APPENDIX 1

CLEVELAND FIRE BRIGADE

Building Fire Emergency Response Standards Evaluation 2018/19

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Data Quality

We are satisfied that any information and assessments included in this report are in all respects accurate and complete. No significant data quality issues have been identified during the preparation of this report by the Risk and Performance Team nor have any been brought to the team's attention.

Whilst we have not validated every item of information within the report we are confident, from our knowledge of our staff, relevant systems and processes, that the information produced is done so in accordance with CFB approved guidance. No issues on data quality have been identified in any internal or external assessment conducted on the Brigade.

Our commitment to high quality data is driven by our Performance Management Framework that encapsulates data quality as a key element.

Our embedded approach to the principles of efficient and accurate data collection, collation, recording, analysis and reporting of information across the organisation, to partners and the public, enable increased levels of confidence in the quality of information produced.

In all cases, whatever the source of the information, the most relevant that is available is used within our reports. Information and data sharing agreements and protocols have been formally established where data is shared between partners.

We continually work to further improve the quality of our data through internal reviews of management information systems, processes and procedures. Staff understanding and adherence to appropriate data quality standards will be continually monitored to ensure current high standards are maintained and are not the sole responsibility of the Risk and Performance Team.

1 Introduction

The purpose of this report is to provide ELT with an evaluation and analysis of the Emergency Response standards for Building Fires that were introduced with effect from 1st April 2018 comparing to the former standards in operation to ascertain whether they are achieving their intended purpose.

2 Background

In 2018/19 the approval of the Community Integrated Risk Management Plan 2018/22 (CIRMP) saw the introduction of a new suite of emergency response benchmark covering all areas of the Brigade's Emergency Response strategy.

The development of the new standards was underpinned and supported by the following documents

- Emergency Response Policy and Strategy
- Industrial Response Review
- Task analysis and Optimum Crewing Levels Report
- Evaluation of Emergency Response Arrangements
- Risk Categorisation Model

The standards for building fires, that this report concentrates upon, moved away from the risk based benchmark for building fires to a standard benchmark for the entire Brigade area. The new standards were implemented 1st April 2018**.**

Corporate Priority SSC1: Aspire to the guiding principle that 'everyone should have equal entitlement to the same attendance targets for fire engines, irrespective of whether they live in a geographic area in which there is a higher likelihood or a lower likelihood of a fire occurring' and implement the outcomes of the review of the emergency response standards.

SSC1.6: evaluate new building fire emergency response standards

It was agreed when the CIRMP was approved that for the first year (2018/2019) performance against both the 'old' and the revised emergency response standards would be reported. An analysis and evaluation of these benchmarks was identified for completion during 2019/20.

3 Comparison of Former vs New Standards

The following section compares performance against both the old and new revised emergency response standards.

3.1 Former standard

The Brigade's former attendance standards for F1 Building Fires were established in 2004 following the removal of the National Standards of Fire Cover. National Standards of Fire Cover focused on property risk in a given area aligning resources and standards towards emergency response for the protection of property.

The Brigade's policy is to attend all emergency incidents as quickly as possible

The 2003/04 IRMP established a response standard in terms of the weight of a response to an incident. It established a policy at that time that no deterioration in standards from previous years would be acceptable. As a result attendance standards established during 2004/05 broadly conformed to 5 and 8 minute response times for high risk areas. These local standards risk to individuals and Firefighter safety by council ward.

The risk assessment process used to inform the response standards has evolved over the years with datasets and associated systems being enhanced as detailed below;

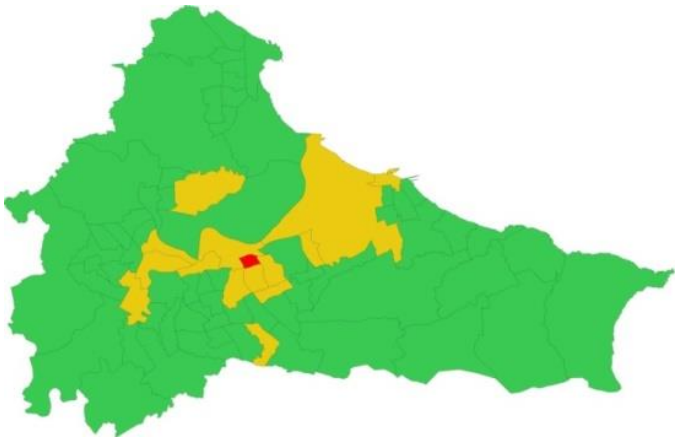
2004: We utilised a district based model based on a weighted service demand to identify problem areas in each district. This enabled resources to be targeted into these areas to mitigate the risks.

2006: The National Framework required Fire and Rescue Authorities (FRAs) to produce a local IRMP that detailed the FRA's strategy, in collaboration with other agencies, for reducing the commercial, economic and social impact of fires and other emergency incidents. To support this all FRS were provided with the Fire Services Emergency Toolkit (FSEC) by Government. FSEC is an IT application to support strategic and tactical decision making which included the development of Integrated Risk Management Plans. We utilised FSECs Building Fire Risk national risk assessment model to develop our own risk assessment which was used to develop our ER standards. This assessment focused on four key categories of information (incidents, injuries and fatalities, lone pensioners and rented accommodation) to ascertain the fire building risk in the area.

2011: During production of the IRMP in 2011 our intelligence indicated that the risk assessment methodology could be enhanced by adding additional factors not included in the original model subsequently identified as having a direct correlation to fire risk. Therefore the methodology adopted in 2006 was extended in 2011 including three additional factors or 'risk layers' (deprivation, smoking and drinking). A resultant single risk map, shown at both output area and ward level, was produced which informed both our emergency response and prevention services.

2014: During 2014 a fundamental review and evaluation of our risk assessment methodology was undertaken. Part of this involved a review of how other FRS approached their risk assessment methodology. This confirmed that no single model was used by FRS and as such we adjusted our own local approach with the development of two distinct risk assessments:

Community Risk Assessment: used to identify 'pure' risk and thus direct our targeted approach to prevention services. It utilises seven risk factors in the assessment.



Emergency Risk Assessment - based around service demand (incidents and casualties) informing emergency response standards and appliance disposition (as demonstrate in the map).

This process was subject to external validation by Industrial Statistics Research Unit (ISRU) of Newcastle University.
The standards applied to this Emergency Response risk assessments are profiled at ward level. The standards applied to the High, Medium and Low risk thresholds are shown in the following table;

Risk Type	**Fire Brigade Attendance**	
BUILDING FIRES in HIGH Risk Areas	One Fire engine within 5 minutes on 75% of occasions	Second Fire engine within 8 minutes on 75% of occasions And **A third fire engine within 10 minutes on 75% of building fires where there is reported to be persons involved**
BUILDING FIRES in MEDIUM Risk Areas	One Fire engine within 8 minutes on 75% of occasions	Second Fire Engine within 11 minutes on 75% of occasions
BUILDING FIRES in LOW Risk Areas	One Fire engine within 10 minutes on 75% of occasions	Second fire engine within 13 minutes on 75% of occasions

3.2 2018/19 Standard

During 2018/19 the introduction of the CIRMP saw a revised approach to Emergency Response standards based on the premise that every individual should receive a broadly similar emergency response in terms of the resources deployed and the time taken to arrive irrespective of place of residence.

Development of our locally determined new Emergency Response Standards to Building Fires has utilised intelligence derived from live fire tests conducted in dwellings to establish tenability and survivability of people in fires. This process is described in more detail within the following section.

The resultant outcome provides Emergency Response standards to fire in buildings of;

Building Fires (Dwellings and Other Buildings)

- Average of Seven (**7) minutes** for the attendance of the first appliance to ALL building fires
- Average of **ten (10) minutes** for the attendance of the support appliance to ALL building fires
- **90%** receiving an attendance of the **1st Appliance within ten (10) minutes**

Development of new standards

The development of the 2018/19 Emergency Response Standards to Building Fires utilised intelligence derived from live fire tests conducted in dwellings to establish tenability and survivability of people in fires. The tests provided raw data and assessments made utilising the methodology set out in **ISO 13571:2012 Life-threatening components of fire-- Guidelines for the estimation of time to compromised tenability in fires**.

Thirteen full scale tests were used with different fires set and different door configurations to establish when conditions became untenable. Data collected during the tests determined that fire created untenable conditions with rescue being required within:

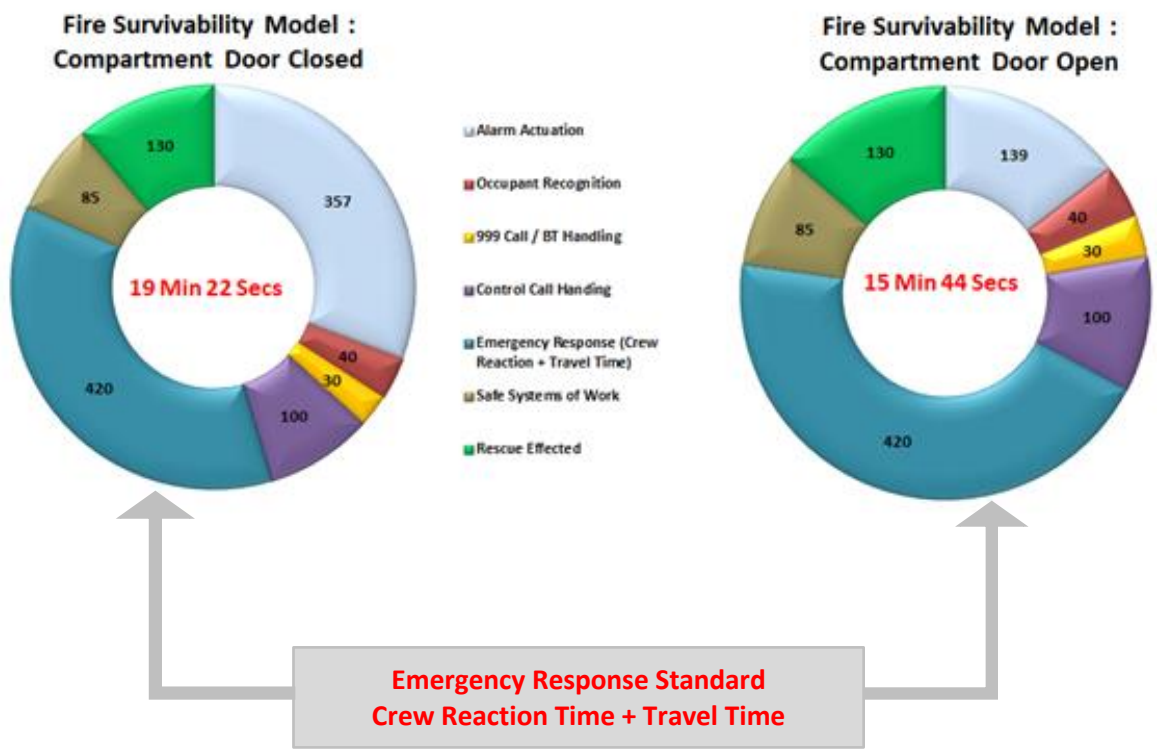
- 15:44 minutes with the door open in the room of origin
- 19:22 minutes with the door closed in the room of origin

Timeline

By utilising this data a timeline for human survivability was developed setting out the components of an incident from the start of a fire in a domestic property until the last reasonable point where a successful rescue could be made. The components of the incident include;

- **Alarm actuation:** time taken for the products of combustion to reach detection.
- **Occupant recognition:** time taken for the occupant to recognise and act upon the signal from the detection.
- **Dial 999 BT call handling :** time taken for calling 999,requesting the fire service and being connected
- **Fire control call handling:** average time for fire control operators to collect sufficient information to mobilise fire service resources.
- **Crew reaction time** :** average time for crews to respond to the call for assistance and mobilise to the scene
- **Appliance travel time**:** average time from the appliance booking mobile to incident until it arrives at the scene and books in attendance
- **Safe systems of work:** average time for crews on the scene to make an assessment of what has happened and what systems need to be put in place
- **Rescue affected:** average time for crews to search a building and perform a rescue.

**The Emergency Response Standards for Building Fires equates to the total of Crew Reaction Time and Appliance Travel Time, as demonstrated in the following chart;



The aims and intended benefits of implementing the new standards for Building Fires include;

1 Equal entitlement of an emergency response appliance to a building fire when required no matter the risk of the area.
2 Removes the cliff edge boundaries of response standards between geographical wards.
3 Maintaining consistent improving performance for ER standards through enhancements in configuration and deployment of resources.
4 Through detailed analysis and improvements on each of the time elements in the timeline identified in the human survivability model, the overall timeline for responding to a suspected building fire incident will reduce and thus the likelihood of an individual surviving such an incident will increase. Note the ER response benchmarks only cover the crew reaction time and appliance travel time to incidents. Separate benchmarks have been established for other elements of the human survivability model such as Call Handling Time by Fire Control.
5 Targeting of those areas that can't be reached within the approved standard for prevention services.

3.3 Comparison of Emergency Standards

The table summarises the 'old' and the revised emergency response standards..

Old Standards	New Standards
▪ Originates from former standards of fire cover	▪ Based on national research
▪ Standards based on Initial Incident Type i.e. type of incident received by Fire Control.	▪ Standards are based on Initial Incident Type i.e. type of incident received by Fire Control.
▪ Standards based on all building fires including F1 Building AFA	▪ Standards based on all building fires including F1 Building AFA
▪ Excludes non-building primary fire incidents	▪ Excludes non-building primary fire incidents
▪ Standard based on Time of Mobilisation instruction from Fire Control to Time of Arrival at incident. Hence it includes: ❖ Crew Turnout Time ❖ Travel Time	▪ Standard based on Time of Mobilisation instruction from Fire Control to Time of Arrival at incident. Hence it includes; ❖ Crew Turnout Time ❖ Travel Time
▪ Clock stops when the fire appliance crewed by 4+ officers attends the incident	▪ Clock stops when the fire appliance crewed by 4+ officers attends the incident
▪ Standards are locally determined, hence no comparisons can be made between fire and rescue services	▪ Standards are locally determined, hence no comparisons can be made between FRS's
▪ Differential standard based on the risk of a geographical area	▪ No risk assessment model used to determine ER risk of an area
▪ Standard based on a risk assessment model - Emergency Response Risk Assessment at ward level. In 2018/19 there were ❖ 1 High Risk Ward ❖ 14 Medium Risk Wards ❖ 64 Low Risk Wards	▪ Standard Response standard for all area
▪ Standard is shown as a % achievement of the appropriate standard with a 75% threshold set as a performance level	▪ The standard is shown as an average time for attendance
	▪ Comparing the former risk based response standards, the adoption of the new standard means that: ❖ 1,498 (1%) dwellings receive a slower response standard (7 compared to 5 Minutes) ❖ 235,180 (99%) dwellings receive an enhanced standard (7 compared to 8 or 10 minutes)

4 2018/19 Performance

Reporting achievement against the approved revised ER standards has been ran in parellel with the former ER risk based standards. The following table provides details of those standards applicable for this evaluation. Details of performance of all ER standards are reported in the Annual Perfomance and Efficiency Report 2018/19.

4.1 Response Benchmarks – Pre April 2018

Building Fires : ER Standard	2018/19	Target	% Direction of travel from target
High Risk Wards			
1st Pump in 5 minutes	96% (23/24)	75%	19%
2nd pump in 8 minutes	100% 23/23	75%	25%
3rd pump in 10 minutes (persons reported)	No Incidents	75%	-
Medium Risk Wards			
1st Pump in 8 minutes	97% (861/886)	75%	22%
2nd pump in 11 minutes	96% (730/764)	75%	22%
Low Risk Wards			
1st pump in 10 minutes	97% (1,467/1,511)	75%	22%
2nd pump in 13 minutes	94% (1,127/1,205)	75%	19%

4.2 Response Benchmarks 2018/19

Building Fires

Indicator		2018/19	Target	% Direction of travel from target
1.1.2.10	Average time of first appliance attendance to a building fire (7 Minutes)	00:04:48 (88% within 7 mins)	00:07:00	-31%
1.1.2.11	First appliance attendance to building fires within 10 minutes on 90% of occasions	98% (2,372/2,421)	90%	8%
1.1.2.12	Average time of second appliance to attend a building fire incident (10 minutes)	00:06:44 (88% within 10 mins)	00:10:00	-33%

Detailed at Appendix 1 is comparator information of benchmarks between 2017/18 and 2018/19.

5 Analysis

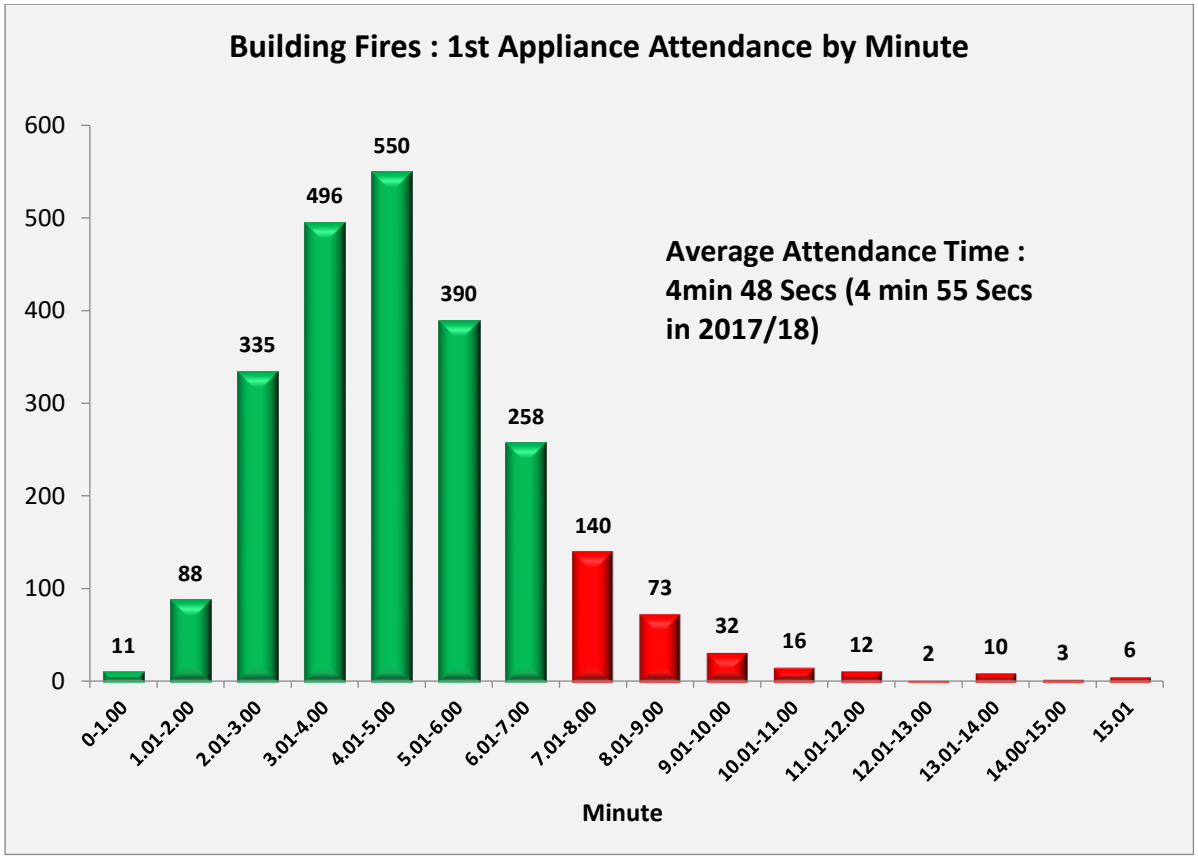
The Brigade has successfully achieved its targeted performance levels on both the former and new response standards. .

One factor to consider when analysing this performane against emergency response standards is that achievment of standards has been achived while 23% (2,014 hours) of the time the Brigade has operated with fewer than the optimum level of 18 available appliances, as set out in the CIRMP.

There are however incidents where we have failed to achieve the specified standard. The following section concentrates on these incidents and provides further analysis including those incidents where we have failed the standard in more detail in respect of the new ER standards.

5.1 Analysis of Attendance by Minute: 1st Appliance Attendance

A detailed analysis of all mobilisations as first appliance attendance at a Building Fires has been undertaken to determine the spread of attendance across one minute intervals. The outcome of this analysis is shown in the following chart.



An analysis of all of 1st appliance mobilisation indicates

- The average attendance time for first appliance attendance is 4 minute 48 seconds. In 2017/18 the average time was 4 minute 55 seconds;
- No 1st appliance mobilisations reduced from 2546 in 2017/18 to 2421 in 2018/19
- The fastest attendance time was 19 seconds (2 occasions);
- The slowest attendance time was 29.49 minutes;
- 11 x attendances were made under 1 minute;
- 9 x attendances were made over 14 minutes;
- 88% of 1st appliance attendance within 7 minutes;
- In 2018/19 23% of time (2,014 hours) the Brigade operated with fewer than 18 appliances.

The average response time has reduced from 4 min 55 seconds in 2017/18 to 4 minute 48seconds (2% improvement) in 20018/19. It can't be proved that this reduction is attributable to the introduction of the new standards as there are a number of external influencing factors which could impact on the emergency response standard such as numbers and locations of incidents and appliance availability

5.2 Summary Analysis of Mobilisations against standards

The following table provides a summary analysis of those mobilisations which have passed and failed the respective benchmarks.

Mobilisations against ER Standard	Old Standard		2018/19 Standard	
	No	%	No	%
1st Appliance: No. Mobilisations Achieving Standard	2,351	97	2,126	88
No Exceeding Standard	70	3	295	12
Total Mobilisations: 1st Appliance	2,421	100	2,421	100
2nd Appliance: No. Mobilisations Achieving Standard	1,880	94	1,746	88%
No Exceeding Standard	112	6	246	12%
Total Mobilisations: 2nd Appliance	1,992	100	1,992	100%
1st Appliance: No. Mobilisations Achieving 10 Mins			2,372	98%
No Exceeding Standard			49	2%
Total Mobilisations: 1st Appliance 10 Mins			2,421	100%

From this analysis we can see fewer mobilisations have exceeded the respective benchmark when analysing against the old standards (70 1st appliance and 112 2nd appliance mobilisations). This is however not unexpected as the new standards provide more stringent benchmarks for 99% of properties in the Brigade area and as a result we would expect the number of mobilisations to exceed the standard to increase.

5.3 Duty System Analysis

An analysis of mobilisations, including those who exceed the standards, across retained crewed appliances and whole-time appliances are detailed within the following table;

	1st Mob	1st Exceeding Standard	% of Mobs	2nd Mob	2nd Exceeding Standard	% of Mobs
Whole-time	2,261(93%)	208 (71%)	9%	1,810(91%)	166(67%)	9%
Retained	160 (7%)	87(29%)	54%	182(9%)	80(33%)	44%
Total	2,421(100%)	295(100%)	12%	1992(100%)	246(100%)	12%

Key findings from this

1st Appliance

- 12% (295) of 1st appliance mobilisations exceed the ER Standard
- 93% (2261) of 1st Appliance mobilisations are by whole-time appliances, 9% (208) of exceed the standard.
- 7% (160) of 1st Appliance mobilisations are by Retained appliances,54% (87) of which exceed the standard
- 71% of total mobilisations exceeding the 1st appliance ER standard are by whole-time appliances and 29% by retained appliances

2nd Appliance

- 12% (246) of 2nd appliance mobilisations exceed the ER Standard
- 91% (1810) of 2nd Appliance mobilisations are by whole-time appliances, 9% (166) of which exceed the standard.
- 9% (182) of 2nd Appliance mobilisations are by Retained appliances,44% (80) of which result exceed the standard.
- 67% of total mobilisations exceeding the 2nd appliance ER standard are by whole-time appliances and 33% by retained appliances

In absolute figures whole-time appliances incur more failures but proportionally the largest number of failures occur within retained crewing appliances when compared with the number of mobilisations.

5.4 Station and Appliance Analysis

The following table details the numbers of 1st and 2nd appliance exceeding the standard against the responding stations.

Station	1st Mob	No Exceeding Standard	%	2nd Mob	No Exceeding Standard	%
Middlesbrough	478	26	5%	463	24	5%
Stockton	426	42	10%	312	36	12%
Grangetown	420	24	6%	380	30	8%
Redcar	158	29	18%	74	21	28%
Thornaby	222	39	18%	267	20	7%
Billingham	57	9	16%	47	11	23%
Coulby Newham	130	15	12%	33	4	12%
Stranton	383	31	8%	313	35	11%
Headland	8	4	50%	11	7	64%
Yarm	7	6	86%	4	3	75%
Guisborough	41	19	46%	8	5	63%
Saltburn	27	11	41%	31	14	45%
Skelton	34	21	62%	34	26	76%
Loftus	30	19	63%	15	10	67%

Key findings from this

- All stations have incurred mobilisations that exceed the ER standards over the course of the year;
- Middlesbrough mobilised as first and second appliance the most number of times;
- In absolute terms Stockton incurred the highest number of mobilisations that exceed the benchmarks;
- Yarm mobilised the fewest number of times and proportionally Yarm incurred the highest proportion of their mobilisations who exceed the benchmark.

Full details by individual appliance are provided in Appendix 2

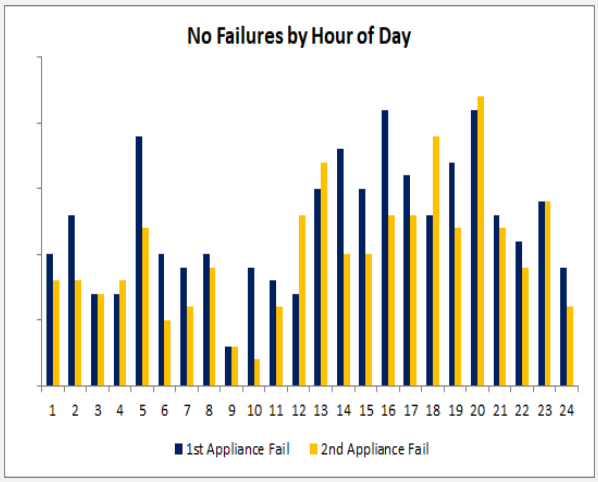
5.5 Temporal Analysis of Mobilisations Exceeding the Benchmarks

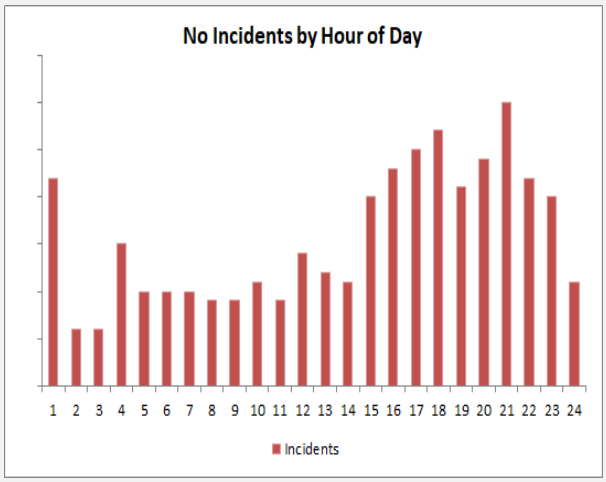
Incidents can occur at any time of the day and operational appliances must be in a state of readiness to respond to such incidents at any time of the day. The following table provides details of the number of mobilisations exceeding the ER standard by 1st and 2nd appliance mobilisations by hour of day.

Hour	1st Appliance Exceeding ER Standard	2nd Appliance Exceeding ER Standard	Hour	1st Appliance Exceeding ER Standard	2nd Appliance Exceeding ER Standard
00	10	8	12	15	17
01	13	8	13	18	10
02	7	7	14	15	10
03	7	8	15	21	13
04	19	12	16	16	13
05	10	5	17	13	19
06	9	6	18	17	12
07	10	9	19	21	22
08	3	3	20	13	12
09	9	2	21	11	9
10	8	6	22	14	14
11	7	13	23	9	6

Key Findings

- In absolute terms there are more mobilisations exceeding the ER standard in the afternoon and early evening. However comparisons must be made to the equivalent incident profile which follows a similar pattern – as shown in the charts below.
- Peak time for mobilisations failing the ER Standard for both 1st and Second appliance is 19:00 to 19:59 hours
- Fewest number of mobilisations exceeding the benchmark for 1st appliance is 08:00 to 08:59 and 2nd appliance is 09:00 to 09:59.





5.6 Reasons for Mobilisations Exceeding ER Standards

Each time an appliance exceeds the benchmark, operational personnel have been requested to record details of why the benchmark was not achieved. Where this is not recorded, a manual inspection of incident logs has been undertaken to try and ascertain the reasons for such an event. This enables the data to be analysed to inform operational management to alleviate any emerging risks creating such events.

An analysis of the mobilisations exceeding the ER standard has been undertaken and the following reasons have been extrapolated from the Analysis.

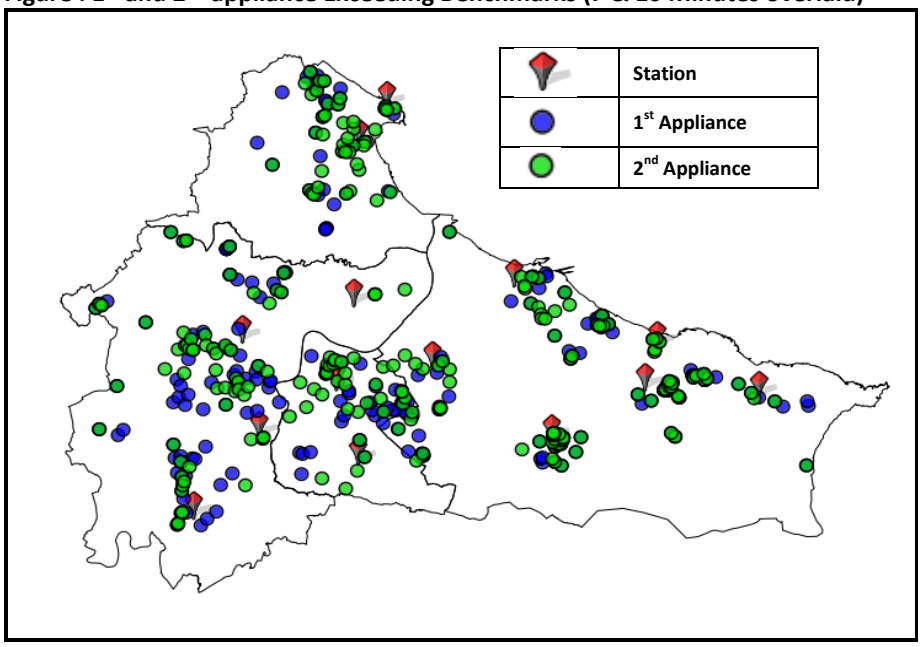
Of the reasons recorded the following were the most common reason for the failure

- 63% Distance to incident
- 5% Crew Reaction Time
- 9% Road conditions including traffic and roadworks
- 3% Locating Incident
- 15% MDT issues including officers failure to record
- 15% No Reason / other

5.7 Geographical Location of failures

The following map provides details of where mobilisations exceeding the benchmark have occurred.

Figure : 1st and 2nd appliance Exceeding Benchmarks (7 & 10 Minutes overlaid)



As can be seen such mobilisations are occurring across the Brigade area with concentrations unsurprisingly within the urban areas where the majority of the incidents occur. There is no significant concentration of mobilisations exceeding the benchmarks.

5.8 Initial Type vs End Type

Response benchmarks are based on initial incident type. An important area to analyse for those mobilisations exceeding the ER standard are what the incident turns out to be especially when they are turn out to be primary fire incidents as these significantly increases the risk of a casualty occurring.

The following table provides an analysis of those 1st and 2nd appliance exceeding the ER standard in relation to what the incident finally turns out to be.

Initial Incident	1st Appliance No	2nd Appliance No	End Type	1st Appliance No	2nd Appliance No
Building Fire	93	103	F1 Primary Fire	38	49
Building Fire AFA	202	143	F3 Secondary Fire	18	18
			False Alarm	233	179
			SE/Other	6	0
	295	246		295	246

From the 295 1st appliance and 246 2nd appliance mobilisations that exceed the benchmarks, the analysis indicates;

- 79% (233) 1st appliance and 73% (179) 2nd appliance mobilisations turn out to be False Alarms.
- 13% (38) 1st appliance and 20% (49) second appliance mobilisations were to primary fires.
- 18 1st appliance and 18 2nd appliance mobilisations were to secondary fires.

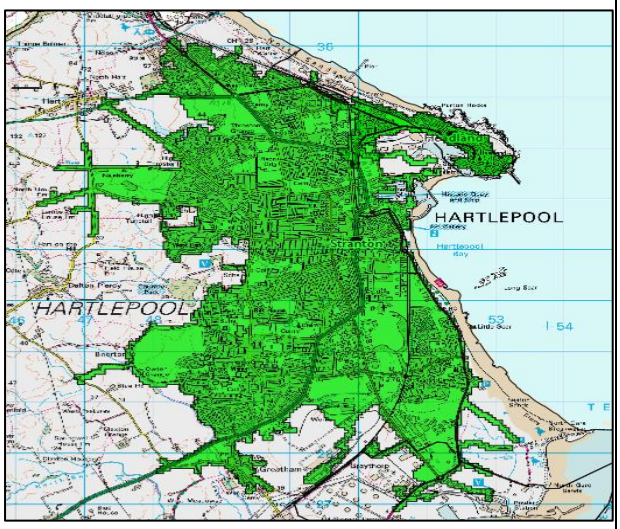
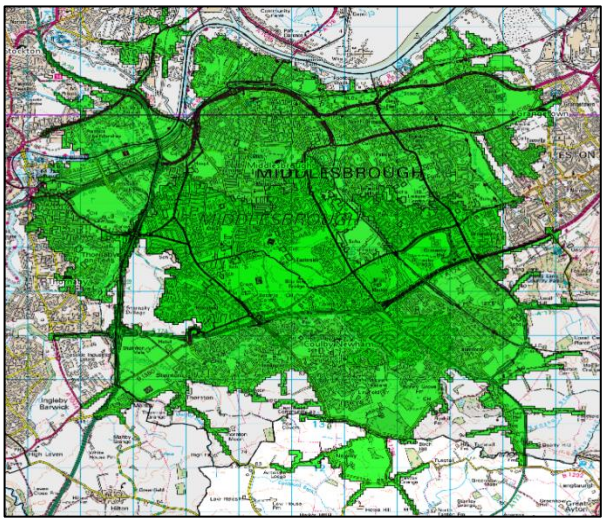
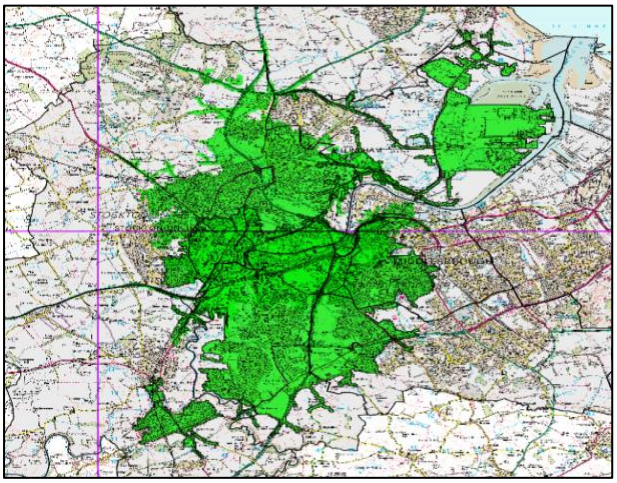
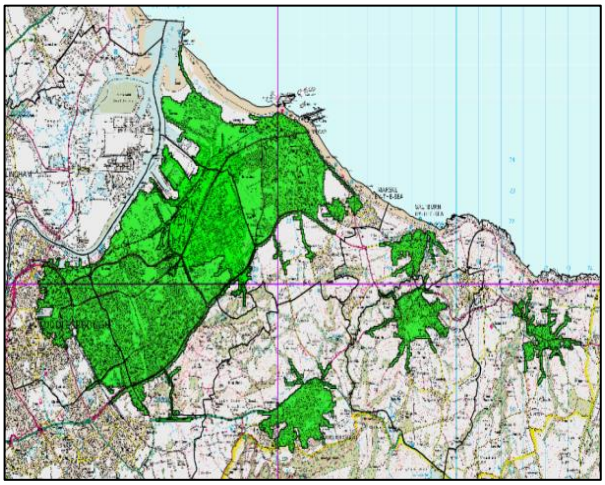
5.9 Primary Fire Mobilisations Analysis

An analysis of the mobilisations that exceed the benchmarks that turn out to be primary fires has been undertaken to understand the risks and outcomes arising from these mobilisations. The key findings from this analysis shows

- 87 mobilisations relate to 72 incidents;
- In total at 72 incidents there was a mobilisation exceeding the ER Standards : either 1st Appliance, 2nd Appliance or Both exceeding the standard;
- 15 (21%) Incidents where 1st and 2nd Appliance exceeded the benchmark;
- No incidents involved Fatalities and/or injuries
- 34 (47%) incidents involved a sleeping Risk made up of 31 House fires and 3 Fires in Flats
- 22 (31%)of the 72 incidents were deliberate in nature
- 21 (29%) caused by Radiated Heat

6 Mitigating Actions: Areas outside of the Response Benchmark Reach

As can be seen in the following maps there are areas in each district (depicted by the unshaded areas) which can't be reached by the 7 minute benchmark which creates a risk for the Brigade to address.

Hartlepool	Middlesbrough
	
Stockton on Tees	**Redcar and Cleveland**
	

In order to mitigate against this risk, those addresses in High / Medium risk output areas (Community Risk Profile) that can't be reached within 7 minutes (in part or whole) have been identified to enable appropriate preventative services to be provided.

An example of the granularity of the information provided to enable targeting of premise that had not received a HFSV is attached at Appendix 3

These details were provided to the Area Manager Prevention and Area Managers Emergency Response on 3rd April 2019 and appropriate preventative services (HFSV and SAW) are being delivered to mitigate against the risks these areas pose.

7 Conclusion

The information contained within the attached report shows

- We maintain our policy of getting to all emergency response incidents as quickly as possible with the response standards a measure of our success in achieving this.
- All of the 2018/19 Emergency Response standards for building fires have been achieved by a considerable margin;
- The adoption of these performance standards has resulted in an increased number of mobilisations exceeding the ER standard when comparing to the numbers exceeding the former risk based ER standards. This was expected as 99% of properties within the Brigade area now receive a faster response benchmark than the previous risk based standard.

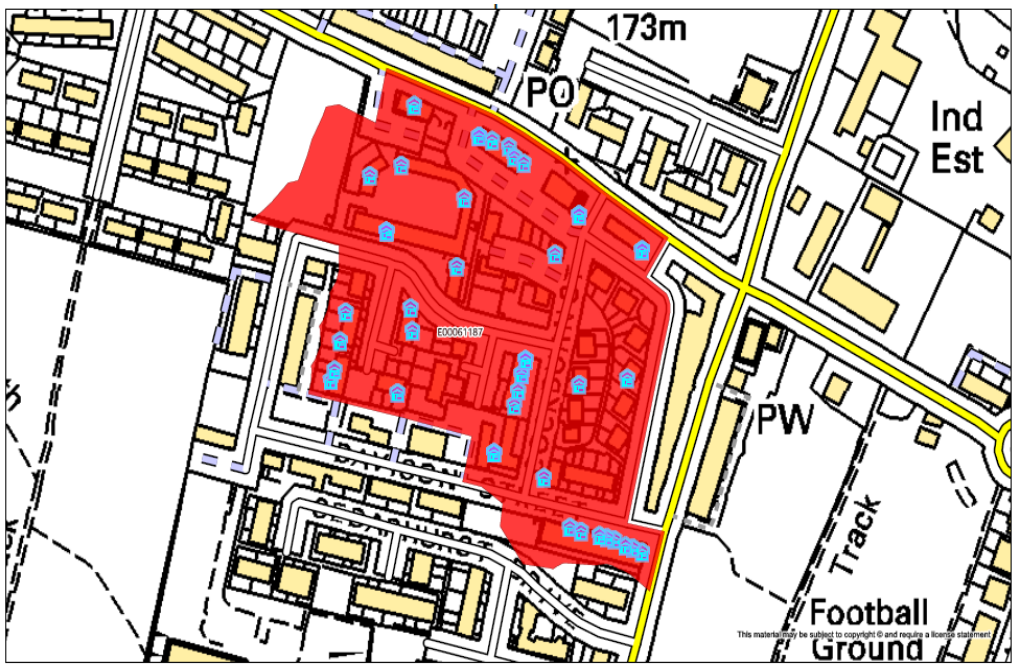
Appendix 1: Comparison of Outturn 2017/18 and 2018/19

Old Standards	2017/18	2018/19	Difference
High Risk			
1st Pump in 5 minutes	73% (11/15)	96% (23/24)	+23%
2nd pump in 8 minutes	93% (13/14)	100% (23/23)	+7%
3rd pump in 10 minutes (persons reported)	100% (4/4)	No Incidents	--
Medium Risk			
1st Pump in 8 minutes	97% (869/898)	97% (861/886)	--
2nd pump in 11 minutes	96% (767/800)	96% (730/764)	--
Low Risk			
1st pump in 10 minutes	96% (1560/1620)	97% (1,467/1,511)	+1%
2nd pump in 13 minutes	95% (1268/1339)	94% (1,127/1,205)	-1%
New Standards	**2017/18**	**2018/19**	**Difference**
Average time of first appliance attendance to a building fire (7 Minutes)	00:04:55	00:04:48	-00:00:07
First appliance attendance to building fires within 10 minutes on 90% of occasions	97.3%	98%	+0.7%
Average time of second appliance to attend a building fire incident (10 minutes)	00:06:48	00:06:44	-00:00:04

Appendix 2: Summary of Mobilisations and Failures by Appliance

Station	Call Sign	Staffing	1st Mob	1st Fails	% Fail	2nd Mob	2nd Fails	% Fail
Middlesbrough	A1	Whole-Time	277	10	4	177	11	6
Middlesbrough	A3	Whole-Time	201	16	8	286	13	5
Stockton	B1	Whole-Time	309	24	8	120	12	10
Stockton	B3	Whole-Time	109	14	13	154	14	9
Stockton	B4	Retained	8	4	50	38	10	26
Grangetown	C1	Whole-Time	227	12	5	162	10	6
Grangetown	C3	Whole-Time	193	12	6	218	20	9
Redcar	D1	Whole-Time	153	26	17	33	16	48
Redcar	D3	Retained	5	3	60	41	5	12
Thornaby	E1	Whole-Time	134	25	19	86	6	7
Thornaby	E3	Whole-Time	88	14	16	181	14	8
Billingham	G1	Whole-Time	57	9	16	47	11	23
Coulby Newham	H1	Whole-Time	130	15	12	33	4	12
Stranton	I1	Whole-Time	277	18	6	75	11	15
Stranton	I3	Whole-Time	106	13	12	238	24	10
Headland	J3	Retained	8	4	50	11	7	64
Yarm	K3	Retained	7	6	86	4	3	75
Guisborough	L3	Retained	41	19	46	8	5	63
Saltburn	M1	Retained	27	11	41	31	14	45
Skelton	N1	Retained	34	21	62	34	26	76
Loftus	O3	Retained	30	19	63	15	10	67

Appendix 2: Example of HFSV Targetting Dwellings Outside 7 Minute Coverage areas



full_address
3 PROSPECT PLACE_LINGDALE_SALTBURN-BY-THE-SEA_TS123DR
7 PROSPECT PLACE_LINGDALE_SALTBURN-BY-THE-SEA_CLEVELAND_TS123DR
22 PROSPECT PLACE_LINGDALE_SALTBURN-BY-THE-SEA_CLEVELAND_TS123DR
27 PROSPECT PLACE_LINGDALE_SALTBURN-BY-THE-SEA_CLEVELAND_TS123DR
29 PROSPECT PLACE_LINGDALE_SALTBURN-BY-THE-SEA_CLEVELAND_TS123DR
35 PROSPECT PLACE_LINGDALE_SALTBURN-BY-THE-SEA_TS12 3DR
2 MOORDALE COURT_DAVISON STREET_LINGDALE_SALTBURN-BY-THE-SEA_CLEVELAND_TS123DX
3 MOORDALE COURT_DAVISON STREET_LINGDALE_SALTBURN-BY-THE-SEA_CLEVELAND_TS123DX
4A DAVISON STREET_LINGDALE_SALTBURN-BY-THE-SEA_CLEVELAND_TS123DX
2 DAVISON STREET_LINGDALE_SALTBURN-BY-THE-SEA_CLEVELAND_TS123DX
4 DAVISON STREET_LINGDALE_SALTBURN-BY-THE-SEA_CLEVELAND_TS123DX
5 DAVISON STREET_LINGDALE_SALTBURN-BY-THE-SEA_CLEVELAND_TS123DX
6 DAVISON STREET_LINGDALE_SALTBURN-BY-THE-SEA_CLEVELAND_TS123DX
8 DAVISON STREET_LINGDALE_SALTBURN-BY-THE-SEA_CLEVELAND_TS123DX
10 DAVISON STREET_LINGDALE_SALTBURN-BY-THE-SEA_CLEVELAND_TS123DX
14 DAVISON STREET_LINGDALE_SALTBURN-BY-THE-SEA_CLEVELAND_TS123DX
16 DAVISON STREET_LINGDALE_SALTBURN-BY-THE-SEA_CLEVELAND_TS123DX
16 KIRKBRIGHT CLOSE_LINGDALE_SALTBURN-BY-THE-SEA_CLEVELAND_TS123DY
17 KIRKBRIGHT CLOSE_LINGDALE_SALTBURN-BY-THE-SEA_CLEVELAND_TS123DY
27A HIGH STREET_LINGDALE_SALTBURN-BY-THE-SEA_CLEVELAND_TS123DZ
15A_HIGH STREET_LINGDALE_SALTBURN-BY-THE-SEA_TS12 3DZ
15B_HIGH STREET_LINGDALE_SALTBURN-BY-THE-SEA_TS12 3DZ