

Barrow 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).

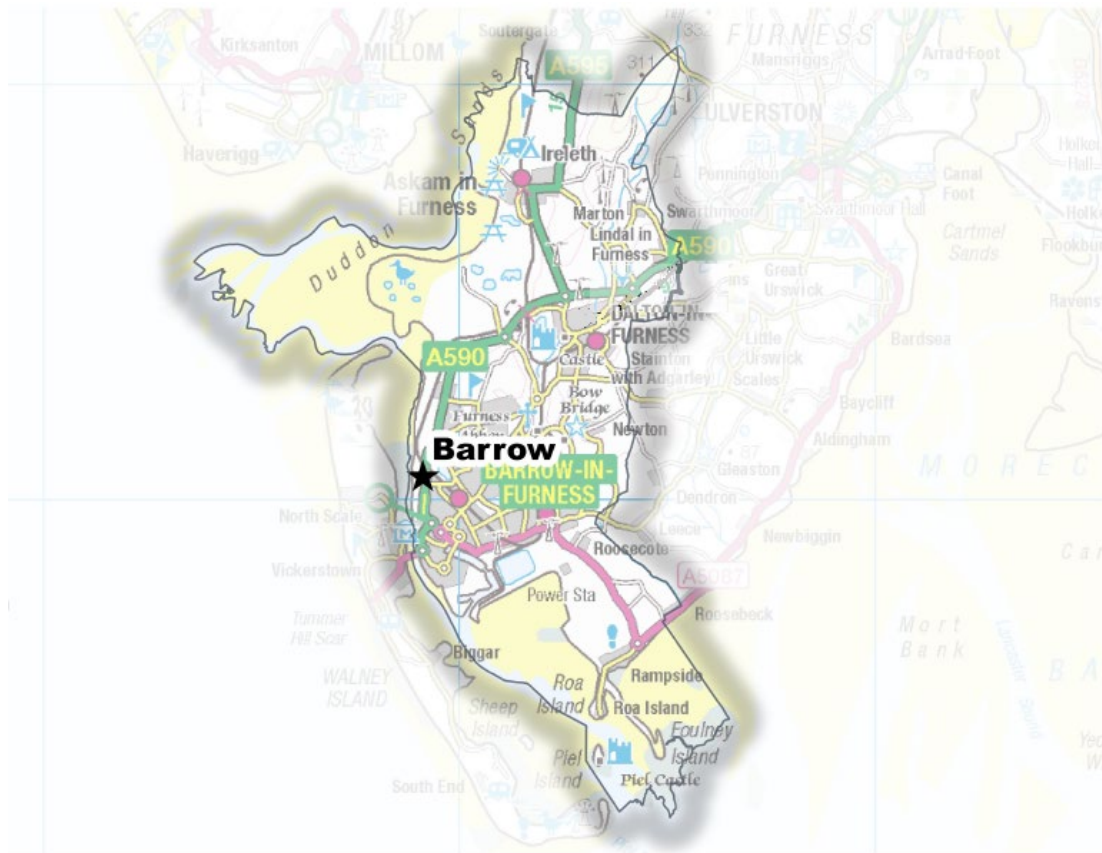
The RBEP 2018 is developed to support the Integrated Risk Management Plan (IRMP) 2019-23. The purpose of the IRMP 19-23 is to identify and assess fire and rescue related risks for the next four years, and set out what the service is going to do to address them.

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 Barrow. A map of the 'station area'¹ is shown below. The station in 17/18 was crewed by 20 regular firefighters.



Station Area	53,400 population
Crewing Type	Regular
Fire Engines	1 fire engine, 1 Aerial Ladder Platform, 1 Mass Decontamination Unit

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

Station Name	Distance by Road (MILES)
Walney	3 miles
Ulverston	9 miles
Broughton	14 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 Barrow regular fire engine had been off duty for 0% of the time.

C40P1	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%

Station Fire Engine Response Times

Barrow regular fire engine (C40P1) has 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.

C40P1	2015/16	2016/17	2017/18
Average crew turnout time (time it takes the crew to respond to the station)	1 min 42 secs	1 min 42 secs	1 min 53 secs
Average response time (time it takes the crew to arrive at the incident from the station)	3 mins 49 secs	4 mins 55 secs	4 mins 44 secs
Number of incidents attended by fire engine C40P1	478	499	535

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: Barrow

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	474	499	548	2	-	2	0.3	3	5	5	0.9	n/a	↑
Injury Road Traffic Collisions ¹	2	6	4	-	-	-	0.0	1	3	3	58.3	Very High	↔
Primary Fires ²	74	71	84	2	-	-	0.9	-	-	-	0.0	Very High	↑
Flooding and water incidents	7	11	13	-	-	-	0.0	1	-	-	3.2	High	↑
Gas incl Carbon Monoxide	6	6	2	-	-	1	6.7	-	-	-	0.0	Medium	↓
Automatic Fire Alarms	238	251	256	-	-	-	0.0	-	-	-	0.0	Standard	↔
Wildfires ⁴	1	1	1	-	-	-	0.0	-	-	-	0.0	Standard	↔
Animal Assistance Incidents	4	6	5	-	-	-	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 548 incidents within Barrow Fire Station area. This included 4 Injury RTCs, 84 primary fires and 13 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 2018.

The fire risk model shows decreasing fire risk for Barrow Fire Station with no high level risk LSOAs, and overall risk score decreasing from 1456 in 2014/15 to 1374 in 2018/19, a decrease of 6%.

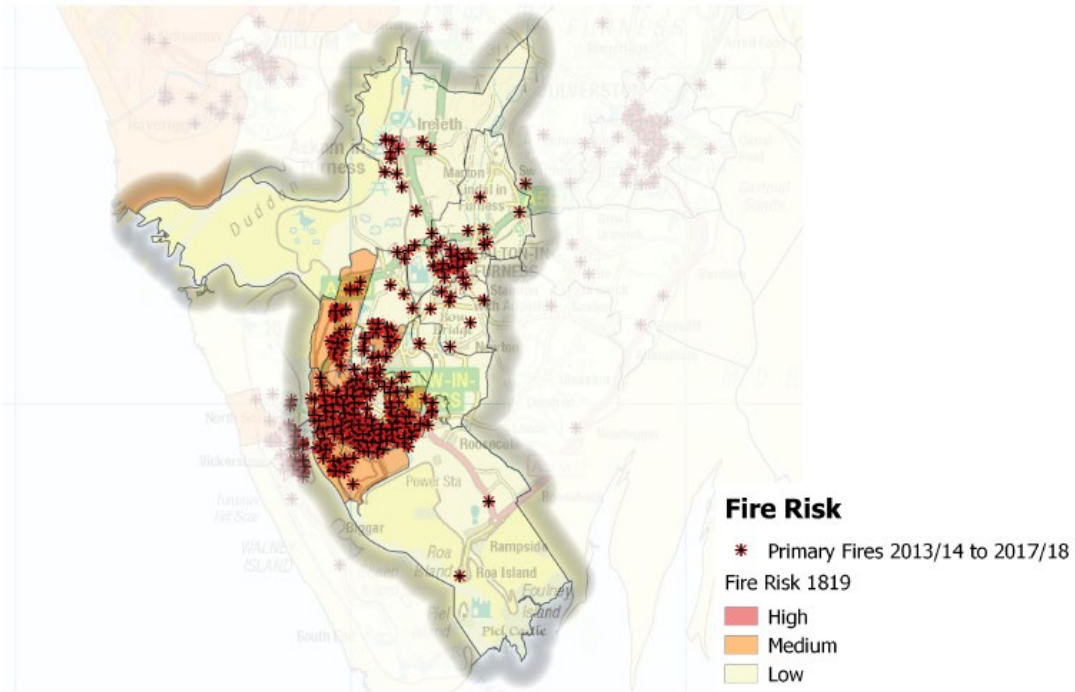
Table 2: 18/19 Primary Fire Risk – Barrow

Barrow 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	1120	25	1018	23	988	22	956	22	972	22
<=34	Low	336	15	376	17	400	18	408	18	402	18
TOTAL		1456	40	1394	40	1388	40	1364	40	1374	40

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

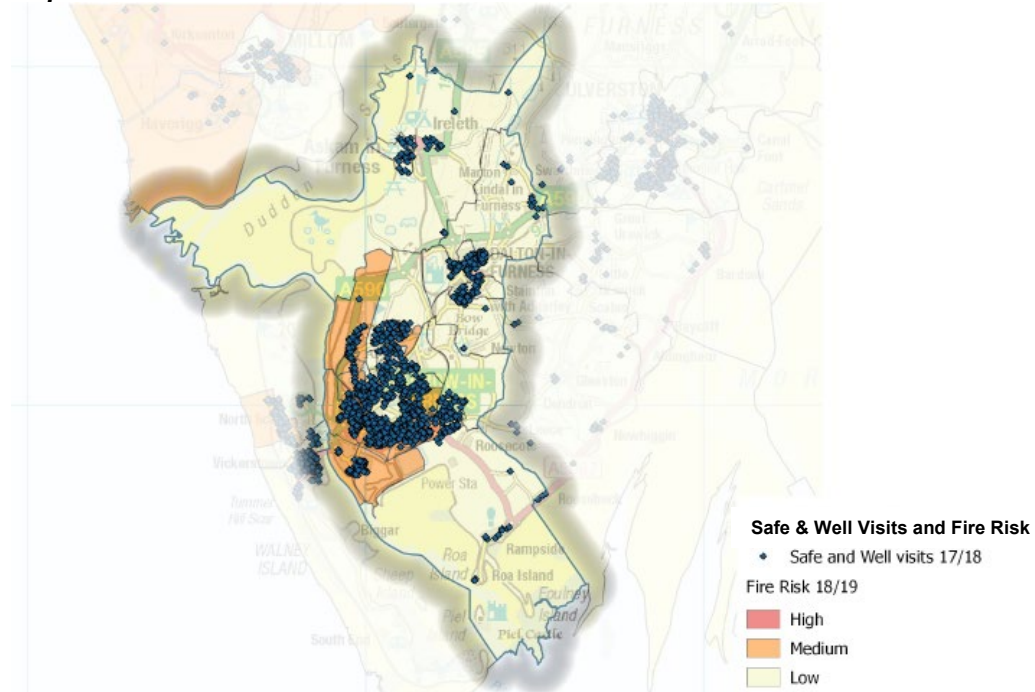
Map 1: 18/19 Primary Fire Risk –Barrow



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 –Barrow



Injury Road Traffic Collision Response Profile

Incident and Risk Profile

The Injury RTC risk modelling shows an increasing rate of risk for Barrow Fire Station area. There are two LSOAs that are high risk in 2018/19. The overall risk score increases from 1416 in 2014/15 to 1436 in 2018/19 – an increase of 1%

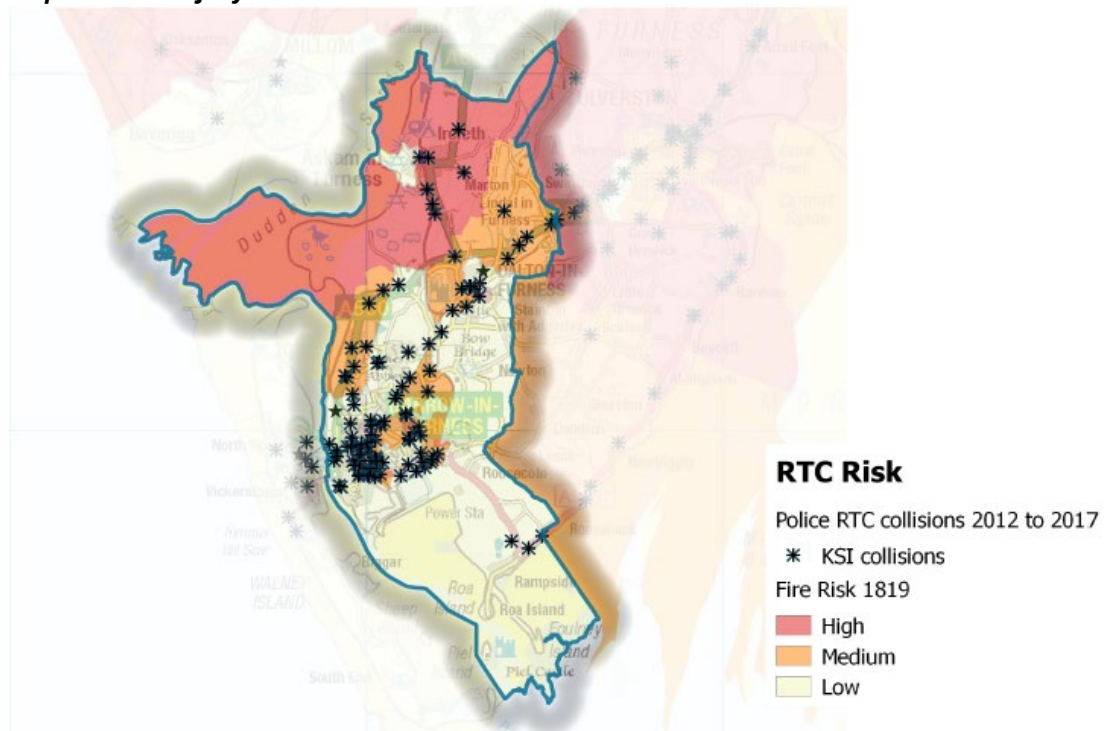
Table 3: 18/19 Injury RTC Risk – Barrow

Barrow 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	300	3	300	3	200	2	400	4	200	2
24-100	Med	432	6	416	6	416	6	476	7	608	9
<=24	Low	684	31	640	31	548	32	576	29	628	29
TOTAL		1416	40	1356	40	1164	40	1452	321	1436	40

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 1: 18/19 Injury RTC Risk – Barrow



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 Barrow-in-Furness District, 7 RAT sessions were provided throughout 2017/18 to a total of 257 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

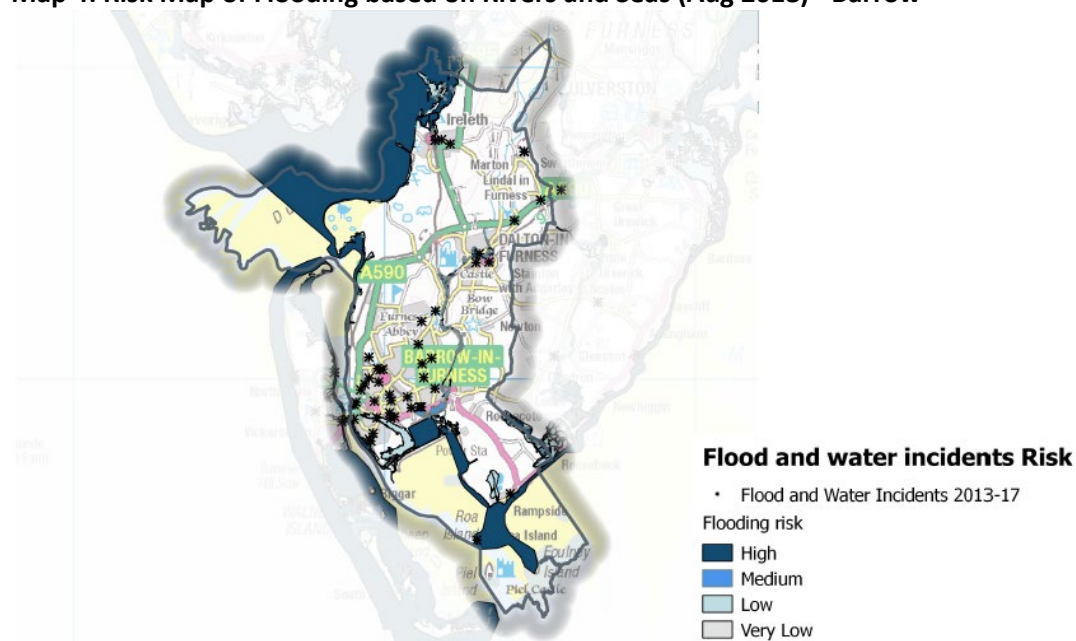
Datasource: CFRMIS

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.

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



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

Although Barrow remains predominantly a shipbuilding town with the BAE Systems shipyard specializing in submarine construction, crews from the station also train regularly on the more diversified risk sites such as the gas terminals, a paper mill and vessels in the dock system.

Barrow	Risk in station area
Heritage	<ul style="list-style-type: none"> • Bow Bridge <p>Grade I listed:</p> <ul style="list-style-type: none"> • West Gate to Furbess Abbey, remains of • Capella Extra Portas with attached walls • Gateway adjoining Capella Extra Portas • Furness Abbey Wall • Furness Abbey, including all medieval remains in care of English • Heritage • Piel Castle • No 101, Rampside Hall <p>Grade II* listed:</p> <ul style="list-style-type: none"> • Abbey House Hotel • Town Hall • Church of St James • Ormsgill Farmhouse • Barn immediately to rear of Sowerby Hall Farmhouse • Park House Farmhouse • Nos 1-13 (Consecutive), Sloop Street Tenements • Nos 1-13 (Consecutive) Steamer Street Tenements • Nos 1-9 (Consec), Devonshire Buildings, Island Road Mission & The • Devonshire Public House • Nos 10-14 (Consecutive), Devonshire Buildings
Environment	<ul style="list-style-type: none"> • No significant Environmental Risk Sites identified within the Station area
Site Specific Risks	<ul style="list-style-type: none"> • British Gas Plc • BAE Systems LTD, Bae Systems Top Yard Area A, BAE Systems Devonshire Dock • Laporte Wood Protection Ltd • Partylite Manufacturing • Sovereign Chemical Industries Ltd • INS Nuclear Terminal, Urofoam Ltd • Advanced Roofing Supplies • Centrica South, Centrica North • Furness General Hospital • Robert McBride Group • United Utilities (Electricity) Depot • Shanks Waste Solutions • CCW Manufacturing Ltd
Rurality	<ul style="list-style-type: none"> • Of the 34 LSOAs that make up Barrow all are designated as Urban according to DEFRA Urban/Rural classifications.

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 Barrow Fire Station area are shown below.

Map: Future Projects and Developments within Barrow Fire Station Area



Currently there are 5 infrastructure projects within Barrow station area:

Station	Size	Project	Investment Impact
West Coast	County	Cumbrian Coastal Railway Enhancement	Improvements to increase capacity, usage and resilience
Barrow	Major	BAE Systems Successor Programme	Sustain 1,400 employees
Barrow	Local	Port of Barrow Improvements	Ensure access and facilities support investment
Barrow	Local	Barrow Waterfront	Ensure port supports marine engineering projects
Barrow	Local	Marina Village	500 homes

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