

**Carlisle East Fire Station**  
**Risk Based Evidence Profile 2018**  
**Risk Review**



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

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## Contents

Introduction .....	3
Station Area and Resources.....	4
Fire Engine Availability .....	5
Station Fire Engine Response Times.....	5
Station Area Response Priorities.....	6
Primary Fire Response Profile.....	7
Incident and Risk Profile .....	7
Prevention and Protection Activity .....	8
Injury Road Traffic Collision Response Profile.....	9
Incident and Risk Profile .....	9
Prevention and Protection.....	10
Flooding and Water Rescue - Response Profile .....	11
Incident and Risk Profile .....	11
Prevention and Protection Activity .....	11
Other Risk information.....	12
Horizon Scanning.....	14

## 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).

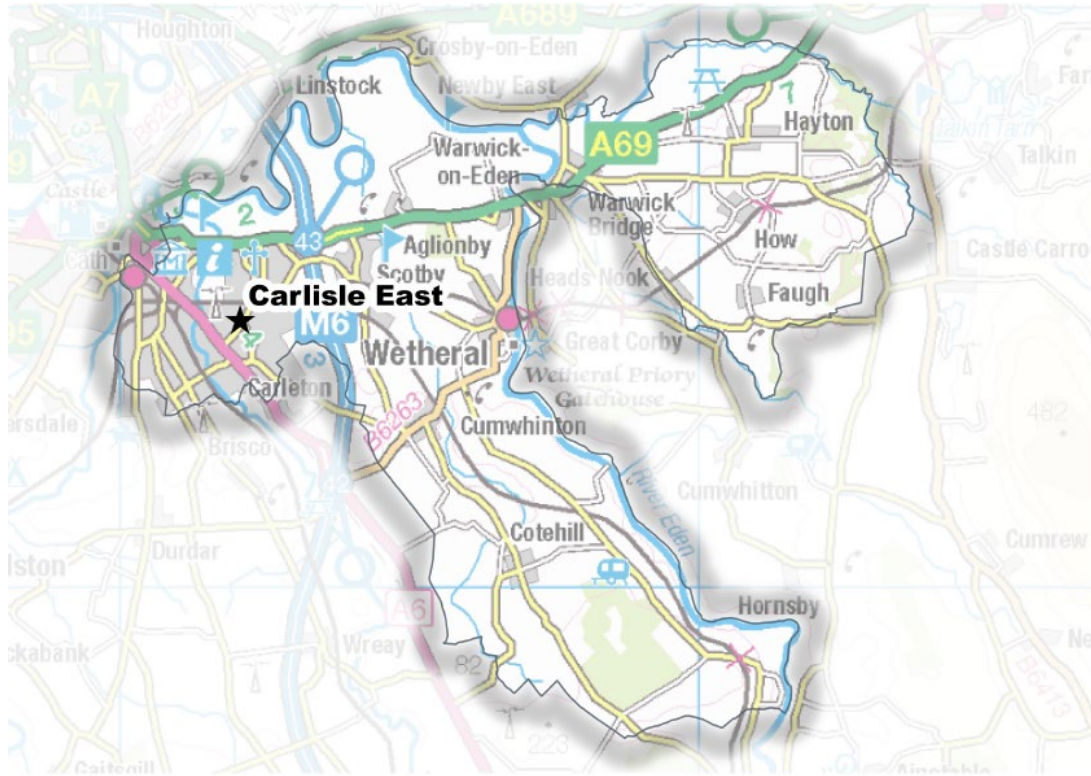
The RBEP 2018 is developed to support the Integrated Risk Management Plan (IRMP) 2019-23. The purpose of the IRMP 19-23 is to identify and assess fire and rescue related risks for the next four years, and set out what the service is going to do to address them.

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 the east of Carlisle. . A map of the ‘station area<sup>1</sup>’ is shown below. The station in 17/18 was crewed by 21 firefighters working the regular duty system.



Station Area	36,100 population
Crewing Type	Regular
Fire Engines	1 fire engine, 1 Aerial Ladder Platform and 1 Boat

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

Station Name	Distance by Road (MILES)
Carlisle West	4 miles
Brampton	9 miles
Longtown	11 miles

<sup>1</sup> 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 Carlisle East regular fire engine had been off duty for 0% of the time.

C20P1	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

Carlisle East fire engine 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.

Between 2015/16 and 2017/18 the Carlisle East regular fire engine (C20P1) had the following response times below

C20P1	2015/16	2016/17	2017/18
Average crew turnout time (time it takes the crew to respond to the station)	1 min 27 secs	1 min 28 secs	1 min 42 secs
Average response time (time it takes the crew to arrive at the incident from the station)	5 min 17 secs	6 min 48 secs	7 min 22 secs
Number of incidents attended by fire engine C20P1	545	540	502

## 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: Carlisle East**

Fire, Rescue and Road Safety Priorities 2018/19	Incidents			Fatalities				Seriously Injured Casualties				PRIORITY	2017/18 compared to 3yr average <sup>3</sup>
	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	394	415	356	1	1	4	0.5	2	4	6	1.0	n/a	↓
Injury Road Traffic Collisions <sup>1</sup>	5	12	7	-	-	2	8.3	2	3	3	33.3	Very High	↓
Primary Fires <sup>2</sup>	55	69	54	-	-	1	0.6	-	-	1	0.6	Very High	↓
Flooding and water incidents	39	20	13	-	-	-	0.0	-	1	-	0.0	High	↓
Gas incl Carbon Monoxide	-	-	-	-	-	-	11.1	-	-	-	0.0	Medium	↔
Automatic Fire Alarms	173	191	177	-	-	-	0.0	-	-	-	0.0	Standard	↓
Wildfires <sup>4</sup>	-	1	1	-	-	-	0.0	-	-	-	0.0	Standard	↑
Animal Assistance Incidents	5	4	1	-	-	-	0.0	-	-	-	0.0	Standard	↓

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

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

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

<sup>3</sup>Increase or decrease if greater than 5% of three year average

<sup>4</sup>Wildfire 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 356 incidents within Carlisle East Station area with 7 fatalities. This included 7 Injury RTCs, 54 primary fires and 13 flooding and water incidents.

CFRS Risk Profile identifies the levels of risk within an area (Lower Super Output Area<sup>2</sup>) 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 Carlisle East station with no high level risk LSOAs, and overall risk score decreasing from 1084 in 2014/15 to 912 in 2018/19, a decrease of 16%.

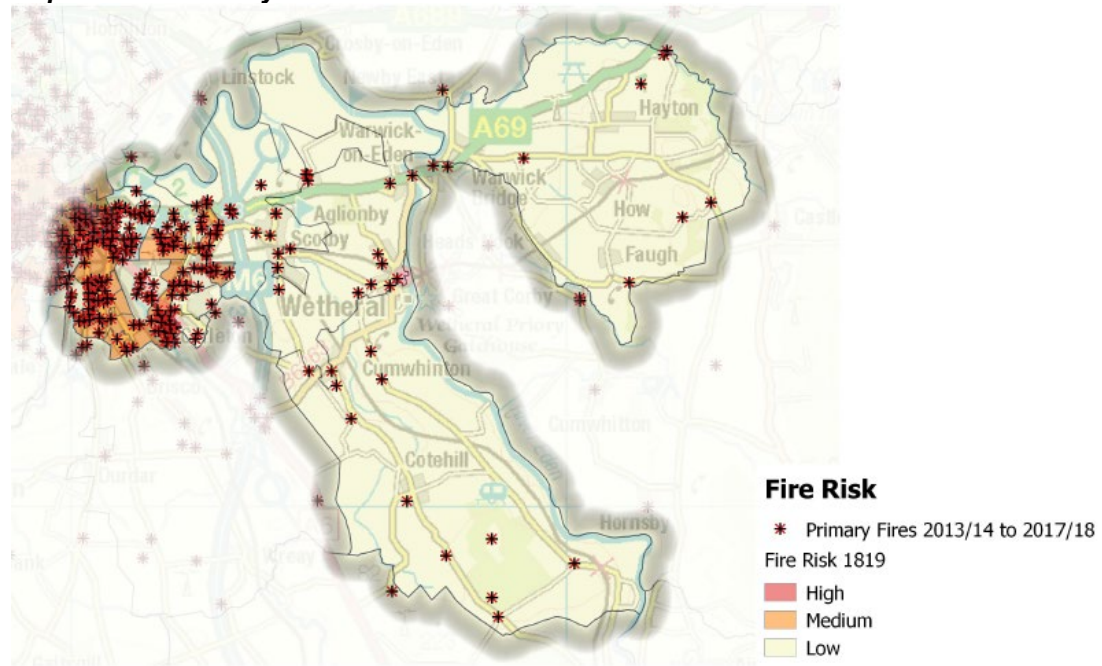
**Table 2: 18/19 Primary Fire Risk – Carlisle East**

Carlisle East 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	778	16	646	14	592	13	568	13	466	11
<=34	Low	306	14	366	16	402	17	388	17	446	19
<b>TOTAL</b>		<b>1084</b>	<b>30</b>	<b>1012</b>	<b>30</b>	<b>994</b>	<b>30</b>	<b>956</b>	<b>30</b>	<b>912</b>	<b>30</b>

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

<sup>2</sup> 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.

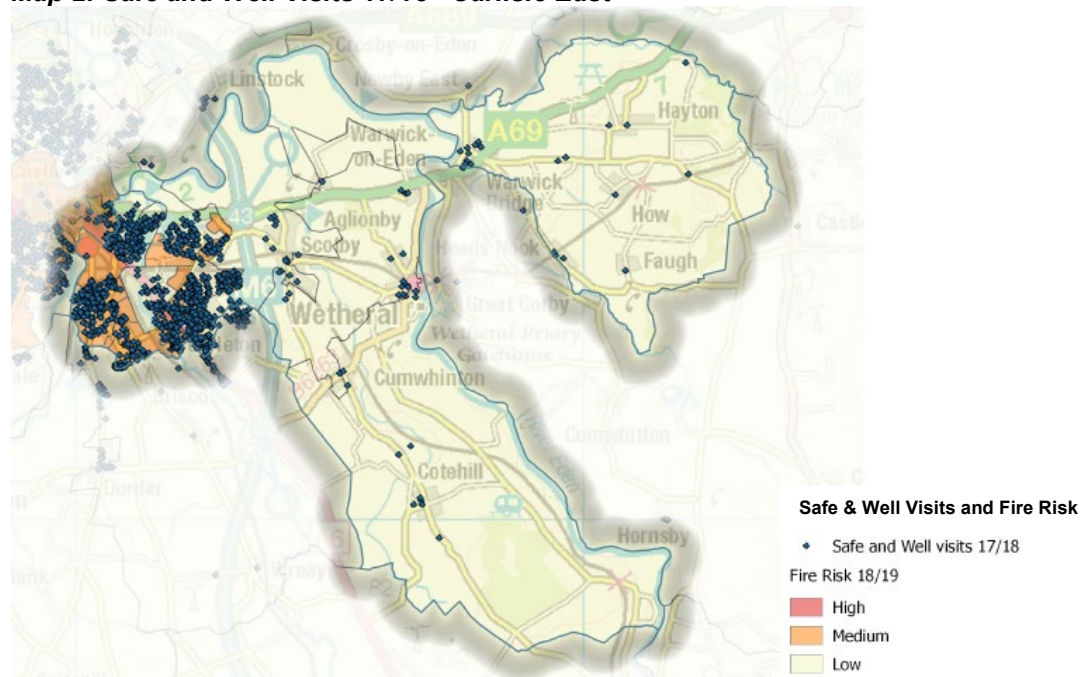
**Map 1: 18/19 Primary Fire Risk –Carlisle East**



**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 –Carlisle East**





## Injury Road Traffic Collision Response Profile

### Incident and Risk Profile

The Injury RTC risk modelling shows an increasing rate of risk for Carlisle East Fire Station area. There is one LSOA that is high risk in 2018/19. The overall risk score increases from 932 in 2014/15 to 944 in 2018/19 – an increase of 1%

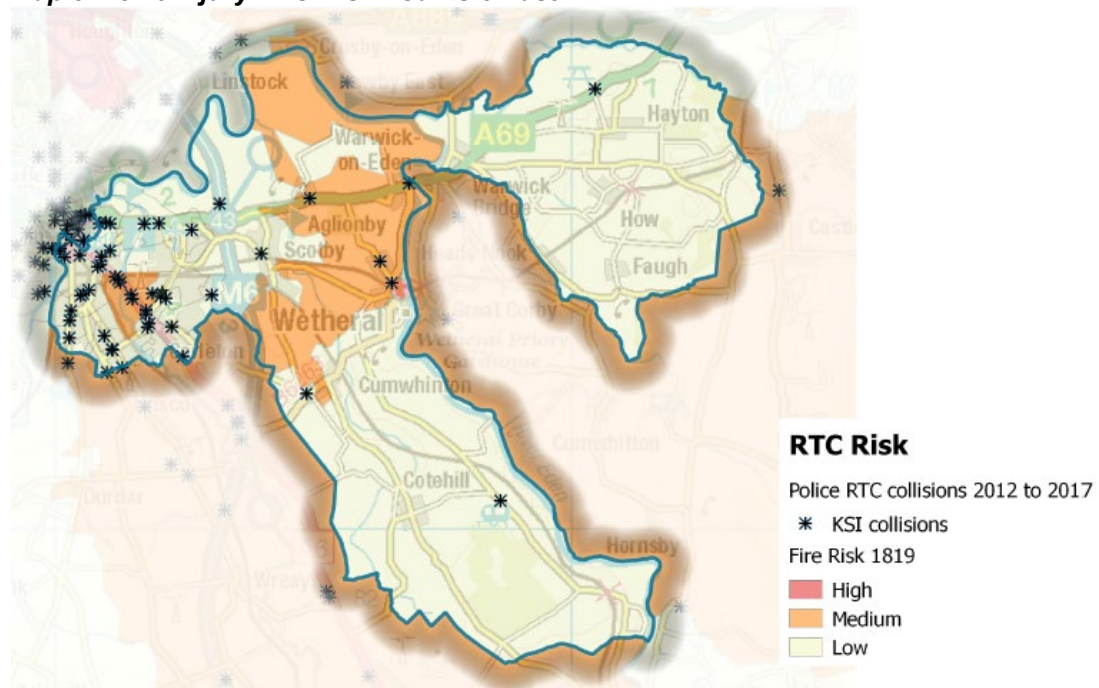
**Table 3: 18/19 Injury RTC Risk – Carlisle East**

Carlisle East 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	200	2	0	0	100	1	0	0	100	1
24-100	Med	332	5	424	6	308	5	440	7	252	4
<=24	Low	400	23	508	24	528	24	584	23	592	25
<b>TOTAL</b>		<b>932</b>	<b>30</b>	<b>932</b>	<b>30</b>	<b>936</b>	<b>30</b>	<b>1024</b>	<b>321</b>	<b>944</b>	<b>30</b>

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 – Carlisle East**



## 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 Carlisle District, 24 RAT sessions were provided throughout 2017/18 to a total of 629 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
<b>Cumbria</b>	<b>82</b>	<b>2,147</b>

*Datasource: CFRMIS*

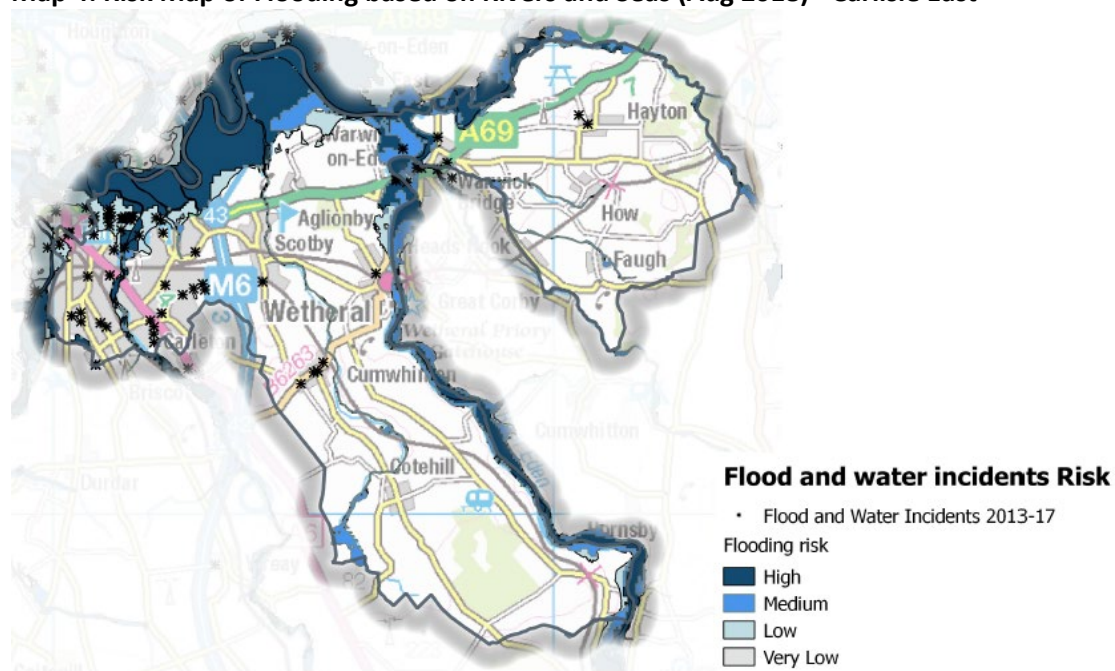
## Flooding and Water Rescue - Response Profile

### 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.

St. Aidan's Ward has the 5<sup>th</sup> highest percentage of flood and water related incidents (2%) over the last 5 years across Cumbria.

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



### 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 city of Carlisle is situated in the north of the county near to the Scottish border it is a city that is steeped in history and has many historical monuments including Carlisle Castle, the Cathedral and the Citadel which was built by Henry VIII. Although Carlisle is 2,000 years-old, it is a modern, thriving city offering shopping, entertainment, sports and sightseeing. It is the home of Carlisle United Football Club, an award winning museum and art gallery and the World Heritage site of Hadrian's Wall.

It is an important junction point for some of the county's main transport routes such as the West Coast Rail Line, the M6 Motorway, the A69 and the A695 which join together the North East of England and West Cumbria with Scotland and the North West of England.

The City has a number of industrial estates, including Kingstown and Rosehill, both of which are home to many different commercial premises.

The Lanes Shopping Centre, in the heart of the city, has over 75 retailers under one roof. It is home to familiar high street names as well as a flagship Debenhams store. The Victorian Market Hall has independent specialist storeholders and a regular weekend farmer's market. Carlisle is split into 12 urban wards, has the largest population in the county nearing 102,000 people, has eight secondary school and a major hospital, an airport to the east of the city and the Sands Centre which is Cumbria's premier live arts venue.

Carlisle East	Risk in station area
Heritage	<ul style="list-style-type: none"> <li>• Carlisle Castle</li> <li>• Wetheral Priory</li> <li>• Carlisle Cathedral</li> <li>• Dalston Road Cemetery</li> </ul> <p><b>Grade I listed:</b></p> <ul style="list-style-type: none"> <li>• Church of St Michael</li> <li>• Crown Court, adjoining offices and gate arch</li> <li>• Nisi Prius Courthouse, associated offices and gate arch</li> <li>• De Irebys Tower and outer bailey wall</li> <li>• Eden Bridge</li> <li>• Captains Tower and Inner Bailey Walls</li> <li>• Market Cross</li> <li>• Cathedral Church of the Holy and Undivided Trinity</li> <li>• Nos 5 and 6 Green Market</li> <li>• Nos 10-22 (Even) West Walls incorporating city walls</li> <li>• Wall, gates and railings in front of Tullie House</li> <li>• Bridge over outer Moat</li> <li>• No 15, Tullie House and extensions</li> <li>• Tithe Barn</li> <li>• Old Town Hall</li> <li>• West City Walls</li> <li>• Nos 5, 5A and 5B The Abbey, The Deanery and Prior's Tower</li> </ul>

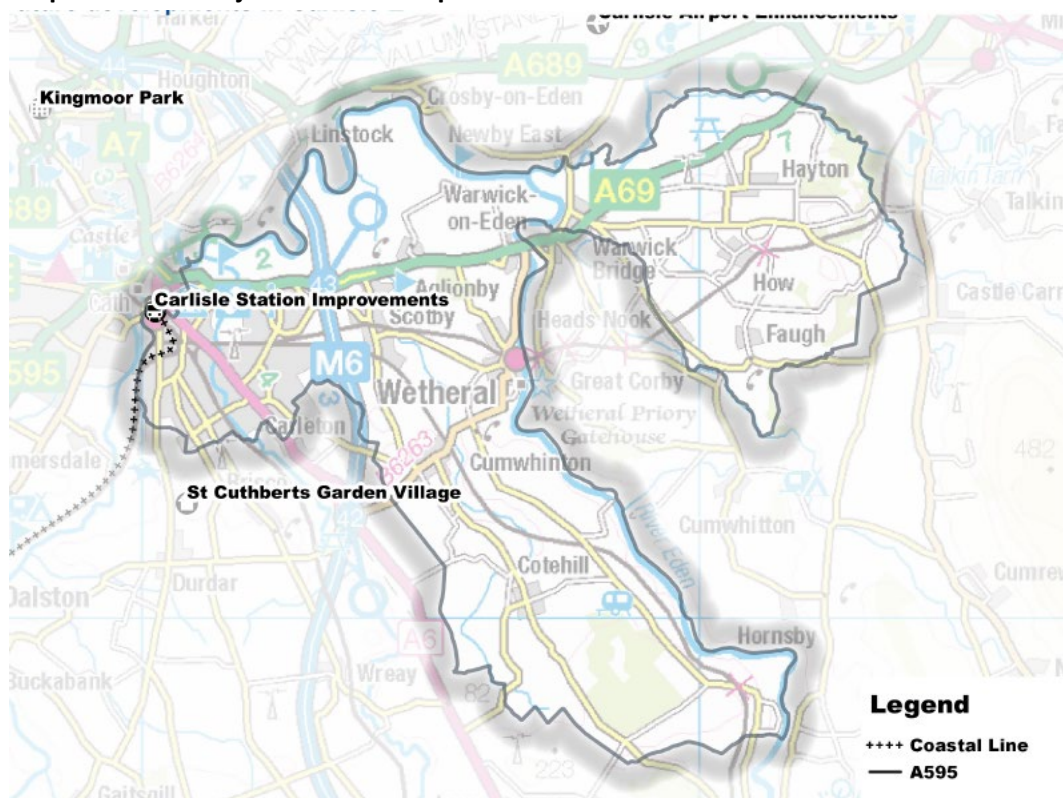
Carlisle East	Risk in station area
	<ul style="list-style-type: none"> <li>• Inner Bailey: Keep</li> <li>• Abbey Gate and Gatehouse</li> <li>• Inner Bailey: Palace Range including part of Queen Mary's Tower</li> <li>• Ruins of Dormitory of former Priory of St Mary</li> <li>• Fraternity of former Priory of St Mary</li> <li>• West City Walls and Tile Tower adjoining at south-west</li> <li>• Fragment of north City Walls adjoining south-east angle</li> <li>• Outer Bailey: Half-Moon Battery, Flanking Wall and Bridge</li> </ul> <p>Dalton:</p> <ul style="list-style-type: none"> <li>• Curtain Walls surrounding Rose Castle</li> <li>• Gate with flanking lodge and tower, to north of Rose Castle</li> <li>• Rose Castle</li> </ul> <p>Great Corby:</p> <ul style="list-style-type: none"> <li>• Kitchen garden walls to south-east of Corby Castle</li> <li>• Gate Lodge to east of Corby Castle</li> <li>• Wall and gate piers to East of Corby Castle</li> <li>• Cascade to west of Corby Castle</li> <li>• Dovecote to south-east of Corby Castle</li> <li>• Salmon coops to South of Corby Castle</li> <li>• Tempietto, Corby Castle</li> <li>• Corby Castle</li> </ul> <p>Highbridge:</p> <ul style="list-style-type: none"> <li>• Thistlewood Farmhouse</li> </ul> <p>Kirkbampton:</p> <ul style="list-style-type: none"> <li>• Church of St Peter</li> </ul> <p>Rockcliffe:</p> <ul style="list-style-type: none"> <li>• Churchyard Cross, south of Church of St Mary</li> </ul> <p>Wetheral:</p> <ul style="list-style-type: none"> <li>• Walls of east range of Wetheral Priory, east of Gatehouse <ul style="list-style-type: none"> <li>• Wetheral Priory Gatehouse</li> </ul> </li> <li>• Corby Bridge</li> <li>• St Constantine's Cells</li> </ul> <p>Plus over 50 Grade II* listed buildings</p>
Environment	<ul style="list-style-type: none"> <li>• Special Protected Area: Rockcliffe Marsh (NY087577)</li> <li>• 9 Site of Specific Scientific Interest</li> </ul>
Site Specific Risks	<ul style="list-style-type: none"> <li>• Stead McAlpin, Cumberland Infirmary, Atlas Works, Carnaud Metalbox, Bevcan, Pirelli Ltd, Carlisle United AFC, BSW Timber, BP Dalston, Nestles. AW Jenkinson Wodwaste, calor gas, Carlisle Airport, Carlisle Cathedral, Cumbria Waste Management Hespian Wood, FloGas UK, Ineos Dalston, Shanks Waste Management Hespian Wood</li> </ul>
Rurality	<ul style="list-style-type: none"> <li>• Of the 58 LSOAs that constitute Carlisle, the majority are designated 'Urban' according to DEFRA Urban/Rural</li> </ul>

Carlisle East	Risk in station area
	classifications with 1 'Town and Fringe' and 7 '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 Carlisle East Fire Station area are shown below.

**Map 5: Future Projects and Developments within Carlisle East Fire Station Area**



Currently there are infrastructure projects within Carlisle East station area:

Station	Size	Project	Investment Impact
West Coast	County	Cumbrian Costal Railway Enhancement	Improvements to increase capacity, usage and resilience
Carlisle East & West	Local	Carlisle Station Improvements	Improvements to passenger & freight

Based on these economic and housing projects, Carlisle district's population is expected to remain relatively stable with projections of growth between +1% and +6% by 2023, which would lead to primary fire growth between 1 and 9. This would have no projected impact on fire casualty rates by 2023.