

Whitehaven Fire Station
Risk Based Evidence Profile 2018
Risk Review



**Prepared by Cumbria County Council
Performance and Intelligence Team**

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Introduction

This document forms part of the Risk-Based Evidence Profile 2018 (RBEP 2018). The RBEP 2018 is comprised of a 'core' document profiling risk and demand across the county, and 38 individual station profiles (of which this is one).

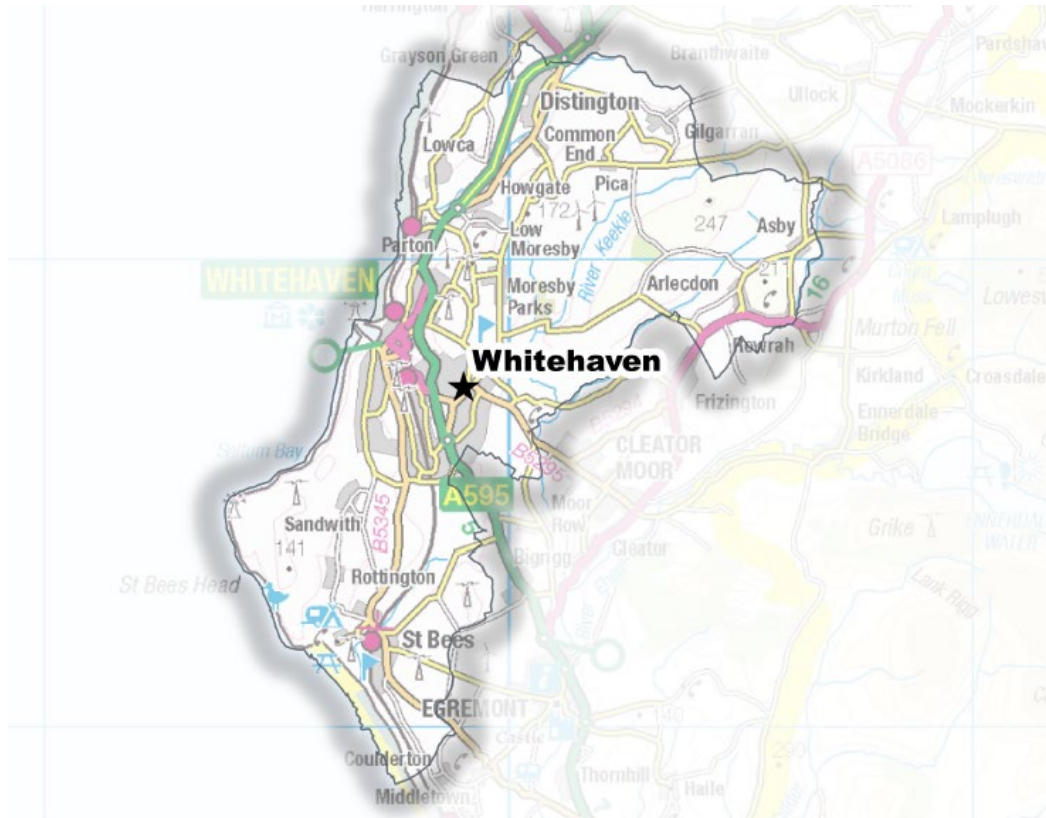
The RBEP 2018 is developed to support the Integrated Risk Management Plan (IRMP) 2019-23. The purpose of the IRMP 19-23 is to identify and assess fire and rescue related risks for the next four years, and set out what the service is going to do to address them.

Each station profile details the station area and its available resources, alongside the demand and risk for that station. Prevention and protection activities are also provided to evaluate the scope of mitigating actions that have been taken to address high priority risks.

Horizon scanning is conducted to identify any significant infrastructure, economic and housing developments which need to be taken into account for future service provision.

Station Area and Resources

The fire station is situated in Whitehaven. A map of the 'station area'¹ is shown below. The station in 17/18 was crewed by 20 regular firefighters and 12 firefighters working the On-call duty system



Station Area	33,300
Crewing Type	Regular and On-call
Fire Engines	2 fire engines and 1 unimog wildfire unit

The following table indicates the travel distance in miles from Whitehaven Fire Station to the next nearest three fire stations.

Station Name	Distance by Road (MILES)
Frizington	3 miles
Egremont	5 miles
Workington	8 miles

¹ This is a nominal area which distributes the county across its 38 stations for the purposes of management and performance benchmarking.

Fire Engine Availability

During 2017/18 the Whitehaven regular fire engine (C02P1) had been off duty for 0% of the time.

C02P1	2015/16	2016/17	2017/18
Total Availability	100%	100%	100%
Mon - Fri (08:00 - 18:00)	100%	100%	100%
Mon - Thurs (18:00 - 08:00)	100%	100%	100%
Fri - Mon (18:00 - 08:00)	100%	100%	100%

During 2017/18 the Whitehaven On-call fire engine (C02P2) had been off duty for 9.1% of the time.

C02P2	2015/16	2016/17	2017/18
Total Availability	70.32%	73.41%	90.90%
Mon - Fri (08:00 - 18:00)	54.95%	57.57%	81.7%
Mon - Thurs (18:00 - 08:00)	87.15%	87.36%	97.42%
Fri - Mon (18:00 - 08:00)	67.47%	73.64%	92.4%

Station Fire Engine Response Times

Whitehaven fire engines have been called to the following number of incidents over the last three years with the associated response times. Some of the incidents attended may have been in neighbouring station areas.

Between 2015/16 and 2017/18 the Whitehaven on regular engine (C02P1) had the following response times below

C02P1	2015/16	2016/17	2017/18
Average crew turnout time (time it takes the crew to respond to the station)	1 min 14 secs	1 min 35 secs	1 min 6 secs
Average response time (time it takes the crew to arrive at the incident from the station)	4 min 52 secs	6 min 11 secs	4 min 44 secs
Number of incidents attended by fire engine C02P1	427	354	413

Between 2015/16 and 2017/18 the Whitehaven On-call fire engine (C02P2) had the following response times below

C02P2	2015/16	2016/17	2017/18
Average crew turnout time (time it takes the crew to respond to the station)	4 min 30 secs	4 min 38 secs	5 min 9 secs
Average response time (time it takes the crew to arrive at the incident from the station)	4 min 40 secs	1 min 14 secs	1 min 14 secs
Number of incidents attended by fire engine C02P2	81	67	70

Station Area Response Priorities

A 3 year profile of demand within the station area, with associated number of fatalities and seriously injured casualties, is detailed in the table below.

Table 1: Prevention, Protection and Response Priorities: Whitehaven

Fire, Rescue and Road Safety Priorities 2018/19	Incidents			Fatalities				Seriously Injured Casualties				PRIORITY	2017/18 compared to 3yr average ³
	2015/16	2016/17	2017/18	2015/16	2016/17	2017/18	Average per 100 incidents	2015/16	2016/17	2017/18	Average per 100 incidents		
All incidents	331	287	252	1	2	-	0.3	2	3	4	1.0	n/a	↓
Injury Road Traffic Collisions ¹	2	9	5	-	1	-	6.3	1	2	2	31.3	Very High	↓
Primary Fires ²	44	38	33	1	-	-	0.9	-	1	-	0.9	Very High	↓
Flooding and water incidents	5	1	4	-	-	-	0.0	-	-	-	0.0	High	↑
Gas incl Carbon Monoxide	-	3	-	-	-	-	0.0	-	-	-	0.0	Medium	↓
Automatic Fire Alarms	189	151	130	-	-	-	0.0	-	-	-	0.0	Standard	↓
Wildfires ⁴	-	-	-	-	-	-	0.0	-	-	-	0.0	Standard	↔
Animal Assistance Incidents	1	3	1	-	-	-	0.0	-	-	-	0.0	Standard	↓

↔ = No Difference +/-5% ↑ = Higher ↓ = Lower

¹Injury Road Traffic Collisions include RTCs attended by CFRS where there was a fatality or a rescue with injury

²Primary fires include all fires in buildings, vehicles and outdoor structures or any fire involving casualties, rescues or fires attended by five or more appliances

³Increase or decrease if greater than 5% of three year average

⁴Wildfire is defined as any uncontrolled vegetation fire which requires a decision, or action, regarding suppression, plus any one of the following criteria (i) involves a geographical area of greater than 1 hectare (ii) has a sustained flame length of 1.m (iii) requires a committed resource of 4 or more appliances (iv) requires resources to be committed for over 6 hours (v) presents a serious threat to life, environment, property and infrastructure

Primary Fire Response Profile

Incident and Risk Profile

In 2017/18, there were 252 incidents within Whitehaven Fire Station area with 4 seriously injured casualties. This included 5 Injury RTCs, 33 primary fires and 4 flooding and water incidents.

CFRS Risk Profile identifies the levels of risk within an area (Lower Super Output Area²) of incident types occurring – this is based on the likelihood of an incident occurring and also on the likelihood of that incident being of a life-threatening or serious nature. Full details of the risk model calculations used are in Appendix B of RBEP.

The fire risk model shows decreasing fire risk for Whitehaven Fire Station with no high level risk LSOAs, and overall risk score decreasing from 826 in 2014/15 to 814 in 2018/19, a decrease of 1.5%.

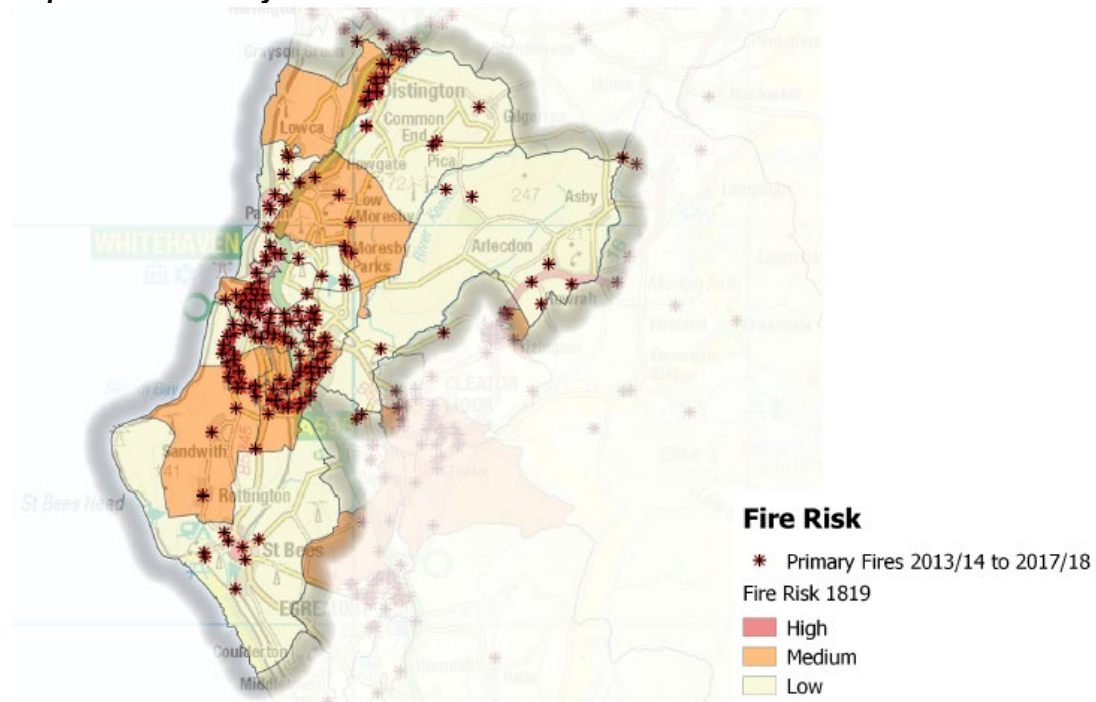
Table 2: 18/19 Primary Fire Risk – Whitehaven

Whitehaven Risk Profile		Incidents 2009/10 - 13/14		Incidents 2010/11 - 14/15		Incidents 2011/12 - 15/16		Incidents 2012/13 - 16/17		Incidents 2013/14 - 17/18	
		2014/15 Risk		2015/16 Risk		2016/17 Risk		2017/18 Risk		2018/19 Risk	
Score	Risk Grade	Risk Score	No of LSOAs	Risk Score	No of LSOAs	Risk Score	No of LSOAs	Risk Score	No of LSOAs	Risk Score	No of LSOAs
>=76	High	0	0	0	0	0	0	0	0	0	0
35- 75	Medium	434	9	456	10	486	11	550	12	486	11
<=34	Low	392	15	356	14	316	13	290	12	328	13
TOTAL		826	24	812	24	802	24	840	24	814	24

The map of Fire Risk below shows levels of Fire Risk by LSOA, with the last 5 years of primary fire incidents clustering within Whitehaven town centre.

² Lower Super Output Areas are geographic areas created by the [Office for National Statistics](https://www.ons.gov.uk/methods/geography/other-geographies/lsoas) to support statistical analysis at a more detailed geographical level. Each LSOA is designed to have similar population sizes of up to 1,200 households.

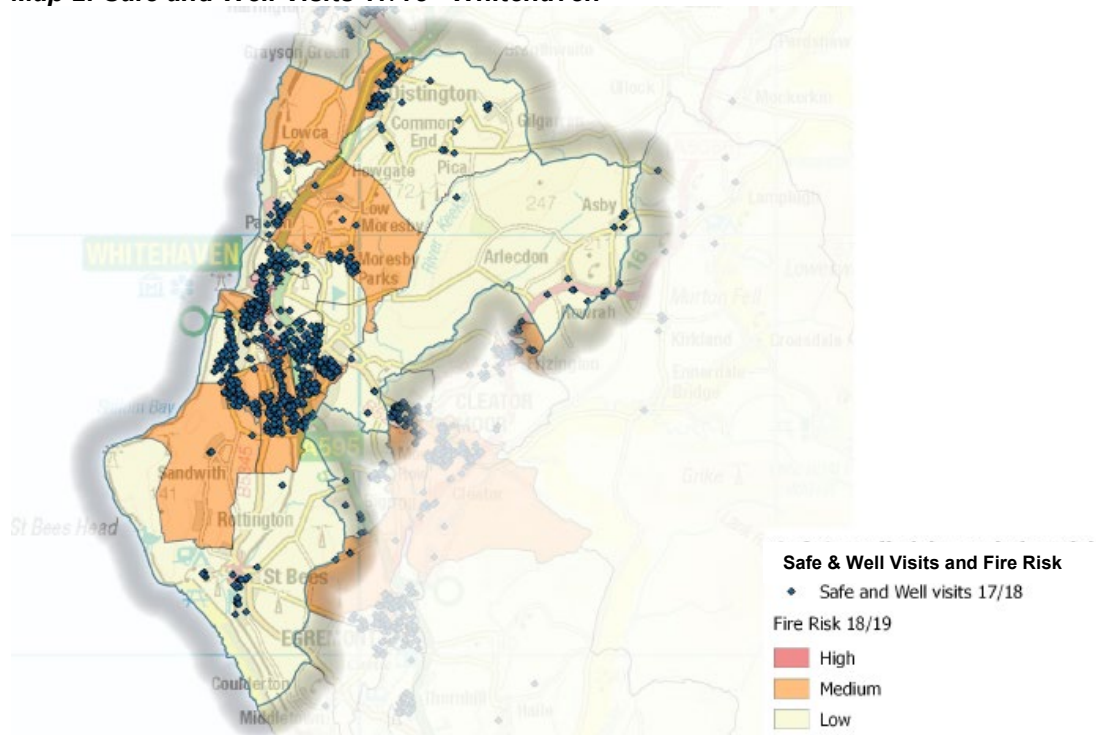
Map 1: 18/19 Primary Fire Risk –Whitehaven



Prevention and Protection Activity

In April 2017 CFRS implemented their new Safe and Well visits. These are targeted at individual households that are high risk, rather than areas of high risk as previously targeted in the Home Safety Visits. In 2017/18 CFRS conducted 10,432 Safe and Well visits across Cumbria.

Map 2: Safe and Well Visits 17/18 –Whitehaven



Injury Road Traffic Collision Response Profile

Incident and Risk Profile

The Injury RTC risk modelling shows a decreasing rate of risk for Whitehaven Fire Station area. There are no high risk LSOAs in 2018/19. The overall risk score decreases from 1004 in 2014/15 to 744 in 2018/19 – a drop of 26%

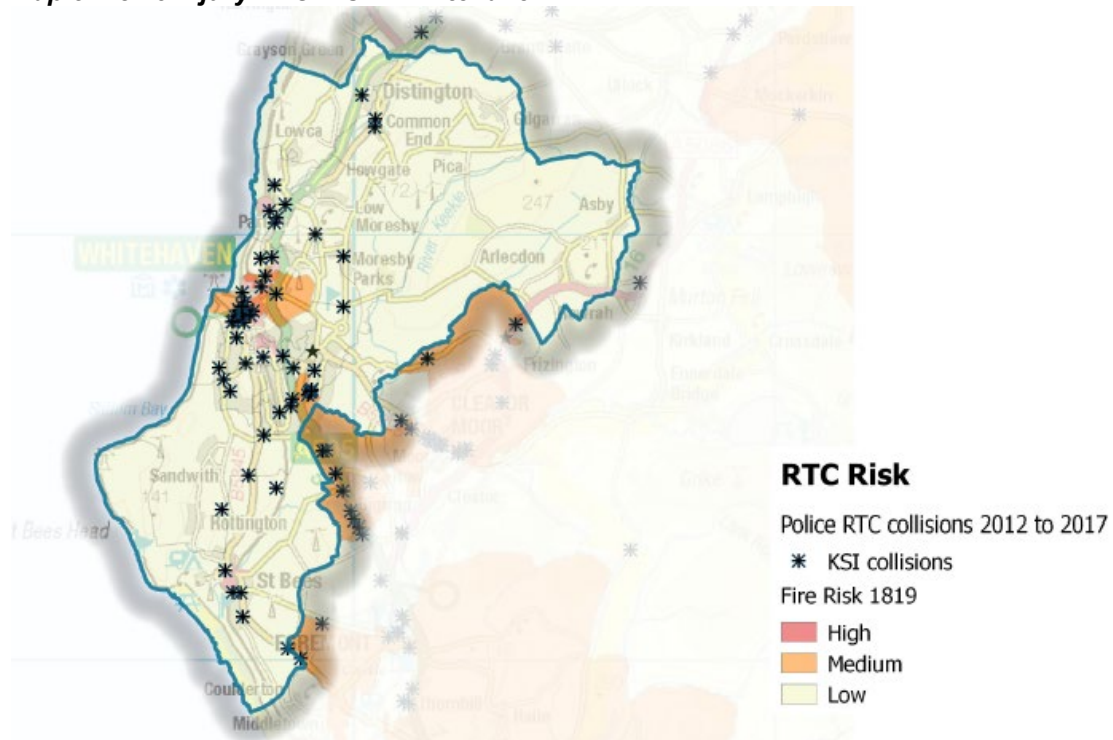
Table 3: 18/19 Injury RTC Risk – Whitehaven

Whitehaven Risk Profile		Incidents 2009/10 - 13/14		Incidents 2010/11 - 14/15		Incidents 2011/12 - 15/16		Incidents 2012/13 - 16/17		Incidents 2013/14 - 17/18	
		2014/15 Risk		2015/16 Risk		2016/17 Risk		2017/18 Risk		2018/19 Risk	
Score	Risk Grade	Risk Score	No of LSOA	Risk Score	No of LSOAs	Risk Score	No of LSOAs	Risk Score	No of LSOAs	Risk Score	No of LSOAs
100	High	100	1	100	1	100	1	0	0	0	0
24-100	Med	528	7	160	2	64	1	336	5	192	3
<=24	Low	376	16	572	21	580	22	400	19	552	21
TOTAL		1004	24	832	24	744	24	736	321	744	24

Datasources: Cumbria Constabulary RTC Data, FireCore Incident data

The map below shows the risk levels by LSOA for Cumbria, overlaid with Killed/ Seriously Injured (KSI) incidents between 2012 and 2017.

Map 3: 18/19 Injury RTC Risk – Whitehaven



Prevention and Protection

CFRS provide Road Awareness Training (RAT) sessions targeted at drivers aged 18 to 25 years, as these are at highest risk of being involved in a collision. We also currently provide RAT sessions targeted at those aged 55 years and older.

In Copeland District, 11 RAT sessions were provided throughout 2017/18 to a total of 329 attendees.

Table 4: Number of RAT sessions 2017/18 by District

Road Traffic Awareness Training Sessions completed 2017/18		
District	Number of RATs	Number attended
Allerdale	27	305
Barrow-in-Furness	7	257
Carlisle	24	629
Copeland	11	329
Eden	3	120
South Lakeland	10	507
Cumbria	82	2,147

Datasource: CFRMIS

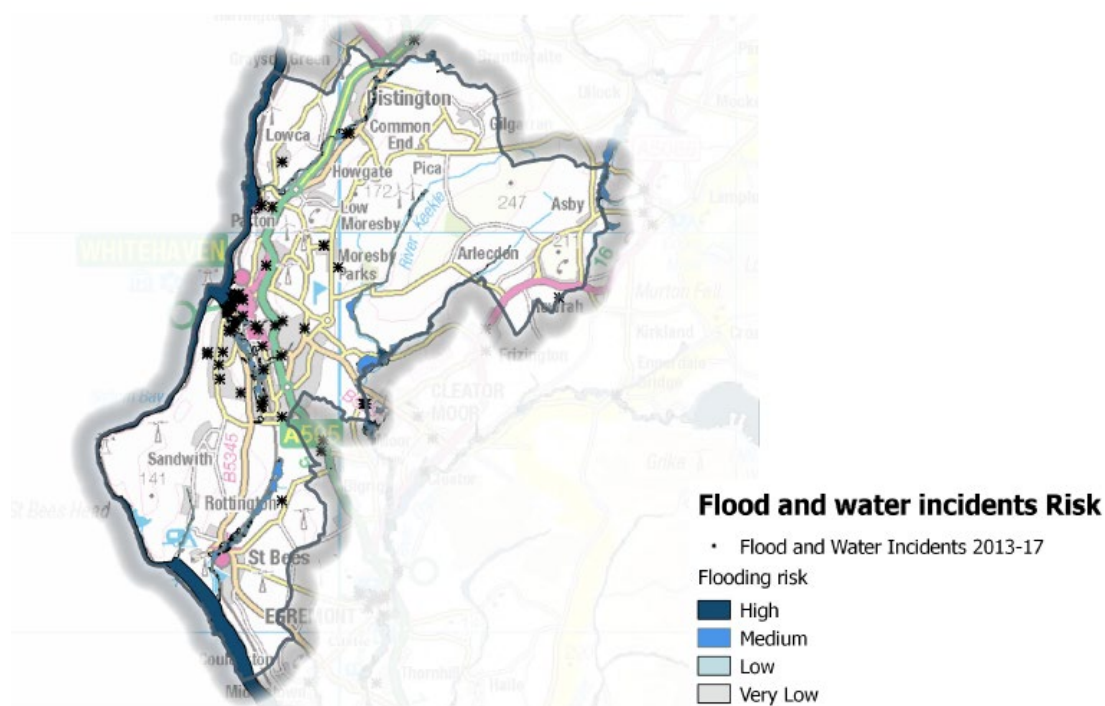
Flooding and Water Rescue - Response Profile

Incident and Risk Profile

Flood Risk is taken from the Environment Agency's Risk of Flooding from Rivers and Seas (Aug 2018). The risk of flooding is categorised into high, medium, low and very low areas. Incidents responded to by CFRS between 2013 and 2017 are overlaid on the risk areas.

Harbour Ward in Whitehaven has one of the highest percentages of flood and water related incidents (2.2%) over the last 5 years across Cumbria

Map 4: Risk Map of Flooding based on Rivers and Seas (Aug 2018) - Whitehaven



Prevention and Protection Activity

The [Environment Agency's Cumbria Flood Action Plan](#) (1 June 2016) details 65 areas of action for implementation across Cumbria, Eden, Derwent and Kent and Leven Catchment areas. These proposed actions fall into five key themes

- Strengthening Defences
- Upstream Management
- Maintenance
- Resilience
- Water Level Management Boards

Full details of the Cumbria 2015 Flood Events are available in the [Flood Impact Assessment](#) Dec 2015.

Other Risk information

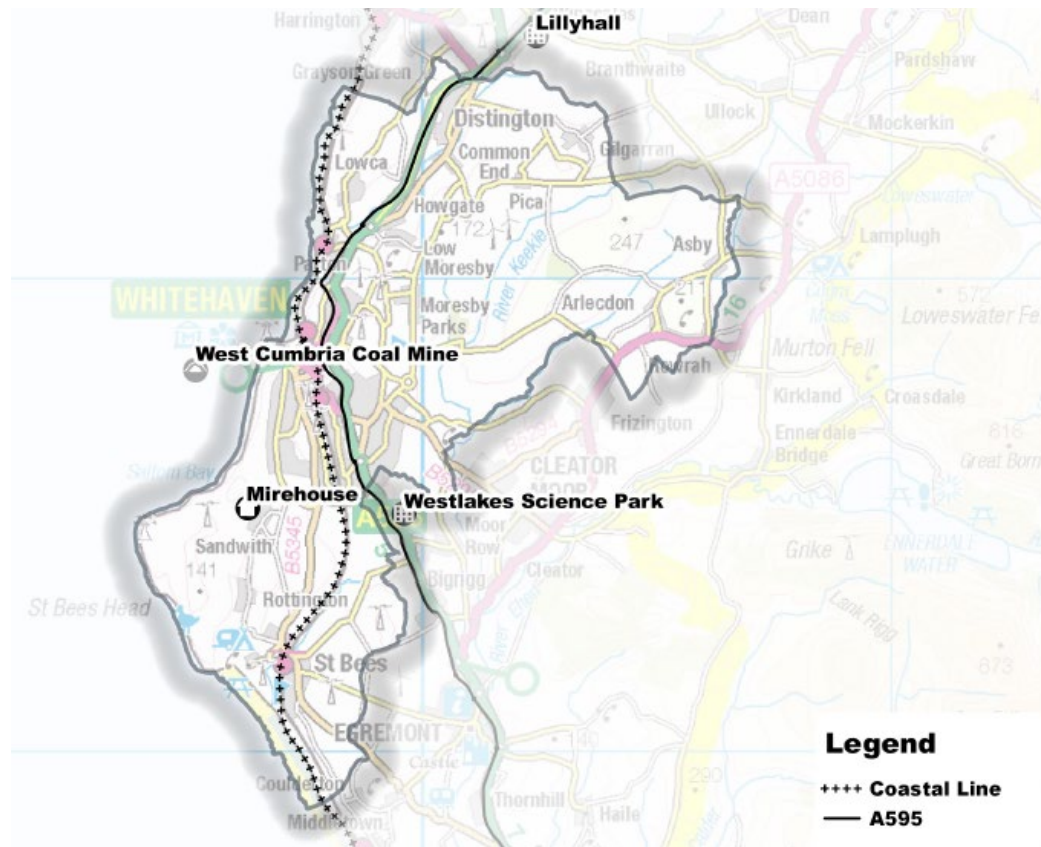
The historic Georgian town of Whitehaven is situated on the west coast of Cumbria and centers on a newly refurbished marina, which continues to develop. Whitehaven has a population of 26,000 people with the main local employer being the British Nuclear Group at Sellafield.

Whitehaven	Risk in station area
Heritage	<p>Grade I listed:</p> <ul style="list-style-type: none"> • Moresby Hall, Moresby • Cross in churchyard to north of Priory Church nave, St Bees • St Bees School, Music room in former chancel to Priory Church of St Mary, St Bees • Church of St Mary & St Bega, St Bees • Wall, to west of Priory Church nave, incorporating medieval cross & lintel, St Bees • Church of St James, Whitehaven <p>Grade II* listed:</p> <ul style="list-style-type: none"> • Rosehill, house & adjoining wall, Moresby • Pow Bridge over Pow Beck, St Bees • Manor Stead & house adjoining to north, St Bees • Nether End Farmhouse, Weddicar • No 14 Scotch Street, Whitehaven • No 52 (Somerset House) Duke Street, Whitehaven • No 151, including area railings Queen Street, Whitehaven • Nos 44 & 45 Roper Street, Whitehaven • Barracks Mill, Catherine Street Whitehaven
Environment	<ul style="list-style-type: none"> • Special Area of Conservation: River Ehen (NY031144) • 2 Sites of Specific Scientific Interest
Site Specific Risks	<ul style="list-style-type: none"> • West Cumberland Hospital • Whitehaven Tunnel (Railway) • Rum Story • Beacon Centre • Whitehaven Rugby Recreational ground
Rurality	<ul style="list-style-type: none"> • Of the 24 LSOAs that make up Whitehaven 19 are designated 'Urban' according to DEFRA Urban/Rural classifications, 1 "Town and Fringe" and 4 'Village and Hamlet'

Horizon Scanning

Risk and demand are constantly evolving across the county, and as such necessitate an evolving service to optimise efficiency and effectiveness. In the short to long-term a range of infrastructure and economic projects are anticipated across the county. Those that are planned within the Whitehaven Station area are shown below.

Map 5: Future Projects and Developments within Whitehaven Fire Station Area



Currently there are 4 infrastructure projects within Whitehaven Fire Station area:

Station	Project	Investment Impact
West Coast	Cumbrian Coastal Railway Enhancement	Improvements to increase capacity, usage and resilience
	A595 Corridor Enhancements	Improvements to support economic growth in West Cumbria
Whitehaven	West Cumbria Coal Mine	2-3 million tonnes of coal pa
	Mirehouse	2500-4,000 new homes

Based on these economic and housing projects, Copeland district's population is expected to remain relatively stable with projections of growth between -3% and +4% by 2023, which would lead to primary fire growth between -3 and 3. This would have no projected impact on fire casualty rates by 2023.