



Department for  
Communities and  
Local Government

# Fire and rescue incident data and statistics – the status quo and future evolution

Fire Information Group seminar, 11 June 2014



## **DCLG Fire incident and casualty Statistics Publications:**

1. Fire Statistics Monitor, headline data - count of incidents and fire casualties each January and June/July
2. Fire Statistics Great Britain – detailed analyses of location and causes of fires and of resulting casualties, and effectiveness of smoke alarms
3. Fire Incidents Response Times – each July / August



## 1. Fire Statistics Monitor

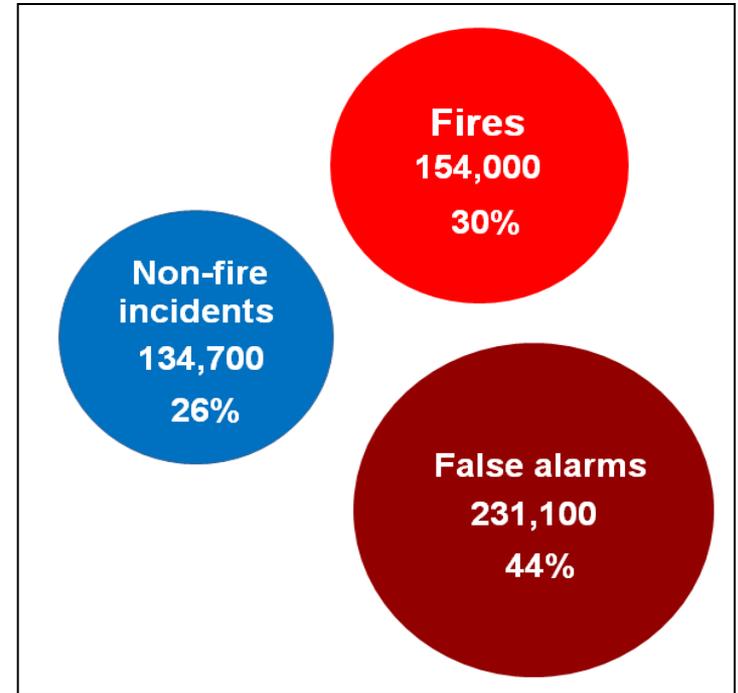
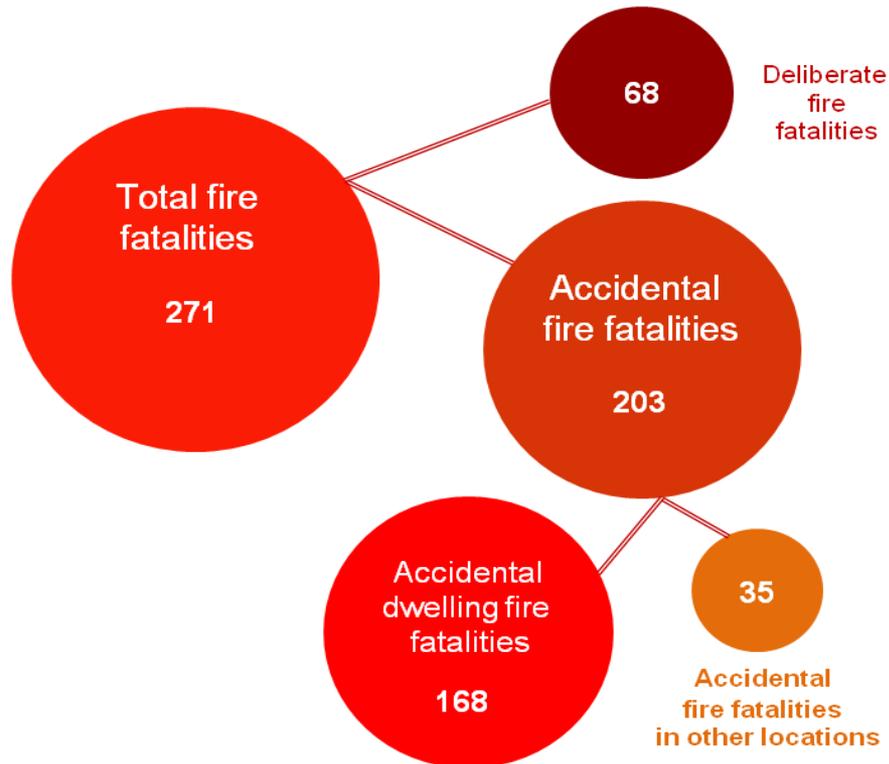
- Expansion to 39 spreadsheet reference tables (previously 23 tables) in response to user requests & regularly requested data.
- Overhaul of commentary:
  - Previously long standard text. 'Elevator commentary'
  - Reordered and with much of detail in new summary tables
- Two presentational experiments (Summer 2013):
  1. Bullet points and charts accompanying reference tables
  2. Bubble and brick diagrams...





## Fire Statistics Monitor experiment Bubble diagrams

Fire fatalities, England, 2012-13(p)



pp 4 & 5 , July 2013 Fire Statistics  
Monitor,

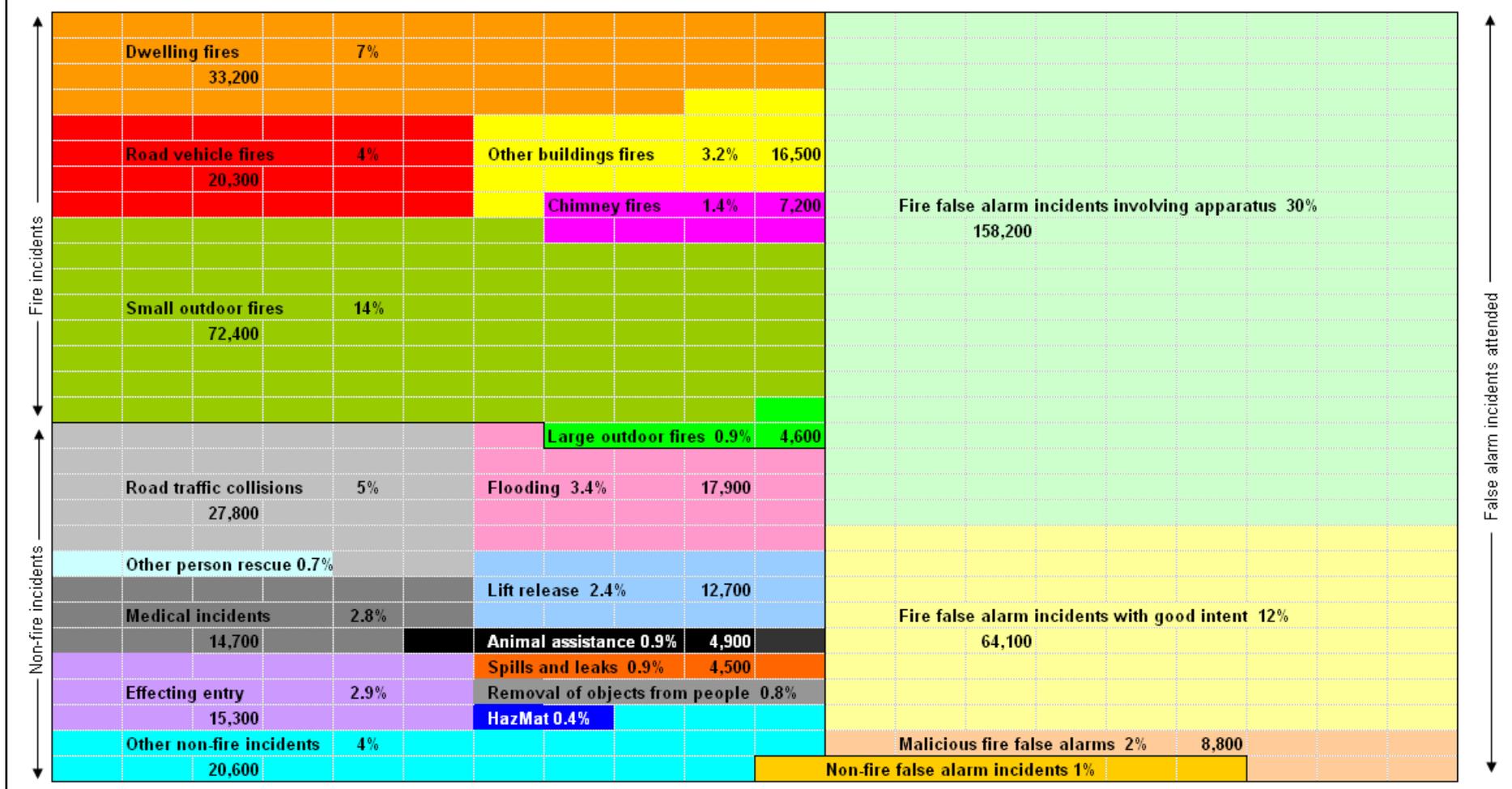
[www.gov.uk/government/collections/fire-statistics-monitor](http://www.gov.uk/government/collections/fire-statistics-monitor)



# Fire Statistics Monitor experiment Brick diagram

(page 10 of July 2013 Fire Statistics Monitor)

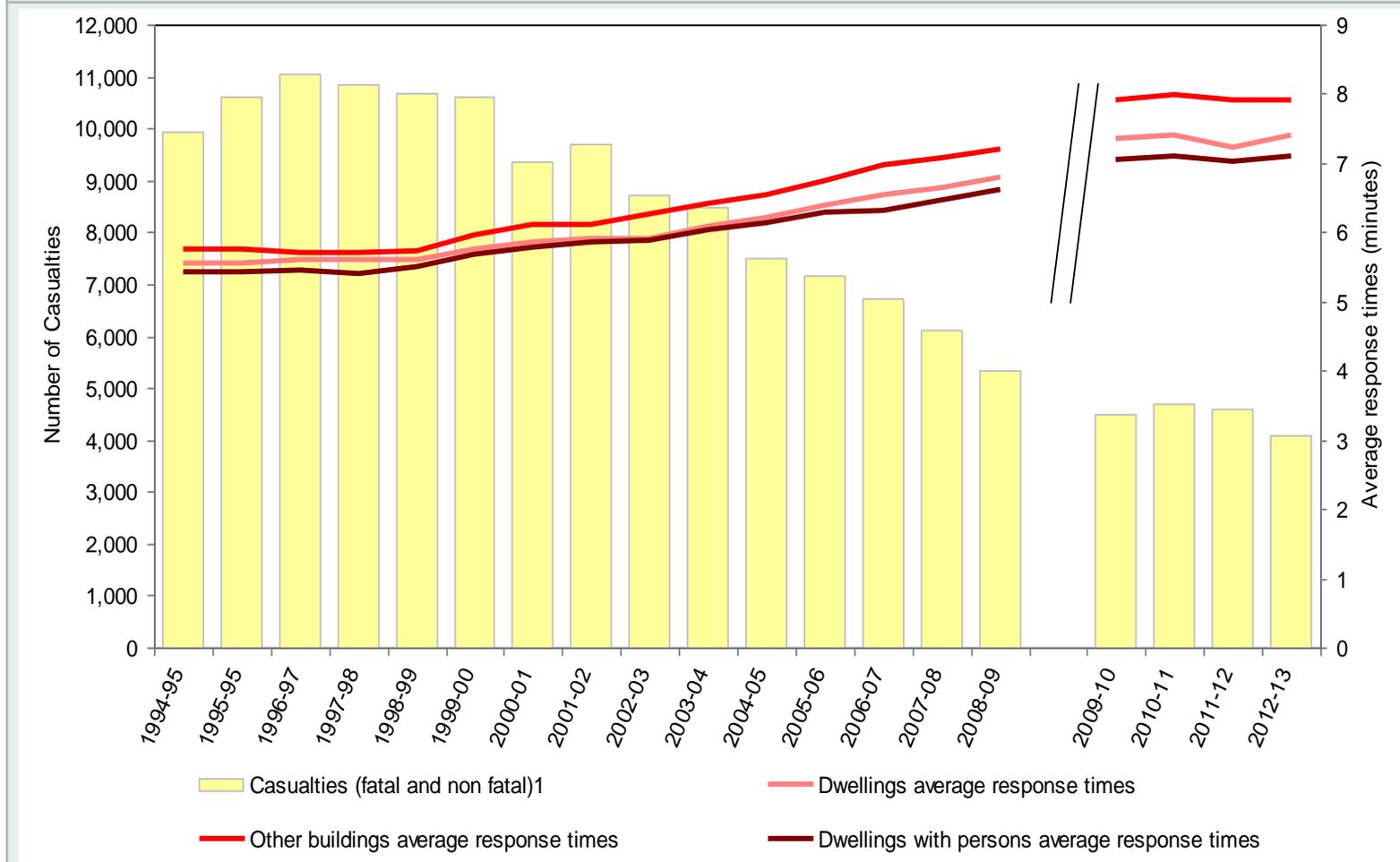
Incidents attended by local authority fire and rescue services, England, 2012-13





# Fire Incidents Response Times (1)

Chart 1: Fire response times and hospital casualties, England. 1994-95 to 2012-13



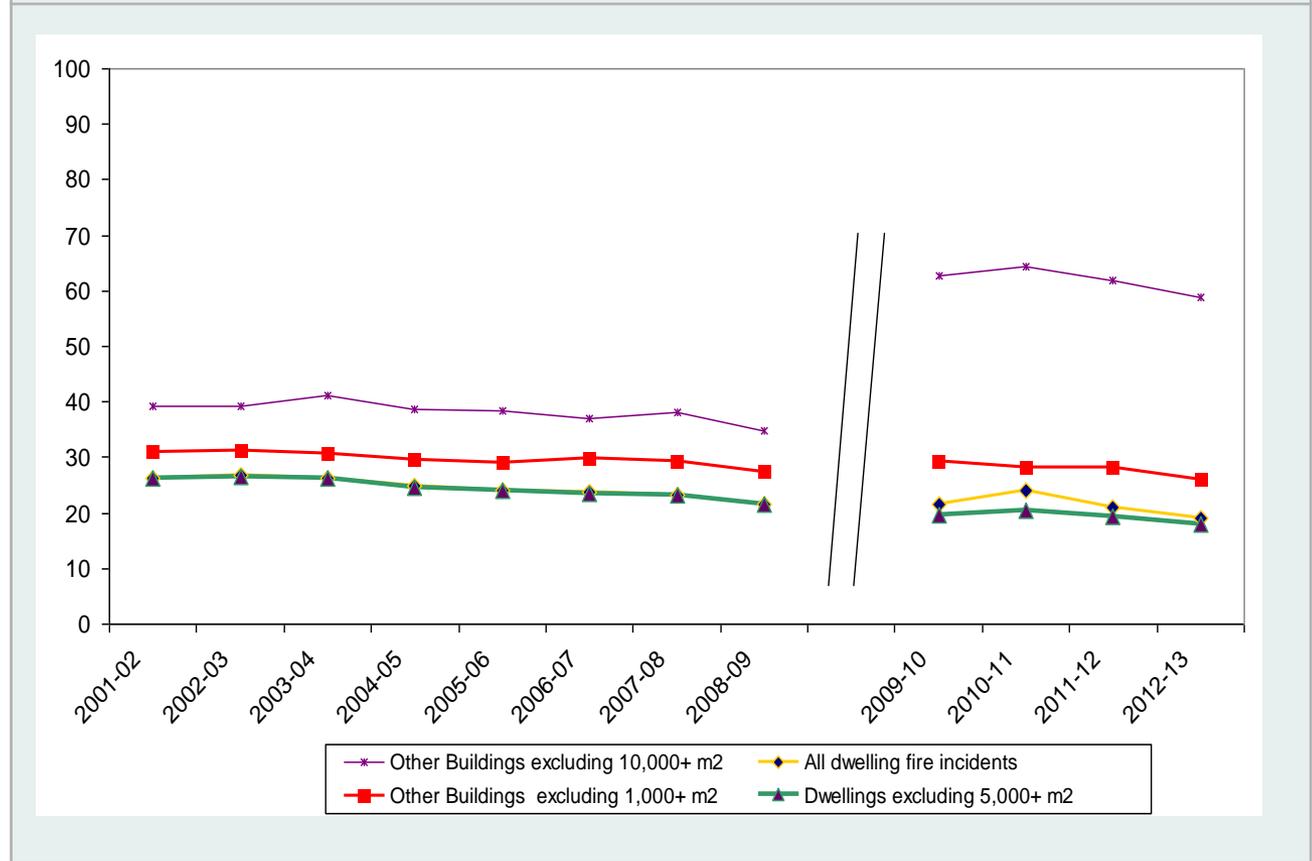


Shortlisted for Royal  
Statistical Society  
Excellence in Official  
Statistics Awards in  
2013.

Awarding panel's  
comments were:  
- "engaging and  
informative",  
- "good use of  
contextual data to  
give a rounded  
picture of the  
statistics being  
reported on", and  
- "what a good  
statistical bulletin  
should be".

## Fire Incident Response Times (2)

Chart 2: Total area of damage in building fires, England, 2001-02 to 2012-13





## Supplementary analyses (one-off publications)

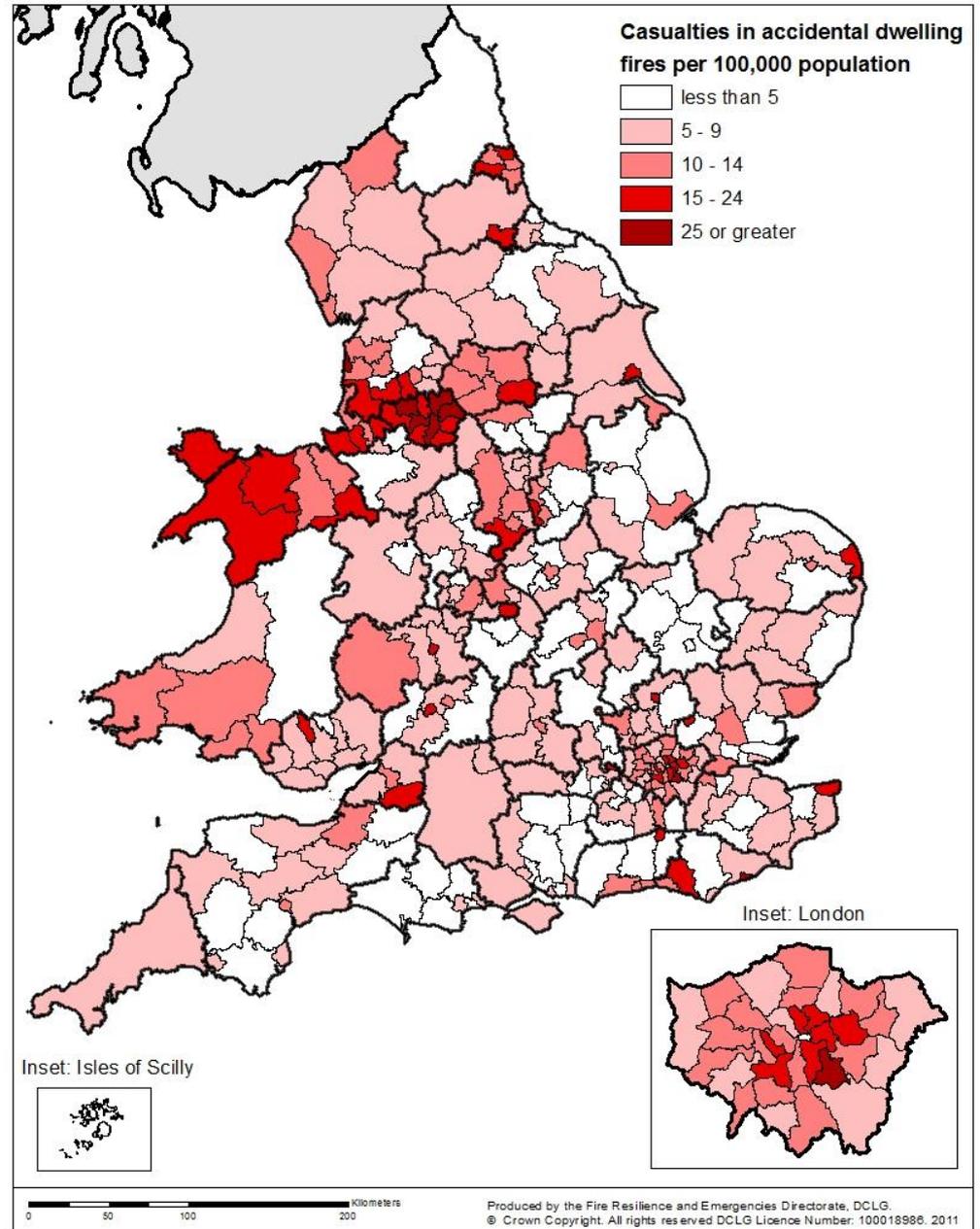
[www.gov.uk/government/collections/fire-statistics-supplementary-analyses](http://www.gov.uk/government/collections/fire-statistics-supplementary-analyses)

- *The effect of alcohol or drugs on casualty rates in accidental dwelling fires, England, 2011-12*
- *Analysis of fires in buildings of timber framed construction, England, 2009 to 2012*



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## Casualties in accidental dwelling fires





## Main fire and rescue incident and casualty statistics publications – in summary

### Publications

1. *Fire Statistics Monitor* (biannual)  
Headline incident and casualty data by fire and rescue authority areas, England.  
GB data in supporting data tables where agreed by devolved administrations.
2. *Fire Incidents Response Times* (annual) – annual average response times & numbers of incidents by time bands (minute intervals) by fire and rescue authority area
3. *Fire Statistics Great Britain* (annual) – detailed analyses of locations and causes of fires, and analysis of the operation of smoke alarms.





## Fire and Rescue Incident Recording System ('IRS') HISTORY

- Data definition - 2005 & 2006
- Piloted - late 2006
- Go live between Autumn 2007 and 1 April 2009
- Suggestions for change to questions reviewed in 2010
- Large batch of changes to categories in April 2012 (not additional questions)

Current 'Questions and Lists' (since April 2012) ->

[www.gov.uk/government/publications/incident-recording-system-for-fire-and-rescue-authorities](http://www.gov.uk/government/publications/incident-recording-system-for-fire-and-rescue-authorities)

Original questions and lists ->

[www.gov.uk/government/publications/incident-recording-system-for-fire-and-rescue-authorities-questions-and-lists-v1-2](http://www.gov.uk/government/publications/incident-recording-system-for-fire-and-rescue-authorities-questions-and-lists-v1-2)



## Fire and Rescue Incident Recording System ('IRS') DEVELOPMENT OF NEW SYSTEM

### Why?

- Support old IT is also expensive  
(no improvement would still require upgrades!)
- Existing system was always expensive to make any changes  
(new system to be built in a way that is more flexible)

### Timings

- Contractor carried out exploratory phase in February.
- Approval received from Cabinet Office and Government Digital Service
- Contractor now finalising design
- Replacement system being developed during the Summer and Autumn



## A few examples of changes to the data being collected (1)

A group of data experts from Fire and Rescue Service has been meeting since Autumn to finalise the details of new questions and new categories.

Here are a few examples:

1. For fires in dwellings, a new question of the **tenure of household** (eg owner-occupied, privately rented, social/council rented)
  - Requested by numerous fire and rescue services and others
  - Has been collected successfully by West Midlands Fire and Rescue



### 2. Electricity supply, wiring, cables etc...

The Incident Recording System has just two broad categories. These are to be split as follows:

a) 'Electricity apparatus, batteries and generators' to become:

- Apparatus including generators
- Batteries
- Cut-out fuse
- Consumer unit
- Meter

b) 'Wiring, cabling and plugs' to become:

- Wiring and cabling
- Extension lead (single socket)
- Multi adaptor
- Multi adaptor extension lead
- Plugs
- Solar panel



## A few examples of changes to the data being collected (3)

### 3. Casualty 'other circumstances'

a) Extra categories to be added: deaf/hearing-impaired, blind/visually-impaired

b) The existing 20 categories are a mix of i) casualty characteristics, and ii) what happened.

These are to be split to allow selection of i) significant characteristics of victim:

ie Bed-ridden, wheel-chair, other immobility, suspected alcohol, suspected drugs

From ii) the 15 options of what happened to the casualty:

eg discovered fire, trapped by fire, attempted to fight fire, returned to fire, and the five categories of how the casualty injured



## Fire and Rescue Incident Recording System ('IRS') A RICH DATA SOURCE

- Now 5 years of data (April 2009 to March 2014)
- Over 100 data fields (for building fires with casualties)
- Data quality is predominantly good, and the new IRS will support data quality further, eg for questions with long lists of categories
- Access to record-level data
  - 18 fire and rescue authorities accessing England data base
  - 22 other applications
  - The future... open data (covering data items without data protection issues)



**Thank you for your attention!**

To get in touch:

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or by contact details are on the front and at the rear  
of each of our publications
  
- iii) fire and rescue statistics user interest and feedback form:  
[www.gov.uk/government/publications/fire-statistics](http://www.gov.uk/government/publications/fire-statistics)  
The page also links to all our fire statistics publications.