



Fire Facts

Incident response times

2018

About this publication

Publication date: 28 June 2019

This document was produced by the London Fire Brigade Business Intelligence Team (in the ICT Department).

For information about this publication contact:

Andrew Mobbs
LFB Information Management
169 Union Street
London SE1 0LL

Tel: 020 8555 1200

email: andrew.mobbs@london-fire.gov.uk

This document, and the accompanying tables, are available to download from the London Datastore at <https://data.london.gov.uk/publisher/lfb>

Copyright and reproduction

This publication is the copyright of the London Fire Brigade.

You may use or re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence, visit

www.nationalarchives.gov.uk/doc/open-government-licence/

The London Fire Brigade

The London Fire Brigade is run by the London Fire Commissioner (LFC) who is the fire and rescue authority for London.

For more information about LFB/LFC and the work of the London Fire Brigade visit www.london-fire.gov.uk.

Other publications in this series

The London Fire Brigade has other publications in the Fire Facts series. Check on the London Datastore for the latest versions <https://data.london.gov.uk/publisher/lfb>

Other data available

The LFB publishes a range of data on the London Datastore. Much of these data are updated on a monthly basis. Go to the LFB page on the datastore to see what is available – <https://data.london.gov.uk/publisher/lfb>

We publish information about the incidents we attend and the attendance times for the first and second fire engines to arrive via our online mapping tool. This tool displays information at borough and ward level and is updated monthly. To use this tool visit <https://lfbincidentmapping.london-fire.gov.uk/>

Contents

Introduction	v
<i>About the London Fire Brigade</i>	v
<i>Fire stations and fire engines</i>	vi
<i>Symbols and conventions used</i>	vi
Chapter 1 Responding to emergencies	1
<i>Our response standards</i>	1
<i>The emergency response process</i>	2
Chapter 2 Discovery of the fire and calling the fire brigade	3
<i>The importance of calling the fire brigade early</i>	3
<i>Delay between fire start and 999 call</i>	3
Table 2.1 Delay between fire start and 999 call for dwelling fires	5
Chapter 3 Emergency call handling	6
<i>Answering a 999 call</i>	7
<i>Handling a 999 call</i>	7
<i>Confirming the location</i>	7
<i>Dispatching (mobilising) fire engines</i>	8
<i>Call handling time</i>	8
Table 3.1 Average time taken to answer an emergency 999 call	9
Table 3.2 Emergency 999 calls answered within seven seconds	9
Table 3.3 Average time from 999 call answer to confirmation of location	9
Table 3.4 Average time from confirmation of location to fire engine mobilisation	9
Table 3.5 Average emergency call handling time	9
Chapter 4 Crew turn-out times	10
<i>Turn-out times</i>	10
Table 4.1 Average crew turn-out time	11
Chapter 5 Fire engine response times	12
<i>Response times for the first fire engine</i>	12
<i>Response times for the second fire engine</i>	13
<i>Response times for the third fire engine</i>	13
<i>First fire engines arriving within 10 minutes</i>	13
<i>First fire engines arriving within 12 minutes</i>	14

<i>Attendance time distributions</i>	14
Table 5.1 Average first appliance attendance time	15
Table 5.2 Average second appliance attendance time.....	16
Table 5.3 Average third appliance attendance time	17
Table 5.4 First appliance within 10 minutes	18
Table 5.5 First appliance within 12 minutes	19
Table 5.6 Distribution of first appliance attendance times	20
Table 5.7 Distribution of second appliance attendance times	21
Table 5.8 Distribution of third appliance attendance times.....	22
Chapter 6 Incident response times	23
Table 6.1 Incident response times for first fire engine	24
Chapter 7 Incident durations	25
<i>Fire incidents</i>	25
<i>Special services</i>	26
Table 7.1 Average time taken to conclude operations at fires (time of close), by fire size	27
Table 7.2 Number of fires with durations over 24 hours, by property category and fire size	28
Table 7.3 Average time taken to conclude operations at special services (time of close)	29
Table 7.4 Number of special services with durations over 24 hours, by type	30
Annex A Former national and London standards of response	31
<i>National recommended attendance standards until 2004</i>	31
<i>First London attendance standards from 2004</i>	31
<i>Introduction of 5 minute and 8 minute attendance standards in London from 2005</i>	32
<i>Introduction of 6 minute and 8 minute attendance standards in London from 2008</i>	32
Annex B How we calculate performance	33
<i>Call handling times</i>	33
<i>Crew turn-out times</i>	33
<i>Fire engine response times</i>	33
Table 8: Impact of of the counting rules for fire engine response times	35

Introduction

This *Fire Facts* report sets out the key information on our response times to the 999 calls we receive. Most of the data in this report begins from 2005, as before this period the data we captured about response times was less accurate and is not directly comparable to the most recent data.

About the London Fire Brigade

The London Fire Brigade (LFB) is the fire and rescue service for the Greater London area. The LFB is run by the London Fire Commissioner (LFC) who is the fire and rescue authority for London¹.

Over the period covered by this report (2005-2018) the London Fire Brigade has attended just over 100,000 incidents each year within London of which just under half are false alarms. We also attended around 535 incidents each year in neighbouring county areas (at their request). In this report we focus on those incidents that happen within the boundaries of Greater London. Fire engines from neighbouring counties also attend some incidents in London (when requested); in this report we focus on the response provided by LFB fire engines as we don't have data for the incidents attended by fire engines from other Brigades.

The Brigade sets out how its prevention, protection and response activities will best be used to mitigate the impact of risk on communities, in a cost effective way, in its Integrated Risk Management Plan (IRMP). The Brigade's IRMP is known as the London Safety Plan; the most recent Plan was approved in March 2017 covering the four year period April 2017 to March 2021. The Brigade also publishes a Local Assessment of Risk in London which is available on the LFB website – [here](#) – together with a postcode [tool](#) to look at how we understand risk in different areas of London.

¹ The LFC replaced the former London Fire and Emergency Planning Authority (LFEPA) on 1 April 2018.

Data sources and systems

Information about the 999 calls we receive is recorded in the LFB's mobilising system. Between February 1990 and May 2004, the Brigade used a mobilising system (Marconi) that did not report attendance times by minute and second, so an incident where a fire engine was mobilised at 0850h 05s and arrived at 0855h 50s would record an attendance time of five minutes, even though the elapsed time was actually five minutes and 45 seconds. This means that reported performance against the attendance standards prior to 2004 was better than actual performance to incidents.

In May 2004 the Brigade changed to the Motorola ProCAD mobilising system which records times in minutes and seconds. Because of this discontinuity in data, this report shows the data from 2005 as this is the first complete year with accurate response time data. Data for call handling is also only available since May 2004 when the ProCAD system was introduced.

The Brigade changed mobilising system again during 2015 with a system based on the Capita (Fortek) Vision product. There is continuity of data between the Vision and ProCAD mobilising systems. The new Vision system went live at 2am on 17 November 2015.

Key data about the incidents we attend is passed from the mobilising system to our Incident Management System (IMS). In IMS, crews and others add additional data to create the main incident record. IMS conforms to the requirements of the government's national incident recording system (IRS) which the Brigade adopted in November 2008.

We undertake a range of data quality checks and data improvement processes. However, there are still some data in our systems that we believe contain errors. For example some times are obviously wrong (due to failure to use the fire engine recording systems at the appropriate time), and some arrival times are not available. For this reason a small quantity of data is excluded from the analysis (see Annex B).

Fire stations and fire engines

The London Fire Brigade's response to emergencies is provided by fire appliances (fire engines), other specialist vehicles and fire officers. This Fire Facts publication focusses on the response by fire engines only. All fire engines are based at fire stations, and the number of fire stations and fire engines has fluctuated over the period covered by this report. The location of fire stations and fire engines will determine the Brigade's speed of response to emergencies.

The numbers of fire stations and fire engines in London (at end December each year) is set out below.

Year	Fire engines	Fire stations
2004	170	112
2005 ¹	168	111
2006	168	111
2007	168	111
2008	168	111
2009	168	111
2010 ²	169	112
2011	169	112
2012	169	112
2013 ³	169	112
2014 ^{4,5}	155	102
2015 ⁵	155	102
2016 ⁶	142	102
2017	142	102
2018	142	102

Notes

¹ Manchester Square fire station closed, with two fire engines removed.

² A new fire station at Harold Hill opened, with one new fire engine.

³ In August 2013, 27 fire appliances were temporarily removed from service to provide contingency cover in the event of strike action.

⁴ The Brigade closed ten fire stations, removed 14 fire engines and moved five fire engines to other stations from 9 January 2014 in line with the agreed Fifth London Safety Plan (LSP5). 13 further fire engines remained temporarily removed from stations to provide contingency cover in the event of strike action.

⁵ 13 fire engines remained temporarily away from stations during 2014 and 2015 to provide the contingency cover in the event of strike; 142 fire engines in place in both years.

⁶ The 13 fire engines which had been removed from stations since August 2013, were permanently removed from June 2016.

Symbols and conventions used

Inner and outer London

Where we have made reference to inner and outer London we are using the classification used by the Office of National Statistics.

There are 14 inner London Boroughs which are; Camden, City of London, Hackney, Hammersmith and Fulham, Haringey, Islington, Kensington and Chelsea, Lambeth, Lewisham, Newham, Southwark, Tower Hamlets, Wandsworth and Westminster.

The 19 outer London Boroughs are; Barking and Dagenham, Barnet, Bexley, Brent, Bromley, Croydon, Ealing, Enfield, Greenwich, Harrow, Havering, Hillingdon, Hounslow, Kingston upon Thames, Merton, Redbridge, Richmond upon Thames, Sutton and Waltham Forest.

Symbols

The following symbols have been used throughout:

- .. = not available or not applicable (also used where information has been suppressed to avoid disclosure)
- = nil

Chapter 1 | Responding to emergencies

The Brigade plans the allocation of its resources on a London-wide basis. This means that we plan the location of fire engines (and other resources) so they can arrive at incidents as quickly as possible, wherever the incident occurs in London.

Since our Second London Safety Plan ([LSP2](#)), which was approved by the Authority on 17 March 2005, the Brigade has adopted as a guiding principle the concept that Londoners should have equal entitlement to the fastest possible attendance times, irrespective of whether they live in an area in which there is a higher likelihood or a lower likelihood of fire occurring in the first place. The current standards for the speed of arrival of fire engines to all types of incidents, anywhere in London (i.e. first fire engine in an average of six minutes, second in an average of eight minutes), were put in place by the Third London Safety Plan ([LSP3](#)) 2008-2011.

The Brigade's view is that in the event of a serious incident, each person should be entitled to expect a broadly similar response in terms of resources deployed and the time to arrive. Just because a person lives in an area with a lower likelihood of fire occurring, this does not mean that they should have a slower response time when a fire actually does occur. We now call this approach the "*principle of equal entitlement*". This is a guiding but not overriding principle when we plan our services because it is subject to a number of other objectives and operational constraints.

The Brigade may send a different number of fire engines and appliances to an incident depending on the nature of the incident and the type of building or location. The number of appliances sent to different types of incident as an initial response to an emergency ('999') call is called the "pre-determined attendance" (PDA). For example, the PDA for a dwelling fire is always two fire engines. For complex buildings, or where there are complicated firefighter logistics to take into account, the PDA might be higher. For example, a call to a fire at the British

Museum has a PDA of four fire engines, an aerial appliance and a command unit, and a fire at the Hospital for Sick Children in Great Ormond Street has a PDA of four appliances and one aerial appliance.

Our response standards

So we can see how well we are performing, we set standards for various parts of the process for getting resources to emergency incidents. The current standards were confirmed or put in place by the London Safety Plan 2017 ([LSP2017](#)) which was the subject of public consultation during 2016, and was approved in March 2017.

These indicators start at the time the emergency 999 call is answered by LFB Control to the arrival of a fire engine with crew at the incident scene.

Our response time targets for 2018 were:

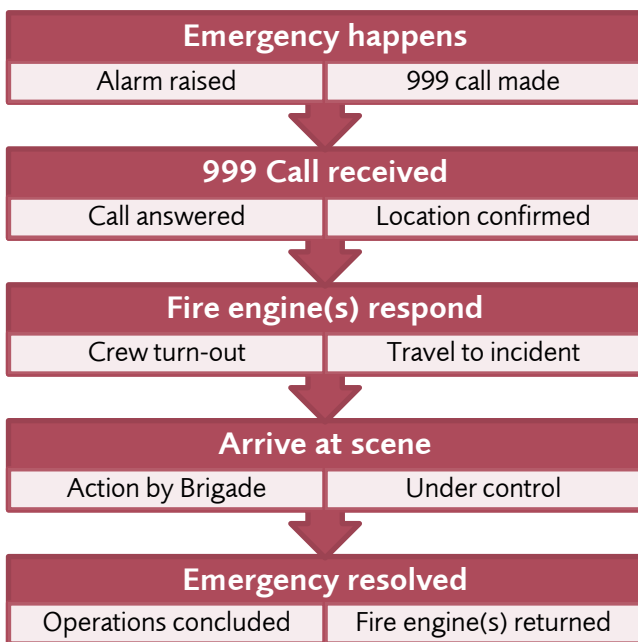
- (a) answer 999 calls within an average of **1.4 seconds**
- (b) answer 92 per cent of 999 calls within **seven seconds**
- (c) dispatch a fire engine to emergency incidents within an average **1 minutes 40 seconds** of answering the call
- (d) for the first fire engine to arrive within an average of **six minutes** from being dispatched
- (e) for the second fire engine (if required) to arrive within an average of **eight minutes** from being dispatched
- (f) for a first fire engine to arrive within **12 minutes** in more than 95 per cent of occasions.
- (g) for a first fire engine to arrive with 10 minutes in more than 90 per cent of occasions.

The emergency response process

For all emergencies, and particularly for fires, there is a period between the incident happening and the time the fire brigade is called which is outside the control of the fire brigade. This is an important period because an undiscovered fire which may have been burning for some time before discovery can result in a worse outcome. It is during this period that smoke alarms and escape plans are very important so that early warning of fire is given and occupants have the chance to escape.

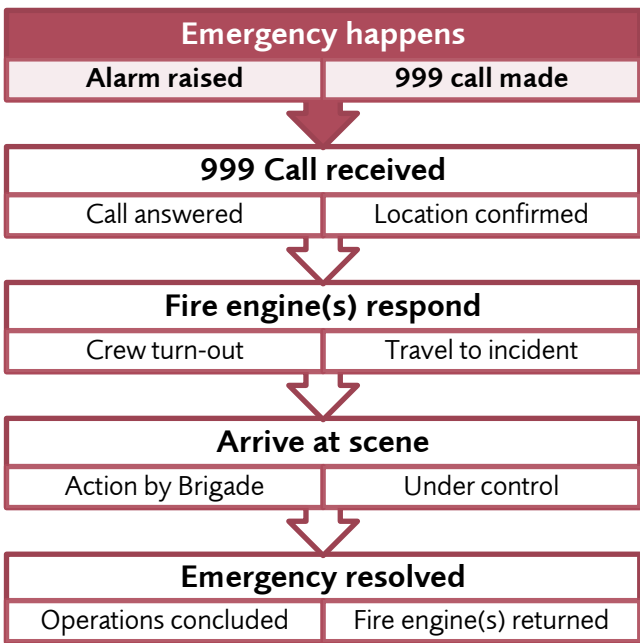
The diagram that follows shows the key stages in responding to and dealing with an emergency call from the time that an emergency happens to the time LFB arrives at the incident scene with vehicles and firefighters to resolve the emergency.

Getting to the incident quickly is important, but so is the work we do when we get there. On arrival our crews carry out a dynamic risk assessment of the situation to ensure that they and any members of the public are safe. This assessment will also include a plan of operations to resolve the situation in the most effective way. When the incident has been brought under control the incident commander at the scene sends a 'stop message' to control which tells them that additional strengthening resources are not required. The incident may still continue for several minutes, hours or even days, but at the time of the stop message, the incident is contained. The incident is closed when the last resource at the scene leaves and returns to its base location.



Chapter 2 | Discovery of the fire and calling the fire brigade

This chapter looks at the key actions, in advance of calling 999, that are necessary for the swift attendance of the Brigade to deal with any emergency and are vital for the avoidance of casualties. These are: the discovery of the emergency/fire by a member of the public or an automated alarm system and the brigade being called via 999.



The actions which are outside the control of the brigade are (a) the time between the ignition of the fire to its discovery and (b) from the discovery to calling the fire brigade.

We don't always know how long it has taken for the Brigade to be called, but when we attend fires our crews and fire investigators use their knowledge of fire development and information from any people present to determine how long it has been between the fire being discovered and the 999 call being made. The Brigade knows from analysis of this information that the time taken from the ignition of a fire to the time the brigade is called can have a greater impact on the fatality rate in dwelling fires than the arrival time of the fire appliances.

The importance of calling the fire brigade early

Fires behave very differently and the rate of fire growth depends on a range of factors such as the material and quantity of items in the room and how big the room is. Some fires develop very quickly and others can smoulder for several hours before the fire fully develops. Those that do develop into more serious fires can do so very quickly and the fire can become very hostile in a few minutes from the start.

Fires in the home are not often serious, but when they are, early warning (e.g. smoke alarms) and evacuation (and fire suppression systems such as sprinklers) are vitally important.

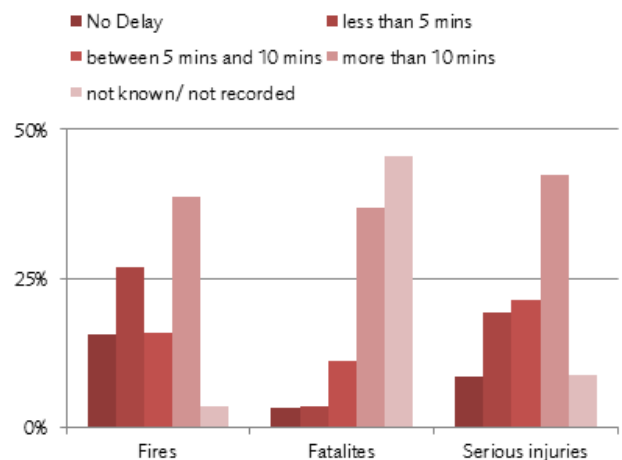
Delay between fire start and 999 call

(Table 2.1)

Only a small proportion of fires in the home are discovered immediately with there being no delay in the Brigade being called (18 per cent). In a much larger proportion of occasions, the delay between discovering the fires and calling 999 is more than 10 minutes (35 per cent).

Chart 1: Delay between fire start and 999 call for dwelling fires (5yr average – 2014 to 2018)

Chart 1: Delay between fire start and 999 call for dwelling fires



When there is a delay in the Brigade being called, there is a corresponding increase in the number of fatalities and number of casualties. In the four years up

to 2016, nearly two-thirds of the fatalities at dwelling fires are when there has been a delay in calling the Brigade of 10 or more minutes. But, due to the Grenfell Tower fire, and the outcome of the Public Inquiry is known, the deaths at this fire are shown as 'unknown'. Nearly half of all serious fire casualties, where the casualty is taken to hospital and the injuries appear serious, happen when the delay is 10 or more minutes.

Table 2.1 Delay between fire start and 999 call for dwelling fires

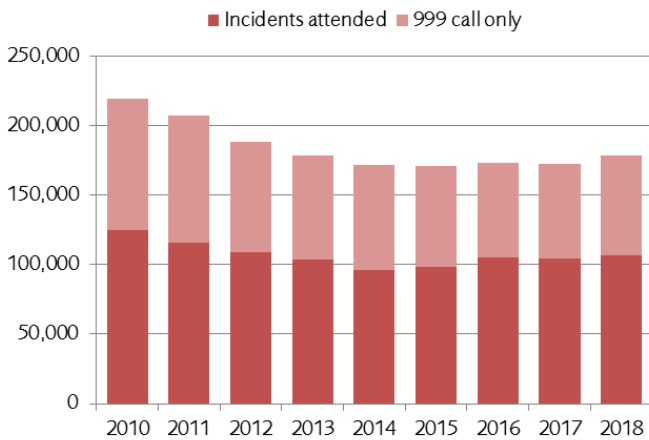
<i>number and percentage</i>	2014	2015	2016	2017	2018	five year total
Delay from ignition to 999 call						
no delay	839	840	856	898	971	4404
less than 5 mins	1570	1546	1486	1547	1489	7638
between 5 mins and 10 mins	944	910	847	927	870	4498
more than 10 mins	2376	2396	2219	2128	1938	11057
not known/not recorded	212	196	197	148	222	975
Delay from ignition to 999 call (%)						
no delay	14%	14%	15%	16%	18%	15%
less than 5 mins	26%	26%	27%	27%	27%	27%
between 5 mins and 10 mins	16%	15%	15%	16%	16%	16%
more than 10 mins	40%	41%	40%	38%	35%	39%
not known/not recorded	4%	3%	4%	3%	4%	3%
Fire fatalities in dwelling fires, by delay						
no delay	0	2	1	2	2	7
less than 5 mins	1	1	2	1	3	8
between 5 mins and 10 mins	3	5	4	4	9	25
more than 10 mins	13	10	24	20	16	83
not known/not recorded	9	5	7	73	9	103
Fire fatalities in dwelling fires, by delay (%)						
no delay	0%	9%	3%	2%	5%	3%
less than 5 mins	4%	4%	5%	1%	8%	4%
between 5 mins and 10 mins	12%	22%	11%	4%	23%	11%
more than 10 mins	50%	43%	63%	20%	41%	37%
not known/not recorded	35%	22%	18%	73%	23%	46%
Fire casualties in dwelling fires - serious, by delay						
no delay	48	41	25	44	51	209
less than 5 mins	96	100	99	87	91	473
between 5 mins and 10 mins	101	91	109	108	114	523
more than 10 mins	230	225	207	182	203	1,047
not known/not recorded	19	52	18	90	35	214
Fire casualties in dwelling fires - serious, by delay (%)						
no delay	10%	8%	5%	9%	10%	8%
less than 5 mins	19%	20%	22%	17%	18%	19%
between 5 mins and 10 mins	20%	18%	24%	21%	23%	21%
more than 10 mins	47%	44%	45%	36%	41%	42%
not known/not recorded	4%	10%	4%	18%	7%	9%

Chapter 3 | Emergency call handling

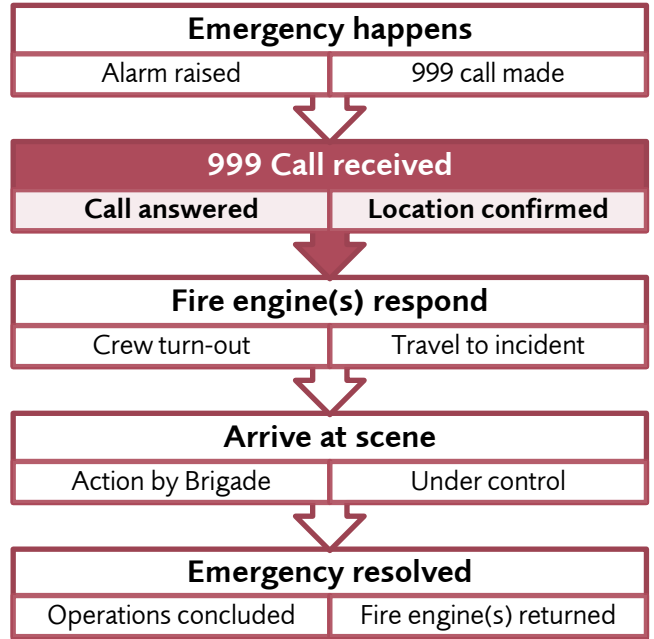
This chapter deals with activity undertaken by LFB control room staff, who take and deal with emergency (999) calls and mobilise resources to deal with emergencies.

Our control room handles many more emergency calls than actual emergencies that we need to attend. In recent years, around 40 per cent of these calls did not result in an emergency response as the call was either not an emergency, or the call was a duplicate reporting of an emergency we were already dealing with. The overall number of calls we handle has fallen over recent years, although it has been relatively level since 2014.

Chart 2: Number of 999 calls received, including the proportion that resulted in attendance at an incident



This chapter covers the interval marked **in bold** on the chart below.



When a member of the public dials 999 (or the European 112 number) they are first connected to the public emergency call service (PECS) who asks "Emergency. Which service?". The PECS's for the UK and London is BT plc which provides the 999/112 emergency call handling service. BT, which has been the sole PECS provider since 2014, is obliged, under the terms of its licence, to provide a public emergency call service by which any member of the public can contact (without charge) any of the local emergency authorities (police, fire, ambulance, coastguard).

If the 999 caller asks for "Fire Brigade", the call is transferred from the PECS to the LFB control operators based at our London Operations Centre in Merton.

Our response time targets for answering emergency calls during 2018 were:

- (a) answer 999 calls within an average of **1.4 seconds**
- (b) answer 92 per cent of 999 calls within **7 seconds**

- (c) dispatch a fire engine to emergency incidents within an average **1 minutes 40 seconds** of answering the call.

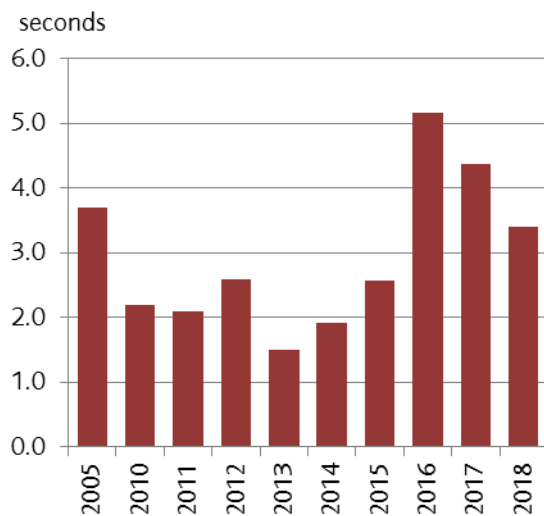
Answering a 999 call

(Table 3.1 and 3.2)

In 2007 it took 4.6 seconds, on average, for an LFB control operator to answer a 999 call when it was passed from the PTO. Call answer times fell between 2007 and 2014 and in 2013 the average time taken to answer a call was down to 1.5 seconds.

Since 2015, it has taken slightly longer to answer calls; this is due to the facility that automatically distributes calls within the control room, not being available when we changed mobilising system in 2015. Automatic call distribution was reintroduced in July 2018, and the average time to answer a call fell to 3.4 seconds in that year.

Chart 3: Average time taken to answer a 999 call

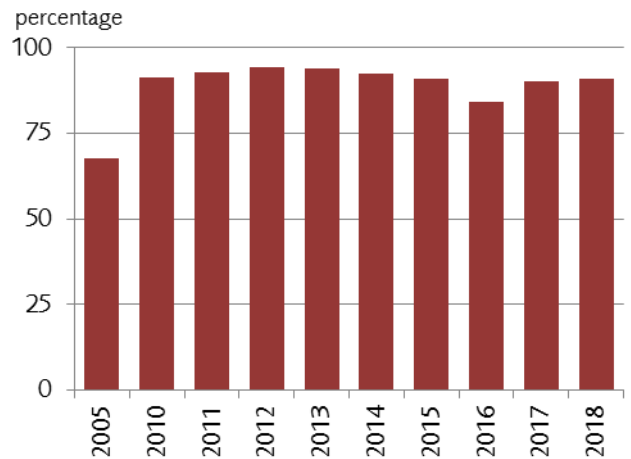


To ensure that we don't have many calls that have unusually extended call answering times we monitor the percentage of calls that are answered within seven seconds.

The occasions when it takes longer than seven seconds to answer a call are those when we have exceptionally high call demand which can happen during very bad weather. For example, on Monday 28 October 2013 control officers received 412

emergency calls in a three hour period (0600 – 0900) as a result of the adverse weather conditions brought about by the 'St Jude's day storm'. This was 13 times the usual number of calls for a typical Monday morning.

Chart 4: Percentage of 999 calls answered within seven seconds



Handling a 999 call

There are two stages to handling a 999 call:

- understanding the nature of the call and confirming there is a real emergency; and
- confirming the address or location and then dispatching a fire engine(s).

Understanding the nature of the call Control operators will handle calls that do not require an attendance. A large number of these are duplicate calls to incidents which are already being handled. Others will be people who do not require a service the Brigade offers, or where the Brigade has decided to not make an attendance. Examples of these are abandoned/hoax calls from public call boxes and some calls to shut in lift releases or to automatic fire alarms sounding where it is confirmed there is no emergency, in line with our policies to filter or 'challenge' certain calls to ensure they need a Brigade emergency response.

Confirming the location

(Table 3.3)

In recent years, it has taken, on average, just under a minute to establish the details of the 999 call, confirm

the nature of the emergency and establish its location. This time has been consistent over recent years.

Dispatching (mobilising) fire engines

(Table 3.4)

The average time taken to dispatch a fire engine to an incident once the location has been confirmed is shown in table 3.4.

Call handling time

(Table 3.5)

The overall time taken to deal with an emergency 999 call, including the time to confirm the location of the incident and the dispatch of a response, is called the 'call handling time'. The total call handling time has fluctuated in recent years, as it includes the time taken by our Control staff, to filter or 'challenge' certain calls to ensure they need a Brigade emergency response. Since the go-live of our replacement mobilising system in late 2015, which allows the use of postcodes to find addresses, call handling times were slightly faster in 2018 at 1m 34s. Call handling times have steadily improved since the introduction of our current mobilising system in November 2015.

Chart 5: Average call handling time

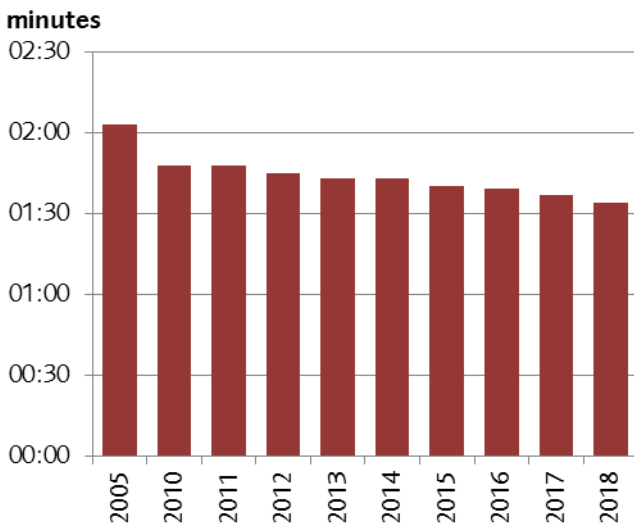


Table 3.1 Average time taken to answer an emergency 999 call*seconds*

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018
Average time taken to answer a 999 call	3.7	2.2	2.1	2.6	1.5	1.9	2.6	5.2	4.4	3.4

Table 3.2 Emergency 999 calls answered within seven seconds*percentage*

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018
999 calls answered within seven seconds (%)	67.5	91.3	92.8	94.4	94.1	92.3	90.8	84.3	90.1	91.0

Table 3.3 Average time from 999 call answer to confirmation of location*minutes*

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018
999 calls time answered to address select	00:56	00:57	00:58	00:58	00:57	00:57	00:57	00:48	00:46	00:45

Table 3.4 Average time from confirmation of location to fire engine mobilisation*minutes*

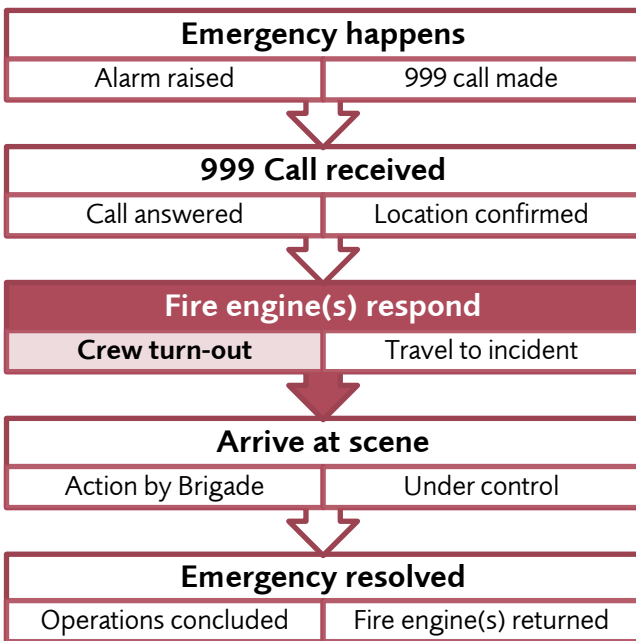
	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018
999 calls address select to mobilisation	01:07	00:50	00:49	00:48	00:46	00:46	00:44	00:51	00:51	00:49

Table 3.5 Average emergency call handling time*minutes*

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018
999 calls time answered to mobilisation	02:03	01:48	01:48	01:45	01:43	01:43	01:40	01:40	01:37	01:34

Chapter 4 | Crew turn-out times

This chapter looks at the time it takes fire engine crews to leave the fire station once they are mobilised; we call this the 'crew turn-out' time. It deals with the parts of the process marked on the chart below. As can be seen from the chart, the crew turn-out time is a key component (alongside travel time) of the overall time it takes to get to an emergency incident.



The time it takes crews to leave a station is an important part of the process of getting to emergencies as quickly as possible. We record and measure the time it takes from (a) the LFB control operator sending a mobilising message to the fire station and (b) the fire engine crew getting the message, putting on their fire gear (their personal protective equipment), the driver to determine the best way to the incident location and then leaving the fire station with blue lights and sirens.

The time it takes for crews to turn-out does vary between crews at different stations and this is because the layouts of stations vary; it taking longer to get from some parts of an older station to the fire engine than other more modern stations.

Not all mobilisations happen from the fire station. Our crews can be mobilised whilst they are out and about

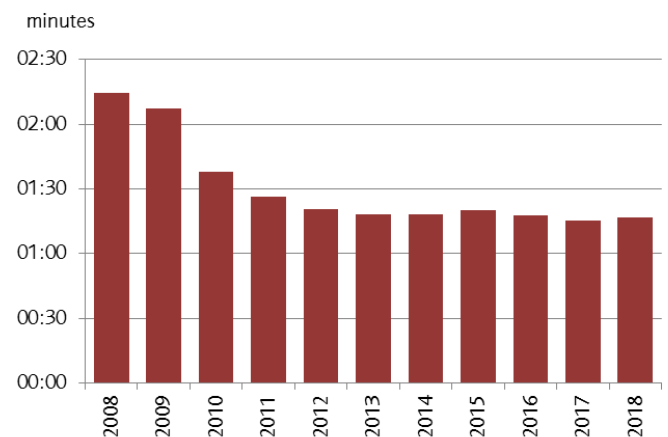
in their local area carrying out other work such as home fire safety visits and familiarisation inspections. In 2018, around 13 per cent of fire engine mobilisation are from these other locations.

Turn-out times

(Table 4.1)

The time it has taken a fire engine crew to turn-out from a fire station is shown in the table below. Turn-out times have been getting quicker since 2008. This reflects increased performance management action to ensure faster crew turn out .

Chart 6: Average crew turn-out times



When we measure turn-out times for a fire station we look at all incidents that station attends regardless of where the incident is located. Turn-out times for the London boroughs are, therefore, the times for the fire engine crews located at fire stations in the borough and not for the incidents that happen in the borough.

Although the layout of stations are different, the turn-out times across London are similar. The average turn-out time for stations by borough is shown in the table below.

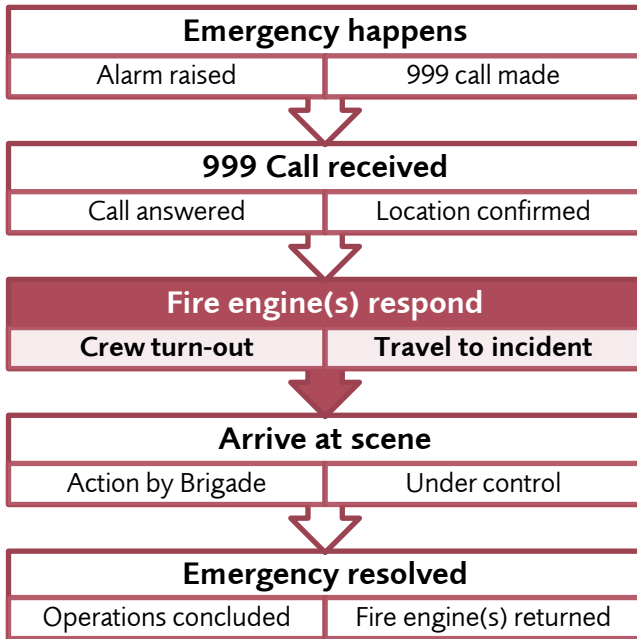
Table 4.1 Average crew turn-out time

<i>minutes</i>	2010	2011	2012	2013	2014	2015	2016	2017	2018
London Total	01:38	01:26	01:21	01:18	01:18	01:20	01:18	01:15	01:17
Inner London	01:38	01:26	01:21	01:20	01:20	01:20	01:18	01:16	01:17
Camden	01:37	01:31	01:29	01:19	01:19	01:22	01:12	01:14	01:17
City of London	01:29	01:12	01:05	01:27	01:26	01:25	01:20	01:11	01:25
Hackney	01:46	01:34	01:27	01:24	01:19	01:20	01:24	01:25	01:19
Hammersmith & Fulham	01:49	01:27	01:13	01:25	01:25	01:23	01:23	01:20	01:19
Haringey	01:45	01:28	01:23	01:20	01:14	01:16	01:16	01:17	01:19
Islington	01:39	01:32	01:27	01:10	01:11	01:09	00:55	00:55	01:01
Kensington & Chelsea	01:36	01:18	01:18	01:20	01:16	01:20	01:18	01:15	01:19
Lambeth	01:35	01:23	01:18	01:21	01:23	01:22	01:22	01:19	01:20
Lewisham	01:41	01:32	01:24	01:17	01:21	01:24	01:17	01:12	01:13
Newham	01:34	01:22	01:05	01:02	01:03	01:05	01:08	01:11	01:12
Southwark	01:32	01:28	01:25	01:27	01:27	01:25	01:27	01:16	01:18
Tower Hamlets	01:31	01:22	01:14	01:11	01:09	01:09	01:11	01:15	01:11
Wandsworth	01:39	01:22	01:13	01:22	01:22	01:23	01:16	01:10	01:14
Westminster	01:40	01:28	01:27	01:30	01:32	01:31	01:29	01:25	01:23
Outer London	01:38	01:26	01:21	01:17	01:17	01:20	01:18	01:14	01:17
Barking and Dagenham	01:38	01:26	01:29	01:22	01:19	01:29	01:22	01:20	01:26
Barnet	01:41	01:25	01:19	01:10	01:17	01:21	01:19	01:19	01:20
Bexley	01:38	01:34	01:27	01:15	01:17	01:20	01:17	01:09	01:10
Brent	01:41	01:31	01:25	01:19	01:19	01:19	01:16	01:17	01:19
Bromley	01:50	01:23	01:11	01:11	01:19	01:22	01:22	01:23	01:27
Croydon	01:44	01:37	01:30	01:19	01:19	01:24	01:20	01:16	01:21
Ealing	01:31	01:22	01:15	01:13	01:13	01:16	01:19	01:17	01:18
Enfield	01:44	01:34	01:27	01:22	01:15	01:22	01:22	01:18	01:19
Greenwich	01:34	01:26	01:21	01:19	01:19	01:19	01:18	01:15	01:19
Harrow	01:23	01:11	01:13	01:09	01:14	01:14	01:08	01:07	01:08
Havering	01:37	01:24	01:14	01:07	01:12	01:12	01:13	01:07	01:15
Hillingdon	01:26	01:20	01:14	01:17	01:19	01:21	01:17	01:13	01:15
Hounslow	01:41	01:27	01:21	01:21	01:22	01:23	01:21	01:20	01:19
Kingston upon Thames	01:41	01:29	01:22	01:23	01:08	01:13	01:11	01:07	01:09
Merton	01:40	01:23	01:12	01:09	01:11	01:17	01:17	01:09	01:11
Redbridge	01:27	01:21	01:17	01:17	01:12	01:14	01:13	01:11	01:06
Richmond upon Thames	01:30	01:16	01:11	01:10	01:15	01:14	01:15	01:10	01:12
Sutton	01:56	01:32	01:30	01:26	01:26	01:23	01:15	01:11	01:22
Waltham Forest	01:40	01:22	01:25	01:21	01:23	01:24	01:17	01:09	01:12

Note: Data for average crew turn-out are for fire stations located in the borough and not for incidents in the borough.

Chapter 5 | Fire engine response times

This chapter looks at the time it takes for fire engines to arrive at emergency incidents. It deals with the parts of the process marked on the chart below.



As explained in Chapter 1, our aim is to get to emergencies as quickly as possible.

To measure our effectiveness at doing this, we have three attendance standards that we monitor our performance against. These standards have been in place since 2008 (as part of LSP3) and are:

- for the first fire engine to arrive within an average of **6 minutes** from being dispatched
- for the second fire engine (if required) to arrive within an average of **8 minutes** from being dispatched
- for a first fire engine to arrive within **12 minutes** in more than 95 per cent of occasions
- for a first fire engine to arrive within **10 minutes** in more than 90 per cent of occasions.

Our fire engine response standards are measured from the time LFB control operators mobilise the first (and subsequent) fire engine to an incident to when the fire engine arrives at the incident location. This

time therefore includes the crew turn-out time detailed in Chapter 4 of this report.

We have used the time a resource is mobilised as the reference point for attendance times for more than 20 years. Attendance times have traditionally been counted from the point that resources are mobilised, and this dates back to at least 1993 when the government performance indicators measured speed of response by reference to "assigning appliances by control".

The advantage of using the time mobilised as the starting point for measuring the attendance time of fire engines is that attendance standards are calculated by reference to the period over which the Brigade has most control.

Whilst the time between crew turn-out and arrival at an incident may vary depending on traffic conditions and marginal differences in crew turn-out times at different stations, the time taken for the Brigade to attend an incident will principally be determined by the physical location of fire stations and fire engines.

Generally inner London boroughs have faster attendance times than outer London boroughs. This is a consequence of a pre-existing (and continuing) clustering of fire stations in inner London as a result of the former government standards (see Annex A). This historical position means that attendance times are faster in inner London. A move towards equal entitlement – which has been an objective since 2005 (see annex A) – is more likely to result in attendance times increasing in inner London and decreasing in outer London. However, in terms of relative performance the inner London boroughs still generally have faster attendance times.

Response times for the first fire engine

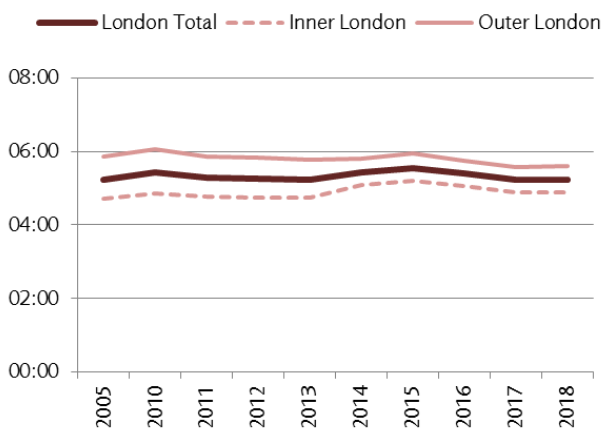
(Table 5.1)

The standard for the first fire engine is to arrive at an incident, on average, within six minutes of being mobilised. The standard applies to London as a whole,

although we try to achieve it in each London borough area, but at no other lower geography (e.g. ward).

Our London-wide performance is comfortably within the standard, but a few boroughs fall outside the target. The average time for inner London is slightly faster than the time for outer London. The average time by London borough will vary with most boroughs within our published standard and only a few outside.

Chart 7: Average response time for the first fire engine

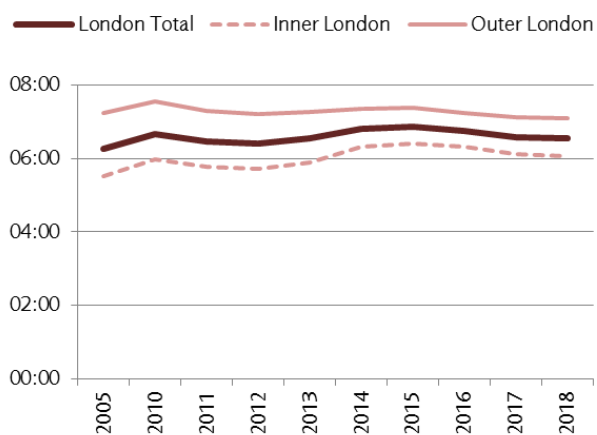


Response times for the second fire engine.

(Table 5.2)

The standard for the second fire engine is to arrive at an incident, on average, within eight minutes of being mobilised. The standard applies to London as a whole, although we try to achieve it in each London borough area, but at no other lower geography (e.g. ward).

Chart 8: Average response time for the second fire engine



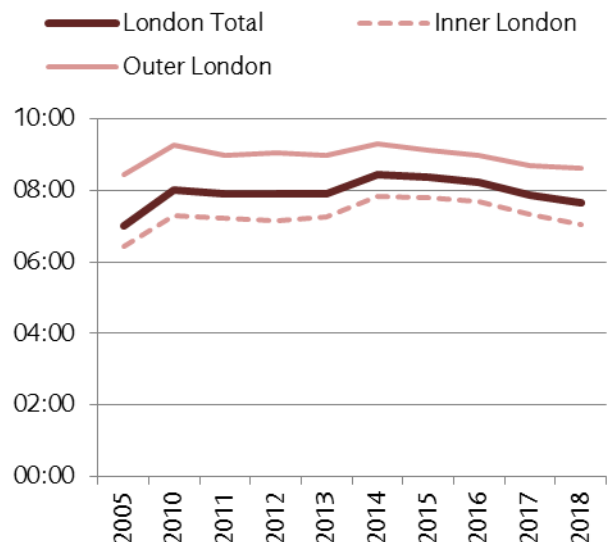
Our London-wide performance is comfortably within the standard, but a few boroughs fall outside the target. The average time for inner London was faster than for outer London. The average time by London boroughs will vary, with most boroughs within the published standard.

Response times for the third fire engine.

(Table 5.3)

Most incidents are quickly resolved by only one or two fire engines. A third fire engine is sent to incidents on about one in ten occasions. Other than the overarching intention that all our fire engines arrive as quickly as possible, there is no standard for the third fire engine to arrive.

Chart 9: Average response time for the third fire engine



On average it took about eight minutes for a third fire engine to arrive at an emergency incident in London in recent years. The average time for inner London was faster than the time for outer London.

First fire engines arriving within 10 minutes

(Table 5.4)

Our third attendance standard is to get a fire engine to an incident anywhere in London within 10 minutes on 90 per cent of occasions. This standard, together with the 12 minute standard, is to ensure that no incident has an exceptionally protracted attendance time.

London wide we have achieved this 10 minute standard on over 94 per cent of occasions in each of the last 10 years.

First fire engines arriving within 12 minutes

(Table 5.5)

Our fourth attendance standard is to get a fire engine to an incident anywhere in London within 12 minutes on 95 per cent of occasions. This standard is to ensure that no incident has an exceptionally protracted attendance time.

London wide we have achieved this standard on over 97 per cent of occasions in each of the last 10 years.

Attendance time distributions

(Tables 5.6, 5.7 and 5.8)

Measuring arrival times using an average is a useful way of summarising our response to incidents. Another way is to look at the distribution of response times by minute intervals. These distributions (based on data for the five years to 2018, help to understand the range of response times.

There were some mobilisations (around 500) that were over 20 minutes. These times are excluded from performance attendance calculations as they represent errors in the data: either due to human error, or failure with the systems, in recording a correct time of arrival at the incident.

Chart 10: First fire engine arrival time distribution, five year average to 2018

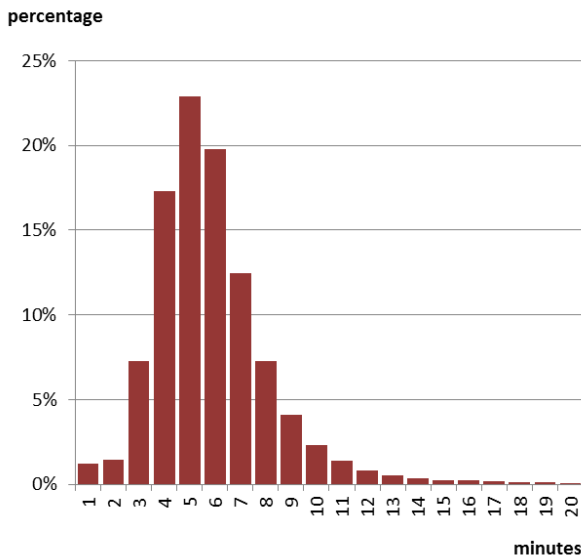


Chart 11: Second fire engine arrival time distribution, five year average to 2018

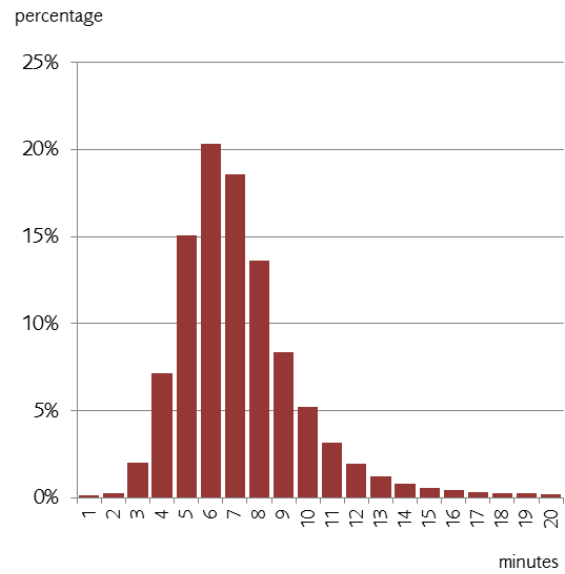


Chart 12: Third fire engine arrival time distribution, five year average to 2018

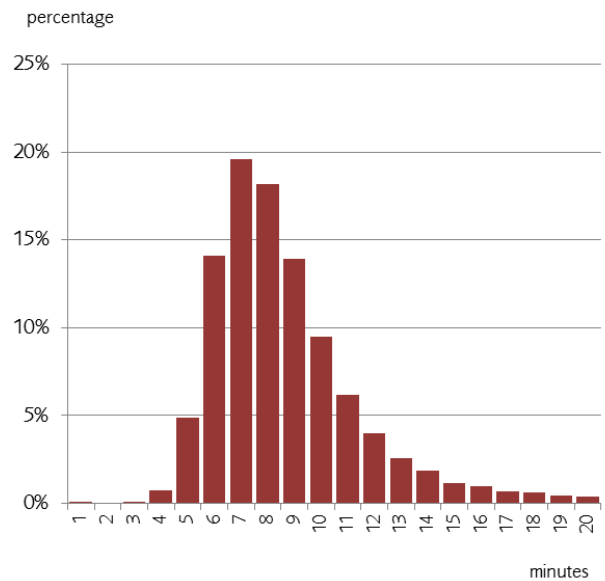


Table 5.1 Average first appliance attendance time

minutes

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018
London total	05:14	05:25	05:17	05:15	05:14	05:27	05:33	05:24	05:13	05:14
Inner London	04:44	04:52	04:46	04:44	04:44	05:06	05:12	05:04	04:53	04:53
Camden	04:29	04:43	04:36	04:36	04:30	04:54	05:08	05:02	04:56	04:56
City of London	04:42	04:42	04:48	04:49	04:37	04:58	05:10	05:07	04:55	04:55
Hackney	04:43	04:55	04:38	04:39	04:39	05:01	05:08	04:56	04:52	04:50
Hammersmith and Fulham	05:07	05:14	05:06	04:59	04:47	04:58	05:03	05:00	04:48	04:50
Haringey	05:35	05:42	05:34	05:31	05:28	05:30	05:35	05:22	05:17	05:15
Islington	04:47	04:43	04:36	04:36	04:33	04:55	05:04	04:49	04:44	04:34
Kensington and Chelsea	04:30	04:30	04:25	04:23	04:26	04:42	04:42	04:38	04:24	04:28
Lambeth	04:40	04:33	04:29	04:29	04:32	04:40	04:49	04:48	04:38	04:43
Lewisham	04:49	04:46	04:45	04:37	04:44	05:09	05:15	05:01	04:49	04:53
Newham	04:48	05:07	04:59	04:52	05:06	05:46	05:36	05:22	05:12	05:10
Southwark	04:45	04:43	04:38	04:33	04:44	05:25	05:32	05:15	04:50	04:51
Tower Hamlets	04:23	04:31	04:26	04:24	04:29	04:49	05:00	04:54	04:39	04:36
Wandsworth	05:08	05:11	05:05	04:53	04:55	05:11	05:08	05:00	04:50	04:51
Westminster	04:36	04:59	05:04	05:03	04:57	05:19	05:24	05:21	05:11	05:09
Outer London	05:52	06:03	05:51	05:50	05:46	05:49	05:56	05:45	05:35	05:36
Barking and Dagenham	05:37	05:47	05:31	05:36	05:29	05:47	06:45	05:38	05:32	05:47
Barnet	06:01	06:31	06:11	06:12	06:07	05:58	06:04	05:49	05:46	05:49
Bexley	05:56	06:00	05:44	05:42	05:44	05:49	06:04	05:54	05:40	05:39
Brent	05:46	06:00	05:43	05:54	05:46	05:48	05:57	05:45	05:42	05:37
Bromley	06:14	06:21	06:16	06:13	06:15	06:11	06:02	06:00	05:51	06:07
Croydon	05:28	05:35	05:35	05:32	05:28	05:27	05:35	05:26	05:09	05:14
Ealing	05:31	05:47	05:28	05:22	05:23	05:30	05:39	05:35	05:26	05:22
Enfield	06:11	06:30	06:21	06:20	06:12	06:16	06:14	06:00	06:01	05:58
Greenwich	05:22	05:20	05:18	05:10	05:04	05:27	05:25	05:28	05:13	05:18
Harrow	06:20	06:24	06:10	06:12	06:03	05:52	06:00	05:50	05:47	05:34
Havering	06:35	05:58	05:35	05:38	05:34	05:53	06:03	06:00	05:46	05:51
Hillingdon	06:16	06:38	06:30	06:39	06:34	06:41	06:35	06:25	06:14	06:13
Hounslow	05:58	06:13	05:53	05:48	05:51	05:53	05:56	05:47	05:28	05:39
Kingston upon Thames	05:52	06:08	05:52	05:57	06:00	05:52	05:50	05:50	05:23	05:33
Merton	05:39	05:47	05:35	05:28	05:30	05:34	05:34	05:35	05:23	05:11
Redbridge	05:33	05:45	05:32	05:42	05:34	05:50	06:04	05:49	05:33	05:38
Richmond upon Thames	06:16	06:34	06:17	06:15	06:03	05:53	05:58	05:44	05:33	05:23
Sutton	05:56	06:06	06:01	05:53	05:49	05:44	05:42	05:40	05:29	05:25
Waltham Forest	05:12	05:43	05:39	05:05	05:02	05:01	05:19	05:05	04:59	05:02

Table 5.2 Average second appliance attendance time

minutes

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018
London total	06:16	06:40	06:28	06:24	06:32	06:48	06:52	06:45	06:35	06:33
Inner London	05:32	05:58	05:47	05:43	05:54	06:19	06:25	06:18	06:07	06:04
Camden	05:11	06:08	05:55	05:57	05:53	06:04	06:15	06:12	06:02	06:02
City of London	05:29	05:55	05:58	05:51	05:41	06:35	06:42	06:44	06:11	06:07
Hackney	05:19	05:55	05:27	05:17	05:29	05:51	06:03	05:50	05:50	05:50
Hammersmith and Fulham	06:09	06:30	06:12	05:58	06:01	06:14	06:22	06:11	05:59	06:07
Haringey	06:14	06:24	06:13	06:06	06:25	06:15	06:22	06:11	06:14	06:05
Islington	05:18	05:37	05:32	05:34	05:52	06:34	06:42	06:29	06:19	06:05
Kensington and Chelsea	05:21	05:42	05:35	05:20	05:50	06:12	06:15	06:13	05:55	05:49
Lambeth	05:13	05:15	05:09	05:01	05:21	05:26	05:45	05:42	05:28	05:26
Lewisham	06:15	06:11	06:10	06:09	06:27	07:03	07:00	06:59	06:39	06:31
Newham	05:49	06:17	06:04	05:58	06:16	07:11	07:15	07:05	06:54	06:49
Southwark	05:36	05:44	05:43	05:37	05:50	06:40	06:47	06:33	06:05	06:04
Tower Hamlets	05:13	05:46	05:26	05:32	05:43	06:30	06:38	06:24	06:18	06:09
Wandsworth	06:01	06:26	06:18	06:08	06:06	06:45	06:35	06:30	06:26	06:25
Westminster	05:05	05:53	05:52	05:51	05:56	06:04	06:03	06:07	05:51	05:53
Outer London	07:14	07:33	07:18	07:12	07:16	07:21	07:23	07:14	07:07	07:05
Barking and Dagenham	06:34	07:00	06:33	06:25	06:24	06:45	07:38	06:28	06:33	06:38
Barnet	07:49	08:32	08:12	08:14	08:09	07:33	07:37	07:22	07:11	07:07
Bexley	07:15	07:05	06:39	06:39	06:58	07:48	07:40	07:26	07:25	07:09
Brent	06:31	06:55	06:39	06:42	06:52	07:15	07:13	06:58	07:00	06:54
Bromley	07:49	08:17	08:02	08:02	08:06	07:48	07:39	07:21	07:16	07:28
Croydon	06:40	06:51	06:53	06:42	06:43	06:41	06:48	06:38	06:32	06:34
Ealing	06:33	06:58	06:32	06:28	06:36	07:05	07:17	07:05	07:01	07:07
Enfield	07:23	07:51	07:36	07:35	07:22	07:25	07:38	07:29	07:25	07:22
Greenwich	06:37	06:56	06:54	06:45	06:51	06:48	06:38	06:43	06:37	06:28
Harrow	08:35	08:44	08:21	08:18	08:13	07:12	07:17	07:14	07:12	07:09
Havering	07:57	07:34	07:19	07:15	07:32	08:04	08:18	08:16	07:56	07:47
Hillingdon	07:39	08:07	07:59	07:54	07:55	08:27	08:20	08:05	08:00	07:51
Hounslow	07:38	07:44	07:18	07:05	07:04	07:01	07:06	07:11	06:52	06:49
Kingston upon Thames	07:47	08:16	07:55	08:09	08:27	08:04	07:42	07:54	07:30	07:32
Merton	07:21	07:54	07:43	07:48	07:36	07:44	07:09	07:27	07:16	07:10
Redbridge	06:43	07:14	06:49	06:55	07:01	07:39	07:39	07:38	07:15	07:17
Richmond upon Thames	08:14	08:24	08:29	08:25	08:34	07:22	07:24	07:17	07:11	07:02
Sutton	07:56	07:34	07:11	07:18	06:57	07:04	07:10	06:55	06:45	06:55
Waltham Forest	06:35	06:54	06:37	05:54	06:08	06:31	06:31	06:40	06:36	06:42

Table 5.3 Average third appliance attendance time

minutes

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018
London total	07:00	08:01	07:53	07:53	07:55	08:26	08:21	08:13	07:51	07:39
Inner London	06:26	07:17	07:13	07:10	07:15	07:50	07:48	07:41	07:18	07:03
Camden	05:49	07:16	07:08	07:10	07:07	07:46	07:35	07:37	07:18	07:03
City of London	06:28	07:25	07:18	07:21	06:49	08:07	07:32	07:52	06:57	06:52
Hackney	06:40	07:23	07:25	07:19	07:26	07:48	07:40	07:37	07:29	07:01
Hammersmith and Fulham	07:10	07:36	07:11	07:14	07:12	07:58	07:35	07:30	06:53	06:50
Haringey	07:33	08:19	08:09	08:00	08:11	08:21	08:12	07:46	07:49	07:42
Islington	06:21	07:03	07:09	07:09	07:14	07:31	07:59	07:41	07:29	06:38
Kensington and Chelsea	06:34	07:27	07:06	07:02	07:00	07:34	07:17	07:29	06:52	06:41
Lambeth	06:23	06:59	06:58	06:50	07:18	07:32	07:26	07:20	06:53	06:45
Lewisham	07:03	07:32	07:46	07:37	07:40	08:05	08:01	07:57	07:28	06:57
Newham	07:03	07:33	07:16	07:24	07:50	08:34	08:05	07:58	08:02	07:47
Southwark	06:43	06:57	06:53	06:56	07:07	07:53	08:04	07:38	07:05	06:55
Tower Hamlets	06:15	07:02	06:46	06:37	06:51	07:53	08:11	07:34	07:10	07:01
Wandsworth	07:08	07:20	07:19	07:13	07:21	07:51	07:46	07:49	07:35	07:33
Westminster	06:09	07:09	07:27	07:15	07:09	07:41	07:52	07:53	07:25	07:02
Outer London	08:26	09:16	08:59	09:03	08:58	09:19	09:07	08:59	08:42	08:37
Barking And Dagenham	07:34	08:49	08:11	08:24	08:13	08:58	08:34	07:44	08:33	08:04
Barnet	09:43	10:39	09:29	09:24	09:16	09:22	08:42	08:48	08:34	08:31
Bexley	08:11	08:27	08:37	08:36	08:49	10:47	09:16	09:51	09:44	10:04
Brent	08:03	08:45	08:24	08:52	08:45	08:43	09:03	08:30	08:05	08:14
Bromley	09:21	09:48	09:46	09:38	09:38	09:47	09:46	09:50	09:42	09:44
Croydon	08:12	08:32	08:46	08:54	08:48	08:34	08:35	08:33	08:03	08:03
Ealing	08:07	08:42	08:32	08:10	08:06	08:45	09:16	08:36	08:25	08:48
Enfield	08:37	09:24	09:15	09:33	09:49	09:37	09:07	09:21	09:11	08:46
Greenwich	07:52	08:41	08:27	08:10	08:05	09:00	08:23	08:19	08:05	08:03
Harrow	10:20	10:51	10:50	09:59	10:51	09:11	09:20	09:44	08:54	08:13
Havering	08:12	09:02	08:55	08:47	08:34	09:38	08:43	08:48	09:31	09:00
Hillingdon	08:34	09:47	09:32	10:03	09:39	10:31	10:35	10:07	09:22	09:29
Hounslow	08:57	10:03	09:47	09:35	09:24	09:35	08:36	09:24	08:36	08:25
Kingston Upon Thames	08:28	09:10	08:54	09:38	09:54	08:48	09:15	10:06	08:25	08:06
Merton	08:03	09:51	09:32	09:24	08:50	10:20	09:07	08:58	08:52	09:02
Redbridge	07:50	09:01	08:48	09:01	09:04	09:51	10:02	09:37	09:11	08:59
Richmond Upon Thames	09:19	10:09	09:20	09:27	09:30	09:41	09:13	09:20	08:54	08:46
Sutton	09:07	09:28	09:02	09:41	08:45	08:37	08:48	08:27	07:53	08:30
Waltham Forest	07:36	08:52	08:05	07:57	07:36	08:22	08:23	07:48	08:29	08:09

Table 5.4 First appliance within 10 minutes

percentage

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018
London total	95.7%	94.7%	95.6%	95.9%	96.0%	95.8%	95.1%	95.9%	96.6%	96.5%
Inner London	97.3%	97.0%	97.4%	97.7%	97.6%	97.0%	96.6%	97.2%	97.8%	97.8%
Camden	97.8%	97.3%	97.5%	97.8%	97.9%	97.2%	96.7%	97.1%	97.8%	97.5%
City of London	97.4%	97.9%	98.0%	98.1%	98.2%	97.2%	97.2%	97.5%	97.8%	97.3%
Hackney	97.1%	96.6%	97.7%	97.6%	97.7%	97.0%	97.1%	97.9%	98.2%	98.1%
Hammersmith and Fulham	96.6%	96.5%	97.4%	97.4%	98.0%	97.7%	97.2%	97.5%	97.9%	98.3%
Haringey	95.6%	95.0%	95.2%	96.4%	96.2%	96.8%	95.7%	97.3%	97.1%	97.7%
Islington	96.8%	97.0%	97.6%	98.0%	98.1%	97.4%	97.3%	98.3%	98.1%	98.5%
Kensington and Chelsea	97.4%	97.6%	98.1%	98.1%	98.4%	98.0%	98.0%	98.3%	98.7%	98.4%
Lambeth	97.3%	97.3%	97.7%	97.9%	97.7%	98.3%	98.1%	98.0%	98.3%	97.9%
Lewisham	97.5%	97.7%	97.6%	97.9%	98.0%	96.9%	96.5%	97.3%	98.0%	98.2%
Newham	97.2%	96.4%	97.0%	98.0%	96.9%	95.2%	95.6%	96.2%	97.0%	96.6%
Southwark	97.3%	97.5%	97.4%	98.0%	97.7%	96.9%	95.6%	97.0%	98.5%	98.4%
Tower Hamlets	98.0%	97.8%	97.7%	98.2%	97.8%	97.2%	96.6%	96.7%	98.1%	98.1%
Wandsworth	97.0%	95.8%	97.2%	97.6%	97.6%	96.2%	96.9%	97.4%	98.3%	97.9%
Westminster	97.8%	96.9%	97.0%	97.0%	97.1%	96.7%	95.9%	95.9%	96.7%	97.0%
Outer London	93.7%	92.1%	93.6%	93.9%	94.3%	94.3%	93.5%	94.5%	95.3%	95.1%
Barking and Dagenham	95.4%	94.5%	95.9%	95.3%	95.6%	94.2%	89.7%	95.7%	96.8%	94.8%
Barnet	92.8%	89.6%	92.4%	92.2%	93.2%	94.2%	93.5%	94.1%	95.3%	94.7%
Bexley	93.2%	93.4%	94.5%	94.8%	94.9%	94.9%	92.7%	93.7%	94.9%	94.4%
Brent	93.6%	92.8%	94.5%	94.2%	94.8%	95.1%	94.2%	95.3%	95.4%	96.5%
Bromley	91.9%	90.5%	91.1%	91.5%	91.4%	92.3%	93.0%	92.6%	94.2%	92.6%
Croydon	95.8%	94.3%	94.8%	95.3%	95.1%	95.6%	94.5%	95.6%	96.6%	96.2%
Ealing	94.7%	93.0%	94.8%	95.5%	94.7%	95.0%	94.3%	95.2%	95.3%	95.8%
Enfield	93.0%	89.4%	91.2%	91.9%	92.6%	92.1%	92.0%	93.8%	93.0%	93.5%
Greenwich	95.6%	95.5%	95.8%	96.9%	97.1%	95.9%	95.8%	96.3%	96.6%	96.8%
Harrow	91.9%	90.2%	92.5%	92.3%	94.3%	95.6%	94.5%	94.7%	94.9%	96.4%
Havering	90.2%	93.2%	95.7%	95.1%	95.5%	94.5%	91.9%	93.0%	94.4%	93.0%
Hillingdon	91.6%	89.6%	90.1%	90.1%	91.0%	90.8%	90.9%	92.2%	93.0%	92.5%
Hounslow	92.3%	90.4%	93.4%	93.8%	94.4%	93.4%	93.6%	94.3%	95.9%	94.5%
Kingston upon Thames	94.1%	91.4%	94.6%	93.5%	92.8%	92.3%	93.1%	93.9%	96.4%	95.5%
Merton	95.1%	94.0%	94.4%	94.6%	95.7%	95.7%	95.5%	94.8%	95.7%	96.9%
Redbridge	95.5%	93.7%	95.2%	94.8%	95.0%	94.6%	92.2%	94.2%	95.8%	95.4%
Richmond upon Thames	92.6%	89.2%	91.9%	91.7%	93.2%	94.3%	94.2%	94.6%	95.3%	95.9%
Sutton	94.8%	92.9%	93.5%	95.3%	95.1%	96.2%	95.6%	95.4%	97.1%	97.4%
Waltham Forest	95.9%	93.1%	94.2%	96.0%	96.9%	97.2%	95.4%	96.3%	96.0%	96.4%

Table 5.5 First appliance within 12 minutes

percentage

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018
London total	97.9%	97.5%	97.9%	98.0%	98.1%	98.0%	97.7%	98.2%	98.5%	98.4%
Inner London	98.7%	98.6%	98.7%	98.8%	98.9%	98.7%	98.5%	98.8%	99.1%	99.0%
Camden	98.8%	98.6%	98.8%	98.9%	99.2%	98.9%	98.5%	98.7%	99.1%	99.2%
City of London	98.4%	98.5%	99.2%	99.0%	99.2%	98.6%	97.7%	98.7%	98.9%	98.5%
Hackney	98.5%	98.2%	98.8%	98.9%	98.9%	98.6%	98.6%	99.1%	99.3%	99.0%
Hammersmith and Fulham	98.1%	98.3%	98.7%	98.7%	99.2%	98.9%	98.6%	98.9%	99.0%	99.1%
Haringey	97.8%	97.4%	97.7%	98.0%	98.2%	98.6%	98.1%	98.8%	98.8%	98.9%
Islington	98.3%	98.7%	98.7%	99.1%	99.0%	99.0%	99.0%	99.4%	99.2%	99.3%
Kensington and Chelsea	98.6%	99.0%	99.2%	99.0%	99.2%	99.1%	99.2%	99.2%	99.5%	99.2%
Lambeth	98.7%	98.8%	98.8%	98.8%	98.8%	99.2%	99.2%	99.1%	99.3%	99.2%
Lewisham	98.6%	99.0%	98.8%	98.8%	99.1%	98.8%	98.7%	98.9%	99.2%	99.2%
Newham	98.6%	98.4%	98.5%	98.9%	98.3%	97.9%	97.6%	98.1%	98.3%	98.4%
Southwark	98.7%	98.7%	98.6%	99.2%	98.7%	98.6%	98.0%	98.9%	99.2%	99.4%
Tower Hamlets	99.1%	99.0%	98.8%	99.1%	98.8%	98.6%	98.3%	98.4%	99.1%	99.1%
Wandsworth	98.7%	98.2%	98.8%	98.8%	99.0%	98.4%	98.4%	98.8%	99.4%	99.2%
Westminster	99.0%	98.6%	98.5%	98.5%	98.7%	98.4%	98.3%	98.2%	98.7%	98.7%
Outer London	96.9%	96.3%	97.0%	97.1%	97.2%	97.3%	96.9%	97.5%	97.9%	97.8%
Barking and Dagenham	97.8%	97.2%	98.1%	97.7%	98.0%	97.5%	96.0%	98.4%	98.3%	97.2%
Barnet	96.5%	94.7%	96.8%	96.1%	96.6%	96.9%	97.2%	97.7%	97.9%	97.0%
Bexley	96.5%	96.8%	97.3%	97.4%	97.7%	97.5%	96.4%	97.0%	97.3%	97.6%
Brent	97.2%	96.8%	97.7%	97.1%	97.7%	98.1%	97.1%	98.0%	97.9%	98.3%
Bromley	96.2%	95.3%	95.8%	96.4%	95.5%	96.8%	96.8%	96.5%	97.4%	96.6%
Croydon	98.2%	97.5%	97.3%	97.8%	97.5%	97.9%	97.5%	97.9%	98.6%	98.5%
Ealing	97.3%	96.5%	97.6%	98.0%	97.7%	97.7%	96.9%	97.7%	97.5%	98.2%
Enfield	96.4%	94.7%	95.9%	95.9%	96.3%	95.8%	96.2%	96.9%	96.9%	97.2%
Greenwich	97.5%	98.1%	97.6%	98.2%	98.8%	98.0%	98.6%	98.1%	98.5%	98.5%
Harrow	96.3%	95.7%	96.4%	96.5%	97.5%	98.0%	97.7%	97.4%	98.0%	98.7%
Havering	94.8%	96.3%	98.2%	97.3%	97.9%	97.7%	96.6%	96.6%	97.4%	96.9%
Hillingdon	96.2%	95.0%	95.5%	95.9%	95.7%	95.3%	95.5%	96.3%	96.5%	96.5%
Hounslow	96.2%	94.9%	96.6%	97.2%	97.0%	97.1%	96.4%	97.4%	98.2%	97.9%
Kingston upon Thames	97.4%	96.0%	97.4%	96.8%	96.8%	96.9%	96.7%	97.4%	98.3%	98.0%
Merton	97.5%	97.0%	97.6%	97.4%	97.7%	97.7%	97.3%	97.6%	98.4%	98.7%
Redbridge	97.7%	97.4%	97.9%	97.2%	97.7%	97.6%	96.5%	97.9%	98.4%	98.1%
Richmond upon Thames	96.7%	95.6%	96.3%	96.2%	96.5%	97.0%	97.1%	97.9%	97.5%	98.4%
Sutton	97.5%	96.7%	97.1%	97.6%	97.7%	98.0%	98.1%	98.1%	98.8%	98.7%
Waltham Forest	97.9%	97.4%	97.6%	98.0%	98.4%	98.6%	97.6%	98.2%	98.2%	98.4%

Table 5.6 Distribution of first appliance attendance times*number and percentage*

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018
Within x min										
01	897	1076	1008	1085	925	835	993	1145	1287	1340
02	2183	1675	1611	1469	1427	1136	1066	1304	1594	1758
03	13557	9111	8690	8238	8036	6078	5826	6954	7704	7873
04	32022	20582	19879	18976	18154	14956	14296	16662	17765	17948
05	35799	24513	23866	22533	22001	19894	20134	22286	22726	23079
06	26643	19823	18790	17520	17193	17259	18048	19392	19067	19540
07	16930	12329	11299	10766	10216	10995	11836	12273	11723	12008
08	9629	7911	6859	6437	6180	6698	7106	7327	6588	6709
09	5400	4655	3837	3643	3350	3889	4155	4069	3476	3708
10	3183	2845	2317	2109	1953	2154	2378	2228	1983	2068
11	1990	1872	1420	1228	1179	1259	1431	1389	1124	1215
12	1344	1198	965	832	723	741	911	823	687	714
13	988	830	572	561	533	499	587	523	461	492
14	646	601	442	362	366	353	403	365	307	321
15	471	362	336	287	256	244	304	250	216	214
16	344	315	255	228	185	188	230	226	168	163
17	251	252	197	180	145	156	187	151	108	134
18	237	162	128	144	115	124	148	118	97	91
19	177	142	112	96	99	86	115	97	73	74
20	128	102	101	87	86	73	82	75	54	64
Within x min (%)										
01	0.59%	0.98%	0.98%	1.12%	0.99%	0.95%	1.10%	1.17%	1.32%	1.35%
02	1.43%	1.52%	1.57%	1.52%	1.53%	1.30%	1.18%	1.34%	1.64%	1.77%
03	8.87%	8.26%	8.46%	8.51%	8.63%	6.94%	6.46%	7.12%	7.93%	7.91%
04	20.95%	18.65%	19.36%	19.61%	19.49%	17.07%	15.84%	17.06%	18.28%	18.04%
05	23.43%	22.21%	23.24%	23.28%	23.63%	22.71%	22.31%	22.82%	23.38%	23.19%
06	17.43%	17.96%	18.30%	18.10%	18.46%	19.70%	20.00%	19.86%	19.61%	19.64%
07	11.08%	11.17%	11.00%	11.12%	10.97%	12.55%	13.12%	12.57%	12.06%	12.07%
08	6.30%	7.17%	6.68%	6.65%	6.64%	7.64%	7.87%	7.50%	6.78%	6.74%
09	3.53%	4.22%	3.74%	3.76%	3.60%	4.44%	4.60%	4.17%	3.58%	3.73%
10	2.08%	2.58%	2.26%	2.18%	2.10%	2.46%	2.64%	2.28%	2.04%	2.08%
11	1.30%	1.70%	1.38%	1.27%	1.27%	1.44%	1.59%	1.42%	1.16%	1.22%
12	0.88%	1.09%	0.94%	0.86%	0.78%	0.85%	1.01%	0.84%	0.71%	0.72%
13	0.65%	0.75%	0.56%	0.58%	0.57%	0.57%	0.65%	0.54%	0.47%	0.49%
14	0.42%	0.54%	0.43%	0.37%	0.39%	0.40%	0.45%	0.37%	0.32%	0.32%
15	0.31%	0.33%	0.33%	0.30%	0.27%	0.28%	0.34%	0.26%	0.22%	0.22%
16	0.23%	0.29%	0.25%	0.24%	0.20%	0.21%	0.25%	0.23%	0.17%	0.16%
17	0.16%	0.23%	0.19%	0.19%	0.16%	0.18%	0.21%	0.15%	0.11%	0.13%
18	0.16%	0.15%	0.12%	0.15%	0.12%	0.14%	0.16%	0.12%	0.10%	0.09%
19	0.12%	0.13%	0.11%	0.10%	0.11%	0.10%	0.13%	0.10%	0.08%	0.07%
20	0.08%	0.09%	0.10%	0.09%	0.09%	0.08%	0.09%	0.08%	0.06%	0.06%

Table 5.7 Distribution of second appliance attendance times*number and percentage*

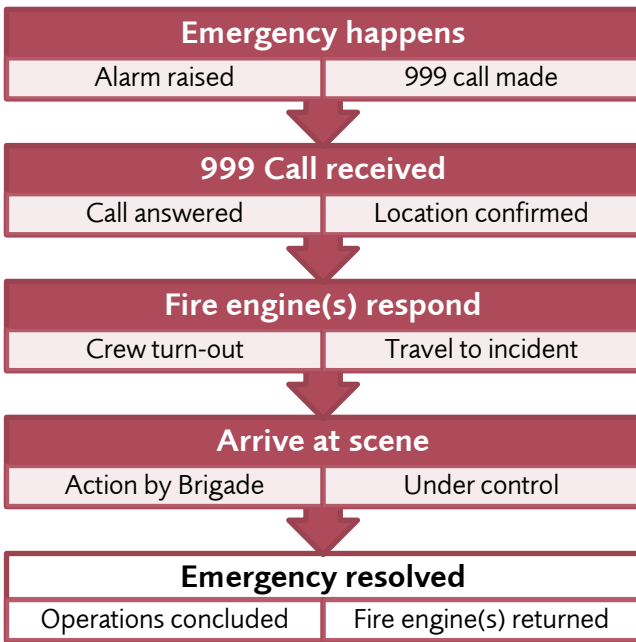
	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018
Within x min										
01	36	18	10	14	11	13	13	61	70	105
02	176	143	108	104	98	69	71	86	111	124
03	1,935	1,332	1,321	1,331	1,023	657	686	718	801	853
04	6,423	3,885	4,069	4,138	3,421	2,474	2,414	2,519	2,837	2,935
05	9,936	7,155	7,165	7,113	6,201	5,052	4,885	5,473	6,134	6,291
06	9,879	8,152	7,848	7,638	7,224	6,571	6,714	7,684	8,071	8,450
07	7,761	6,899	6,556	5,976	6,116	5,934	6,477	7,066	7,335	7,487
08	5,552	5,113	4,656	4,493	4,415	4,601	4,794	5,415	5,143	5,189
09	3,532	3,416	2,817	2,726	2,759	2,921	3,135	3,307	3,098	3,007
10	2,193	2,153	1,851	1,731	1,712	1,854	2,084	2,047	1,782	1,859
11	1,249	1,490	1,235	1,067	1,079	1,159	1,250	1,198	1,154	1,093
12	879	995	742	717	660	722	767	770	675	655
13	553	617	516	489	463	458	527	506	404	429
14	444	445	374	324	323	329	330	286	324	276
15	294	334	245	235	232	208	243	233	194	217
16	218	253	191	186	160	171	167	142	143	149
17	182	179	130	128	134	139	138	109	116	133
18	138	129	128	109	112	89	108	95	89	83
19	123	108	101	76	92	107	96	77	71	89
20	80	84	59	62	64	69	72	78	55	68
Within x min (%)										
01	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.3
02	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3
03	3.8	3.1	3.3	3.4	2.8	2.0	2.0	1.9	2.1	2.2
04	12.5	9.1	10.1	10.7	9.4	7.4	6.9	6.7	7.3	7.4
05	19.3	16.7	17.9	18.4	17.1	15.0	14.0	14.5	15.9	15.9
06	19.2	19.0	19.6	19.8	19.9	19.6	19.2	20.3	20.9	21.4
07	15.0	16.1	16.3	15.5	16.8	17.7	18.5	18.7	19.0	19.0
08	10.8	11.9	11.6	11.6	12.2	13.7	13.7	14.3	13.3	13.1
09	6.8	8.0	7.0	7.1	7.6	8.7	9.0	8.7	8.0	7.6
10	4.3	5.0	4.6	4.5	4.7	5.5	6.0	5.4	4.6	4.7
11	2.4	3.5	3.1	2.8	3.0	3.4	3.6	3.2	3.0	2.8
12	1.7	2.3	1.8	1.9	1.8	2.1	2.2	2.0	1.7	1.7
13	1.1	1.4	1.3	1.3	1.3	1.4	1.5	1.3	1.0	1.1
14	0.9	1.0	0.9	0.8	0.9	1.0	0.9	0.8	0.8	0.7
15	0.6	0.8	0.6	0.6	0.6	0.6	0.7	0.6	0.5	0.5
16	0.4	0.6	0.5	0.5	0.4	0.5	0.5	0.4	0.4	0.4
17	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3
18	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
19	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.2
20	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2

Table 5.8 Distribution of third appliance attendance times*number and percentage*

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018
Within x min										
01	3	4	7	3	8	6	4	4	10	21
02	5	2	2	1	3	1	-	2	8	11
03	34	5	7	10	7	5	2	8	15	26
04	316	124	121	141	110	20	20	23	67	81
05	1,419	774	825	746	536	204	191	225	411	454
06	1,916	1,603	1,508	1,513	1,112	658	689	924	1,157	1,332
07	1,619	1,788	1,817	1,697	1,353	939	1,038	1,301	1,675	1,794
08	1,208	1,447	1,502	1,447	1,029	1,003	1,112	1,270	1,444	1,454
09	777	1,155	1,092	1,049	880	806	817	992	989	980
10	453	773	730	703	577	563	571	679	674	632
11	298	555	460	523	379	348	425	419	415	381
12	215	414	315	340	241	232	275	287	250	239
13	126	255	243	213	165	176	145	188	151	155
14	83	209	163	144	131	127	115	117	108	108
15	71	130	132	100	80	71	69	77	76	65
16	49	87	82	93	59	62	58	64	63	43
17	34	83	79	84	48	48	33	47	39	33
18	35	72	60	59	57	42	36	26	41	25
19	25	53	49	45	34	28	22	30	28	17
20	26	39	42	37	32	26	32	22	18	22
Within x min (%)										
01	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.3
02	0.1	0.0	0.0	0.0	0.0	0.0	-	0.0	0.1	0.1
03	0.4	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.2	0.3
04	3.6	1.3	1.3	1.6	1.6	0.4	0.4	0.3	0.9	1.0
05	16.3	8.1	8.9	8.3	7.8	3.8	3.4	3.4	5.4	5.8
06	22.0	16.7	16.3	16.9	16.3	12.3	12.2	13.8	15.1	16.9
07	18.6	18.7	19.7	19.0	19.8	17.5	18.4	19.4	21.9	22.8
08	13.9	15.1	16.3	16.2	15.0	18.7	19.7	18.9	18.9	18.5
09	8.9	12.1	11.8	11.7	12.9	15.0	14.4	14.8	12.9	12.4
10	5.2	8.1	7.9	7.9	8.4	10.5	10.1	10.1	8.8	8.0
11	3.4	5.8	5.0	5.8	5.5	6.5	7.5	6.2	5.4	4.8
12	2.5	4.3	3.4	3.8	3.5	4.3	4.9	4.3	3.3	3.0
13	1.4	2.7	2.6	2.4	2.4	3.3	2.6	2.8	2.0	2.0
14	1.0	2.2	1.8	1.6	1.9	2.4	2.0	1.7	1.4	1.4
15	0.8	1.4	1.4	1.1	1.2	1.3	1.2	1.1	1.0	0.8
16	0.6	0.9	0.9	1.0	0.9	1.2	1.0	1.0	0.8	0.5
17	0.4	0.9	0.9	0.9	0.7	0.9	0.6	0.7	0.5	0.4
18	0.4	0.8	0.6	0.7	0.8	0.8	0.6	0.4	0.5	0.3
19	0.3	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.2
20	0.3	0.4	0.5	0.4	0.5	0.5	0.6	0.3	0.2	0.3

Chapter 6 | Incident response times

So far, this report has looked at each stage of the incident response process. In this chapter we look at the combined effect of stages undertaken by the Brigade; the response from the time the 999 call is answered until the arrival of the first fire engine.



Times for the process between call answer and first fire engine response are only available from November 2008. The data for the times for 999 call handling (to the point of selecting the incident locations) and the times for the mobilisation and arrival of fire engines, are held in separate systems before this time, and it has not been possible to join the historic data together.

Whilst it is possible to calculate the target for the overall incident response time, we do not routinely publish performance on this basis. However, the combined targets for a first appliance would be **7m 41s** based on the component targets (as outlined earlier in this document) as follows:

- call answer (1.4 secs),
- call handling (1m 40s) and
- fire engine first attendance (6m)

(Table 6.1)

The data in table 6.1 shows that , the average time taken to respond to an emergency incident from the time the 999 call was answered, until the time the first fire engine arrived on scene, had been over seven minutes in recent years, although fell below seven minutes in 2017 and 2018.

The average incident response time in inner London was faster than in outer London. The time also varies by borough.

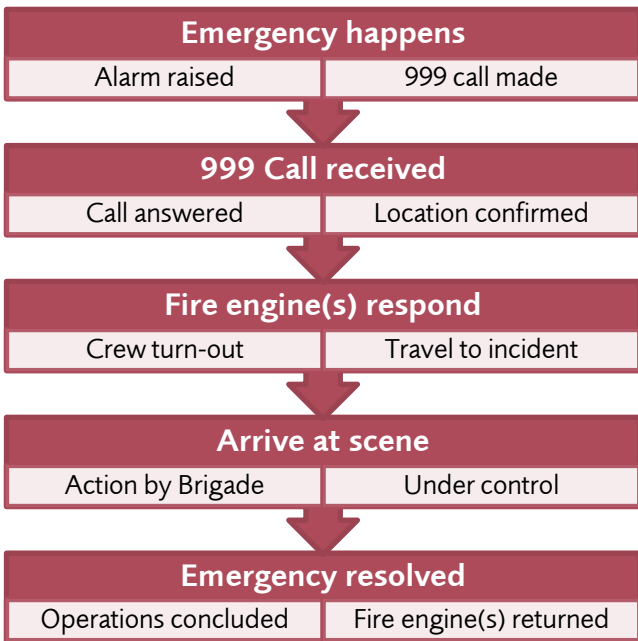
Table 6.1 Incident response times for first fire engine

minutes

	2010	2011	2012	2013	2014	2015	2016	2017	2018
London total	07:14	07:06	07:02	06:58	07:09	07:15	07:07	06:54	06:53
Inner London	06:39	06:34	06:29	06:27	06:48	06:52	06:43	06:33	06:31
Camden	06:27	06:21	06:17	06:07	06:32	06:46	06:41	06:32	06:31
City of London	06:28	06:32	06:30	06:18	06:39	06:51	06:40	06:27	06:32
Hackney	06:46	06:30	06:31	06:24	06:46	06:51	06:39	06:34	06:31
Hammersmith and Fulham	07:00	06:53	06:43	06:26	06:38	06:40	06:43	06:26	06:26
Haringey	07:33	07:27	07:17	07:14	07:16	07:18	06:38	07:05	06:56
Islington	06:30	06:25	06:22	06:17	06:38	06:44	06:34	06:23	06:13
Kensington and Chelsea	06:13	06:08	06:07	06:05	06:17	06:19	06:11	06:01	06:04
Lambeth	06:22	06:18	06:13	06:17	06:21	06:31	06:28	06:19	06:21
Lewisham	06:31	06:31	06:20	06:27	06:49	06:54	06:43	06:28	06:29
Newham	06:53	06:48	06:42	06:48	07:29	07:19	07:08	06:59	06:52
Southwark	06:32	06:28	06:19	06:30	07:14	07:15	06:57	06:30	06:29
Tower Hamlets	06:20	06:14	06:13	06:15	06:34	06:46	06:38	06:26	06:20
Wandsworth	06:55	06:50	06:38	06:36	06:47	06:48	06:41	06:31	06:29
Westminster	06:45	06:49	06:46	06:38	07:00	07:00	07:01	06:47	06:44
Outer London	07:55	07:42	07:38	07:32	07:33	07:40	07:31	07:17	07:16
Barking and Dagenham	07:42	07:23	07:26	07:21	07:37	08:33	07:23	07:14	07:31
Barnet	08:25	08:04	08:04	07:54	07:43	07:47	07:36	07:29	07:27
Bexley	07:46	07:34	07:25	07:26	07:32	07:47	07:41	07:20	07:17
Brent	07:49	07:35	07:47	07:30	07:36	07:42	07:31	07:28	07:16
Bromley	08:13	08:09	08:05	08:02	07:57	07:52	07:48	07:37	07:46
Croydon	07:24	07:22	07:18	07:14	07:08	07:15	07:10	06:51	06:55
Ealing	07:40	07:17	07:08	07:07	07:10	07:21	07:17	07:11	07:02
Enfield	08:24	08:15	08:07	07:58	07:58	07:58	07:51	07:50	07:41
Greenwich	07:13	07:10	07:00	06:48	07:11	07:10	07:15	07:00	06:59
Harrow	08:11	07:55	07:55	07:43	07:28	07:35	07:30	07:20	07:04
Havering	07:53	07:28	07:28	07:23	07:42	07:54	07:47	07:30	07:33
Hillingdon	08:30	08:22	08:28	08:21	08:27	08:23	08:18	08:07	07:56
Hounslow	08:12	07:50	07:43	07:41	07:46	07:45	07:39	06:42	07:23
Kingston upon Thames	07:51	07:34	07:41	07:43	07:36	07:31	07:35	07:02	07:15
Merton	07:38	07:27	07:11	07:14	07:12	07:15	07:16	06:58	06:46
Redbridge	07:39	07:27	07:32	07:23	07:37	07:49	07:36	07:14	07:20
Richmond upon Thames	08:24	08:10	08:04	07:47	07:35	07:39	07:23	07:12	07:00
Sutton	07:51	07:43	07:39	07:28	07:19	07:18	07:15	07:03	07:06
Waltham Forest	07:35	07:28	06:52	06:49	06:44	06:59	06:54	06:41	06:39

Chapter 7 | Incident durations

This chapter looks at the overall time it takes from a 999 call being made to the incident being fully resolved and all the fire engines and fire investigators leaving the scene.



The time taken to fully conclude operations cannot always be taken as a sign of how severe an emergency was. There are many actions we carry out after the emergency has been resolved but before we leave the scene. For example after a fire we will stay to help an occupier restore or secure their property. Incidents where we carry out investigations will also have longer durations.

Fire incidents

(Table 7.1 and 7.2)

On average it takes just under an hour to conclude a fire incident. Some fire types, such as small outdoor fires (which typically involve rubbish and bin fires), can be concluded in around 20 minutes; other fires, such as those that involve a large number of fire engines, can take many hours to resolve and we will remain on scene for more than a day.

Most of the fires we attend are small and require little or no firefighting. Around 20 per cent of the fires we

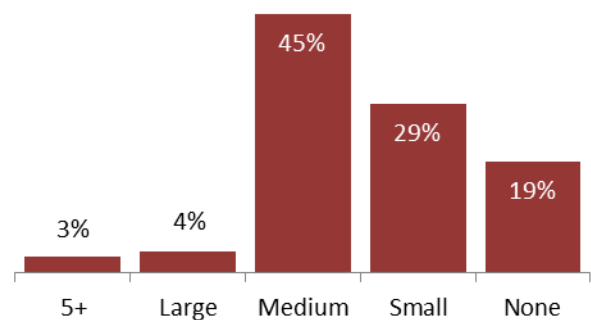
attended in recent years required no firefighting when we arrived, with a further 30 per cent being small fires and only required minimal firefighting.

Fire size categorisation

We have classified fires by the amount of firefighting required to bring them under control. These categories are:

- *None* – no firefighting required on arrival
- *Small* – minimal firefighting required; extinguished by physical means (e.g. stamping, smothering or immersing in water) or by using a small portable extinguisher.
- *Medium* – fires which required the use of the hose reel attached to a fire engine
- *Large* – fires which required the use of a main jet supplied from a fire hydrant
- *Five +* – large fires, attended by five or more fire engines.

Chart 13: Proportion of incidents in each fire size category, five years 2013-2018



Fires where there is no firefighting required are typically concluded in around 30 minutes when the fire is outdoors (outdoor and transport fires), and in around 50 minutes to one hour when the fire was in a building. These times will include the time taken to investigate where the fire was and may involve us securing the scene if we had to gain access.

Small fires take a similar amount of time. Those that happen outdoors take around 20 minutes to conclude, whilst those in buildings range from 39 minutes in

other residential buildings to over an hour in non-residential buildings. The longer time in non-residential buildings is likely to be the time taken to identify someone responsible for the premises to consider any fire safety issues.

Using a five year average to 2018, medium sized fires account for around 45 per cent of all fires we attend, with most of these (28 per cent of all fires) being outdoor fires. A medium outdoor fire will take some 32 minutes to conclude, whilst a medium sized dwelling fire will take around two hours to conclude.

Large fires and those that have five or more fire engines on scene take significantly longer to conclude. A large dwelling fire will take around four hours to conclude (using the five year average) and those that have five or more fire engines in attendance take around eight hours to fully conclude. These times represent the additional work in dampening down and making the building safe as well as the time to investigate the cause of the fire. Fortunately, these larger incidents are infrequent with large dwelling fires accounting for five per cent of dwelling fires and 5+ fire engine fires accounting for four per cent of dwelling fires.

Other property types have similarly long times for large and five plus fire engine fires. Again these size fires are infrequent, with large fires accounting for less than five per cent of fires and five plus fire engine fires about three per cent of fires.

We deal with a small number of protracted incidents where we are on scene for more than 24 hours. This can be due to (a) continued firefighting, as can happen with fires at large waste sites (b) us keeping the area safe to monitor the situation or while heated gas cylinders cool down or (c) due to our continued investigations.

Special services

(Table 7.3 and 7.4)

Special service is the name given to the range of emergencies we attend that are not fires or false alarms. These include, for example, attending road traffic accidents, water rescues and incidents involving hazardous chemicals.

On average a special service incident takes around half an hour to conclude. However, there are some types of special service that take considerably longer to resolve than others.

In recent years, the longest special service incident durations were for hazardous material incidents with durations of over one and half hours. These incidents not only involve additional precautions but we also ensure that the scene is safe and we do our best to minimise the effect of chemicals on the wider environment.

There will be some special service incidents in any year where we were in attendance for more than 24 hours.

Table 7.1 Average time taken to conclude operations at fires (time of close), by fire size

hours : minutes

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	5 year average
Overall average	00:41	00:58	00:57	00:56	00:56	00:57	00:59	01:00	00:58	01:01	00:59
Dwelling	01:21	01:40	01:38	01:26	01:27	01:26	01:33	01:38	01:31	01:38	01:33
5+	04:40	08:37	08:51	08:28	08:27	08:25	09:06	08:49	05:39	05:06	07:25
Large	02:27	04:02	04:06	03:43	04:10	03:49	03:50	03:45	03:55	04:31	03:58
Medium	01:58	02:18	02:14	02:01	01:55	01:59	02:03	01:59	02:05	02:05	02:02
Small	00:48	00:52	00:51	00:48	00:46	00:46	00:48	00:49	00:43	00:47	00:47
None	00:42	01:01	00:57	00:50	00:47	00:53	00:50	00:57	00:51	00:50	00:52
Non Residential	01:27	01:57	01:59	01:50	01:51	01:54	01:53	02:00	01:46	02:05	01:55
5+	05:42	08:19	09:57	10:30	09:12	09:25	09:33	09:11	08:18	08:30	08:59
Large	01:48	03:38	03:03	03:26	03:19	03:11	02:56	03:47	03:41	03:54	03:30
Medium	01:16	01:50	01:40	01:34	01:41	01:35	01:32	01:34	01:10	01:40	01:30
Small	01:00	01:10	01:16	00:59	01:06	01:06	01:03	01:07	01:05	01:03	01:05
None	00:49	01:07	01:05	00:53	00:52	01:01	01:02	01:05	01:01	01:02	01:02
Other Residential	00:57	01:11	01:26	01:02	00:56	01:04	01:18	01:18	01:24	01:24	01:18
5+	04:27	07:31	10:12	09:30	06:41	09:26	07:35	08:20	04:59	04:47	07:02
Large	01:36	02:43	03:48	02:42	02:26	03:35	03:56	03:41	03:38	05:01	03:58
Medium	01:39	02:38	03:13	01:51	02:21	01:43	02:24	02:04	03:00	02:08	02:16
Small	00:45	00:51	00:58	00:44	00:37	00:46	00:46	00:48	00:46	00:55	00:48
None	00:39	00:48	00:42	00:40	00:43	00:49	00:49	01:04	00:48	00:52	00:52
Outdoor	00:23	00:29	00:27	00:26	00:27	00:28	00:30	00:29	00:29	00:32	00:30
5+	04:54	09:11	06:45	05:27	08:47	07:05	07:21	07:33	04:49	04:52	06:20
Large	02:15	01:23	01:46	01:30	01:26	01:34	01:52	01:28	01:32	01:51	01:39
Medium	00:22	00:27	00:26	00:24	00:26	00:27	00:30	00:28	00:29	00:32	00:29
Small	00:23	00:22	00:23	00:20	00:20	00:20	00:20	00:21	00:21	00:21	00:21
None	00:20	00:30	00:30	00:32	00:29	00:32	00:35	00:32	00:32	00:31	00:33
Transport	00:33	00:51	00:50	00:52	00:46	00:47	00:48	00:52	00:51	00:48	00:49
5+	03:58	04:05	05:00	06:54	03:24	05:30	03:10	03:22	02:29	04:36	03:49
Large	01:41	02:13	02:22	02:38	02:49	02:27	02:38	02:45	02:24	02:06	02:28
Medium	00:33	00:50	00:48	00:48	00:44	00:45	00:47	00:49	00:50	00:48	00:48
Small	00:33	00:35	00:31	00:45	00:32	00:36	00:30	00:45	00:38	00:34	00:37
None	00:24	00:33	00:38	00:34	00:30	00:33	00:33	00:37	00:39	00:30	00:34

Five year average is 2014 to 2018

Times calculated from time of 999 call answer to the time the incident is closed

Times excludes protracted incidents over 24 hours

Includes all types of fire (primary, secondary, late call and chimney)

Table 7.2 Number of fires with durations over 24 hours, by property category and fire size

<i>number</i>	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total	120	124	101	117	127	114	94	86	103
Dwelling	60	57	57	43	50	37	52	42	50
5+	32	35	34	26	23	18	35	24	34
Large	5	4	7	6	11	4	5	2	3
Medium	17	11	7	5	4	10	5	10	7
Small	4	2	1	4	6	2	4	2	4
None	2	5	8	2	6	3	3	4	2
Non Residential	38	37	26	30	41	47	20	20	23
5+	28	28	17	19	22	30	15	17	18
Large	1	5	0	2	3	0	1	1	1
Medium	6	1	8	4	4	7	1	0	1
Small	1	0	0	2	5	4	1	0	0
None	2	3	1	3	7	6	2	2	3
Other Residential	4	4	3	3	1	2	0	0	3
5+	3	2	1	1	0	1	0	0	2
Large	0	0	0	0	1	0	0	0	1
Medium	1	1	1	0	0	0	0	0	0
Small	0	0	0	1	0	0	0	0	0
None	0	1	1	1	0	1	0	0	0
Outdoor	13	19	9	30	27	19	19	18	21
5+	2	6	4	11	11	2	2	3	9
Large	0	1	0	1	0	0	1	1	1
Medium	5	4	3	9	8	8	9	7	8
Small	3	3	0	5	3	6	5	3	0
None	3	5	2	4	5	3	2	4	3
Transport	5	7	6	11	8	9	3	6	6
5+	1	1	1	3	1	2	0	1	1
Large	0	1	3	1	0	0	0	0	0
Medium	4	5	2	4	4	2	3	5	4
Small	0	0	0	1	1	3	0	0	0
None	0	0	0	2	2	2	0	0	1

Table 7.3 Average time taken to conclude operations at special services (time of close)

hours : minutes

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018
All special service incidents	00:25	00:31	00:30	00:31	00:31	00:32	00:33	00:37	00:33	00:35
Advice Only	00:27	00:29	00:31	00:33	00:27	00:27	00:36	00:34	00:35	00:40
Animal assistance incidents	00:32	00:37	00:37	00:38	00:36	00:35	00:36	00:40	00:36	00:40
Assist other agencies	00:38	00:44	00:45	00:46	00:47	00:53	00:50	01:03	00:47	00:58
Effecting entry/exit	00:20	00:22	00:22	00:22	00:22	00:22	00:23	00:23	00:22	00:23
Evacuation (no fire)	00:47	01:08	01:12	01:03	01:09	01:03	01:19	01:06	01:03	01:19
Flooding	00:34	00:37	00:35	00:37	00:35	00:36	00:36	00:50	00:35	00:39
Hazardous Materials incident	01:06	01:48	01:30	01:33	01:25	01:36	01:30	01:47	01:38	01:43
Lift Release	00:18	00:22	00:22	00:23	00:23	00:24	00:24	00:25	00:25	00:24
Making Safe (not RTC)	00:27	00:45	00:45	00:45	00:46	00:49	00:49	00:55	00:53	00:51
Medical Incident	-	00:36	00:38	00:35	00:37	00:38	00:37	00:40	00:40	00:43
Medical Incident - Co-responder	-	-	-	-	-	-	-	00:30	00:31	01:07
No action (not false alarm)	00:22	00:23	00:21	00:21	00:21	00:21	00:21	00:22	00:22	00:22
Other rescue/release of persons	00:33	00:42	00:37	00:40	00:43	00:41	00:47	00:51	00:50	00:54
Other Transport incident	01:07	00:33	00:36	00:34	00:37	00:40	00:41	00:45	00:38	00:39
Removal of objects from people	00:22	00:26	00:27	00:29	00:29	00:34	00:29	00:30	00:32	00:26
Rescue or evacuation from water	-	00:48	00:49	00:49	00:47	01:02	00:57	01:30	01:11	01:25
Road Traffic Collision	00:32	00:39	00:41	00:42	00:41	00:42	00:43	00:44	00:42	00:43
Spills and Leaks (not RTC)	-	00:30	00:28	00:28	00:26	00:27	00:26	00:29	00:29	00:28
Stand By	00:21	00:49	01:01	00:56	00:59	01:09	00:53	01:08	01:08	01:31
Suicide/attempts	00:55	00:49	00:56	01:14	01:02	01:02	01:03	01:21	01:16	01:14
Water provision	00:37	00:42	00:40	01:36	02:11	00:26	-	-	00:24	04:15

Time calculated from time of 999 call answer to the time the incident is closed

Times excludes protracted incidents over 24 hours

Table 7.4 Number of special services with durations over 24 hours, by type

hours : minutes

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018
All special service incidents	3	11	5	26	11	13	22	39	20	12
Advice Only	-	-	-	-	1	-	1	2	1	1
Animal assistance incidents	-	-	-	1	1	-	-	-	-	-
Assist other agencies	2	-	-	2	-	3	2	4	3	-
Effecting entry/exit	-	-	-	2	1	-	1	2	1	-
Evacuation (no fire)	1	-	-	-	-	-	-	-	-	1
Flooding	-	4	-	8	2	5	10	9	2	3
Hazardous Materials incident	-	-	-	1	2	1	2	1	1	2
Lift Release	-	1	-	4	-	-	1	-	-	-
Making Safe (not RTC)	-	-	-	1	1	-	-	-	-	1
Medical Incident	-	-	-	-	-	-	-	2	1	-
Medical Incident - Co-responder	-	-	-	-	-	-	-	4	2	-
No action (not false alarm)	-	2	2	-	-	1	1	3	1	-
Other rescue/release of persons	-	-	-	1	-	1	1	-	-	-
Other Transport incident	-	-	-	-	1	-	-	2	-	1
Removal of objects from people	-	-	-	3	-	-	-	-	-	-
Rescue or evacuation from water	-	-	-	-	-	1	-	-	-	-
Road traffic collision (RTC)	-	2	-	3	1	-	2	8	4	2
Spills and Leaks (not RTC)	-	-	1	-	-	1	-	1	-	-
Stand By	-	1	2	-	-	-	1	1	4	-
Suicide/attempts	-	1	-	-	1	-	-	-	-	1

Annex A | Former national and London standards of response

National recommended attendance standards until 2004

Prior to the Fire and Rescue Services Act 2004, the government recommended national standards for arrival times at incidents was based on a broad categorisation of risk posed in particular geographical areas. Guidance was published by the Home Office in 1947 in the form of Fire Service Circular 7/1947 (following a review in 1944) which recommended six broad categories of risk (A – F) for particular localities. These were revised (by Fire Service Circular 4/1985) in 1985 following a recommendation by the former Central Fire Brigades Advisory Council. London was subdivided into four categories of risk (Categories A – D) based on government guidance on property characteristics.

Category A represented the highest risk to property and Category D represented the lowest risk to property. Between these categories there were widely differing target attendance times. For example, an area within Category A, which constituted 2 per cent of London in geographical terms immediately prior to the removal of these standards in 2004, demanded a fast response (five minutes for the first two appliances and a third appliance within eight minutes). By contrast, parts of London in Category D, which constituted 17 per cent of London in geographical terms, could expect to wait up to 20 minutes for a response from one fire engine.

Category A areas were generally focussed on parts of inner London which had main shopping centre and business buildings, theatres and other entertainment venues or high risk industrial property; significantly, there was no mention of housing in the Government's 'A' risk category. In contrast to the Brigade's current guiding "*principle of equal entitlement*", the Government standards prioritised particular geographical areas which had the effect that people living in different areas could not expect similar attendance times, but rather particular areas were prioritised over others. The effect of the Government's targets was that prior to 2004,

London's emergency response and station locations were configured to provide a faster response in central and inner London than outer London and there was a cluster of resources in the inner London boroughs.

The Brigade campaigned against the Government targets for a number of years and for the replacement of the targets with local integrated risk management planning, and the flexibility to determine the speed and weight of response to different types of incident. The Brigade wished to see a move towards integrated risk management plans which considered a range of factors and prevention activities rather than simply responding to incidents.

In 1995 the Audit Commission published a report 'In the line of fire' arguing that there was scope for radical changes to the standards so that future risk categorisation would be based on empirical evidence and there would be more local flexibility. The former Central Fire Brigades Advisory Councils set up a Joint Committee to respond to this and published a report in 1998 "Out of the Line of Fire" recommending that the standards be reconsidered. In the light of these representations, the Government established The Independent Review of the Fire Service chaired by Professor Sir George Bain which resulted in the report "The Future of the Fire Service: reducing risk, saving lives" in December 2002 (The Bain Report). This recommended changes to the fire and rescue service including removal of the national recommended standards of fire cover. The government responded positively to the recommendations of the Bain report and published a white paper "Our Fire and Rescue Service" presented to Parliament in June 2003 which led, in turn to the Fire and Rescue Service Act 2004.

First London attendance standards from 2004

Following the enactment of the 2004 Act (one of the main purposes of which was to confer greater autonomy and flexibility on what became fire and rescue services) and the removal of the Government recommended national standards, the Brigade had the

opportunity and flexibility to formulate its own overriding policy objectives in terms of the deployment of resources.

Our first London Safety Plan for 2004/2005 (LSP1) stated that the Brigade would continue using the former recommended attendance times on a temporary basis whilst consideration was given to what the appropriate standard should be. This recognised that some consideration was needed to formulate the right policy for London.

Introduction of 5 minute and 8 minute attendance standards in London from 2005

LSP2 (the second London Safety Plan for 2005/2008), gave specific consideration to the principle of seeking to achieve more even response times across London – sometimes call 'equal entitlement'. This represented a desire to see that people in similar types of buildings (presenting similar risks) anywhere in London can expect to wait a similar amount of time for fire engines to arrive when an emergency happens. This approach was described at the time in the following way:

"There is a powerful argument that at the point when a fire actually breaks out (notwithstanding those control measures that have been put in place) the risk is broadly the same whatever its location. In other words a fire in a bedroom in Westminster has the same potential consequence as a fire in a bedroom in Sutton or Bromley. In risk terms it is also difficult to argue that, just because one person is less likely to have a fire that it follows they should receive a slower response if they do have one. If this logic is accepted it moves us towards developing a single set of attendance standards across London."

LSP2 set clear objectives to promote the concept of equal entitlement to ensure that there would be more similar times for how long people could expect to wait for fire engine(s) to arrive and to reduce the differences in performance across London. The aim is that people in similar types of building, anywhere in London, could expect to wait a similar time for fire engines to arrive. This principle was crucially dependent on looking at the best place to locate fire engines in order to improve performance against the new standards and was not constrained by the

locations of fire engines that had been determined under the former national recommended standards.

LSP2 proposed that the Brigade would maintain the existing attendance times but set targets to achieve them on a London-wide basis namely (i) attendance of the first appliance within five minutes 65 per cent of the time and within eight minutes 90 per cent of the time; and (ii) attendance of the second appliance within eight minutes 75 per cent of the time and in 10 minutes 90 per cent of the time.

Introduction of 6 minute and 8 minute attendance standards in London from 2008

LSP3 (2008/2011) took the opportunity to review whether the LSP2 attendance standards (particularly the first appliance standard of five minutes), which had reflected the fastest attendance times under the government's recommend standards, were still relevant and achievable on a London-wide basis. It also considered they were the most useful and realistic measure of how quickly the Brigade mobilises resources in response to calls for assistance.

It was noted that the historic location of fire stations meant that attendance times are longer in some parts of London. A move to using average attendance times as performance indicators at borough level provided a clearer picture of these differences and a more reliable picture of how long someone could expect to wait for a fire engine to arrive.

LSP3 considered the performance that was achievable in the circumstances prevailing at the time for the first fire engine to respond (i.e. six minutes rather than five minutes). As a result LSP3 adopted three attendance standards. These were: (i) to get the first fire engine to an incident within an average of six minutes, (ii) to get the second fire engine to an incident within an average of eight minutes, and (iii) to get a fire engine to an incident anywhere in London within 12 minutes on 95 per cent of occasions.

LSP2017 introduced a further standard, from 1 April 2017, which is to get a fire engine to an incident anywhere in London with 10 minutes on 90 per cent of occasions.

Annex B | How we calculate performance

Call handling times

Call handling times are calculated for attended incidents in London only. They include incidents attended by any LFB resource (although the majority will be by one or more fire engines). In line with the calculation for fire engine response times (below), call handling times in excess of 20 minutes are excluded from the calculation. This ensures that extended call handling times, which sometimes occur because of a failure to record the time resources are mobilised, do not distort true performance.

Crew turn-out times

Crew turn-out times are calculated for LFB fire engines (pumps) only. We only look at the times where the fire engine is mobilised from the fire station and we exclude times where the appliance is sent as a relief crew for an ongoing incident.

This means we count:

- 1) London pumps
- 2) Turned out from a fire station
- 3) Where the mobilisation is an 'initial' or 'reinforcement' mobilisation (excludes reliefs and standby mobilisations).

Fire engine response times

Attendance times for fire engines are measured from (a) the time an appliance is mobilised to (b) the time the appliance arrives at the incident scene. No special appliances (e.g. aerial appliances, fire rescue units) currently have published attendance times. The standard applies London-wide to any type of emergency incident.

We updated our attendance time calculation from April 2017 to capture more accurate times, and all data published in this document use this calculation, including historic times prior to April 2017. The following criteria are used to calculate published attendance time performance:

- 1) Arrival times for all pumping appliances regardless of location of the appliance at time of mobilisation

and will include appliances from other station grounds.

- 2) First appliance and second appliance is determined by the order of arrival at the incident, i.e. the first appliance will be the first to arrive not necessarily the first to be mobilised.
- 3) Mobilisations included in the calculation are for:
 - a) Incidents in London only.
 - b) London pumping appliances only; pumping appliances from neighbouring brigades that attend in London are not included.
 - c) Appliances on any mobilised attendance, including running calls, incident upgrades, additional mobilisations.
 - d) Mobilisations where a time value is present in the data; sometimes 'time arrived' is missing due to a failure (human or technical) to record the time.
- 4) Mobilisations are excluded where:
 - a) The incident is a 'shut in lift' release not attended as an emergency (i.e. not on 'blue light').
 - b) The mobilisation is to a batch mobilised flooding call (not attended as an emergency)².
 - c) The calculated attendance time is greater than 20 minutes (because this generally reflects a failure (human or technical) to record a time of arrival in a timely manner.
 - d) The mobilisations was a relief appliance for an appliance mobilised as part of the initial or upgraded attendance, or the mobilisation was a standby move to another fire station.
 - e) The attending crew has added a delay code for 'arrival time incorrect', 'did not arrive', 'returned by stop', or attendance at 'non-emergency road speed'.

² We sometimes 'batch' calls to flooding together when we get a high number of 999 calls from within a very small area with very localised flooding.

f) The attendance was on a strike day by a non-LFB crew (e.g. emergency fire crew capability (EFCC)).

The impact of these 'counting rules' on the numbers of pumping appliance mobilisations counted and not counted (in 2018) is shown in the table 8 below.

Table 8: Impact of of the counting rules for fire engine response times

The table below shows (for appliance mobilisations in 2018) how the 'counting rules' for fire engine response times, outlined above, impact on the numbers of appliance mobilisations which are counted for reporting fire engine attendance time performance.

Initial appliance mobilisation records	215,890	
<i>Exclude: Non-LFB appliances and LFB special appliances</i>	39,755	
<i>Exclude: Training events (which are not incidents)</i>	809	
<i>Exclude: Time arrived (at scene) missing (rule 3(d))</i>	2,260	
<i>Exclude: Duplicate/repeat attendances</i>	0	
LFB pumping appliance mobilisations	173,066	
Responses not measured in attendance performance		
<i>Exclude: Responses to Incidents outside London (rule 3(a))</i>	850	0.49%
<i>Exclude: 'Shut in lift' incidents at normal road speed (rule 4(a))</i>	5,080	2.94%
<i>Exclude: Batch-mobilised calls to flooding at normal road speed (rule 4(b))</i>	104	0.06%
<i>Exclude: Relief/standby mobilisations (rule 4(d))</i>	3,445	1.99%
<i>Exclude: Crew reported delay/not arrived/returned by stop (rule 4(e))</i>	3,287	1.90%
<i>Exclude: Responses on strike days (rule 4(f))</i>	0	-
<i>Exclude: Attendance time longer than 20 minutes (rule 4(c))</i>	11488	6.64%
Total pumping appliance mobilisations excluded	24,254	14.01%
Total pumping appliance mobilisations used in calculation	148,812	