Response times to fires attended by fire and rescue services: England, April 2017 to March 2018

Statistical Bulletin 01/19

17 January 2019
Further information

This release contains statistics about incidents attended by fire and rescue services (FRSs) in England. The statistics are sourced from the Home Office’s online Incident Recording System (IRS), which allows FRSs to complete an incident form for every incident attended, be it a fire, a false alarm or a non-fire (also known as a Special Service) incident. The online IRS was introduced in April 2009. Previously, paper forms were submitted by FRSs and an element of sampling was involved in the data compilation process.

Fire and Rescue Incident Statistics and other Home Office statistical releases are available from the Statistics at Home Office pages on the GOV.UK website. The dates of forthcoming fire and rescue and other Home Office publications are pre-announced and can be found via the Statistics: release calendar. For further information about the statistics in this publication, email FireStatistics@homeoffice.gov.uk.

Data tables linked to this release and all other fire statistics releases can be found on the Home Office’s ‘Fire statistics data tables’ page. The sections below state the most relevant tables for each section. The tables can be found here:

Guidance for using these statistics and other fire statistics outputs is available on the fire statistics collection page, found here:

The information published in this release is kept under review, taking into account the needs of users and burdens on suppliers and producers, in line with the Code of Practice for Statistics. If you have any comments, suggestions or enquiries, please contact the team via email using FireStatistics@homeoffice.gov.uk or via the user feedback form on the fire statistics collection page.

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# Contents

Further information ......................................................................................................................... 2

Contents .............................................................................................................................................. 3

1 Key facts ........................................................................................................................................ 4

2 Introduction .................................................................................................................................... 5

   Data source: Incident Recording System ..................................................................................... 5

   Methodology and changes for 2017/18 ....................................................................................... 5

   Publication of data ....................................................................................................................... 7

   Background to response times in England .................................................................................. 7

3 Variation in total response times .................................................................................................... 9

   Total response times by type of fire attended ............................................................................ 9

   Response times by type of fire and rescue authority (FRA) ..................................................... 10

4 Response time components ........................................................................................................... 12

   Response time components by fire type .................................................................................... 12

5 Distribution of total response times .............................................................................................. 16

6 Response times and outcomes ....................................................................................................... 18

   Dwellings ...................................................................................................................................... 18

   Other buildings ............................................................................................................................ 19

Annex – Public consultation: Fire Response Times ......................................................................... 21
1 Key facts

This release presents statistics on fire incident response times between April 2017 and March 2018, focussing on trends in average (mean) total response times and the component parts (call handling, crew turnout and drive times) in England. The results show:

- Overall, total response times to fires have increased gradually over the past 20 years. However, these have generally plateaued since 2014/15.
- The average total response time to primary fires (potentially more serious fires that harm people or cause damage to property)\(^1\) in England in 2017/18 was 8 minutes and 45 seconds: no change since 2016/17 but an increase of 34 seconds since 2012/13.
- Two types of primary fires showed an increase in average response times in 2017/18 (dwelling fires by 2 seconds and ‘other outdoor’\(^2\) fires by 8 seconds), road vehicle fires were unchanged and ‘other building’ fires decreased by 1 second compared with 2016/17.
- Average total response time to secondary fires in 2017/18 (which can broadly be thought of as smaller outdoor fires, not involving people or property)\(^3\) increased by 1 second to 9 minutes 10 seconds compared with 2016/17 and increased by 48 seconds compared with 2012/13.
- Call handling times have followed a similar pattern to total response times (plateauing from 2014/15 with some signs of decreasing to 2017/18), crew turnout times have consistently decreased across all fire types but drive times have increased across all fire types.
- Fire and rescue authorities (FRAs) in predominantly urban areas had an average total response time of 7 minutes 39 seconds to primary fires in 2017/18: a decrease of 4 seconds compared with 2016/17 but an increase of 25 seconds since 2012/13.
- Average total response time to primary fires in significantly rural FRAs was 10 minutes and 6 seconds in 2017/18: an increase of 12 seconds and 1 minute 4 seconds since 2016/17 and 2012/13, respectively.
- Average total response time to primary fires in predominantly rural areas was 10 minutes 32 seconds: a decrease of 2 seconds since 2016/17 but an increase of 18 seconds since 2012/13.
- The average response time to dwelling fires involving casualties and/or rescues in England in 2017/18 was 7 minutes 33 seconds. This was a decrease of 9 seconds compared with 2016/17 but an increase of 28 seconds since 2012/13.

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\(^1\) For more detailed technical definitions of different types of fire, see the Fire statistics definitions document.

\(^2\) Other outdoor fires are fires in either primary outdoor locations, or fires in non-primary outdoor locations that have casualties or five or more pumping appliances attending. For a full definition of other outdoor locations, please refer to the Fire statistics definitions document.

\(^3\) This excludes chimney fires. For a full definition of chimney fires, please see the Fire statistics definitions document.
2 Introduction

Data source: Incident Recording System

Each time a fire and rescue service (FRS) attends an incident in England, details of that incident are uploaded to the Home Office's Incident Recording System (IRS) by the FRS. The IRS is used as the source for all the statistics in this publication, except for table FIRE1403 (Chartered Institute of Public Finance & Accountancy). More information on the IRS can be found at:


Methodology and changes for 2017/18

This statistical release presents statistics on response times to fires between April 2017 and March 2018. It focuses on trends in average (mean) response times in England.

In previous years, this release published only what is now termed the ‘total response time’, which is the minutes and seconds taken from time of call to time of arrival at the incident by the first vehicle. This continues to be the headline statistic, as this is the time that is likely to be of main public interest. However, in response to user feedback, statistics on the component parts of total response times are also presented. See Box 1 below for definitions.

Box 1: Definitions of response time components

<table>
<thead>
<tr>
<th>Total response time</th>
</tr>
</thead>
<tbody>
<tr>
<td>999 call</td>
</tr>
<tr>
<td>Station alerted</td>
</tr>
<tr>
<td>First vehicle leaves</td>
</tr>
<tr>
<td>First vehicle arrives</td>
</tr>
</tbody>
</table>

- **Call handling time** – defined as the minutes and seconds from the time of call to the time that a responding station is alerted. The operator may stay on the line after the station is alerted to gather additional information or provide advice and reassurance as necessary. This extra time is not included in the call handling time calculations.

- **Crew turnout time** – defined as the minutes and seconds from the time the station is alerted to the time the first vehicle departs.

- **Drive time** – defined as the minutes and seconds from the first vehicle to leave a station to the first vehicle to arrive at the scene of the incident. Note that these may not necessarily be the same vehicle.
Some FRSs have local definitions for response times which may not include the call time, however this does not affect records in the IRS.

The IRS questions concerning when a vehicle is mobilised (the earliest instance in an incident being the time the station is alerted) and becomes mobile (leaves the station) are not mandatory for FRSs to complete, therefore a small number of FRSs have not supplied these data for some years. These are detailed in table FIRE1001 and no data are displayed for the response time components for the affected years.

Around 16 per cent (26,215) of 2017/18 fire incidents were excluded for the purpose of analysis (compared with 17%, or 26,969, of 2016/17 incidents). The following incidents were excluded for the following reasons:

- a. For road vehicle fires, where the road vehicle was abandoned.
- b. Where the location of the fire was a derelict property.
- c. Where an FRS learned of the fire when it was known to have already been extinguished (known as ‘late calls’).

Exclusions a) to c) are applied as these would generally be treated as lower priority incidents if known at the time of call, therefore the balance of public safety lies in slower drive speeds and would increase the average times calculated.

- d. Where the total response time for an incident was over an hour or less than one minute.

Exclusion d) is applied to avoid erroneous data or exceptional incidents from skewing the averages. This is because these are likely, in the main, to be erroneous. One example could be incidents that occur across a clock change between Greenwich Mean Time and British Summer Time.

- e. Where the sequence of events (time of call → mobilisation → vehicle mobile → arrival at scene) in an incident are not recorded in a logical sequence, either through recording error (e.g. a vehicle appears to have arrived before it left) or absence of data (null values).

Exclusion e) is new to the 2017/18 response times publication where the component parts (call handling, turnout and drive time) are shown and results from the need to have internally consistent timings within each incident so that they sum to the total response time for all categories and are drawn from the same set of incidents. For those few years where a small number of FRSs have not provided the times for station alerted and vehicles leaving the station (which are not mandatory fields in the IRS), exclusion e) is not applied in order to allow the total response time to be calculated as in previous years. In total, exclusion e) decreases the number of incidents used in the calculations by around one per cent in primary fires and between one and two per cent in secondary fires in each year since 2009/10, with some variation between years and primary fire locations. This changes the calculated total response time between 0.0 and 0.2 per cent for primary fires and by between 0.1 and 0.3 per cent for secondary fires, although there is some variation between fire types/locations and
years. This translates into changes of typically no more than one second and does not affect any of the trends reported.

f. Where there was heat and/or smoke damage only (no flame).

Exclusion f) is retained in this publication for reasons of continuity with calculations from previous years and because removing it would represent too large a change to the methodology without wider consultation. However, ‘heat and/or smoke damage only’ is likely only to be known after attendance by an FRS and so there appears to be no clear reason why such incidents would not be treated as seriously and urgently as any other under the same circumstances at the time of call. A consultation on the merits of adding ‘heat and/or smoke damage only’ fires back into the pool of incidents used for the calculations is therefore being carried out – see the Annex for more details.

In addition, as this publication focuses on primary and secondary fires only, it does not include chimney fires.

Publication of data

This publication is accompanied by reference data tables. All fire statistics tables can be found at: www.gov.uk/government/statistical-data-sets/fire-statistics-data-tables

The layout of the response times data tables has been condensed from nine separate tables into three, and the response times are now shown as minutes and seconds rather than decimal minutes (e.g. ‘7.5’ decimal minutes is now displayed as ‘7m 30s’).

The following tables have been updated alongside this publication:

FIRE: 1001 (now also including the previous 1003, 1005, 1006, 1007, 1008 and 1009), 1002, 1004, 1403.

These tables include data on Fire and Rescue Authority (FRA) areas. It is important to note that direct comparisons in response times should not be made between different fire and rescue services as there are a range of factors that affect average response times, for example, population density, local road conditions and firefighter crewing arrangements.

The IRS is a continually updated database, with FRSs adding incidents on a daily basis. The figures in this release refer to records of incidents that occurred up to and including 31 March 2018. A snapshot of the dataset was taken on 12 September 2018 for analysis, so the statistics published may not match those held locally by FRSs and revisions may occur in the future.

Background to response times in England

Fire and rescue services have had autonomy in setting their own response targets and strategies based on local integrated risk management plans since the introduction of the Fire and Rescue Service Act 2004. Before the introduction of the Act, Government recommended national standards for response times based on broad risk categories for particular areas.4

This statistical release and the accompanying data tables show average total response times

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4 For a detailed discussion of how these national standards worked in one city, see Annex A of the London Fire Brigade publication “Fire Facts: Incident response times 2017”.
from 1994/95 onwards. Over this time, improvements in recording accuracy both at the FRS level with newer mobilisation software and at the national level with the introduction of the Incident Recording System have been made. For example, prior to May 2004, the London Fire Brigade used a system which only recorded full minutes elapsed and not seconds, so the response time to each incident could have been under-recorded by up to 59 seconds. The effects of these changes is particularly apparent at the recording discontinuity marked in the charts in the following chapters between 2008/09 and 2009/10, when the IRS was introduced, so while general trends may be compared across this time, absolute values of average response times should not be compared across this discontinuity.

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3 Variation in total response times

Total response times by type of fire attended

The total response time is the minutes and seconds elapsed from the time of call to the arrival of the first vehicle to the incident. The average total response time\(^6\) to primary fires (potentially more serious fires that harm people or cause damage to property)\(^7\) in England in 2017/18 was 8 minutes and 45 seconds, no change since the previous year but an increase of 34 seconds compared with five years ago in 2012/13.

Total response times to secondary fires (which are generally smaller outdoor fires, not involving people or property\(^7\)) have increased by 1 second, to 9 minutes and 10 seconds, since last year. This is an increase of 48 seconds since 2012/13.

Figure 3.1 Average total response times (minutes) by type of fire\(^8\), England; 1994/95 to 2017/18

While total response times to all types of fires have increased since 2012/13, the absence of change in primary total response time since 2016/17 comprises a mixture of small increases and decreases for the main primary fire types of dwellings (+2 seconds), ‘other buildings’ (-1 second), road vehicles (no change) and ‘other outdoor’ (+8 seconds). It should be noted that ‘other outdoor’ fires are numerically the smallest of the main primary fire types, comprising just four per cent of fires in the analysis for 2017/18, and so are more prone to larger fluctuations (of both increases and decreases) as can be seen throughout the time series.

\(^6\) Response time is defined here as the duration from time of call to time of arrival of the first vehicle at the scene of the incident

\(^7\) For more detailed technical definitions of different types of fires, see the definitions document.

\(^8\) Response times for secondary fires were not recorded before the introduction of the IRS and so are only available from 2009/10 onwards.
(Figure 3.1). Of the dwelling fires in 2017/18, the average response time to fires in flats was 6 minutes 55 seconds, compared with 8 minutes 9 seconds for houses/bungalows and 7 minutes 53 seconds for ‘other dwellings’. This probably reflects that most flats (75% of those included in the analysis for 2017/18) are in ‘predominantly urban’ locations (see below) and therefore generally within closer proximity to a fire station than rural dwellings.

The table below provides a summary of the trends in the last year for response times to fires.

### Table 1 Response times to fires by type of fire with a summary of trends

<table>
<thead>
<tr>
<th>Type of Fire</th>
<th>2017/18</th>
<th>Change since 2016/17</th>
<th>Change since 2012/13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>8 min 45 sec</td>
<td>0 sec</td>
<td>+34 sec</td>
</tr>
<tr>
<td>Dwelling</td>
<td>7 min 44 sec</td>
<td>+2 sec</td>
<td>+21 sec</td>
</tr>
<tr>
<td>Other building</td>
<td>8 min 30 sec</td>
<td>-1 sec</td>
<td>+38 sec</td>
</tr>
<tr>
<td>Road vehicle</td>
<td>9 min 35 sec</td>
<td>0 sec</td>
<td>+27 sec</td>
</tr>
<tr>
<td>Other outdoor</td>
<td>10 min 46 sec</td>
<td>+8 sec</td>
<td>+1 min 9 sec</td>
</tr>
<tr>
<td>Secondary</td>
<td>9 min 10 sec</td>
<td>+1 sec</td>
<td>+48 sec</td>
</tr>
</tbody>
</table>

Source: FIRE1001

**Response times by type of fire and rescue authority (FRA)**

Of the 45 fire and rescue authorities (FRAs), 21 showed a decrease in average total response time to primary fires between 2016/17 and 2017/18, 23 showed an increase and one showed no change. (Source: FIRE1001)

FRAs can be split into three rural-urban classifications (predominantly rural, significantly rural and predominantly urban)\(^{11}\) and by whether they are metropolitan or non-metropolitan\(^{12}\). As shown in Figure 3.2, average response times to primary fires are lower in predominantly urban areas and quicker still in the subset of predominantly urban FRAs which are metropolitan. The difference in average total response times between predominantly urban and predominantly rural FRAs has been around two to three minutes every year since 1994/95. All types of FRA have shown gradual increases in average response time over the

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\(^9\) Arrows in this table are not to scale. Arrows pointing upwards indicate an increase and arrows pointing downwards a decrease in average total response time.

\(^{10}\) This excludes chimney fires. For a full definition of chimney fires, please refer to the definitions document.

\(^{11}\) As defined by the Department for Environment, Food and Rural Affairs’ *2011 Rural-Urban Classification of Local Authorities and other geographies*.

\(^{12}\) Metropolitan FRAs are a subset of those in the predominantly urban category, while non-metropolitan comprises those in predominantly rural, significantly rural and the remainder of predominantly urban FRAs.
past twenty years, while predominantly urban areas and predominantly rural areas showed two consecutive decreases since 2015/16. Significantly rural FRAs returned to the long-term increase in 2017/18. (Source: FIRE1001)

The average total response time to primary fires in England during 2017/18 for:

- **predominantly rural** FRAs was 10 minutes 32 seconds, a decrease of 2 seconds since 2016/17 but an increase of 18 seconds since 2012/13;

- **significantly rural** FRAs was 10 minutes 6 seconds, an increase of 12 seconds and 1 minute 4 seconds since the last year and five years previous, respectively;

- **predominantly urban** FRAs was 7 minutes 39 seconds, a decrease of 4 seconds but an increase of 25 seconds since 2016/17 and 2012/13, respectively.

- **metropolitan FRAs** was 7 minutes 11 seconds, a decrease of 4 seconds since 2016/17 but an increase of 14 seconds since 2012/13.

- **non-metropolitan FRAs** was 9 minutes 53 seconds, an increase of 3 seconds since 2016/17 and 46 seconds since 2012/13.

**Figure 3.2 Average total response times (minutes) to primary fires by FRA type,¹³ England; 1994/95 to 2017/18**

Source: FIRE1001

* Please see the definitions document on the discontinuity in series.

¹³ The metropolitan and non-metropolitan groupings are new to this 2017/18 release, being calculated with IRS data and so are not available for the pre-2009/10 back-data series.
4 Response time components

Response time components by fire type

As described in Box 1 (p.5), the total response time (from time of call to time of first arrival) can be further divided into the following three components:

- Call handling time (from time of call to the station being alerted).
- Crew turnout time (time between the station being alerted and the time the first vehicle departs i.e. the time it takes for the firefighters to prepare to leave).
- Drive time (from the time the first vehicle leaves to the first vehicle arriving at the scene of the incident).

This is the first time that these breakdowns of the average response time have been published, in response to user need and to help explain which parts of the emergency response chain have changed over time. These data are drawn from the IRS and so are only available from 2009/10 onwards (FIRE1001).

While there has been a general increase in total response times in England since 2009/10, with a plateau from 2014/15 (Figure 3.1), Figure 4.1 shows that:

- call handling times have followed a similar pattern to total response times (plateauing from 2014/15 with some signs of decreasing to 2017/18);
- crew turnout times have consistently decreased across all fire types, but
- drive times have increased fairly consistently across most of the time series.

It is notable that dwelling fires have the quickest times in all three of the response time components, probably reflecting the relative ease with which a street address can be communicated on the telephone and the urgency with which an FRS responds to fires with the greatest potential risk to life. ‘Other outdoor’ fires, by contrast, are typically among the slowest responses in all three categories, which could reflect the difficulty of describing an outdoor location without a street address (call handling) and the difficulty of finding it once mobile (drive time).

A range of possible factors could have contributed to the general increase in total response time to primary fires (Figure 3.1). These may include changing traffic levels, ‘drive to arrive’ policies and control staff typically asking more questions of the caller to better assess the risk and attendance needed. The possibility that changes to crew health and safety policies (e.g. that firefighters should dress in their personal protective equipment before boarding the appliance rather than en route in a moving vehicle) could be increasing response times seems unlikely as there has been a sustained reduction in crew turnout times. Analysis addressing the cause of the increase in fire response times in England, published in 2009, concluded that rising traffic levels was the primary cause. This was based on data from 1996

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14 ‘Drive to arrive’ policies require drivers to modify driving depending on risk, in order to reduce the number of incidents whilst mobile.
to 2006 and the national situation may have changed since then, but an updated analysis is outside the scope of this statistics publication.

However, it is difficult to isolate the impact of any of these individual factors, and there may also be other factors, locally or nationally, which affect response times, such as urban sprawl and new housing developments outdating the strategic positioning of fire stations.

Table 2 Average response times to fires by response time component and type of fire with a summary of trends,\textsuperscript{16} England; 2017/18

<table>
<thead>
<tr>
<th>Type of fire\textsuperscript{17} and response time component</th>
<th>2017/18</th>
<th>Change since 2016/17</th>
<th>Change since 2012/13</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Call handling</td>
<td>1 minute 25 seconds</td>
<td>-2 seconds ↓</td>
<td>+14 seconds ↑</td>
</tr>
<tr>
<td>Crew turnout</td>
<td>1 minute 38 seconds</td>
<td>-2 seconds ↓</td>
<td>-11 seconds ↓</td>
</tr>
<tr>
<td>Drive time</td>
<td>5 minutes 42 seconds</td>
<td>+5 seconds ↑</td>
<td>+33 seconds ↑</td>
</tr>
<tr>
<td><strong>Secondary</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Call handling</td>
<td>1 minute 45 seconds</td>
<td>-1 second ↓</td>
<td>+17 seconds ↑</td>
</tr>
<tr>
<td>Crew turnout</td>
<td>1 minute 34 seconds</td>
<td>-2 seconds ↓</td>
<td>-7 seconds ↓</td>
</tr>
<tr>
<td>Drive time</td>
<td>5 minutes 51 seconds</td>
<td>+5 seconds ↑</td>
<td>+40 seconds ↑</td>
</tr>
</tbody>
</table>

The response time components for primary fires by FRA type (Figure 4.2) show that the plateau and slight decrease in primary total response times seen in Figure 3.2 are largely the result of decreases in crew turnout times in all FRA types.

Although crew turnout times for predominantly rural FRAs typically took a minute to a minute and a half longer than predominantly urban ones in each year, likely due to the higher proportion of on-call (‘retained duty system’) firefighters who first need to get to a station once alerted, it was the predominantly rural FRAs which showed the greatest decrease in crew turnout time since 2012/13 (Figure 4.2).

Drive times for both predominantly rural and significantly rural FRAs continued to increase year-on-year, while drive times for predominantly urban (and the subset therein of metropolitan FRAs) has plateaued since 2014/15.

\textsuperscript{16} Arrows in this table are not to scale. Arrows pointing upwards indicate an increase and arrows pointing downwards a decrease in average total response time.

\textsuperscript{17} This excludes chimney fires. For a full definition of chimney fires, please refer to the definitions document.
Figure 4.1 Average response times (minutes) by response time component and type of fire, England; 2009/10 to 2017/18

a) Call handling time

b) Crew turnout time

c) Drive time

- Dwellings
- Other buildings
- Road vehicles
- Other outdoor
- Secondary fires
Figure 4.2 Average response times (minutes) by response time component to primary fires by FRA type, England; 2009/10 to 2017/18

a) Call handling time

b) Crew turnout time

c) Drive time

- Predominantly rural
- Significantly rural
- Predominantly urban
- Metropolitan
- Non-metropolitan
5 Distribution of total response times

Figures 5.1 and 5.2 show the frequency distribution of total response times by one-minute bands for fires in dwellings and other buildings in England (source table FIRE1004). The shapes of the curves reflect both the long-term reduction (i.e. decreasing height of the curves) in the total number of fires between 2007/08 and 2017/18 (decreases of 26% and 37% for dwellings and other buildings, respectively; table FIRE0102) and the increasing response times to those fires (i.e. the distribution of the curves moving to the right).

In 2017/18:

- over half (54%; 29,550) of primary fires were responded to within 8 minutes, while the most frequent response time band was 6 to 7 minutes (15%; 8,025).
- for dwelling fires, just over half (51%; 10,484) were responded to within 7 minutes and the most frequent time bands were 6 to 7 minutes (17%; 3,558) and 5 to 6 minutes (17%; 3,474) (Figure 5.1).
- for fires in other buildings, over half (56%; 6,610) were responded to within 8 minutes and the most frequent time band was 6 to 7 minutes (15%; 1,761) (Figure 5.2).
- for road vehicle fires, over half (56%; 9,422) were responded to within 9 minutes, and the most frequent time band was 6 to 7 minutes (13%; 2,173).
- for primary ‘other outdoor’ fires, over half (54%; 2,825) were responded to within 10 minutes and the most frequent time bands were 7 to 8 minutes (11%; 548) and 8 to 9 minutes (11%; 546).
- the majority (60%; 49,669) of secondary fires were responded to within 9 minutes (48% within 8 minutes), while the most frequent response time bands were 6 to 7 minutes (14%; 11,458) and 7 to 8 minutes (14%; 11,282).
Figure 5.1 Number of fires attended by FRSs in one-minute total response time bands for fires in dwellings, England; 2007/08, 2012/13, 2016/17 and 2017/18

Source: FIRE1004

Figure 5.2 Number of incidents in one-minute total response time bands for fires in ‘other buildings’, England; 2007/08, 2012/13, 2016/17 and 2017/18

Source: FIRE1004
6 Response times and outcomes

There is no straightforward relationship between response times and the outcomes of a fire as the type of fire and the time elapsed before the fire was discovered (both outside the control of FRSs) as well as other factors will also have an influence on the outcome. However, it is sometimes assumed that slower response times would be associated with greater instances of casualties/rescues and larger areas of damage due to the later starting of firefighting activities.

Dwelling fires with casualties (including fatalities) and/or rescues have had consistently faster average response times than that majority of dwelling fires where no casualties and/or rescues were involved (Figure 6.1). However, these comprise a relatively small number of incidents (around 11% of dwelling fires in the calculations since 2009/10) so are potentially more susceptible to fluctuations in average response times. This difference in response times to dwelling fires with casualties and/or rescues compared to those without is most strongly apparent in the drive time but less pronounced in the crew turnout, while the call handling time is around the same or higher, from 2009/10 to 2017/18. This suggests that, while dwelling fires are responded to most quickly of all primary fire types (see Table 1, Chapter 3), response times appear to reduce even more for higher risk incidents which are likely to involve casualties or rescues, if it has been possible to collect this information from the caller.

As noted in Chapter 3, the long-term trend has been an increase in total response times yet the average area of damage in both dwelling and ‘other building’ fires has been decreasing (Figure 6.1, 6.2).18 This would seem counterintuitive if it was assumed that increased response time would lead to increased spread. However, possibilities may include that the hypothetical increase in area of damage is in fact being offset by improved early detection (the proportion of households with a working smoke alarm has continued to increase19), the gradual replacement of old furnishings with newer materials with improved fire resisting properties, new buildings with sprinkler systems and numerous other factors which are difficult to quantify.20

Dwellings

- The average total response time to dwelling fires involving casualties and/or rescues in England in 2017/18 was 7 minutes 33 seconds. This was a decrease of 9 seconds since 2016/17 but increase of 28 seconds since 2012/13. (Source: FIRE1002)

- The average total response time to dwelling fires not involving casualties and/or rescues in England in 2017/18 was 7 minutes 45 seconds, an average increase of 3 seconds since 2016/17 and 20 seconds since 2012/13.

- In 2017/18, the average area of fire damage to dwellings (excluding those incidents with areas of damage over 5,000m2)18 in England decreased by five per cent

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18 See Detailed analysis of fires attended by fire and rescue services, England, April 2017 to March 2018
19 See Fire prevention and protection statistics, England, April 2017 to March 2018
20 See Focus on trends in fires and fire-related fatalities for a more in-depth look at factors that have influenced trends in fire incidents and fire-related fatalities.
compared with 2016/17 and decreased by 16 per cent compared with 2012/13, while the average response time to dwelling fires increased by 2 seconds (<1%) and 21 seconds (5%) over the same time, respectively (Figure 5.1). (Source: FIRE0204, FIRE1001)

Other buildings

- The average area of fire damage to other buildings (excluding those incidents with areas of damage over 1,000m²) decreased by seven per cent since 2016/17 and by 11 per cent since 2012/13, while the average response time to other building fires decreased by 1 second increase since 2016/17 but increased by 38 seconds (8%) since 2012/13 (Figure 5.2). (Source: FIRE0305, FIRE1001)
Figure 6.1 Average total response times (Avg RT) to dwelling fires with and without casualties or rescues and average extent of damage (excluding 5,000+ m²) for dwelling fires, England; 1994/95 to 2017/18

Source: FIRE0204, FIRE1002
* Please see the definitions document on the discontinuity in series.

Figure 6.2 Average total response times (Avg RT) and average extent of damage (excluding 1,000+ m²) for ‘other building’ fires, England; 1994/95 to 2017/18

Source: FIRE0305, FIRE1001
* Please see the definitions document on the discontinuity in series.
Annex – Public consultation: Fire Response Times

The Home Office Fire Statistics team are looking for user feedback on one area of the statistics produced in ‘Response times to fires attended by fire and rescue services’, but would also welcome other feedback on the release generally. The consultation is open to everyone, including members of the public.

Responses to this consultation should be completed by 17 April 2019.

We plan to publish a summary of responses to the consultation, and decisions made, in due course. Please indicate if you do not wish for your replies to be made public.

The survey itself can be found here and it covers whether fire incidents with ‘heat and/or smoke damage only’ should be included in the calculation of response times.

‘Heat and/or Smoke Damage only’ exclusion

As discussed in chapter 2, when the first fire incidents response times statistical release was published in 2012 it was decided to exclude incidents where there was ‘heat and/or smoke damage only’. This was mainly to keep the release consistent with previous ad hoc requests (such as Parliamentary Questions) where this approach had been used. It should also be noted that this (2012) release only had 3 years’ worth of data based on the online Incident Recording System. Home Office statisticians have been reviewing the response times release and are considering whether to include incidents marked as ‘heat and/or smoke damage only’ in future publications.

Including these fires (over two thirds of which are dwelling fires) would increase the number of fires included in the response times calculation (for example this would add 12,833 incidents to the 2017/18 total fires figure) although the trend in response times would remain broadly similar. Examples of these fires include smouldering wires and cooking appliances producing smoke damage but not producing a flame. If we include ‘heat and/or smoke damage only’ incidents in future publications, we will include a consistent back series to 2009/10, as is currently the case, and a section showing the effect of the changes.
Statistical Bulletins are prepared by staff in Home Office Statistics under the National Statistics Code of Practice and can be downloaded from GOV.UK:

https://www.gov.uk/government/organisations/home-office/about/statistics

ISBN: 978-1-78655-765-0

ISSN: 1759-7005

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