number of households that are to be constructed on that site. These are illustrated in the individual station profiles, along with a description as to their location in terms of being inside or outside of the attendance standards isochrones. All residential developments sit within the attendance standards isochrones, although some may have extended travel times compared to others. Further predictive work will be undertaken in stage II that will seek to quantify the additional risk that this may pose to ESFRS in the future, by calculating the number of additional dwelling fire and RTC fatalities per year as a result of the proposed development sites, in line with the methodology described within the ORR Risk Assessment Methodology document. That being said, the initial perception is, although there are significant developments in Wealden (the South Wealden Growth Area) and in Rother (near to the Bexhill-Hastings Link Road and North Bexhill Access Road), there isn't a significant increase in risk as a result of these developments.

Commercial

Similarly, details of commercial developments have been supplied from the local planning office and these are shown below. Full details of location of sites can be found within the individual station profiles. The majority of these areas fall within the attendance standards, although some could potentially have extended travel times, particularly if a 2nd pumping appliance is required.

It can be seen there is a significant geographical area designated as commercial development within the City of Brighton and Hove, and these areas have a range of types of development, from retail to industrial, employment to hospital floorspace etc.

The A22 employment corridor within Wealden is situated on the edge of Hailsham and, although within the attendance standards, there would be increased travel times, particularly for the 2nd pump attendance. In Rother there are a number of commercial developments in and around the Bexhill area, particularly around the Bexhill-Hastings Link Road and North Bexhill Access Road located in the north of the town. There is also some development in Rye Harbour which has extended travel times to the area. In Lewes District there is significant industrial development in the Newhaven area near the Port Access Road and where the new cement works is to be built.

Whilst predictive analytical calculations cannot be made as to the impact on community risk, the development areas have been considered as to their magnitude, the commercial type and the location as to whether they are inside or outside the attendance standards isochrones, in conjunction with all of the other layers of risk discussed as part of the Operational Response Review.

Local Authority	# of sites	Floorspace (sqm)	% of ESFRS
Brighton & Hove	8	243,930	40.4
Eastbourne	0	0	0.0
Hastings	11	66,900	11.1
Lewes	6	164,543	27.2
Rother	19	106,162	17.6
Wealden	1	22,500	3.7
ESFRS	45	604,035	100.0

Road Risk

All UK roads (excluding motorways) fall into the following four categories:

- **A roads** – major roads intended to provide large-scale transport links within or between areas.
- **B roads** – roads intended to connect different areas, and to feed traffic between A roads and smaller roads on the network.
- **Classified unnumbered** – smaller roads intended to connect together unclassified roads with A and B roads, and often linking a housing estate or a village to the rest of the network. Similar to 'minor roads' on an Ordnance Survey map and sometimes known unofficially as C roads.
- **Unclassified** – local roads intended for local traffic. The vast majority (60%) of roads in the UK fall within this category.

The following table shows the total length of Road across the ESFRS area, broken down by Road type. There are no motorways and fewer than 50 miles of dual carriageway in the service area. Consequently, the road infrastructure is poor. The three geographically separate coastal urban areas of East Sussex have poor road connectivity, yet contain 70% of the total population of the authority's area. This increases road traffic collision risks, our service response times, and limits the local economy. Due to tourism related traffic, this issue is further exacerbated in the summer months, particularly during school and bank holidays. Many of the 'A' roads across three local authority areas that cover the more rural areas of East Sussex (Lewes, Rother & Wealden), are quite narrow and windy and atypical of an 'A' Road in other parts of the UK.

Road Type	ESFRS
A Road	521km (10%)
B Road	302km (6%)
Classified Unnumbered	759km (14%)
Total Classified Roads	3,779km (30%)
Not Classified/Unclassified	1,582km (70%)
Total All Road Types	5,361km (100%)

The main urban centres and population hubs of the area are linked from east to west by the A259/A27, Brighton & Hove, Lewes, Eastbourne, Bexhill and Hastings all rely upon this important trunk road. There are two main routes to London from the area, the A23/M23 corridor from Brighton and the A21 corridor from Hastings. There are inconsistencies in the standard of our strategic road network and additional housing growth will increase stress on key points on the A27, A22 and A271. The A27 is one of the busiest trunk roads in the whole of the UK.

ESFRS only attends around 25% of all road traffic collisions on ESFRS roads. Therefore, data from the Sussex Safer Road Partnership (SSRP) was sourced to understand the fuller picture of road (RTC) risk. The following map and table shows RTCs across the ESFRS area over a five year period (January 2013 – December 2017), broken down by severity.

KSI Collisions over five year period (January 2013 – December 2017)
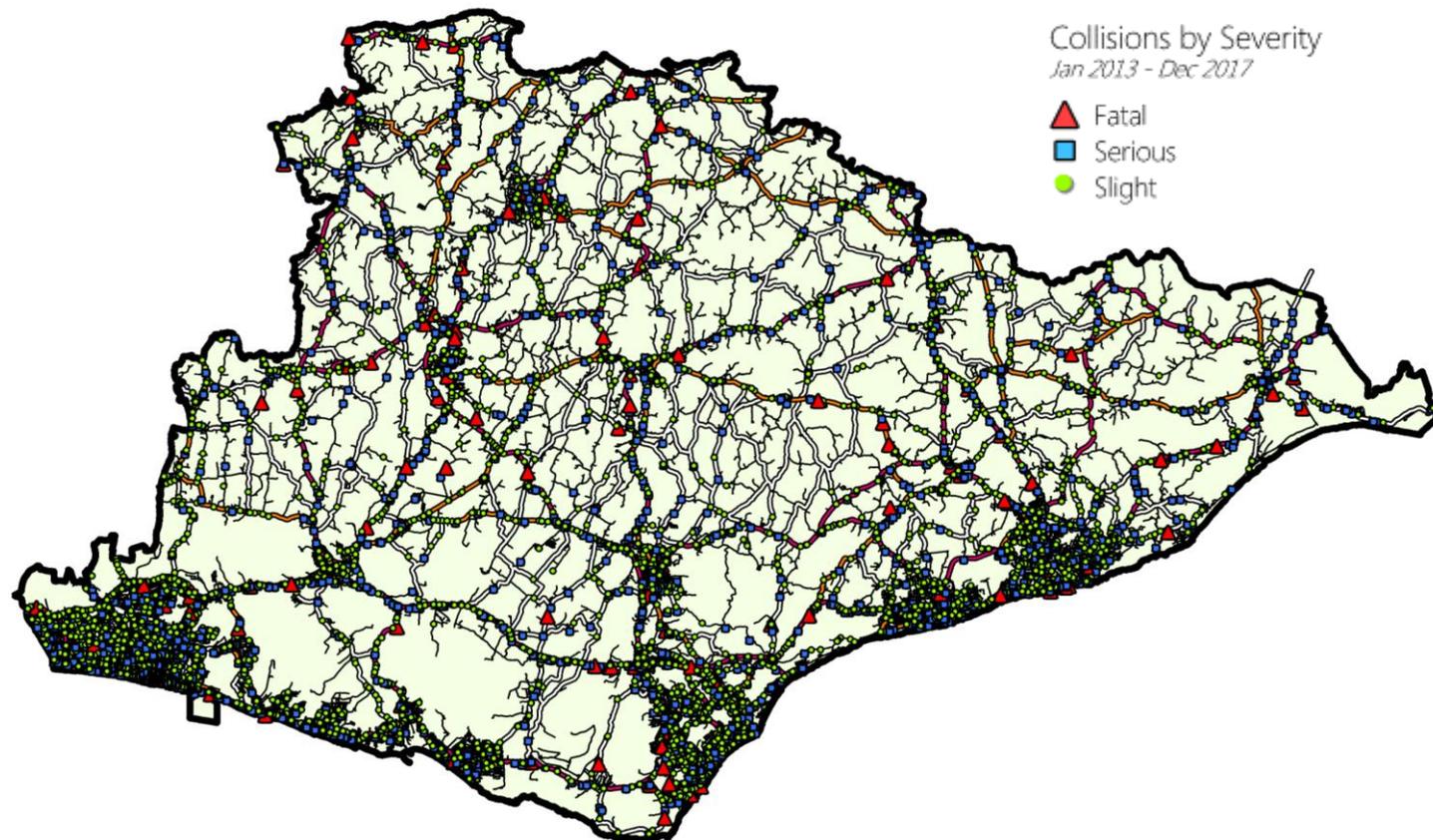
Station Area	# of KSI Collisions	Average per Yr	Tot. Fatal	Tot. Serious	Tot. Slight	% Outside Att. Std. Iso.
Barcombe	248	50	3	55	190	29.8
Battle	230	46	8	50	172	0.0
Bexhill	527	105	2	105	420	0.0
Broad Oak	117	23	2	33	82	2.6
Burwash	159	32	3	47	109	2.5
Crowborough	306	61	6	75	225	5.9
Eastbourne	1,214	243	11	215	988	0.7
Forest Row	163	33	7	55	101	22.7
Hailsham	558	112	7	117	434	4.8
Hastings Bohemia Rd	879	176	9	172	698	0.1
Hastings The Ridge	334	67	2	71	261	2.1
Heathfield	207	41	5	48	154	8.2
Herstmonceux	49	10	0	13	36	2.0
Hove	1,104	221	2	211	891	0.0
Lewes	468	94	5	112	351	6.0
Mayfield	117	23	3	28	86	1.7
Newhaven	294	59	1	59	234	0.0
Pevensey	158	32	2	33	123	0.0
Preston Circus	1,999	400	7	392	1,600	0.0
Roedean	679	136	5	120	554	0.0
Rye	184	37	6	58	120	4.3
Seaford	246	49	4	62	180	21.1
Uckfield	320	64	11	72	237	9.4
Wadhurst	94	19	1	32	61	1.1
ESFRS	10,654	2,131	112	2,235	8,307	3.0

It can be seen from the table above that over the past five years there have been, on average, 2,131 road traffic collisions across the ESFRS area involving injuries, ranging from slight, through to fatal injuries. 78% of KSI collisions have a severity of 'slight' and a further 21% are classed as 'serious'. 1.1% are fatal – which equates to 112 fatal collisions over the past 5 years. 38% of all fatal collisions occur in Wealden, which have on average 8 fatal collisions per year.

In Lewes and Wealden, a large proportion of KSI collisions were outside of the ESFRS attendance standards isochrones – the top 3 station areas responsible being Barcombe, Forest Row and Seaford.

That being said, 97% of all KSI collisions over the 5 year period were within the attendance standards isochrones.

| Stations within LA	# of KSI Collisions	Average per Yr	Tot. Fatal	Tot. Serious	Tot. Slight	% Outside Att. Std. Iso.
Brighton & Hove	3,782	756	14	723	3,045	0.0
Eastbourne	1,214	243	11	215	988	0.7
Hastings	1,213	243	11	243	959	2.2
Lewes	1,256	251	13	288	955	57.0
Rother	1,217	243	21	293	903	9.4
Wealden	1,972	394	42	473	1,457	55.8
ESFRS	10,654	2,131	112	2,235	8,307	3.0

Congestion

Traffic flow in and through the ESFRS area is only set to continue with an increase in population, more cars on the road and more visitors coming into the ESFRS area. Congestion is a particular problem in the City of Brighton and Hove. The TomTom Traffic Index provides statistics and information about congestion levels in the City.

The TomTom Traffic Index figures are based on speed measurements from TomTom's historical traffic database. These speed measurements are used to calculate travel times on individual road segments and entire networks. By weighting the number of measurements, busier and more important roads in the network have more influence on the city's congestion level than quieter, less important roads. This ensures the statistics match the user experience of driving in the City.

The congestion level percentages represent the measured amount of extra travel time experienced by drivers across the entire year. TomTom calculate this by establishing a baseline of travel times during uncongested, free flow conditions across each road segment in the city. Travel times are they analysed across the entire year (24/7) – and compared with information against free flow periods to derive extra travel time. An overall congestion level of 36% means that the extra travel time is 36% more than an average trip would take during uncongested conditions. Average times are of actual taken trips, across every vehicle in the entire network, 24/7. Travel times in free-flow (uncongested) conditions are not based on speed limits but on actual trips made. These calculations are also performed for individual hours of each day of the week, so it's possible to see how high congestion levels are across the City during the busiest times of the day, including morning and evening peak hours. The TomTom Traffic index statistics are calculated from anonymized GPS data collected via navigation devices, in-dash systems and smartphones.

According to the TomTom Traffic Index, Brighton & Hove rank 6th most congested city in the UK (62 out of 403 worldwide), based on 2018 data. As the 6th most congested city, Brighton & Hove has an average journey time 34% slower than if traffic was flowing freely. This increases to over 60% during peak times during the rush-hour and add an additional 18 minute per 30 minute trip in the morning and evening.

WORKDAYS PEAK CONGESTION

Congestion statistics during morning and evening peaks

■ MORNING PEAK

■ EVENING PEAK

59%

59%

Mon
Tue
Wed
Thu
Fri

120% 100% 80% 60% 40% 20% 0%   0% 20% 40% 60% 80% 100% 120%
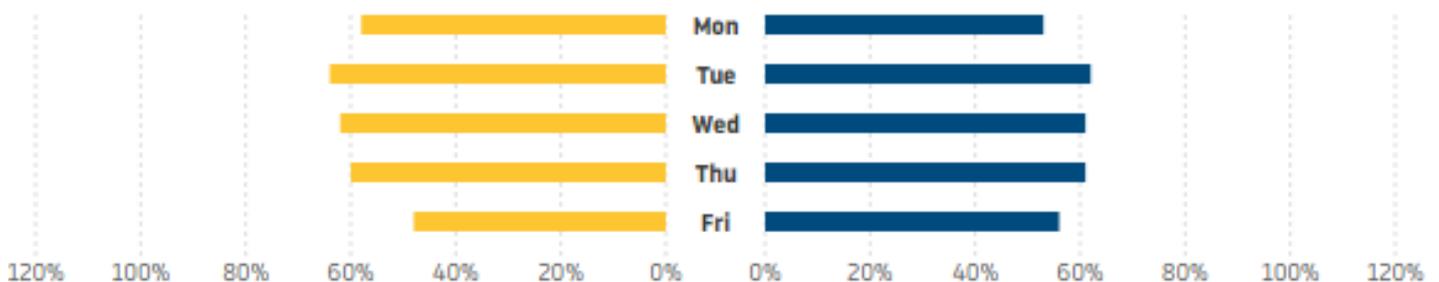
EXTRA TRAVEL TIME IN PEAK HOURS

Additional time spent in the car during peak hours

+18 min

per **30 min** trip
in the morning

+18 min

per **30 min** trip
in the evening

62

WORLD RANK 2018

CONGESTION LEVEL 2018

24 / 7 congestion level

34%

DATA COVERAGE

50 011 492 km

Highways
21 554 797 km

Non-highways
28 456 695 km
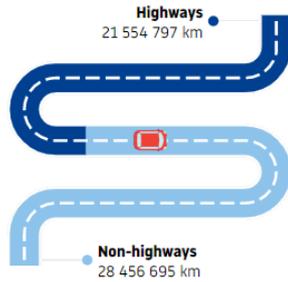
BEST DAY

April

1

Sunday

| **15%** | The lowest average daily congestion |

WORST DAY

November

9

Friday

| **52%** | The highest average daily congestion |

CONGESTION LEVEL BY TIME OF DAY

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
12:00 AM	8%	2%	1%	2%	3%	3%	7%
	4%	1%	0%	0%	0%	0%	4%
02:00 AM	3%	1%	0%	1%	0%	0%	2%
	1%	0%	0%	0%	0%	0%	1%
04:00 AM	0%	0%	0%	0%	0%	0%	0%
	0%	0%	0%	0%	0%	0%	0%
06:00 AM	0%	5%	5%	5%	5%	4%	0%
	2%	33%	37%	35%	34%	27%	4%
08:00 AM	6%	58%	64%	62%	60%	48%	12%
	13%	36%	39%	39%	38%	37%	21%
10:00 AM	24%	31%	31%	32%	32%	35%	32%
	36%	34%	34%	35%	35%	39%	42%
12:00 PM	45%	37%	36%	38%	38%	44%	49%
	40%	36%	34%	36%	37%	43%	51%
02:00 PM	34%	36%	34%	36%	37%	43%	46%
	31%	40%	42%	43%	43%	51%	37%
04:00 PM	31%	45%	50%	51%	51%	56%	35%
	27%	53%	62%	61%	61%	56%	36%
06:00 PM	20%	34%	42%	42%	42%	40%	31%
	16%	20%	22%	23%	24%	28%	25%
08:00 PM	13%	15%	15%	15%	17%	19%	19%
	11%	12%	12%	12%	13%	16%	16%
10:00 PM	9%	9%	11%	11%	11%	16%	17%
	6%	6%	7%	7%	8%	12%	13%

Water Risk

According to the World Health Organisation "Drowning is a serious and global public health issue, claiming a shocking 372,000 lives a year". Drowning is a leading cause of accidental death in the UK and ESFRS are committed to working with our partner agencies to ensure everyone is equipped with the necessary information they need to protect themselves and their loved ones. A drowning incident happens quickly and without warning. It has a devastating impact on families and many people will survive a drowning incident but are left with life changing injuries. According to the most recent figures from the national Water Safety Forum Water Incident Database (WAID), 263 people lost their lives in accidental drownings in the UK in 2018.

East Sussex and the City of Brighton & Hove have one of the highest number of accidental drownings in the UK, hence the commitment in the current Integrated Risk Management Plan (2017-2020) as a key community risk. With above average levels of sunshine in the region, East Sussex's 55 mile coastline is very popular for both tourists and residents. Due to its seaside proximity to London, Brighton & Hove alone attracts more than 11 million visitors each year. Other notable coastal attractions include; Seaford, Cuckmere Haven, Birling Gap, Beachy Head, Eastbourne, Pevensey Bay, Bexhill, Hastings, Pett Level, Winchelsea and Camber Sands. A key feature of traditional seaside resorts are piers, there are 3 in ESFRS service area; Brighton Palace Pier, Eastbourne Pier and Hastings Pier. Along with the coastal risk, East Sussex also comprises many rivers, lakes, marshes and reservoirs.

Marsh/Moorland

Pevensey Levels (marshes) is a low lying area of wet grassland, 3,500 hectares are designated as a Site of Special Scientific Interest (SSSI). The area is managed by The Sussex Wildlife Trust.

Reservoirs

Arlington	246 acre site, located in Wealden, SSSI site, South East Water
Darwell	156 acre site, located in Rother, Southern Water
Powdermill	Located in Rother, Southern Water
Weir Wood	280 acre site, located in Wealden (bordering with West Sussex), Southern Water
Bewl Water	800 acre site, located on border of Rother, Wealden and Kent, Southern Water

Rivers

Ouse	140 miles (including main river + tributaries), located in Lewes, mouth is in Newhaven
Cuckmere	Located on border of Lewes/Wealden
Rother	Located in Rother, mouth is in Rye
Uck	Located in Wealden, feeds into Ouse

The following map shows the Detailed River Network (DRN), which is a large-scale, accurate and fully attributed digital river centreline covering England and Wales. The DRN is captured from the water features theme of the OS MasterMap topographic layer and built into a network using automated rules. Other input datasets and extensive local Environment Agency (EA) staff knowledge has been used to augment the core geometry to incorporate critical spatial detail and attribution, such as flow direction and path, not available from the OS mapping and to verify the accuracy of the centreline itself. Primary Rivers are usually larger rivers and streams; the secondary and tertiary rivers are 'ordinary watercourses'. The EA carries out maintenance, improvement or construction work on Main Rivers to manage flood risk. Lead local flood authorities, district councils and internal drainage boards carry out flood risk management work on ordinary watercourses.

Detailed River Network by River Type
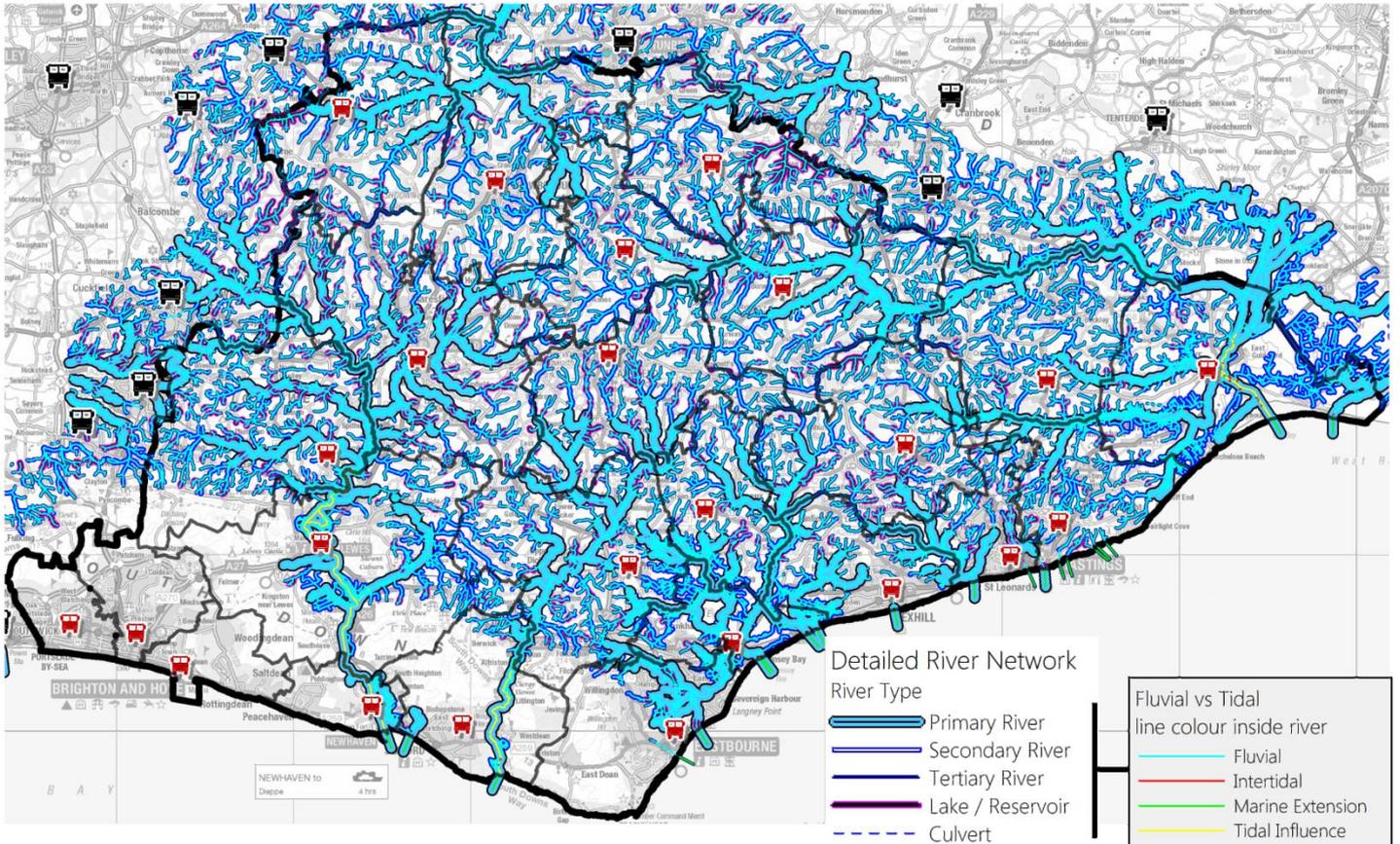
River Type	Fluvial vs Tidal	ESFRS River Length	%
Primary River	Fluvial	613.07	15.6
Primary River	Intertidal	2.02	0.1
Primary River	Marine Extension	6.25	0.2
Primary River	Tidal Influence	41.19	1.0
	Total Primary	662.53	16.9
Secondary River	Fluvial	1,129.06	28.8
Secondary River	Intertidal	0.58	0.0
Secondary River	Tidal Influence	0.97	0.0
	Total Secondary	1,130.62	28.8
Tertiary River	Fluvial	1,899.39	48.4
Tertiary River	Intertidal	2.37	0.1
Tertiary River	Marine Extension	6.22	0.2
Tertiary River	Tidal Influence	0.24	0.0
	Total Tertiary	1,908.22	48.6
Lake / Reservoir	Fluvial	111.25	2.8
Culvert	Fluvial	111.24	2.8
	Total Fluvial	3,864.01	98.5
	Total Intertidal	4.97	0.1
	Total Marine Extension	12.47	0.3
	Total Tidal Influence	42.40	1.1
	Grand Total	3,923.85	100

The table to the left shows the total length of rivers by type and whether the river is fluvial or tidal.

It can be seen that there are almost 4,000km of rivers throughout the ESFRS area, about 17% of which are primary rivers, 29% are secondary rivers and 49% are tertiary rivers.

There are a total of 60km of rivers that are classed as tidal, intertidal or marine extension, making up 1.5% of all rivers across the area.

The table below shows the total length of rivers broken down by the different river types across the station area. It can be seen that Barcombe station area has the most rivers overall in terms of total length and highest proportion of primary rivers and tertiary rivers. Rye has the highest proportion of secondary rivers in its area along with the most intertidal rivers. Wadhurst has the greatest proportion of lakes/reservoirs (river length, not area/volume). Lewes has the most tidal rivers.

Total River length by station area

Station area	Primary River	Secondary River	Tertiary River	Lake / Reservoir	Culvert	Total
Barcombe	70.4	38.1	177.8	6.6	13.2	306.0
Battle	24.6	48.7	156.0	10.2	7.5	247.1
Bexhill	25.0	45.5	45.0	0.4	4.6	120.5
Broad Oak	41.0	65.9	152.0	3.3	6.8	269.0
Burwash	42.6	65.2	166.5	4.9	6.8	286.0
Crowborough	34.7	54.5	145.1	5.4	6.5	246.2
Eastbourne	31.4	31.5	6.6	2.4	3.5	75.4
Forest Row	21.5	36.4	131.6	12.9	4.5	207.0
Hailsham	57.9	87.7	134.4	3.9	10.9	294.8
Hastings Bohemia Rd	15.6	19.2	34.8	2.0	7.8	79.4
Hastings The Ridge	11.8	47.0	88.0	2.3	5.1	154.2
Heathfield	24.0	44.5	127.8	6.9	4.6	207.7
Herstmonceux	30.7	64.3	65.6	2.4	1.9	164.9
Lewes	37.8	100.5	65.5	2.3	5.4	211.4
Mayfield	16.3	43.1	100.1	5.6	3.6	168.7
Newhaven	8.0	8.8	0.2	0.0	1.1	18.0
Pevensey	22.8	74.8	7.5	0.5	1.3	107.0
Rye	64.0	164.0	52.3	1.8	3.9	286.0
Seaford	14.1	19.9	15.1	0.2	0.8	50.1
Uckfield	55.5	39.0	128.6	15.6	8.5	247.2
Wadhurst	12.9	32.0	107.7	21.6	3.0	177.3
ESFRS	662.5	1,130.6	1,908.2	111.2	111.2	3,923.9

Beaches

A significant proportion of the ESFRS coastline is given to beach. Camber Sands is a large sand beach located in the very east of the county, on the border with Kent. The beach comprises large flat sands, and a sand dune system. Its composition is unique in the area, and is extremely popular during the summer season. In summer 2016 seven men drowned whilst visiting camber sands, in two separate incidents. Fast moving tides and sand bars make this beach particularly dangerous. Since the incidents life guards have been reinstated at the beach.

Ports, Harbours & Marinas

Brighton Marina is the largest marina in the UK with over 1,200 berths, it is an artificial structure situated in the east of the city. Aside to the working harbour the marina also has a large number of residential dwellings, businesses and leisure facilities.

Rye Harbour is located in the East of the county, close to the Kent border. The harbour is located on the river Rother and is designated as a nature reserve.

Newhaven Harbour is located at the mouth of the River Ouse and provides important connections across the channel for commercial and private vehicles. There is a ferry service that travels to Dieppe in France and the harbour also provides docks for other vessels. There is also a swing bridge situated in the harbour which provides logistical challenges when it is open, as it cuts off the only river crossing in the town, cutting off Newhaven Fire Station from half the town. There are also plans to regenerate the area around Newhaven Harbour, with a new access road planned in addition to new industrial developments . There are around 30 registered fishing vessels that operate at the harbour .

Sovereign Harbour is located in the east of Eastbourne, the whole complex is the largest in northern Europe. The working harbour consists of a large number of berths spread over four connected harbours. The development also hosts a large number of residential dwellings, business and leisure facilities.

Shoreham Port

Despite being located in West Sussex, due to its size and nature and proximity to the border it is worth mentioning here. Shoreham Port is a large facility which handles large shipping vessels and processes cargo. It also has a number of berths and is home to a large number of hard industry, including concrete works and a power station.

Water-related rescues

The table below shows the total number of incidents ESFRS responded to classified as rescue or evacuation from water over the 9 year review period. However, this does not represent the totality of water-related rescues as these types of incidents are often classified in different ways. Other potential classifications include 'Assist other agency' – this one is a common one; for example, from the 7 deaths at Camber Sands in 2016, ESFRS attended just one incident and this was classified as 'Assist other agency' because ESFRS's role was to provide lighting at the scene. Other potential classifications of water-related rescues are 'Flooding', as well as 'stuck in mud'. However, from the figures below it can still be seen that the majority of these incidents are where there are bodies of water – which is in line with the fact that rivers and beaches continue to be the most common locations for fatal drowning incidents.

Rescues/evacuation from water incidents (April 2009 – March 2018)

Incident Type	Barcombe	Battle	Bexhill	Broad Oak	Burwash	Crowborough	Eastbourne	Forest Row	Hailsham	Hastings Bohemia Rd	Hastings The Ridge	Heathfield	Herstmonceux	Hove	Lewes	Mayfield	Newhaven	Pevensey	Preston Circus	Roedean	Rye	Seaford	Uckfield	Wadhurst	Total
Special Service - Rescue or evacuation from water	4	0	7	4	0	2	9	0	4	2	4	0	1	0	9	0	0	5	1	0	3	7	6	0	68

Water-related deaths

The most recent figures from the National Water Safety Forum Water Incident Database (WAID) show that in 2018, 263 people lost their lives in accidental drownings in the UK. Deaths from accidental drowning have fallen in the three years since the National Drowning Prevention Strategy was launched. However the figure shows a rise in the number of suicides in water.

In 2018, as in previous years, men are disproportionately represented in the statistics, with 230 males dying in fatal drowning incidents in the UK. River and beaches continue to be the most common locations for fatal drowning incidents. Last year, 74 people drowned in rivers and 73 on or near beaches.

Over the last 4 years, there has been a total of 221 deaths in water within the ESFRS area, an average of 55 per year. However, the trend is an upward one, with 65 deaths in 2018.

Of these deaths, 78% were either suspected or confirmed to be as a result of suicide, the majority of these being at (or around) Beachy Head – a notorious suicide location, not just within the UK but, according to the Wall Street Journal, it is the third most common suicide spot in the world. The Beachy Head Chaplaincy Team

conducts regular day and evening patrols of the area and they have responded to over 9,000 incidents since 2004.

It can be seen from the table below that the numbers of suspected/confirmed suicides has been increasing over the 4 years and, the proportion of all deaths in and around water according to WAID figures is also increasing so that, in 2018, 91% were suicide – with the vast majority of these (92%) located around the peninsular between Birling Gap and Eastbourne Beach.

WAID water-related deaths for ESFRS area

Year	# of deaths in water	Suicide	% suicides
2015	43	33	76.7
2016	55	39	70.9
2017	58	41	70.7
2018	65	59	90.8
Total	221	172	77.8

where suicide is suspected, probable or confirmed

49 water-related deaths were not as a result of suicide – the majority of these being suspected or confirmed as accidental. 80% of these were coastal locations and almost a third were around Beachy Head and the surrounding peninsular. Over the 4 year period (2015 to 2018), there were a total of 4 deaths in rivers/lakes/ponds – an average of 1 per year.

Heritage Risk

There are a wide variety of heritage and cultural risks across the county of East Sussex and the City of Brighton & Hove, including a significant number of graded/listed buildings, thatched properties, sporting venues such as the Amex stadium and the South Downs National Park. These site-specific risks are considered carefully and policies, procedures and processes relating to these risks are defined, refined and aligned through Operational Risk Information process.

The ESFRS area is one of the most wooded in England and 63% is designated as an Area of Outstanding Natural Beauty (AONB), with over 50 miles of coastline, some of which is designated 'heritage coast'.

Listed Buildings
Within the UK there are three categories of listed buildings;
- Grade I buildings are of exceptional interest, nationally only 2.5% of listed buildings are listed as Grade I
- Grade II* buildings are particularly important buildings of more than special interest; nationally 5.5% of listed buildings are Grade II*
- Grade II buildings are of special interest; 92% of all listed buildings in the UK are in this class and is the most likely grade of listing for a home owner.

It can be seen from the table below that there are a total of 7,574 listed buildings across the ESFRS area, of which 150 (2%) are categorised as Grade I. 79% of these are inside the attendance standards isochrones, meaning there are, in total, 32 Grade I properties that sit outside of the (daytime) attendance standards – reducing to 27 properties during the 'night time'.

Listed building by Grade (Historic England)

Grade	# in Area	Within Attendance Standard (Day)	%	Within Attendance Standard (Night)	%
I	150	118	78.7	123	82.0
II*	351	292	83.2	301	85.8
II	7073	6157	87.0	6331	89.5
Total	7,574	6,567	86.7	6,755	89.2

The following map shows the location of different types of heritage risk dispersed across the service area area that fall outside of the attendance standards isochrones. There are 819 listed buildings that sit outside of the attendance standards isochrones. The table below the map shows the number of Grade I and II* buildings across each station area, broken down by proportion which sit inside and outside the isochrones. Lewes, Rye and Hailsham have the greatest numbers of Grade I buildings in their station areas, equating to a third of all grade I buildings across the service area.

In addition to listed buildings, there are a number of parks and gardens, protected wrecks, scheduled monuments and battlefields dispersed across the station area and a number of these sit outside of the attendance standards isochrones. A full breakdown can be found in the individual station profiles.

Heritage Risk Map

Legend:
- ▼ Grade I Listed Building
- ▼ Grade II* Listed Building
- ▼ Grade II Listed Building
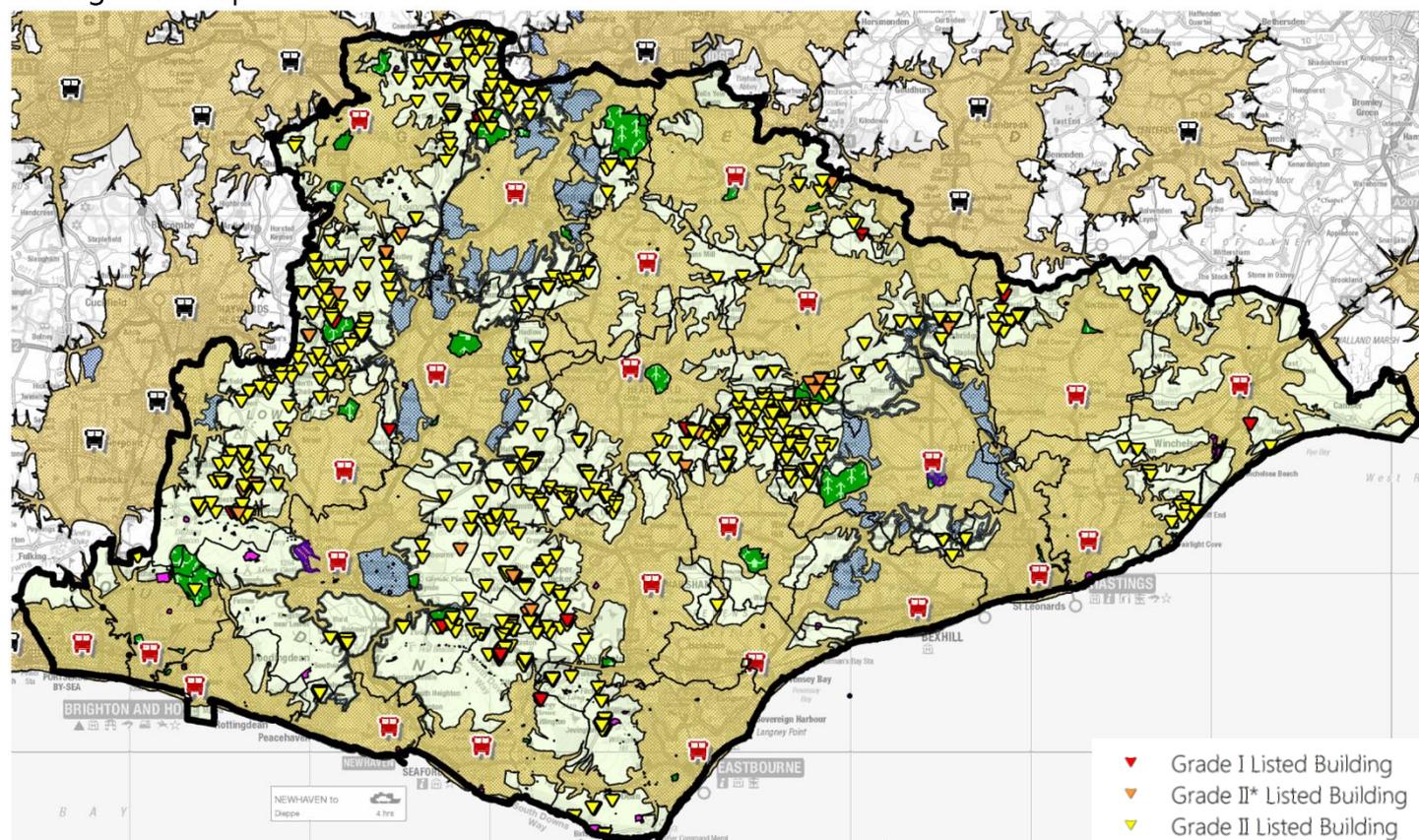
No. of Listed Buildings by Grade

| Station Admin Area	Grade I	Within Att. Std. Day)	%	Within Att. Std. (Night)	%	Grade II*	Within Att. Std. Day)	%	Within Att. Std. (Night)	%
Barcombe	5	4	80.0	4	80.0	19	11	57.9	11	57.9
Battle	9	7	77.8	9	100.0	16	14	87.5	15	93.8
Bexhill	3	3	100.0	3	100.0	6	6	100.0	6	100.0
Broad Oak	6	4	66.7	4	66.7	9	9	100.0	9	100.0
Burwash	6	3	50.0	4	66.7	19	14	73.7	14	73.7
Crowborough	1	0	0.0	0	0.0	10	7	70.0	9	90.0
Eastbourne	10	9	90.0	9	90.0	14	14	100.0	14	100.0
Forest Row	2	1	50.0	1	50.0	10	8	80.0	8	80.0
Hailsham	12	8	66.7	8	66.7	15	9	60.0	9	60.0
Hastings Bohemia Rd	1	1	100.0	1	100.0	12	11	91.7	12	100.0
Hastings The Ridge	2	2	100.0	2	100.0	13	13	100.0	13	100.0
Heathfield	3	1	33.3	1	33.3	14	6	42.9	6	42.9
Herstmonceux	4	4	100.0	4	100.0	8	6	75.0	6	75.0
Hove	8	8	100.0	8	100.0	15	15	100.0	15	100.0
Lewes	21	17	81.0	19	90.5	41	35	85.4	36	87.8
Mayfield	4	4	100.0	4	100.0	4	4	100.0	4	100.0
Newhaven	2	1	50.0	1	50.0	2	2	100.0	2	100.0
Pevensey	1	1	100.0	1	100.0	3	3	100.0	3	100.0
Preston Circus	8	8	100.0	8	100.0	45	45	100.0	45	100.0
Roedean	8	8	100.0	8	100.0	11	11	100.0	11	100.0
Rye	16	15	93.8	15	93.8	24	24	100.0	24	100.0
Seaford	10	6	60.0	6	60.0	8	6	75.0	6	75.0
Uckfield	5	2	40.0	2	40.0	22	10	45.5	14	63.6
Wadhurst	3	1	33.3	1	33.3	11	9	81.8	9	81.8
Grand Total	150	118	79	123	82	351	292	83	301	86

Environmental Risk

Flooding

Coastal flooding is one of the most significant risks on the National Risk Register (NRR), the south coast is particularly vulnerable due to low atmospheric pressure over the English Channel, high tide levels (spring tides) and storm surges, caused by gales driving storms through the channel. The potential impacts include; risk to life, damage to property/infrastructure, pollution/contamination, and long term damage to tourism/agriculture. The consequences could include disruption to utilities, flooding of property, evacuation of residents to temporary accommodation, damage to businesses, health impacts, and long term recovery issues.

The Sussex Resilience Forum (SRF) is taking the following actions to mitigate these risks, and consequences; identify areas of risk, multi-agency plans, strategic planning, developing early warning systems, improving sea/tidal flood defences and developing flood rescue plans.

The following map shows a breakdown of various environmental risks across the ESFRS area. Flood zone areas are defined by the Environment Agency's Flood Zone data and are defined as:

Flood Zone 2 represents land that has been assessed as having between a 1%-0.1% annual probability of river flooding, or between 0.5%-0.1% annual probability of sea flooding in any year.

Flood Zone 3 represents land that has been assessed as having a >1% annual probability of river flooding, or a >0.5% annual probability of sea flooding in any year.
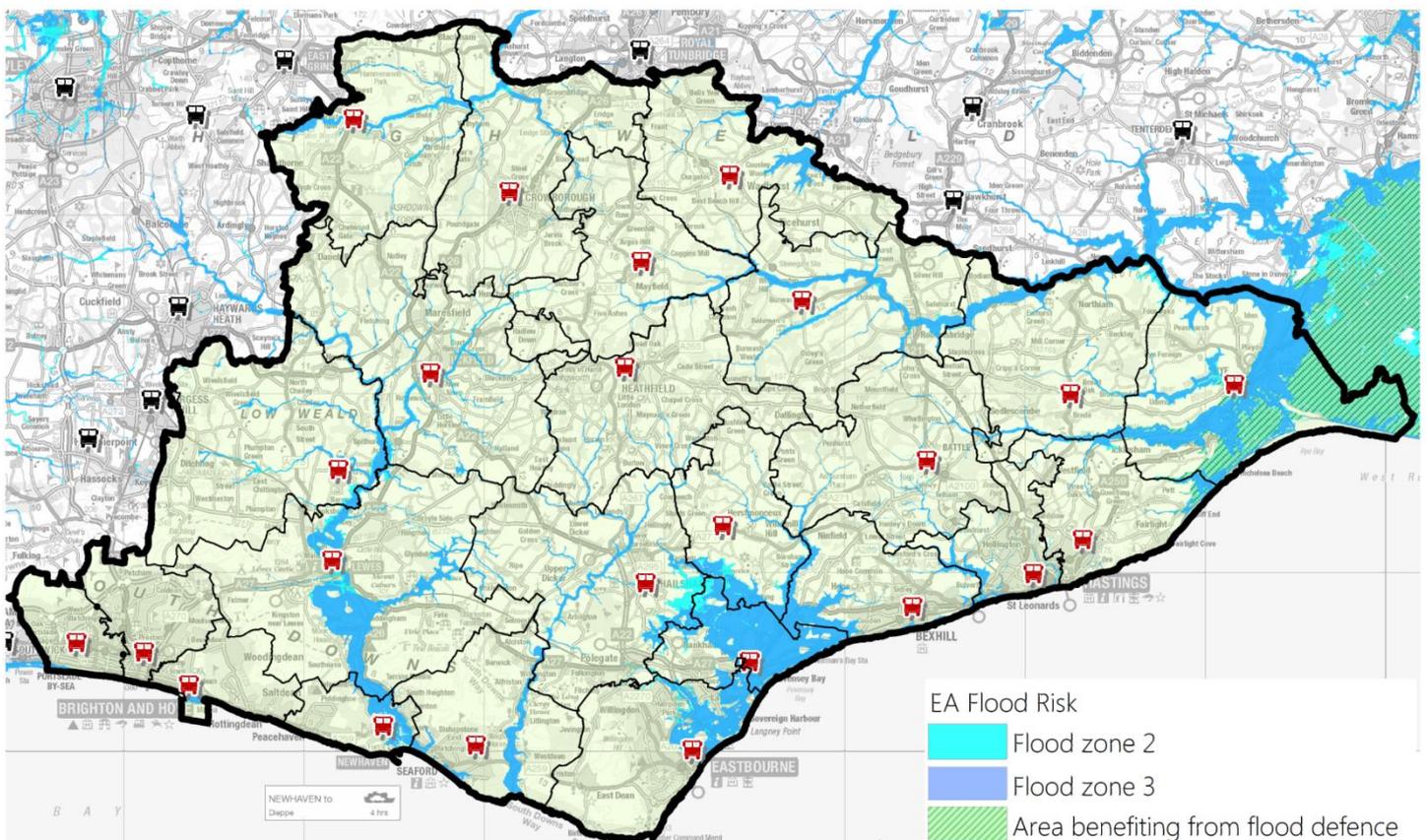
It can be seen from the above map that there are significant parts of the ESFRS that represent a flood risk, both from coastal and fluvial flooding. A number of areas benefit from flood defences, but other areas represent a significant risk from flooding. 3 of our fire stations sit within at least one of the flood zone types listed above – Lewes, Uckfield and Rye. Significant flooding does not just affect the households, businesses and environment that is subjected to the flooding, but the whole service area can be drastically affected, with extended travel times if roads are cut off, particularly due to flooding from rivers.

The following table shows a breakdown of 'special service – flooding' incidents to which ESFRS have responded over the past 9 years, broken down by station area. It can be seen that ESFRS have responded to approximately 380 flooding calls each year and make up approximately 4% of all incidents attended over the past 9 years.

Station area	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	Total
Barcombe	5	4	0	3	5	6	3	1	0	27
Battle	2	0	1	4	3	1	3	2	5	21
Bexhill	21	22	24	18	18	19	19	25	27	193
Broad Oak	5	0	0	1	2	0	0	2	3	13
Burwash	0	2	1	1	1	0	0	3	3	11
Crowborough	4	5	5	7	9	5	4	4	3	46
Eastbourne	43	51	38	37	52	33	41	40	42	377
Forest Row	1	1	0	1	6	0	1	0	1	11
Hailsham	9	2	5	3	9	23	3	7	7	68
Hastings Bohemia Rd	60	62	47	52	56	44	61	40	45	467
Hastings The Ridge	15	13	14	17	18	11	11	10	15	124
Heathfield	2	3	3	1	7	5	5	3	4	33
Herstmonceux	1	0	0	2	4	1	1	0	0	9
Hove	62	62	59	68	39	66	63	69	66	554
Lewes	6	4	3	3	7	13	7	11	10	64
Mayfield	2	0	0	2	3	1	3	4	1	16
Newhaven	12	7	12	13	14	9	8	12	11	98
Pevensey	2	3	3	2	4	1	2	0	2	19
Preston Circus	85	81	81	79	71	95	86	69	108	755
Roedean	32	30	28	28	34	26	48	39	49	314
Rye	1	6	1	5	7	2	2	1	4	29
Seaford	6	10	6	14	9	4	13	4	8	74
Uckfield	7	20	5	5	7	6	6	6	3	65
Wadhurst	4	0	1	4	9	2	5	0	7	32
ESFRS	387	388	337	370	394	373	395	352	424	3,420

Wildfire

Climate change is causing hotter and drier summers; 2018 was the hottest ever summer for England. This has the potential to increase the risk of wild fires occurring. Summer 2018 saw a record breaking number of wildfires in the UK, such as those experienced in Saddleworth Moor, Yorkshire and Winter Hill, Lancashire. These incidents demanded vast resources from their local fire and rescue services.

The National Forest Inventory (NFI) programme monitors woodland and trees within Great Britain. It includes the most in depth survey carried out on Britain's woodland and trees to date. The NFI provides an extensive and unique record of key information about our forests and woodlands. The following map shows the location and type of woodland across the service area.

East Sussex and the South Downs contains vast areas of land that would be at risk of wild fire, including: woodland (The Weald, Ashdown Forest), farmland, grassland, dry valleys and chalk downlands. Many of these areas are of special conservation and scientific importance. It can be seen from the map just how wooded the service area is, particularly to the north and east of the station area, with the south and east been given to the chalk downlands within the South Downs National Park.

National Forest Inventory by Type
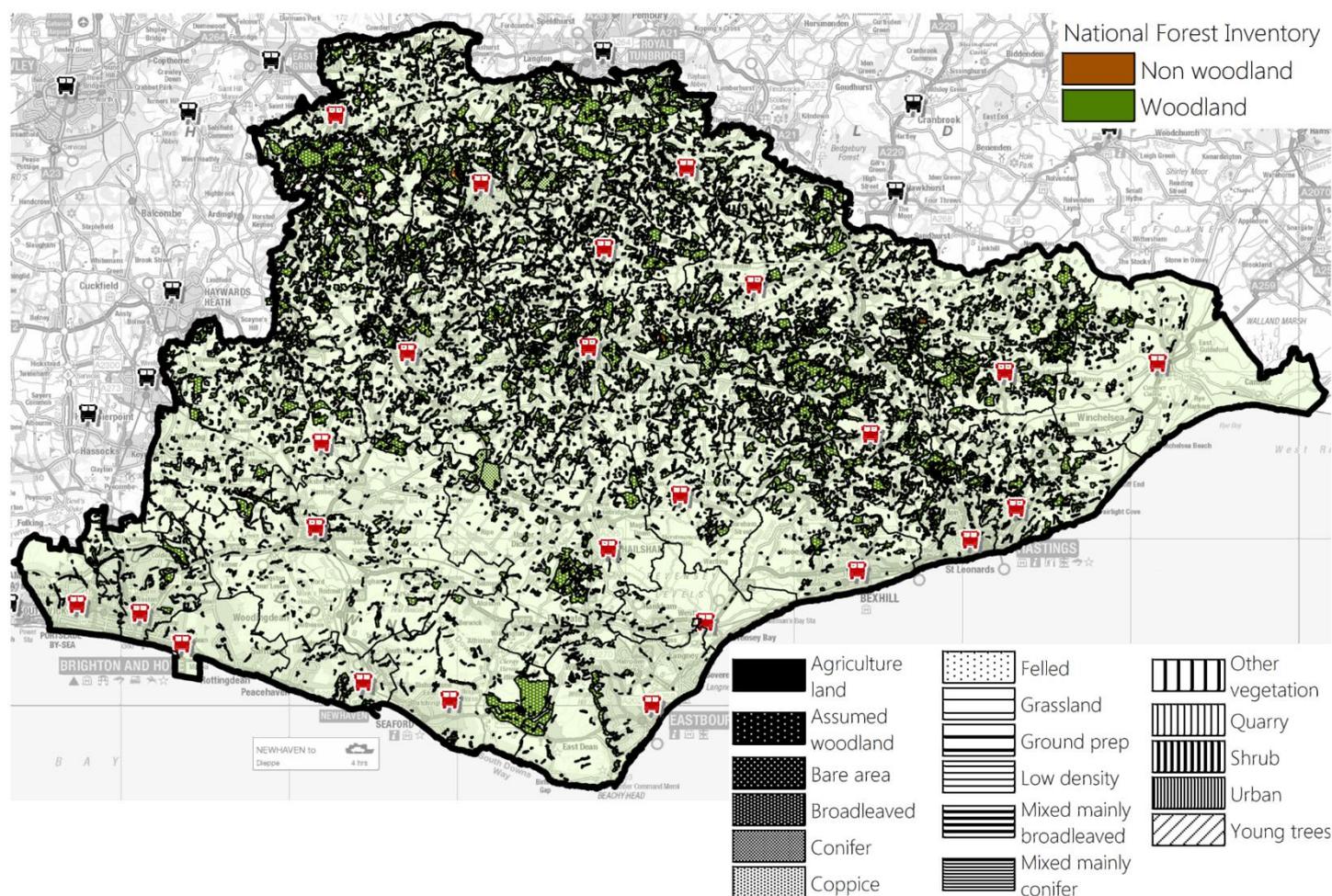
Sites of Special Scientific Interest (SSSI)

Sites of Special Scientific Interest (SSSI) are areas that Natural England designate for conservation. These sites have features of special interest, such as wildlife, geology and/or landform. As a public body, ESFRS must consider the potential impact on SSSI land and any special habitats and species, when carrying out duties and take reasonable steps to conserve and enhance the special features of these SSSIs.

The map below shows the location of the SSSI sites across the ESFRS area. Approximately 12% of the ESFRS service area is designated as a SSSI. The table shows the proportion of SSSIs that are within the attendance standards isochrones and it can be seen that 51% are within the isochrones (during the day).

Sites of Special Scientific Interest

Site of Special Scientific Interest

- Local Nature Reserve (green)
- SSSI Biological (orange)
- SSSI Geological (dark yellow)
- SSSI Mixed (yellow)
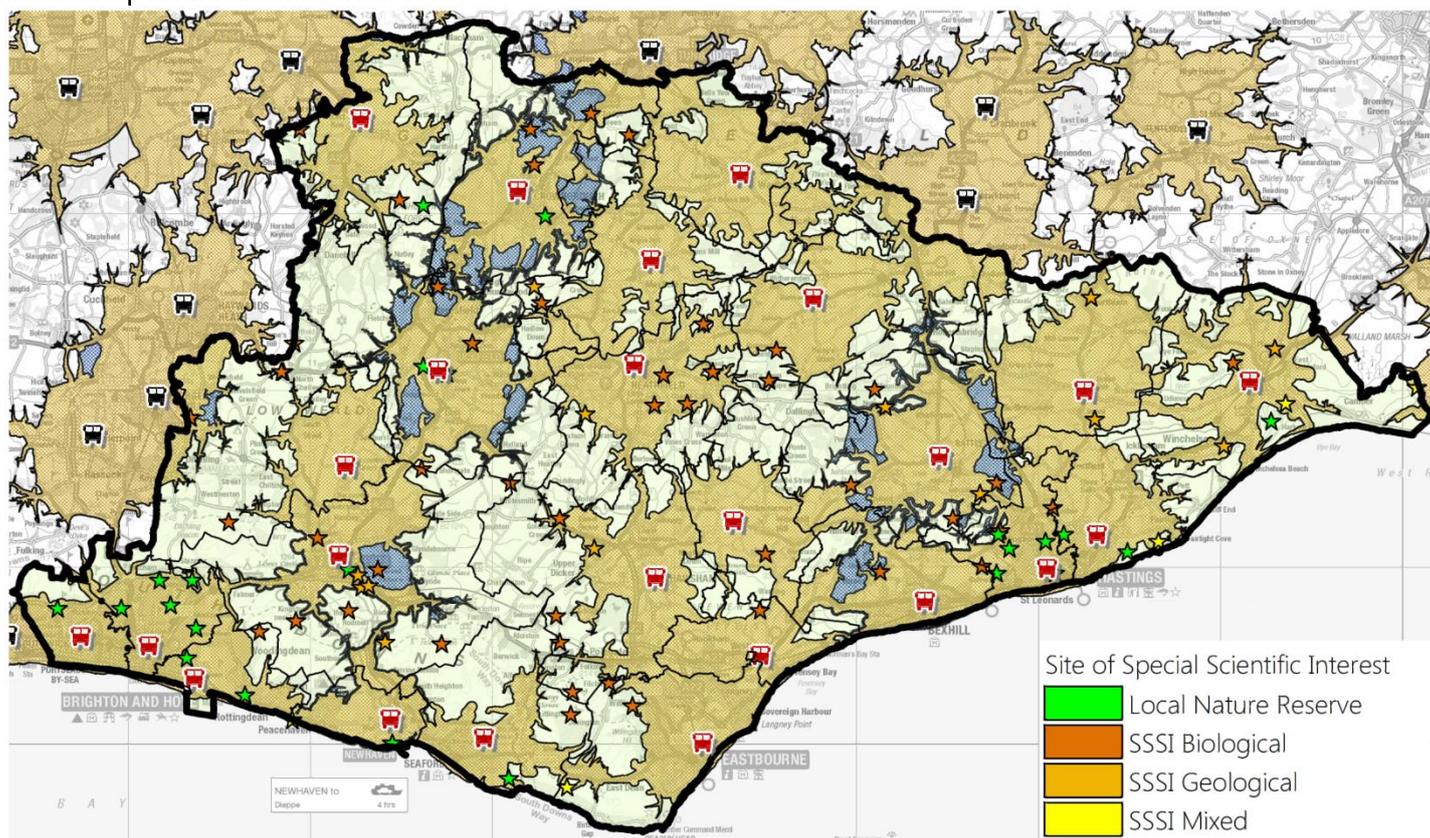
Station Admin Area	No. of SSSIs	Within Attendance Standard (Day)	%	Within Attendance Standard (Night)	%
Barcombe	5	1	20.0	1	20.0
Battle	6	2	33.3	3	50.0
Bexhill	2	1	50.0	2	100.0
Broad Oak	2	2	100.0	2	100.0
Burwash	2	1	50.0	1	50.0
Crowborough	6	4	66.7	5	83.3
Eastbourne	3	0	0.0	0	0.0
Forest Row	4	0	0.0	0	0.0
Hailsham	7	1	14.3	1	14.3
Hastings Bohemia Rd	7	5	71.4	6	85.7
Hastings The Ridge	3	1	33.3	1	33.3
Heathfield	6	4	66.7	4	66.7
Herstmonceux	1	1	100.0	1	100.0
Hove	1	1	100.0	1	100.0
Lewes	11	5	45.5	6	54.5
Mayfield	2	0	0.0	1	50.0
Newhaven	1	1	100.0	1	100.0
Pevensey	1	1	100.0	1	100.0
Preston Circus	5	4	80.0	4	80.0
Roedean	3	2	66.7	2	66.7
Rye	6	5	83.3	5	83.3
Seaford	2	1	50.0	1	50.0
Uckfield	4	3	75.0	4	100.0
Wadhurst	0	0	0.0	0	0.0

| ESFRS | 90 | 46 | 51.1 | 53 | 58.9 |

South Downs National Park

Two thirds of East Sussex is either designated as a national park, or an Area of Outstanding Natural Beauty (AONB). National parks are areas of protected countryside that everyone can visit. They are also places where people live, work and shape the landscape. There are 15 national parks in Britain: 10 in England, three in Wales and two in Scotland. The South Downs was established as a national park in 2010. It contains over 1,600sq km of England's most iconic lowland landscapes stretching from Winchester in the west to Eastbourne in the east. The South Downs National Park Authority (SDNPA) became the local planning authority for the national park in April 2011 and is responsible for the conservation and enhancement of the natural beauty, wildlife and cultural heritage and to help the public understand and enjoy the special qualities of the area. As well as looking after the landscape of the park the authority has a duty to help improve the quality of life and well-being of local communities and businesses in the park. The South Downs National Park (SDNP) has the highest population of all the British national parks, as 112,000 people, and 2 million people live within 5 miles. There were an estimated 46 million visitor days to the SDNP in 2013, generating an income of £464 million and supporting nearly 12,000 jobs. It has the longest rights of way network of all the UK's national parks, with more than 3,300km of footpaths, bridleways and byways. The South Downs National Park covers an area of 1,625 sq. km in total with 274 sq. km being within the ESFRS area. Within the 274 sq. km there is a population of 25,896. In line with other rural areas, the number of people aged over 65 is greater than the rest of the South East.

Ashdown Forest

The forest is located in the north of East Sussex in the High Weald Area of Outstanding Natural Beauty (AONB), and is designated as a SSSI, Special Protection Area, and a Special Area of Conservation.

Special Risk (Operational Risk)

Site-Specific Risk Information (SSRI)

Across the ESFRS area, there are a total of 810 SSRIs (Levels 1-3), 25 of which are level 1, as shown in the table below. It can be see that, overall, 95% of these are within the attendance standards isochrones (day-time), increasing to 96% at night time. 39 SSRIs are outside of the attendance standards isochrones.

Site-specific Risk Information (SSRI) by Level

Station Admin Area	Level 1	Level 2	Level 3	Total	Inside Att. Std. Isochrone (DAY)	Inside Att. Std. Isochrone (NIGHT)
Barcombe	0	3	1	12	4 (33%)	4 (33%)
Battle	0	4	11	16	14 (88%)	15 (94%)
Bexhill	0	9	20	29	29 (100%)	29 (100%)
Broad Oak	0	3	2	7	5 (71%)	5 (71%)
Burwash	3	6	3	13	10 (77%)	12 (92%)
Crowborough	0	15	32	47	46 (98%)	47 (100%)
Eastbourne	3	25	58	88	86 (98%)	86 (98%)
Forest Row	0	5	10	16	15 (94%)	15 (94%)
Hailsham	0	3	6	10	9 (90%)	9 (90%)
Hastings Bohemia Rd	6	35	34	75	75 (100%)	75 (100%)
Hastings The Ridge	2	8	14	24	24 (100%)	24 (100%)
Heathfield	0	6	14	21	20 (95%)	20 (95%)
Herstmonceux	0	3	2	5	5 (100%)	5 (100%)
Hove	0	28	58	86	86 (100%)	86 (100%)
Lewes	3	26	23	59	51 (86%)	52 (88%)
Mayfield	0	4	0	4	4 (100%)	4 (100%)
Newhaven	2	12	20	34	34 (100%)	34 (100%)
Pevensey	0	3	1	4	4 (100%)	4 (100%)
Preston Circus	3	35	72	110	110 (100%)	110 (100%)
Roedean	1	29	52	82	82 (100%)	82 (100%)
Rye	2	2	3	7	7 (100%)	7 (100%)
Seaford	0	3	6	9	9 (100%)	9 (100%)
Uckfield	0	25	17	47	38 (81%)	42 (89%)
Wadhurst	0	2	2	5	4 (80%)	4 (80%)
ESFRS	25	294	461	810	771 (95%)	780 (96%)

The map below shows the dispersion of all SSRIs across the service area. These are described in more detail in the individual station profiles.
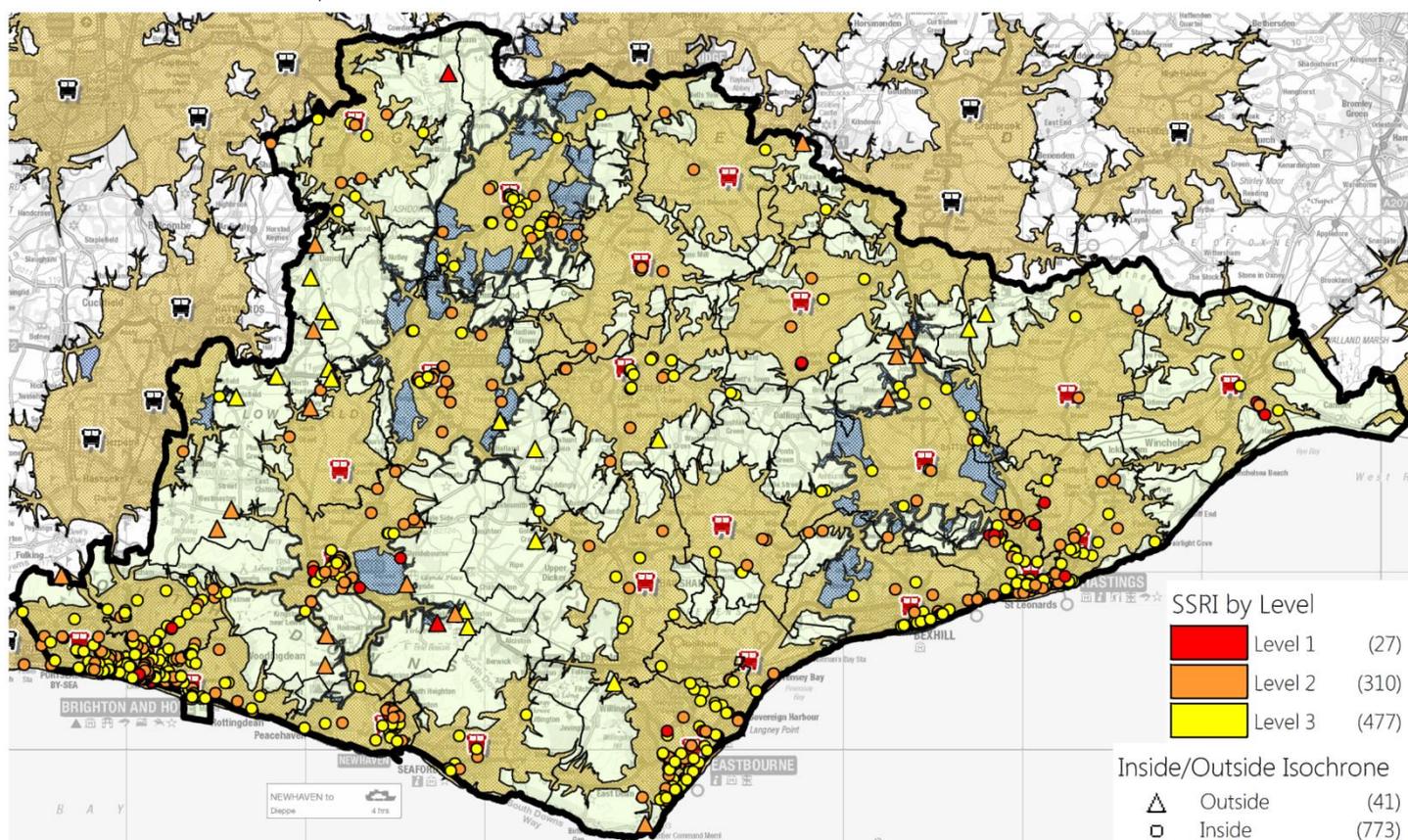
High-Rise Risk

The City of Brighton & Hove have one of the highest densities of high-rise properties in the UK. The following table illustrates the number of high rise premises across the service area. It can be seen that there are 294 properties that are over five floors across the ESFRS area, 64% of which are located within the City of Brighton and Hove.

Station Area	No. of High Rise Premises >5 floors	%
Bexhill	15	5.1
Hastings Bohemia Rd	29	9.9
Seaford	6	2.0
Newhaven	3	1.0
Lewes	2	0.7
Roedean	37	12.6
Preston Circus	77	26.2
Hove	75	25.5
Eastbourne	50	17.0
ESFRS-wide	294	100.0

Emergency Planning

ESFRS has a range of legal responsibilities relating to emergency planning:

- To meet our responsibilities to prepare emergency plans, to train our staff in preparing those plans, and to exercise the plans to make sure they work
- Working with businesses, and the other emergency services, to prepare emergency plans as required under the Control of Major Accident Hazard Regulations (COMAH)
- Preparing and exercising plans, in partnership with others.

ESFRS sponsor, organise and facilitate events which bring together key organisations from across the public, private and voluntary sectors to increase awareness about emergency planning issues, to make sure all of those agencies understand their responsibilities in the event of a major emergency.

Civil Contingencies

The Civil Contingencies Act 2004 introduces the concept of two categories of Organisation/Agency that respond to an emergency:

- Category One Organisations comprise of the main agencies that are likely to be involved at a local level at an emergency. These are the statutory Emergency Services (Ambulance, Coastguard, Fire, and Police), Local Authorities, Health Authorities and the Environment Agency.

- Category Two Organisations include the Utilities, Transport Operators and the Health & Safety Executive.

Category One organisations have a legal duty to plan for "Emergencies"; Category Two organisations have an obligation to co-operate. Both levels of responders have the obligation to take due regard to the voluntary sector in the preparation of plans to improve the resilience of the county to deal with major emergencies.

The Civil Contingencies Act 2004 became active on 1st April 2005 and, with the exception of Business Continuity Management, must be fully complied with by 1st October 2005. The Act includes the following main elements necessary to ensure the correct approach is taken in planning for major emergencies:

Co-operation - The Act imposes a duty on the local responders to co-operate with each other; the mechanism for this is the Local Resilience Forum (LRF).

Sharing - Responders have a duty to share information with each other. This information will be used to produce a Community Risk Register (CRR). This is a statutory requirement and forms the basis for emergency planning.

Risk Assessments - All Category One organisations (see key organisations above) have a duty to carry out and publish joint risk assessments. These will be held within the Community Risk Register. A sub-group of the LRF, a Risk Assessment Working Group, will consider the overall risk to the community and determine an appropriate level.

Emergency Planning - Category One organisations have a duty to maintain plans to prevent, reduce control or mitigate the effects of an emergency. Plans must be in place for the highest risks identified in the Community Risk Register. Training and exercising form part of the emergency planning process.

Business Continuity Management - Category One organisations, because of their nature, are required by the Act to maintain plans so that they can continue to function, even though they are possibly affected by a major emergency themselves. The extent of this planning should cover both internal functions and those companies on whom we are reliant.

Communicating with the Public - A pan-agency process of information provision in a major emergency is in place so that the public will be provided with consistent, accurate and non-contradictory information and advice.

Sussex Resilience Forum (SRF)

The UK is broken into a number of Local Resilience Areas and ESFRS falls into the Sussex Local Resilience Area. Each police force area has a Local Resilience Forum which is responsible for creating and maintaining a Community Risk Register (CRR). The CRR is informed by the National Risk Register (NRR), it identifies possible emergency situations specific to the Local Resilience Area, and the possible actions needed to deal with each risk.

The 'Information on Risks in Sussex' document produced by the Sussex Resilience Forum (SRF) provides information about the identified risks in our area, including the likelihood, severity and preparedness to mitigate the identified risks.

The Sussex Resilience Forum (SRF) is a partnership, made up of all the category 1 and 2 responders and voluntary organisations needed to prepare for and respond to any major emergency within East and West Sussex and Brighton & Hove. The Forum covers the Sussex Police Force area, and includes emergency services, local authorities, Environment Agency and health agencies along with voluntary and private agencies. Under the Civil Contingencies Act (2004) every part of the United Kingdom is required to establish a resilience forum.

National Risk Register / Community Risk Register

The Sussex Resilience Forum (SRF) has a legal obligation to produce a Community Risk Register (CRR), this provides information on the biggest emergencies that could happen to Sussex. Together with an assessment of how likely they are to happen, and the impacts if they do. The National Risk Register (NRR) is the national version of this document.

The Sussex Resilience Forum legally has to produce a Community Risk Register (CRR) to look at the likelihood and impact of a range of hazards. Nationally, every resilience forum uses its own professional judgement, along with guidance from the national version of this document (National Risk Register), to put together its CRR. The national register is produced by the Government using historical and scientific data, and the professional judgements of experts to analyse the risks to the UK as a whole.

The Sussex CRR helps identify emerging issues and also situations where a risk may be increasing or decreasing in our county. It helps highlight any gaps in an organisation's ability to respond to an emergency and indicates what response is required. If a risk is included in the CRR, it doesn't mean it will happen. It means we know it is a possibility, and organisations have made arrangements to reduce its impact.

The following headings are taken from the SRF CRR:

Pandemic Flu
A pandemic influenza event is where many people will be infected in a short time. The World Health Organisation defines an outbreak to be pandemic when the infection hasn't been seen before and there is no natural immunity, it infects humans, spreads and survives easily.

> **Impacts:** Additional deaths, increased demand on health/social care, staff shortages and disruption to essential services, including production and transportation of goods.

> **Consequences:** Reduced care to vulnerable people, disruption to essential utilities, reduced cover of emergency services, disruptions to organisations due to staff shortages and supply chain interruptions.

> **Actions:** Managing demand on NHS/social care, distribution of anti-viral medication, vaccinations, public awareness/management and managing excessive levels of death.

> **ESFRS Actions:** Business continuity plans to deal with staff shortages, and there is also a specific pandemic flu plan manual note.

South Coast Flooding
Coastal flooding is one of the most significant risks on the National Risk Register, the south coast is particularly vulnerable due to low atmospheric pressure over the English Channel, high tide levels (spring tides) and storm surges caused by gales driving storms through the channel.

> **Impacts:** Risk to life, damage to property/infrastructure, pollution/contamination and long term damage to tourism/agriculture.

> **Consequences:** Disruption to utilities, flooding of property, evacuation of residents and temporary accommodation, damage to businesses, health impacts and long term recovery issues.

> **Actions:** Identify areas of risk, multi-agency plans, strategic planning, developing early warning systems, improving sea/tidal flood defences and developing flood rescue capabilities.

> **ESFRS Actions:** ESFRS participate in a tactical advisory group, this informs and collaborates with District and Borough Councils on plans, and ensures that there is a capability to respond and assist in the event of an incident occurring.

Inland Flooding
Temperatures and sea levels are expected to increase over time, extreme weather events are also predicted to become more severe and frequent. This will increase the risk of inland flooding which includes; river flooding, surface water flooding, groundwater flooding, these events are all linked to excess rainfall and high water tables. In autumn of 2000 heavy rainfall caused extensive flooding in Sussex, over 800 properties were affected in Lewes.

> **Impacts:** Risk to life, damage to property/infrastructure, pollution/contamination and long term damage to tourism/agriculture.

Consequences: Disruption to utilities, flooding of property, evacuation of residents to temporary accommodation, damage to businesses, health impacts and long term recovery issues.

Actions: Identify areas of risk, multi-agency plans, strategic planning, and guidance to the public about protecting property, developing early warning systems, improving river defences and developing flood rescue capabilities.

ESFRS Actions: ESFRS participate in a tactical advisory group, this informs and collaborates with District and Borough Councils on plans, and ensures that there is a capability to respond and assist in the event of an incident occurring.

Severe Weather
Sea levels and temperatures are predicted to increase, extreme weather events are also predicted to become more severe and frequent. The main types of severe weather that need to be considered are: storms, gales, low temperatures, heavy snow, heatwaves and drought. Snow has caused major disruption in recent years, and 2018 was the hottest summer for England on record. Due to East Sussex's poor road network this means it is especially sensitive to weather events.

Impacts:
Storms and Gales: Danger to life due to windswept objects/structural failures, damage to property, damage to infrastructure/communication networks and travel disruption.

Low Temperatures/Heavy Snow: Travel disruption, vulnerable people exposed to life threatening temperatures, power/water failures and school/public building closures.

Heatwaves: Increased admissions to GPs/Hospitals, increased breakdowns due to overheating engines and road surface deteriorating due to melting tarmac.

Consequences: Road/travel disruption, damage/disruption to utilities, damage to property and disruption to essential functions/services.

Actions: Multi agency plans, consideration of weather forecasts and distributing early notifications of severe weather.

ESFRS Actions: ESFRS participate in a tactical advisory group, this informs and collaborates with District and Borough Councils on plans, and ensures that there is a capability to respond and assist in the event of an incident occurring.

Fuel Shortages
Disruption can be as a result of a number of factors; short supply, technical problem, industrial action or public protest. In such events supply could be further depleted due to increased (panic) buying. There has been shortages nationally in 2000, 2005 and 2008, resulting in some stations running out of fuel.

Impacts: Public/commercial filling stations exhausted within 48 hours, and up to 10 days to return to normal supply.

Consequences: Impacts on essential services and economic impact.

Actions: Identification of filling stations for essential fuel users - such as emergency services, and multi-agency plans to manage fair distribution to maintain key services.

ESFRS Actions: Under business continuity planning ESFRS maintain bulk fuel storage, have a fuel shortage plan and an approved list of fuelling stations.

Loss of Critical Infrastructure

UK critical infrastructure consists of; electricity, water, gas, oil, fuel, transport, telecommunications, food, health and financial services. Many of the above rely upon each other and events can have direct or indirect impacts.

Impacts: Exposure to poor sanitation, lack of drinking water, homes without heating, cooking and hot water, shortages of fuel, unable to get cash or make card transactions and limited communications.

Consequences: Disruption to essential services, endangerment of vulnerable people, financial impact, civil unrest, increased demand on emergency services, travel disruption and disruption to business and home life.

Actions: Working with utilities to manage supply interruptions, multi-agency plans to manage outages and identify vulnerable people who would require support during outage.

ESFRS Actions: Work with partners to identify where problems exist and plan accordingly to alleviate any potential issues.

Animal Disease

The highest risk diseases are highly contagious, cause high fatalities and have the possibility of infecting humans, these include: Foot & Mouth, Bluetongue, Bird Flu, Rabies, Swine Fever, West Nile Virus and Newcastle Disease.

Impacts: Damage to local agricultural economy, mass cull/disposal of animal carcasses and health risks to farm workers.

Consequences: Psychological impacts on farmers, increased food costs, indirect impacts on tourism and other services and damage to businesses.

Actions: Led by authorities and trading standards - multi agency plans and raising awareness.

ESFRS Actions: ESFRS will abide to control measures put in place by inspectors.

Coastal Pollution

The English Channel is a major shipping route, including oil tankers. There is a significant risk to Sussex of oil or hazardous cargo being washed up on the shore, causing pollution and damage to wildlife, environment and economy.

Impacts: Sea water pollution, beach/shore pollution, damage to Sites of Special Scientific Interest (SSSI), damage to wildlife/environment and health risks.

Consequences: Economic impacts to tourism/agriculture, closure of ports impacting passengers/freight and unrecoverable damage to business.

Actions: Multi agency plans to contain and clean oil spills – minimising impacts and safe disposal of hazardous materials. The Maritime and Coastguard Agency will minimise risk and impact of pollution from ships/offshore installations and promote high safety standards at sea. Upper tier local authorities have contracts with private specialist companies to clean beaches, and this work is co-ordinated nationally.

ESFRS Actions: Have little involvement with these risks but will respond in an emergency if required.

Industrial Accidents

ESFRS is the lead agency for industrial accidents locally. Certain industrial activities involving dangerous substances have the potential to cause serious injuries to people, or far reaching damage to the environment. Sussex contains industrial sites, fuel/gas pipelines and storage depots that all have the potential to cause a major fire or explosion.

Impacts: Endangerment of life, damage to property and local area, and pollution of environment/water courses.

Consequences: Impact to UK oil/gas supplies, economic impacts due to damage to local businesses, long term restoration of impacted area and contamination of crops/agricultural land.

Actions: Work directly with site operators who manage hazardous sites, identifying ways of communication with public and supporting local communities to develop emergency plans.

ESFRS Actions: Work with the Environment Agency and HSE who are the competent authorities on COMAH sites.

Transport Accidents

Transport emergencies can be the result of accidents, but also includes disruption caused by severe weather or flooding, which can further complicate incidents. Most road accidents are within the routine capabilities of the three lead emergency services, however there is a risk an accident may go beyond these capabilities and require extended agency involvement, such as accidents involving chemicals or hazardous materials. The CRR also considers accidents involving the railways, sea and aircraft.

Impacts: Disruption to travel, death/injury, stranded persons in potentially extreme weather, environmental impacts if goods are spilled, damage to property/infrastructure.

Consequences: Impact on local businesses, delays in emergency responses.

Actions: Working with transport companies to plan for dealing with accidents, highways departments working with Highways Agency to keep major roads accessible during severe weather.

ESFRS Actions: Not involved until incident occurs, ESFRS maintain the capability to deal with all traffic accidents and have units at Lewes and Battle to deal with large vehicle incidents.

Cyber Security

This is an emerging and developing risk, and is new to the risk register. A cyber-attack is defined as an offensive manoeuver used by nations, individuals, groups or organisations that targets information systems, networks, or personal devices. Cyber-attacks range from installing spyware/malware/viruses to hinder the function of the system, to stealing, altering or destroying information. In 2017 the NHS was the victim of a malware attack, this resulted in disruption to some operations and appointments.

Impacts: Disruption to business activity and misuse of information.

Consequences: Delayed or failed deliveries, services or payments to businesses, delays in emergency service response, unrepairable damage to IT systems and personal data stolen (including stolen funds).

Actions: Working with central government and Centre for Protection of the National Infrastructure (CPNI) and constant monitoring of IT infrastructure for all types of hacking.

ESFRS Actions: ESFRS ensure all staff undertake annual information security awareness training, and ESFRS also liaise with the National Cyber Security Centre.

Terrorism

The National Risk Register (NRR) of Civil Emergencies states the UK faces a serious and sustained threat from terrorism both international and relating to Northern Ireland. The UK Government's updated counter-terrorism strategy, CONTEST (2011), is an integrated approach based on four main work streams, each with a clear objective to reduce the risk to the UK from international terrorism. CONTEST aims 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. CONTEST deals with all forms of terrorism and continues to be based around four strands:

- Pursue: the investigation and disruption of terrorist attacks;
- Prevent: work to stop people becoming terrorists or supporting terrorism;
- Protect: improving our protective security to stop a terrorist attack; and
- Prepare: working to minimise the impact of an attack and to recover as quickly as possible.

Long-standing and regularly activated major incident plans and structures are in place across government. The adaptability and expertise of the emergency responders provide a solid basis for handling a mass casualty incident. The Joint Emergency Services Interoperability Programme (JESIP) aims to further improve the joint emergency response to any major or complex incident through the development of guidance, joint training and exercising. Our ability to deal with mass casualties has improved steadily, with more health responders having plans to provide additional capability and capacity.

COMAH (Control of Major Accident Hazard Regulations 2015)

COMAH applies mainly to the chemical industry, but also to some storage activities, explosives and nuclear sites, and other industries where threshold quantities of dangerous substances identified in the regulations are kept or used. The Environment Agency and the Health & Safety Executive (HSE) are responsible for applying the regulations across East Sussex, with the following objectives:

- Containing and controlling incidents to minimise the effects and to limit damage to people, the environment and property
- Implementing the necessary measures to protect people and the environment from the effects of major accidents

- Communicating the necessary information to the public and to emergency services and authorities concerned in the area
- Restoring and cleaning-up of the environment following a major accident.

Currently there is one upper tier site in the county that this applies to and 3 lower-tier sites. East Sussex County Council create external plans and ESFRS assist in reviewing these plans. Information is given to the public and those plans are tested. This makes sure all reasonable measures are taken to prevent major accidents and to limit the consequences to people and the environment. Part of the COMAH Regulations puts a duty on the "Competent Authority" to determine an area around a COMAH establishment in which information must be made available. This area is known as the Public Information Zone (PIZ).

Event Planning

Part of planning for emergencies is preparing for events, particularly large scale or high risks events. ESFRS aims to support partners and organisers, promoting safety, and mitigating any risks that may occur. All large scale or high risk events are subject to a Safety Advisory Group (SAG), led by the local upper tier local authority. Permissions are agreed and subsequently all category 1 responders will create their own response plans in the event of an emergency.

Brighton Pride

Brighton & Hove Pride is an annual event promoting equality, diversity, and aims to eliminate discrimination against the LGBT community. In 2018 the city saw 450,000 visitors across the weekend. The event encompasses the whole city, with a parade through the city and various events in Brighton & Hove, the main event "Brighton Pride Festival" is held in Preston Park and saw a crowd of 55,000 in 2018. ESFRS are a key partner of Brighton Pride, and also marches in the parade with a rainbow fire appliance. Due to the large volume of visitors, the event puts high demand on the local transport infrastructure and emergency services.

American Express Community Stadium

The American Express Community Stadium (Amex) is the home of Brighton & Hove Albion Football Club which plays in the English Premier League. Since its opening in 2011 the stadium has increased in capacity, and now has a maximum capacity of 30,750, it regularly attracts crowds of 20,000 - 30,000. The stadium is a multi-purpose venue, and hosts other events, such as music concerts, it was also a venue in the 2015 Rugby World Cup.

Lewes Bonfire

Lewes Bonfire is regarded as the largest bonfire night celebration in the UK, held annually on the 5th November (or 4th if 5th is Sunday). The celebration consists of a large procession though the town centre, then a number of different bonfires/firework displays are held across the town. The event attracts a large volume of visitors, as such there are extensive parking, road and transport restrictions in place.

Eastbourne Airbourne

Airbourne is a free air show that takes place annually in August in Eastbourne. There are events, stalls and markets set up on Eastbourne Seafront and Western Lawns, the air displays are performed along a two mile display line on the seafront. The event is organised by Eastbourne Borough Council, along with the Royal Air Force and British Army. Inherently, air shows carry a high risk.

The Nature Valley Eastbourne International

The Eastbourne International is an international tennis tournament held every year in Devonshire Park, Eastbourne. The tournament is classified as a premier tournament within the Women's Tennis Association, and draws large crowds and international TV coverage.

Love Supreme Jazz Festival

The Love Supreme Jazz Festival is a three day music festival held in Glynde on the first weekend of July every year, and experiences an attendance of 40,000.

Boundary (Shakedown) Festival

Boundary Festival (formally Shakedown) is a one day music festival hosted in Stammer Park, Brighton in late September every year. The event attracts crowds of around 9000.

Partners / Partnerships

ESFRS embraces the opportunity and challenge to deliver a diverse range of community services through partnership arrangements with public, private and voluntary sectors. The Partnership Strategy details the Fire Authority's commitment to its vision and strategic aims, including the promotion of local community safety and sustainability that embraces the objectives of the Localism Act, as well as delivering quality and value for money services through appropriate partnerships.

Due to the reduction in public sector funding, services within adult social care and the health sector are at risk of being reduced. This poses a potential risk to ESFRS as this could increase vulnerability in the community, or increase demand to respond to health related emergencies. This may be further enhanced due to the ageing population.

Over border risks

In addition to all the risks within the ESFRS area, whether inherent, historic or foreseeable, there are also risks that sit just outside of the service area from airports, to nuclear power stations, to large woodlands and industrial ports. Individual station profiles provide more detail on the type of over-border risk experienced within each station area that shared a boundary with a neighbouring Fire & Rescue Service.