

# 2013/14 Performance Report

**End of Year Review** 

**April 2014** 

Version: Final

Data and Information Audit				
Data compiled by: Kelly Robson				
Checked by:	Mark Hedley			
Data valid at:	02 Apr 2014			

### Contents

1	Executive Summary	3
2	Introduction	5
3	Performance against Community Outcome Key Performance Indicators	6
3.1	(LI29) Primary fires per 100,000 population	7
3.2	(LI2) Number of fatalities from all fires per 100,000 population:	10
3.3	(LI1) Number of fatalities from accidental fires in dwellings per 100,000 population:	12
3.4	(LI 8) Accidental dwelling fires per 10,000 dwellings	13
3.5	(LI3) Injuries from accidental dwelling fires per 100,000 population	19
3.6	(LI33) Number of all deliberate fires per 10,000 population	24
3.7	(LI16) Number of deliberate secondary fires per 10,000 population	27
3.8	(LI21) Number of malicious false alarm calls attended	39
3.9	(LI22) Number of false alarm calls due to automatic fire alarms from non-domestic premises per 1,000 non domestic	41
3.1	0 (LI23) Total number of false alarm calls due to automatic fire alarms from domestic premises per 1000 domestic premises	45
Appe	ndix A: Performance summary of all Local Indicators for 2013/14	49
Appe	ndix B: Analysis of Deliberate Secondary Fires	52

### 1 Executive Summary

1.1 Over the last year the Service has achieved significant success in a number of performance areas

During 2013/14 in comparison to 2012/13 we saw:

- 6% (105) fewer **Primary Fires J**
- 3.6% (21) fewer **Accidental Dwelling Fires**
- 20% (14) fewer Injuries from Accidental Dwelling Fires
- 7% (144) fewer **Special Services !**
- 10% (27) fewer Malicious False Alarms Attended
- 4% (115) fewer **DOMESTIC Automatic False Alarms Attended J**
- 8% (221) fewer NON DOMESTIC Automatic False Alarms Attended

#### However

- 21% (1107) more All Fire Calls Attended
- 26% (993) more **Deliberate Fires** 1
- 33% (1041) more **Deliberate Secondary Fires**
- 1.2 HR data such as sickness absence, women and workforce representation from our ethnic minority communities in the workforce are also measured; unfortunately the HR data is not available for this report.
- 1.3 Mobilising data is also not available in this report, due the implementation of the new Mobilising System.
- 1.4 Performance data from West Midlands FRS and South Yorkshire FRS is not available for this report.

- 1.5 Performance measurement indicates we have not met our targets in the following areas. Commentary is provided in this report as to how we intend to address these issues, and focus on achieving our targets in future.
  - <u>LI1: Number of deaths from accidental dwelling fires.</u> (Actual: 4, Target: 0)
  - LI2: Number of deaths from all fires. (Actual: 5, Target: 0)
  - <u>LI5: Number of injuries from all fires.</u> (Actual: 216, Target: 209)
  - <u>LI9: Number of accidental kitchen fires in dwellings.</u> (Actual: 361, Target: 350).
  - LI16: Number of deliberate secondary fires. (Actual: 4200, Target: 3001)
  - <u>LI18: Number of deliberate refuse fires.</u> (Actual: 2818, Target: 2389)
  - <u>LI24: Total number of fire calls attended.</u> (Actual: 6422, Target: 5102)
  - <u>LI33: Number of all deliberate fires</u>. (Actual: 4800, Target: 3617)
- 1.6 This report details this analysis and associated local intelligence for 2013/14.

#### 2 Introduction

2.1 This performance report provides a comprehensive overview of the organisation's performance against Community Outcome Indicators

For each indicator, we measure performance in the following ways:

- 1. Comparison against the previous five years performance (historical)
- 2. Comparison against our target (progress)
- 3. Comparison against Metropolitan FRS (benchmarking against 'like' services')<sup>1</sup>.
- 2.2 This data is analysed monthly and local intelligence added to the statistical analysis. This report details findings of the joint approach to performance management in TWFRS.
- 2.3 Performance is monitored, managed and analysed at both service and district level, to enable us to identify issues and implement improvement action where required. This approach also allows us to identify successes, so we can build on these and promote good practice across the service.

<sup>&</sup>lt;sup>1</sup> When we compare ourselves to other Metropolitan FRS, the actual figures are divided by population or premises (per e.g. 10,000 pop or 10,000 dwellings), this is to ensure an effective comparison can be made. West Midlands FRS and South Yorkshire FRS have been excluded.

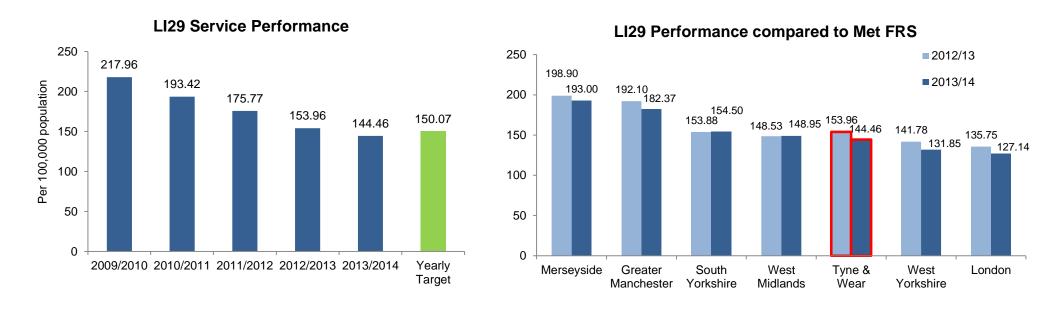
### 3 Performance against Community Outcome Key Performance Indicators

Our Community Outcome KPIs relate to incidents, specifically fires and the associated deaths and injuries. They reflect the organisational priorities for 2013/14, and are broken down as follows:

- Primary Fires
- Fatalities
- Accidental Dwelling Fires
- o Fatalities in Accidental Dwelling Fires
- o Injuries in Accidental Dwelling Fires
- Deliberate Fires
- o Deliberate Primary Fires
- Deliberate Secondary Fires
- Malicious False Alarms (Hoax Calls)
- False Alarms
- Non Domestic False Alarms
- Domestic False Alarms

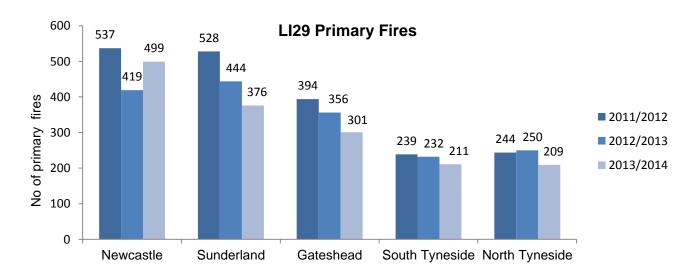
### 3.1 (LI29) Primary fires per 100,000 population

3.1.1 Primary fires include all fires in buildings, vehicles and outdoor structures or any fire involving casualties, rescues, or fires attended by five or more appliances. LI29 is a high level indicator, and is made up of LI8; accidental dwelling fires, LI17; deliberate primary fires and LI35 non domestic property fires. It also includes LI26 primary fires involving road vehicles. Please note further detail of performance in this area is provided throughout this report under the relevant KPI.



- 3.1.2 In 2013/2014 we attended 1,596 primary fires, which is a reduction of 105 (6%) from the previous year. This saw us achieve our target of 1,658 and record our lowest ever figure in this area. We have also seen year on year improvement for the last seven years.
- 3.1.3 All Met FRS have seen similar reductions when 2013/14 is compared to 2012/13 except for South Yorkshire and West Midlands who recorded slight increases. We are currently the third best performing Met FRS.

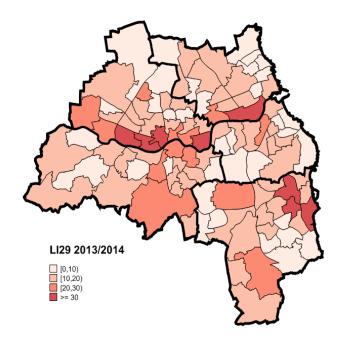
### (LI29) Primary fires district performance 2013/2014



- 3.1.4 All districts with the exception of Newcastle recorded a reduction in primary fires compared to the previous year.
- 3.1.5 Newcastle saw an increase of 80 incidents (19%), of these 31 were accidental and 49 deliberate, all other districts saw a reduction in both accidental and deliberate primary fires.
- 3.1.6 Following analysis of the Newcastle data for the last three years there has been an increase in the number of primary fires where the source of ignition was matches / candles matches, rising from 1 incident in 2011/2012 to 32 incidents in 2013/2014, of these 27 (84%) were deliberate others property, with an increase of 5 in both car and dwelling property types.
- 3.1.7 There was also an increase in the number of primary fires where fuel/chemical related liquids liquids, petrol, oil related were the source of ignition, rising from 8 in 2011/2012 to 29 in 2013/2014. Of these 25 (86%) were deliberate, others property, with the number of primary car fires increasing from 7 to 14 (50%).

# (LI29) Primary fires district performance 2013/2014

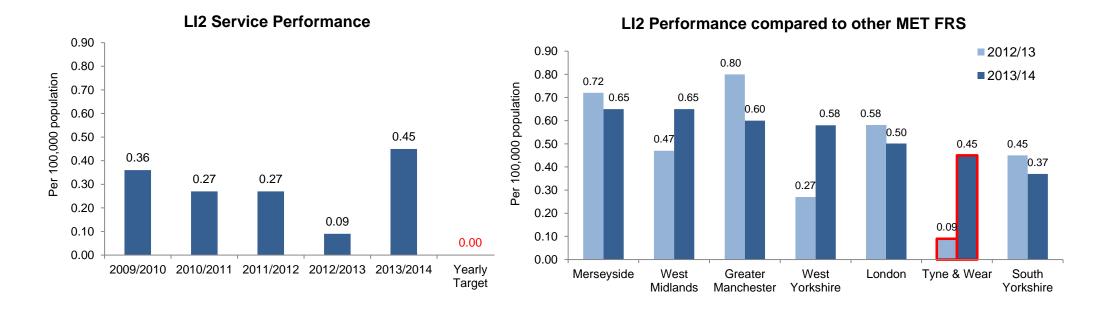
District	Ward	2011/2012	2012/2013	2013/2014
Newcastle	Westgate Ward	63	47	53
Newcastle	Walker Ward	42	46	37
Newcastle	Elswick Ward	46	30	37
Sunderland	Hendon Ward	55	38	33
Sunderland	Millfield Ward	35	47	33
Newcastle	Benwell and Scotswood Ward	25	26	32
North Tyneside	Riverside Ward	26	24	31
Sunderland	Southwick Ward	24	22	31
South Tyneside	Simonside and Rekendyke Ward	19	25	29
Newcastle	Lemington Ward	16	15	29



3.1.8 The above table shows the wards with the highest number of primary fires throughout the service. Westgate, Walker and Elswick wards in Newcastle have the highest number and account for 25% of Newcastle's total.

### 3.2 (LI2) Number of fatalities from all fires per 100,000 population:

3.2.1 The following indicator outlines our performance in relation to the number of fatalities due to all fires that we attend: accidental and deliberate.



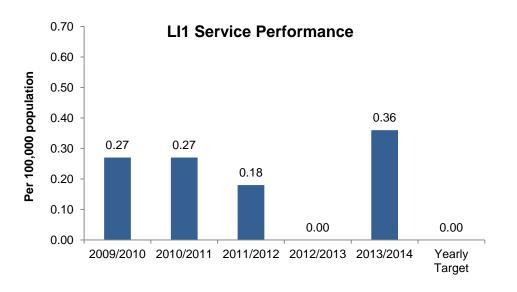
- 3.2.2 Sadly there were five fatalities from all fires (not just accidental) during 2013/2014. Three of which occurred in Newcastle, one in Gateshead and one in South Tyneside. We will not meet our target for this indicator. Despite this we continue to have the lowest number of fatalities from all fires compared to the other Met FRS.
- 3.2.3 Of these fatalities, two of the fires started in the kitchen, one cooking related involving a 49 year old male and the other is believed to have been caused by a kitchen appliance involving an 85 year old male.

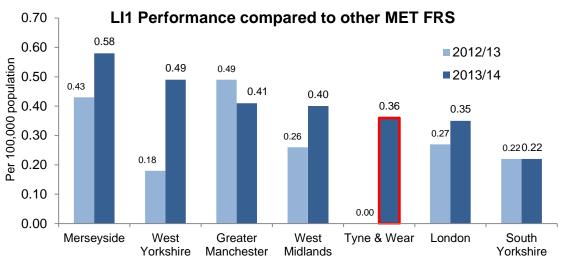
### (LI2) Number of fatalities from all fires per 100,000 population:

- 3.2.4 Two of the fires started in the living room, one was a smoking related incident involving a 77 year old woman, the other was an 85 year old female, the cause of this fire is still under investigation.
- 3.2.5 The fifth fatality was a result of a heat source and combustibles brought together deliberately by a 30 year old male.
- 3.2.6 We are actively taking steps to ensure we reduce the risk of deaths from accidental fires by continuing to refine our targeting of prevention and education work, improving the use of our data to understand current risk and by using community advocates, volunteers and operational staff to improve intelligence and provide a better understanding of our communities and also improving our targeting through working with partners.
- 3.2.7 Please note that some of the incidents are still awaiting a verdict from the coroner following relevant inquests.

### 3.3 (LI1) Number of fatalities from accidental fires in dwellings per 100,000 population:

3.3.1 The following indicator outlines our performance in relation to the number of fatalities due to accidental dwelling fires that we attend. A fatality must be recorded as being the result of the fire (or smoke). A death can be attributed to a fire even if the death occurred weeks or months later.

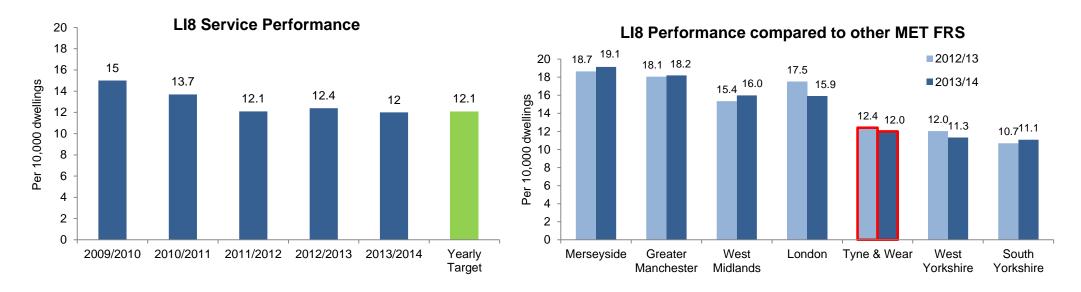




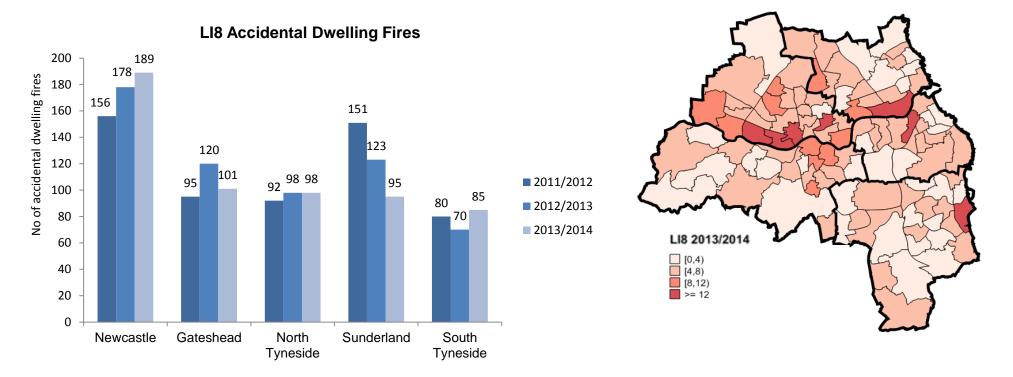
- 3.3.2 There were four fatalities from accidental dwelling fires during 2013/2014. Despite this we continue to have a low number of fatalities from accidental dwelling fires compared to the other Met FRS, only London recorded less.
- 3.3.2 When a fatality occurs an incident profile is produced providing details of the victim, the location, the incident, MOSAIC profile and details of any other incidents in the area. This information is used in a case conference with partners to identify if any actions can be taken to prevent the occurrence of a similar event in future.

### 3.4 (LI 8) Accidental dwelling fires per 10,000 dwellings

3.4.1 An accidental fire is defined as caused by accident or carelessness (not thought to be deliberate) this includes fires which accidentally get out of control. A dwelling is defined as a building occupied by households, excluding residential institutions and short-stay accommodation e.g. hotels/motels and hostels. The definition of a dwelling (for fire reporting purposes) includes non-permanent structures used solely as a dwelling, such as caravans, houseboats and mobile homes.



- 3.4.2 We attended 568 accidental dwelling fires in 2013/2014, a reduction of 21 (3.6%) from the previous year and we have met the target set at 573. We are one of three Met FRS to record a reduction in 2013/14; we also have the third lowest number of accidental dwelling fires.
- 3.4.3 Of the 568 accidental dwelling fires that occurred 241 (42%) were caused by cooking appliance Cooker including oven with the second largest cause being smoking related with 41 incidents (7%). It has been recognised that cooking related fires is an issue across the service and will be an area of focus for Operational and P&E staff in 2014/2015.



3.4.4 The 85 incidents recorded by **South Tyneside** were an increase of 15 incidents (21%) in 2013/14 when compared to the previous year. 53 of these incidents occurred in the kitchen. The main causes being leaving cooking appliances unattended and poor housekeeping regarding grill pans. Other dwelling fires were generally centered upon bedrooms and living rooms where smoking materials and electrical equipment were the main causes.

It is clear that the highest risk room within the home is the kitchen. South Tyneside personnel will continue to highlight the hazards and risks associated with fire through the Home Safety Check (HSC) initiative. This data continues to inform our targeting strategy, and where it is identified that a particular person is at greater risk from having a dwelling fire we will make every effort to carry out an HSC at that home

It is pleasing to note that early detection and warning at all of these incidents by the operation of a working smoke alarm ensured that the injuries were not as serious as might have been had the fire gone undetected.

The South Tyneside Community Safety Team is currently visiting each watch at South Shields and Hebburn stations to update them on the new HSC document. This is being used as an opportunity to refresh the watches on new and emerging issues related to ADFs and to underline the importance of a thorough, professional HSC. Kitchen fires, where items have been left on or near a hob, are an issue we are keen to raise the profile of, in the HSC delivery.

All watches were updated on the new HSC procedure through the e learning package on the intranet. Additionally all watches across the service will be receiving input on the importance of high quality HSC, common themes from recent case studies and the ultimate Protection levels 1 to 4

3.4.5 **Newcastle** district recorded an increase of 11 incidents (6%) by the end of 2013/14; this is the third successive year there has been an increase in this indicator. There have been days of action where Service Volunteers have assisted Newcastle District P&E Dept to target areas in Newcastle where there have been higher incidents of accidental dwelling fires. These days have proven to be extremely productive for obtaining HSC referrals.

There has been an increase of 26 recommendations by crews attending accidental kitchen fires (involving cooking) for victims, particularly elderly victims, to have a precautionary check. If a precautionary check is recommended following a fire where only the item that ignited was damaged then it must be recorded as an accidental dwelling fire rather than a false alarm good intent (near miss) if there was no such recommendation.

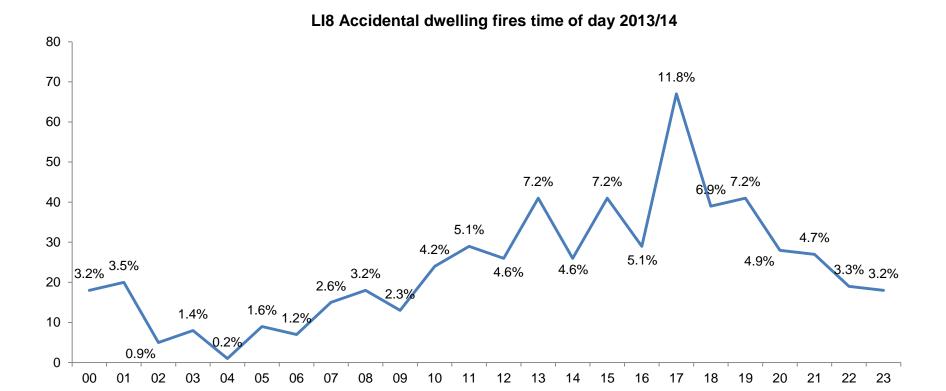
**Gateshead** district recorded a reduction of 19 incidents (16%) in 2013/14. Safety messages are given during HSC's and visits to sheltered accommodation and schools. HSC's are a high priority in the District and, as well as P&E staff and operational crews, GMBC's provider CareCall is carrying out HSC. Agreement has been reached with the Gateshead Housing Company's maintenance contractor and their tradesmen joiners are installing Service provided smoke alarms where needed.

The District has developed a Fire Response Protocol with partners. This is used to analyse each accidental fire and results in events being dealt with on varying levels depending on the circumstances of the incident. The levels can vary from intervention by our staff (eg Hot Strike) to multi agency intervention.

These four levels are: hot strike HSC; further visit by P&E if needed to gauge need for fire safety equipment; partners summoned to consider their intervention; ultimate protection by portable sprinkler / misting system. Partners are encouraged to share information about very high risk vulnerable persons and this has been formalised with the publication of a briefing note "LET SOMEONE KNOW!" that they are distributing to their staff.

The work on this protocol has resulted in engagement with private landlords in Gateshead who own approximately 16,000 properties. Work is ongoing to have HSC carried out on these properties.

- 3.4.7 **North Tyneside** recorded 98 incidents in 2013/14 this is the same figure that was recorded in the previous year. However there has been a 16% (9) increase in the number of incidents occurring in the kitchen, and there has been a 22% reduction in non-kitchen fires, with the majority of these incidents occurring in the bedroom (8) or the living room (7).
- 3.4.8 **Sunderland** continues to show year on year improvement for this indicator. There were 28 (23%) fewer incidents recorded in 2013/14 when compared to the previous year. 69 (73%) of these incidents occurred in the kitchen and the vast majority (57) involved cooking. Once again it is clear that the room with the highest risk is the kitchen and this is emphasised by staff during the delivery of HSC.



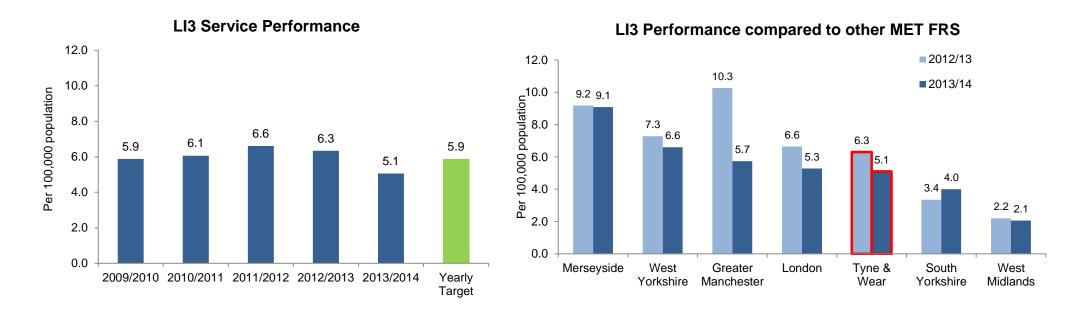
3.4.9 When comparing 2013/14 with 2012/13 there were 2 fewer accidental dwelling fires from smoking materials, 18 less from wiring, cabling and plugs however there were 16 more cooking related accidental dwelling fires, this correlates to the above graph which clearly shows a peak during evening mealtimes. Cooking remains our main cause for concern and accounts for 54.6% of all accidental dwelling fires which occurred in 2013/14. Kitchen safety awareness continues to be delivered via the HSC programme.

3.4.10 The table below shows the main sources of ignition for accidental dwelling fires over the last three years and shows the total numbers and what percentage of all accidental dwelling fires the source of ignition accounts for. It is worth noting that we are seeing an increase in the number of incidents started by heating equipment (fires/heaters). This area has been highlighted in the new development of the HSC process which started on 1<sup>st</sup> April

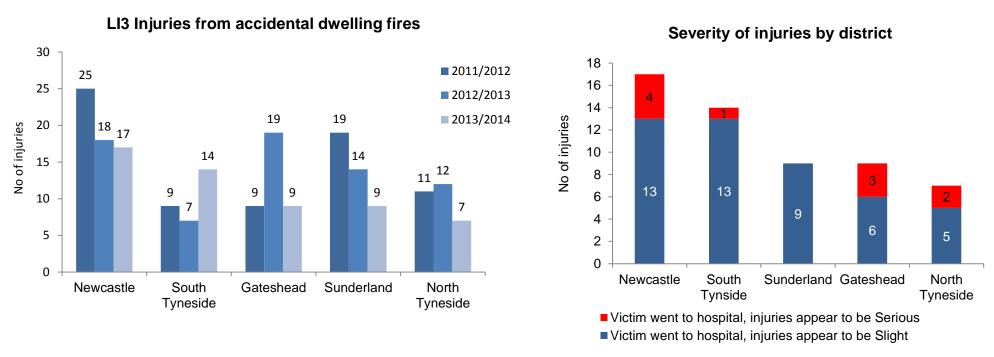
LI8 Source of Ignition	2011/12		2012/13		2013/14	
	Total	%	Total	%	Total	%
Cooking appliances	312	54.4%	294	49.9%	310	54.6%
Other domestic appliances	67	11.7%	93	15.8%	63	11.1%
Smoking related	37	6.4%	46	7.8%	44	7.7%
Electricity supply - wiring, cabling, plugs	30	5.2%	50	8.5%	32	5.6%
Heating equipment – fires/heaters	11	1.9%	14	2.4%	24	4.2%

### 3.5 (LI3) Injuries from accidental dwelling fires per 100,000 population

3.5.1 This indicator highlights our performance in relation to the number of injuries from accidental dwelling fires. An accidental fire also includes incidents where the cause was unknown. An injury must be recorded as being the result of the fire (or smoke). These statistics exclude precautionary checks or first aid given at scene.



- 3.5.2 We have seen a reduction in injuries from accidental dwelling fires for the last three years. In 2013/2014 there were 56 injuries from accidental dwelling fires, this is a reduction of 14 injuries (20%) from the previous year. This positive reduction directly contributes to the achievement of one of our strategic objectives.
- 3.5.3 All Met FRS except for South Yorkshire have reported reductions in 2013/14 when compared to the previous year and we have reported the third lowest figure for the year.



- 3.5.3 All districts showed a reduction in this indicator with the exception of South Tyneside. Although South Tyneside saw an increase of 7 injuries in comparison with the previous year, 8 of the injuries occurred in just 2 incidents both in student accommodation, involved cooking and were slight.
- 3.5.4 Of the 56 injuries only 10 were serious; this is a reduction in injuries of 14% compared to last year. 32 of the 56 injuries (55%) were cooking related.

- 3.5.5 Details of the serious injuries are as follows:
  - Firefighter in Gateshead taken to hospital with a hand injury sustained when tackling a fire.
  - 55 year old female in Newcastle who was suffering from breathing difficulties caused by a chip pan fire.
  - 77 year old female in Newcastle who fell headfirst into a gas fire sustaining burns and a head injury.
  - 23 year old male in North Tyneside. He was playing with a gas canister (for refuelling lighters) which was ignited by an unspecified heat source causing burns to his hands and face.
  - 61 year old female in Gateshead who was taken to hospital after being overcome by fumes/smoke from a fire that started in the kitchen, the cause of which is suspected to be a faulty refrigerator. The victim was rescued from her bedroom.
  - 48 year old female in South Tyneside who suffered burns following a gas explosion in her kitchen.
  - 52 year old female in North Tyneside suffered from cuts/lacerations sustained whilst attempting to escape from a fire in her bedroom. The fire was caused by an iron being left turned on in the bedroom and being placed too close to clothing.
  - 23 year old male in Newcastle suffering from breathing difficulties following a fire involving a gas cylinder which exploded.
  - 48 year old female in Newcastle overcome by fumes in a house fire discovered by her husband when he returned home from work.
  - 82 year old female in Gateshead overcome by fumes after she had left the door to the fire open or door had opened allowing fire gases to fill room.

3.5.6 **South Tyneside** reported 14 injuries, an increase of 50% (7) when compared to the previous year. Three incidents involved multiple victims.

In July, 5 of these injuries were sustained at one particular incident. All victims went to hospital suffering from the effects of smoke, none were serious. In September there were three injuries. Again all three were victims of a single incident, an accidental cooking related kitchen fire in a commercial property, beneath accommodation. It was noted that the victims had English as their second language and further appropriately delivered fire safety education was arranged for the victims, fellow residents and their landlord to reduce their risk from fire in the future.

Intelligence gathered and processed following this fire identified overseas Students attending a local marine facility, with limited understanding of English language, as potentially at risk from fire and at risk of causing unwanted fire signals. As a result training was arranged that delivered a clear fire safety message to this valued part of our community, an issue that the district continues to monitor.

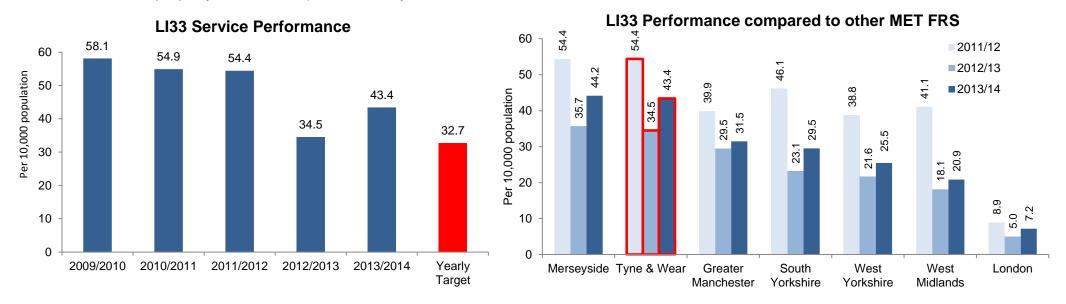
The other incident that involved multiple victims was a gas explosion.

- 3.5.7 **Sunderland** district recorded nine in 2013/14, a reduction of five injuries in comparison to the previous year. It is noteworthy that there were no injuries in Sunderland during Q3. Six of the injuries are attributable to kitchen fires with various causes with the remainder involving other domestic appliances (tumble driers and television); all injuries were slight and not serious.
- 3.5.8 **Gateshead** district saw a reduction of ten injuries (53%) in 2013/14. The District has partner referral procedures in place to identify at-risk occupants. The fire response protocol is now used in the event of an accidental dwelling fire related injury.
- 3.5.9 **North Tyneside** district saw a reduction of five (42%) injuries from 2012/13. Continued education with 'fire in the home' guidance is carried out by the district to ensure injuries from accidental dwelling fires continue to reduce.

3.5.10 **Newcastle** district saw a reduction of one injury (5.5%) from 2012/13. Of the 17 injuries seven involved cooking related incidents. On a monthly basis the district team in Newcastle monitor all incidents against mosaic codes to assist with informing future targetting strategy.

### 3.6 (LI33) Number of all deliberate fires per 10,000 population

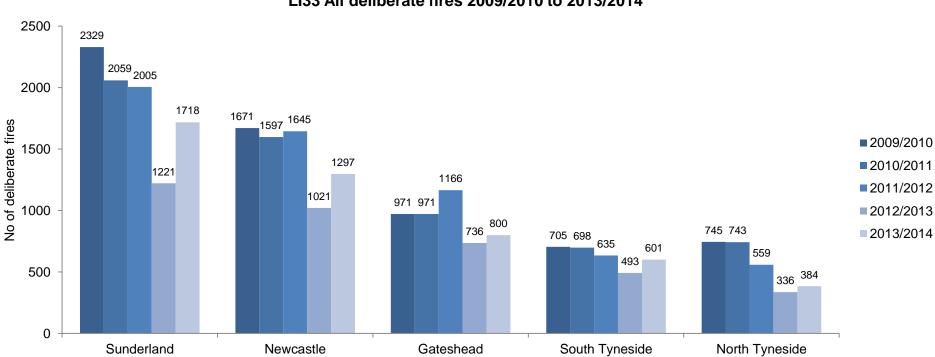
3.6.1 The following indicator outlines our performance in relation to the number of all deliberate fires that we attend. A deliberate fire is defined as an incident where the cause of the fire is suspected to be non-accidental. This indicator includes fires that are both reported as being a primary and secondary fire. A secondary fire is reported as one which does not involve property (including derelict property and vehicles) or a casualty.



3.6.2 In 2013/14 we attended 4,800 deliberate fires (43.4 per 10,000 population). This is an increase of 993 (26%) from 2012/13 and we have not met our target of 3,617 deliberate fires (32.7 per 10,000 population). This does need to be put in the context of an exceptionally good year in 2012/2013 which was experienced across all of the Met FRS. CLG's Fire Statistics Monitor: England for April 2012 to March 2013 acknowledged that much of the decrease in fire incidents in 2012/13 compared to 2011/12 was due to the levels of rainfall which were well above average in spring and summer 2012. Outdoor fires (which include the majority of deliberately started fires) account for half of fire incidents attended. These were 44% lower in 2012/13 compared to the previous year.

### (LI33) Number of all deliberate fires per 10,000 population

- 3.6.3 All Met FRS reported an increase compared to the previous year but, with the exception of London, we recorded the highest percentage increase and have the second highest number of deliberate fires.
- 3.6.4 We have recorded a reduction of 47 (7.3%) deliberate primary fires compared to last year; however this means we have seen an increase in the ratio of deliberate secondary fires compared to deliberate primary fires. Newcastle was the only district to record an increase in deliberate primary fires.



LI33 All deliberate fires 2009/2010 to 2013/2014

3.6.5 All districts have recorded an increase from last year however in comparison with 2011/2012 all districts are showing reductions. It is noteworthy that Newcastle and Gateshead are reversing the upward trend displayed up to 2011/2012.

#### (LI33) Number of all deliberate fires 2013/14

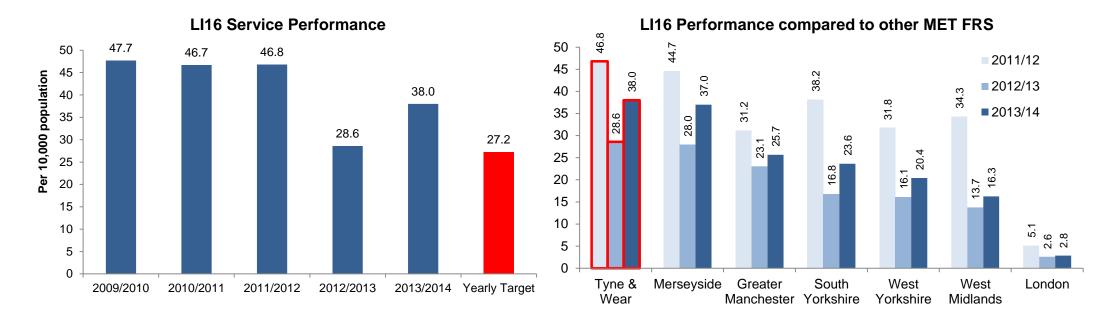
LI33 Property Type	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014
Loose refuse (incl in garden)	2146	1946	1974	1138	1426
Small refuse/rubbish/recycle container (excluding wheelie bin)	843	928	1029	410	348
Refuse/rubbish tip	494	497	561	324	306
Grassland, pasture, grazing etc	471	519	293	170	542
Tree scrub (includes single trees not in garden)	335	376	477	99	177
Wheelie Bin	0*	0*	0*	510	588
Scrub land	292	264	161	75	261
Large refuse/rubbish container (eg skip)	205	210	232	134	148
House - single occupancy	127	112	122	83	65
Purpose Built Flat/Maisonette - multiple occupancy	68	74	55	44	45

<sup>\*</sup> Wheelie bin was not classed as a property type prior to 2012/2013

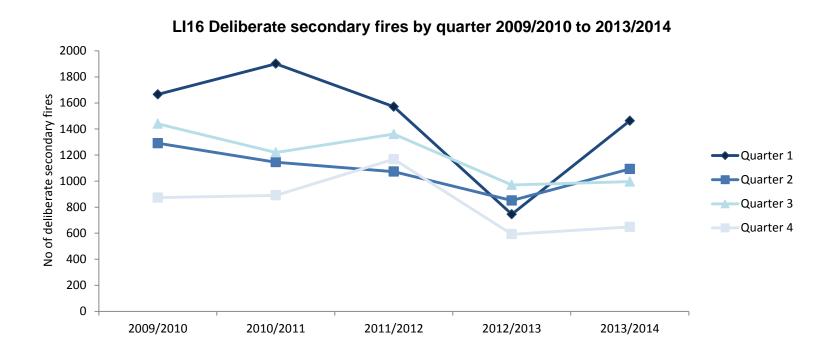
- 3.6.6 Loose refuse has seen an increase of 288 incidents in comparison to the previous year; this appears to coincide with a number of local authorities reducing refuse collections to fortnightly. There has also been a significant increase (79%) of incidents relating to tree scrub (includes single trees not in garden).
- 3.6.7 The following indicator details deliberate **secondary** fires, which form part of this indicator. There has also been a significant increase in this area and the following section provides more detailed commentary on this performance and action to address this increase.

### 3.7 (LI16) Number of deliberate secondary fires per 10,000 population

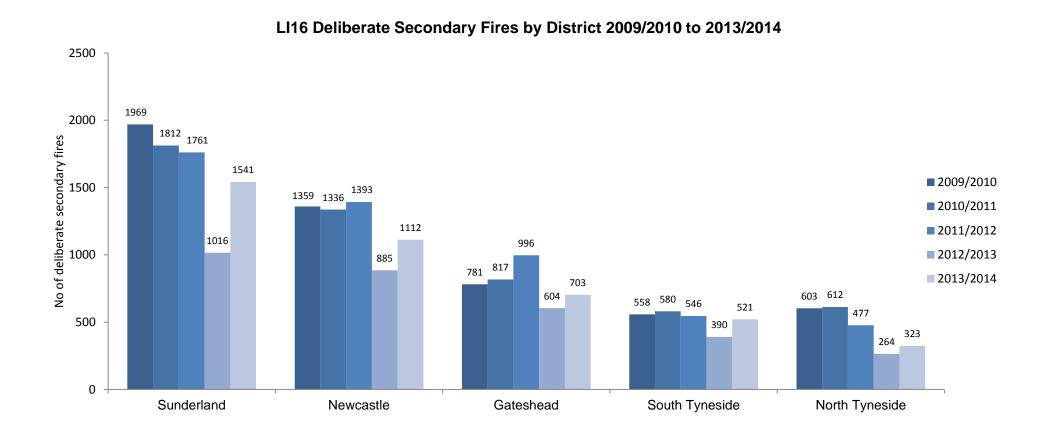
3.7.1 This indicator outlines our performance in relation to the number of deliberate secondary fires (anti-social behaviour) that we attend. A deliberate fire is where the cause is suspected to be non-accidental. In addition to this criterion a deliberate secondary fire includes those where four or less appliances attended the incident, any more would result in it being a primary fire.



- 3.7.2 In 2013/14 we attended 4,200 deliberate secondary fires (38 per 10,000 population). This is a significant increase of 1,041 (33%) from 2012/13 and we did not meet our target. Again, 2012/2013 was an exceptional year for deliberate secondary fires and when compared with 2011/2012 there is a reduction of 19% representing an ongoing downward trend.
- 3.7.3 When we compare our performance to the other Met FRS we had the most deliberate secondary fires in 2013/14; we also had the greatest increase compared to the previous year.
- 3.7.4 The graph on the next page shows this data broken down by quarter.



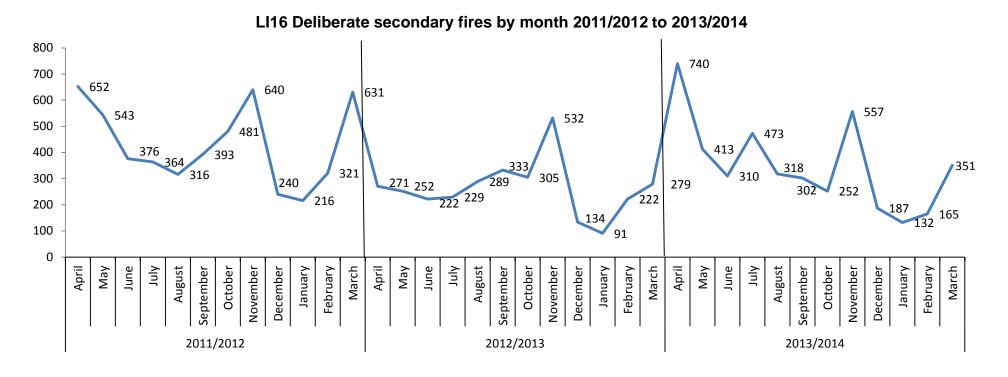
3.7.5 From looking at the above graph we can clearly see although most quarters follow a similar pattern throughout the five years' worth of data; 2012/2013 shows a large reduction in the number of deliberate secondary fires in quarter 1. You will also note that there were only slight increases in quarter 3 and quarter 4 in 2013/2014 when compared to the previous year.



3.7.6 This graph shows the number of deliberate secondary fires for the last five years broken down by district. All districts are showing considerable increases in comparison to last year; however when we examine performance over the last five years all districts are showing a downward trend.

### (LI16) Number of deliberate secondary fires 2013/14

3.7.7 Of the deliberate secondary fires that occurred in 2013/2014 740 (18%) occurred in April. Comparison of performance from previous years (below) indicates that (with the exception of last year) April does tend to see an increase and Lighter Nights campaigns are run accordingly throughout the Service.



3.7.8 Appendix B of this report describes further what we know about deliberate secondary fires that occur in Tyne and Wear and compares our data with the Met FRS, details their performance and includes some actions they are taking to reduce the number of these fires.

3.7.9 All districts are actively engaged in reducing anti-social behaviour (ASB) fires. The following pages provide a summary of district activity throughout 2013/2014.

#### **Sunderland District 52% Increase**

Commentary	Activities	Potential Issues
Sunderland district saw an increase of 525	The district carried out a schools education	2013/2014 has seen Sunderland
deliberate secondary fires from the previous year. However in comparison to	programme with funding and support from the local authority and Northumbria Police. ASB	City Council undergo considerable changes as part of the
2011/2012 there is a reduction of 220	themed training has been delivered to Year 6	Government Spending review. As
incidents (12%).	pupils from 61 of the 80 schools in Sunderland.	partners we have sought to
Following analysis of the property type	2,543 children have visited SafetyWorks! to participate in this training.	continue joint activities in the management of anti-social
there has been a large increase over the	participate in the training.	behaviour fire-setting.
last three years in grassland, pasture and	All personnel within the district are engaged in	
grazing deliberate secondary fires from 98 in 2011/2012, dropping to 73 in 2012/2013	reducing ASB by reporting abandoned vehicles, buildings requiring boarding up and loose refuse	
and rising considerably to 216 in	to the relevant authorities using our reporting	
2013/2014, an increase of 120% from	facility via Sunderland City Council.	
2011/2012.	Crews continue to apply arson prevention stickers	
Scrub land incidents have also increased	to wheelie bins following an increase in wheelie	
from 40 in 2011/2012 dropping to 29 in	bin fires.	
2012/2013 and rising considerably to 110 in 2013/2014, an increase of 175% from	The district has led in the coordination of	
2011/2012.	Sunderland City Council enforcement teams as	
	new staff assume responsibility for enforcement.	
Wheelie bin fires have also increased from	Incident statistics are passed to Sunderland City	
166 in 2012/2013 to 229 in 2013/2014, an increase of 38%.	Council monthly, in order to provide enforcement teams with information on where trends emerge in	
11010400 01 00 /0.	secondary fire-setting.	

### **Newcastle District 26% Increase**

Commentary	Activities	Potential Issues
Newcastle district saw an increase of 227 deliberate secondary fires from the previous year. However in comparison to 2011/2012 there is a reduction of 281 incidents (20%).	A standalone problem solving group has been set up within the district to tackle ASB in hotspot areas.  CCTV locations have been moved to areas	Due to financial constraints Newcastle City Council have reduced bin collections to fortnightly across the city, youth diversionary work has been
Following analysis of the property type there has been a large increase over the last three years in grassland, pasture and grazing deliberate secondary fires, from 52	identified as hotspots.  Environmental Services have allocated all of their resources on a Friday afternoon to a particular	reduced and both Neighbourhood Response Teams and Street Wardens have had reductions in staffing levels.
in 2011/2012, dropping to 32 in 2012/2013 and rising to 87 in 2013/2014, an increase of 67% from 2011/2012.	area to remove refuse and fly tipping prior to the weekend.	Crews have reported an increase in loose refuse.
Wheelie bin fires have also increased slightly in Newcastle district rising from 172 in 2012/2013 to 195 in 2013/2014, an	In December intensive policing took place in Walker ward.  Your Homes Newcastle have provided skips to	The frequency of SNAP meetings is also being reduced.
increase of 13%.	assist with clearing up certain identified neighbourhoods. This has been supported by leaflet drops and monitoring and reporting of areas of concern by operational fire crews.	There is a 10 day trial planned in the Benwell area where there will be no refuse uplifts except on bin collection day; this is to examine the impact of removing the service.
	Operational crews and fire service volunteers have also attended a number of evening projects to promote fire safety.	Newcastle City Council are planning a reduction in late night cleansing in the city centre.
	150 young people visited SafetyWorks! as part of the 2014 Lighter nights campaign. Two additional Phoenix Courses are being run.	

### **Gateshead District 16% Increase**

Activities	Potential Issues
Funding was secured from partners for school visits to SafetyWorks! during the Bonfire period.	Gateshead's Street Action Enforcement Team activities are being reduced. This may impact on
Follow up work to the Wetherby Grove incident has resulted in engagement with volunteers who work in the Gateshead area resulting in community fire	the frequency of patrols of hotspot areas and the time taken to respond to reports of fly tipping.
P&E continue to work in schools and with partners throughout the year, punctuated as required by campaigns such as that for the Bonfire Period and <i>one-offs</i> such as that with partners and Safetyworks! that followed the Wetherby Grove incident.	Uplift teams are being deployed to address other public concerns resulting in a seven day delay in clearing reported flytipping.
	Funding was secured from partners for school visits to SafetyWorks! during the Bonfire period.  Follow up work to the Wetherby Grove incident has resulted in engagement with volunteers who work in the Gateshead area resulting in community fire safety messages reaching a wider audience.  P&E continue to work in schools and with partners throughout the year, punctuated as required by campaigns such as that for the Bonfire Period and one-offs such as that with partners and Safetyworks! that followed the Wetherby Grove

# North Tyneside District 22% Increase

Commentary	Activities	Potential Issues
North Tyneside district saw an increase of 59 deliberate secondary fires from the previous year. However in comparison to 2011/2012 there is a reduction of 154 incidents (32%).	The district continues with the initiative of having one member of P&E as the single point of contact with the local enforcement and Envirolink managers. Together they target specific areas using historical and new data to remove refuse and other items which may contribute to an increase in	Possible issues are being proactively monitored.
Following analysis of the property type there has been a slight increase over the last three years in grassland, pasture and grazing deliberate secondary fires, from 17 in 2011/2012, dropping to 10 in 2012/2013 and rising to 35 in 2013/2014, an increase of 106% from 2011/2012.	Joint ventures with the Fire Service, Police and Environlink are working to reduce ASB, deliberate fires and the public's perceptions of crime.  Work is ongoing with Building Control to identify derelict and vulnerable buildings and ensure they are boarded up.	

# **South Tyneside District 34% Increase**

Commentary	Activities	Potential Issues
Commentary  South Tyneside district saw an increase of 131 deliberate secondary fires from the previous year. However in comparison to 2011/2012 there is a reduction of 25 incidents (5%).  Following analysis of the property type there has been a considerable increase over the last three years in grassland, pasture and grazing deliberate secondary fires, from 47 in 2011/2012, dropping to 33 in 2012/2013	Delivery of Lighter Nights campaign in Q1. Hedworth Week of action in Q2.  South Tyneside Council Handy Estates Team initiative focusing on many of the community issues that surround ASB. The team responds to data and information and intelligence gained from fire crews to reduce deliberate fires.  Having identified hotspots relating to young people and deliberate fires. The district, as part of an	Reduced resources as part of the Government spending review, for example Warden Services and Youth Work.
and rising to 112 in 2013/2014, an increase of 138% from 2011/2012.  Scrub land incidents have also increased	initiative aimed at reducing ASB, delivered two Open College Network accredited training courses to young people. This is supported by the Police and Crime Commissioner's office and is built	
from 24 in 2011/2012 dropping to 19 in 2012/2013 and rising to 50 in 2013/2014, an increase of 108% from 2011/2012.	around crime, ASB awareness and understanding the relationship between crime and victims.  Increased and focussed activity from watches to	
	ensure a high level response to support the Lighter Nights Campaign. This is monitored by the Station Manager using the ASB logs. Watches are targeting specific, identified areas using historical	
	data and reporting potential ASB fires to partners to enable uplift and removal, and providing intelligence to partners to support deployment strategies for local resources.	

3.7.10 The following tables show the wards with the highest number of deliberate secondary fires for each district over the last five years.

SUNDERLAND	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014
Southwick Ward	117	93	86	38	146
Hendon Ward	255	204	214	114	141
Redhill Ward	96	111	122	77	121
Hetton Ward	103	100	98	50	109
Millfield Ward	151	130	126	80	100
Washington North Ward	60	64	82	49	82
Pallion Ward	92	67	113	51	70
Houghton Ward	106	100	67	45	68
Copt Hill Ward	13	18	29	24	64
Washington East Ward	75	64	44	42	60
Ryhope Ward	70	86	36	49	59
St. Anne's Ward	64	63	77	41	58
Barnes Ward	54	48	53	29	58
Castle Ward	150	126	175	54	51
St. Chad's Ward	47	50	29	22	50
Shiney Row Ward	44	56	42	24	44
Washington West Ward	96	55	64	43	42

## (LI16) Number of deliberate secondary fires district performance 2013/14

NEWCASTLE	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014
Walker Ward	135	206	179	77	148
Benwell and Scotswood Ward	137	91	98	78	120
Byker Ward	135	165	128	152	110
Elswick Ward	152	137	141	58	105
Westgate Ward	84	82	87	66	76
Newburn Ward	51	43	67	53	63
Denton Ward	96	102	97	52	50
Wingrove Ward	48	51	42	31	50
South Heaton Ward	49	34	71	49	48
Lemington Ward	45	34	30	46	45
Kenton Ward	65	41	60	31	43
Woolsington Ward	37	68	58	31	41

## (LI16) Number of deliberate secondary fires district performance 2013/14

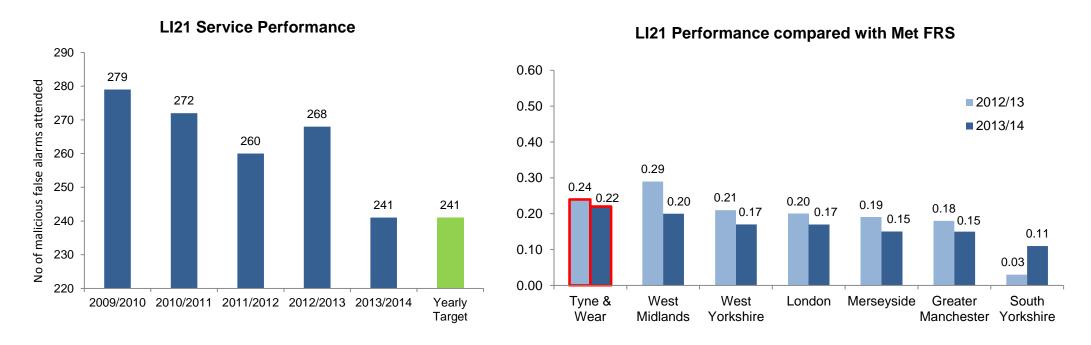
GATESHEAD	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014
Dunston and Teams Ward	73	54	90	108	88
Bridges Ward	50	46	56	48	72
Deckham Ward	34	53	46	77	54
High Fell Ward	38	70	37	36	52
Felling Ward	90	93	110	36	51
Lamesley Ward	41	47	65	32	47
Windy Nook and Whitehills Ward	40	44	46	24	47
Saltwell Ward	28	39	99	56	41

SOUTH TYNESIDE	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014
Boldon Colliery Ward	71	81	86	34	83
Simonside and Rekendyke Ward	72	42	42	31	51
Beacon and Bents Ward	45	55	51	30	50
Hebburn North Ward	26	35	35	42	50
Whiteleas Ward	23	25	32	13	42

NORTH TYNESIDE	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014
Riverside Ward	53	80	65	37	47
Wallsend Ward	87	70	72	16	41
Chirton Ward	84	59	50	28	41

#### 3.8 (LI21) Number of malicious false alarm calls attended

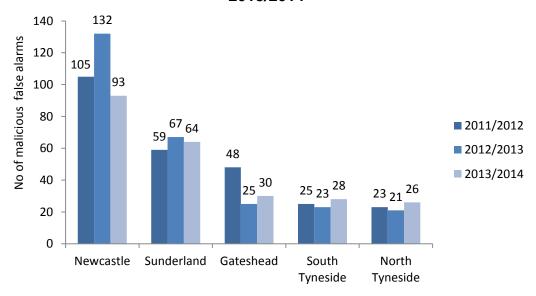
3.8.1 The indicator reflects the number of malicious false alarm calls that we have attended (appliance despatched). A call is defined as being malicious when a call was made with the intent of getting us to attend a non-existent event (both fire and special service).



- 3.8.2 We attended 241 malicious false alarms in 2013/2014 which is a reduction of 27 incidents (10%) from the previous year. Despite our positive performance we continue to report the highest number of these incidents when compared to the other Met FRS.
- 3.8.3 Malicious false alarms have continued to reduce over the last five years and we have met our target of 241. The service wide schools education programme continues to emphasise the consequences of hoax calls.

### (LI21) Number of malicious false alarm calls attended district performance 2013/14

LI21 Malicious False Alarms by District 2011/2012 to 2013/2014



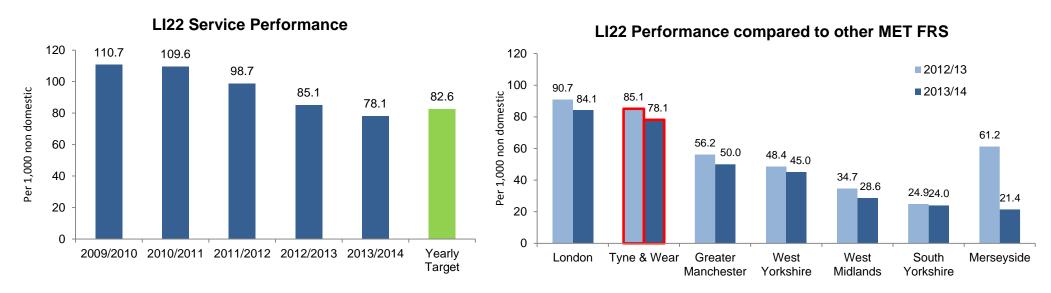
#### Properties with 3 or more malicious false alarms 2013/2014

District	Building	Total
North Tyneside	Four Lane Ends Metro Station	5
Newcastle	Anolha House	3
Newcastle	Walbottle Campus Technology Centre	3
Newcastle	Princes Building	3
Sunderland	Cherry Knowle Hospital	3
Sunderland	River View	3

- 3.8.4 Newcastle district have achieved a reduction of 39 (30%) malicious false alarm calls attended in comparison to the previous year although continue to see the largest number of calls across the Service. Service Delivery are proactively working with Control on Call Challenge to further reduce attendance at these calls.
- 3.8.5 The above table shows the number of properties with 3 or more malicious false alarms during 2013/2014. Three of these properties are in Newcastle district.

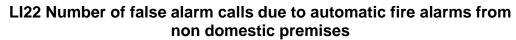
## 3.9 (LI22) Number of false alarm calls due to automatic fire alarms from non-domestic premises per 1,000 non domestic

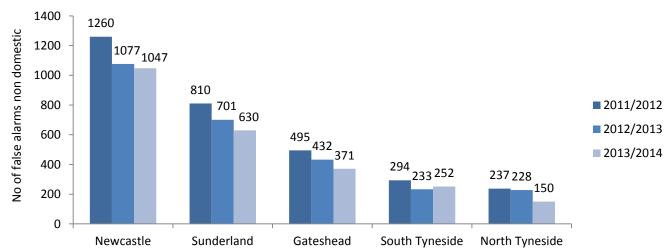
3.9.1 This indicator reflects the number of false alarm calls despatched to as a result of a call being activated by a person or automatic fire detection equipment or fixed firefighting equipment. A non-domestic premise can be classified as a non-residential property, for example a public building, hospital, school or factory.



- 3.9.2 We attended 2,450 (78.1 per 1,000 non domestics) in 2013/2014 reflecting a reduction of 221 (8%) on last year's figures and achieving our target. These incidents are a waste of resources and the continuous reductions over the last five years are a positive indication that our strategies are beginning to take effect, the challenge now is to maintain these reductions going forward which will be achieved by continuing to work with partners, for example hospitals and universities.
- 3.9.3 With the exception of London we continue to have the highest number of automatic false alarm calls to non-domestic properties. You will note the significant reduction in Merseyside's figures; this is due to the introduction of a new policy on attendance at these incidents.
- 3.9.4 Of the 2,450 incidents 35% (764) were caused by system faults.

# (LI22) Number of false alarm calls due to automatic fire alarms from non-domestic premises district performance 2013/14





- 3.9.5 Hospitals and medical care is the main premises type throughout the Service with 444 incidents accounting for 18% of the service total; however, when taking account the ratio between the number of detector heads in hospitals versus the number of activations their performance is higher than other types of commercial premises. The figures across all districts continue to decrease year on year reflecting the good working relationships that fire safety staff continue to foster with colleagues within the NHS trusts in Tyne and Wear.
- 3.9.6 Education premises saw the second highest number of false alarms due to automatic fire alarms from non-domestic premises with 417 incidents or 17% of the service total.
- 3.9.7 336 (14%) of the incidents were classed as other residential with the majority of these (45%) being in residential homes.

# (LI22) Number of false alarm calls due to automatic fire alarms from non-domestic premises - district performance 2013/14

- 3.9.8 **Newcastle** district has seen a reduction of 30 incidents in this indicator. In September and October of 2013 the annual partnership talks were delivered to 'Fresher Students' with a particular focus on fire safety and false alarms. The P&E Watch Manager from Newcastle District personally delivered all of the talks and this was supported by a high profile press release that was coordinated with the release of an educational DVD about fire safety for students in particular.
  - Throughout the year there have been increases recorded against LI22 for Hospitals and Medical Establishments from 157 in 2012/13 to 175 in 2013/14. The main offenders have been identified and the respective Station Managers have discussed with the Fire Safety Department and have met or are planning to meet with the persons responsible for fire safety at the medical establishments to identify any underlying reasons and potential solutions.
- 3.9.9 **Sunderland** district has seen a reduction of 71 (16%) incidents in this indicator; 36% (195) were caused by system faults. Intervention work is on-going with Sunderland Royal Hospital who account for 14% (83) of the district's figure for incidents of this type.
- 3.9.10 **Gateshead** district has seen a reduction of 61 (14%) incidents compared to 2012/13. Ongoing work with Metro Centre and QE Hospital will continue in an effort to further drive down these incidents. Staff are also working on an individual basis with single occupiers of buildings. This has resulted in a reduction in calls. Work is also undertaken with occupiers who have repeat calls.
- 3.9.11 **South Tyneside** has seen an increase of 19 (8%) incidents, the only district recording an increase when compared to last year. The main property type that has these false alarms in the district is educational premises which have risen from 58 to 77 incidents in the last year. 33% (76) of the activiations are caused by system faults. Using data available those with the highest number of calls have been identified and the issue was proactively addressed with key personnel.

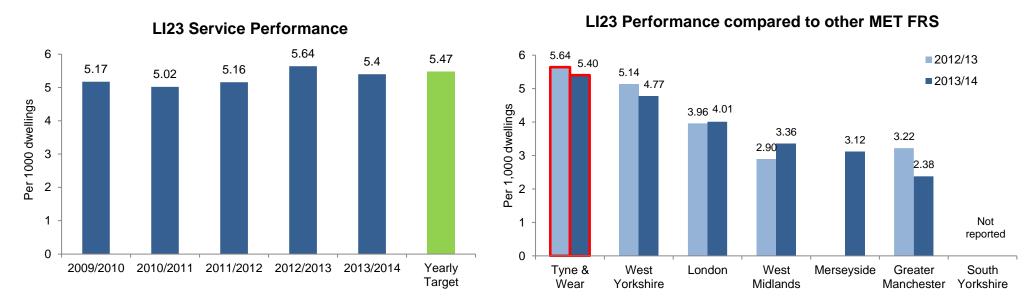
The district has a good working arrangement with South Tyneside Homes and support is given to prevent further false alarm calls. Letters are sent to those building custodians who have false alarms asking what they are doing to prevent further occurrences and if replies are not received then the matter is escalated through the custodian's line management.

# (LI22) Number of false alarm calls due to automatic fire alarms from non-domestic premises - district performance 2013/14

3.9.12 **North Tyneside** saw a reduction of 78 (34%) incidents of this type compared to the previous year. Letters continue to be sent to premises following a call out.

# 3.10 (LI23) Total number of false alarm calls due to automatic fire alarms, either by person responding to an alarm actuated by fire detection equipment or fixed ff equipment from domestic premises per 1000 domestic premises

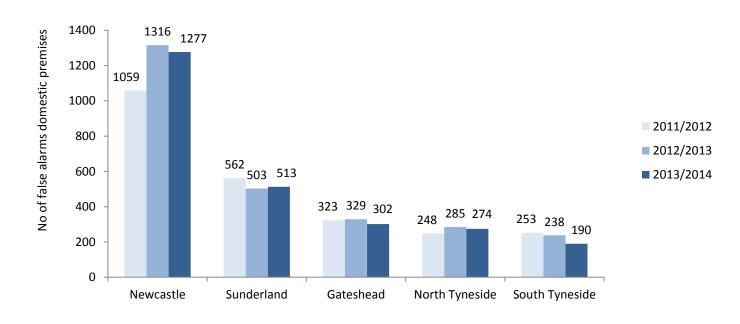
3.10.1 This indicator reflects the total number of false alarm calls due to automatic fire alarms (either by person responding to, an alarm actuated by fire detection equipment or fixed ff equipment) from domestic premises. A domestic premises can be classified a property that is a place of residence i.e. occupied by households, excluding hotels, hostels and residential institutions. Includes non-permanent structures used solely as a dwelling, such as houseboats and caravans.



- 3.10.2 We attended a total of 2,556 incidents in 2013/2014 (5.4 per 1,000 domestic premises), this is a reduction of 115 incidents (4%) from the previous year and achieving our target. However, we continue to record the highest number of false alarm calls from domestic premises when we compare ourselves to the other Met FRS.
- 3.10.3 54% of these incidents were caused by cooking / burnt toast. This has been the main cause for the last five years. Similarly sheltered accommodation remains the most frequent property type accounting for 40% of all incidents attended in 2013/2014.

(LI23) Total number of false alarm calls due to automatic fire alarms, either by person responding to an alarm actuated by fire detection equipment or fixed ff equipment from domestic premises district performance 2013/14

#### LI23 Total number of false alarms from domestic premises



3.10.4 All districts with the exception of Sunderland saw a reduction in this indicator during 2013/2014. Sunderland saw a slight increase of 10 incidents (2%).

# (LI23) Total number of false alarm calls due to automatic fire alarms, either by person responding to an alarm actuated by fire detection equipment or fixed ff equipment from domestic premises district performance 2013/14

3.10.5 **Newcastle** district accounted for 50% of all false alarms due to automatic fire alarms from domestic premises in 2013/2014 although they saw a reduction of 39 incidents (3%) in comparison to the previous year. The table below shows the worst offenders in the district, all are sheltered accommodation properties.

Building Name	Total
Iris Steedman House SA	47
Margaret Collins House SA	35
Theresa Russell House SA	31
Belvedere House SA	24
Coniston Court SA	23
Conewood House SA	22
Keebledale House SA	20

Sheltered accommodation premises accounts for 40% of the district's total, of these incidents 76% are due to cooking / burnt toast. Premises are visited if there are three false alarms in a three month period. These visits are intended to educate and prevent recurrence and partners from YHN accompany P&E officers.

YHN call challenge procedures prevented 530 false alarm calls to us during 2013/14.

# (LI23) Total number of false alarm calls due to automatic fire alarms, either by person responding to an alarm actuated by fire detection equipment or fixed ff equipment from domestic premises district performance 2013/14

- 3.10.6 **Sunderland** saw a slight increase of 10 incidents (2%). The majority (29%) of incidents occurred in Purpose Built Flat/Maisonette multiple occupancy premises type. This is largely attributed to a specific problem in a multi storey property during quarter 1 2013/2014; this issue has been successfully resolved by working in partnership with Gentoo.
- 3.10.7 **Gateshead** saw a reduction of 27 incidents (8%) from the previous year. The P&E department continue to monitor offenders to reduce the number of LI23 incidents. Their work includes visits to dwellings and also sheltered accommodation facilities where they often address resident groups about fire safety matters.
- 3.10.8 **North Tyneside** saw a reduction of 11 incidents (4%) from the previous year. Sheltered accommodation premises accounted for 49% of the district total. Farnham Lodge SA and Lisle Court SA were the worst offenders in the district with a total of 23 incidents.
- 3.10.8 **South Tyneside** saw a reduction of 48 incidents (20%) from the previous year. Again the majority (64%) occurred in sheltered accommodation premises.

## Appendix A Performance summary of all Local Indicators for 2013/14

Target achieved =	
Within 2.5% of target being achieved =	
Target missed by more than 2.5% =	

Incident Data taken 2nd April 2014 from the Performance
Management System

Α	Α	Α	Α	Α
08/09	09/10	10/11	11/12	12/13

Actual	Against	% from
13/14	12/13?	target

Target 2013/14

#### **Deaths and Injuries**

LI1	Number of deaths from accidental fires in dwellings
LI2	Number of deaths from ALL fires
LI3	Number of injuries from accidental fires in dwellings
LIS	excluding precautionary checks and first aid
LI4	Number of injuries from accidental fires in dwellings
LI5	Number of injuries from ALL fires

5	3	3	2	0
7	4	3	3	1
n/a	65	67	73	70
182	168	182	185	181
241	238	228	241	227

4	1	n/a
5	Û	n/a
56	1	-14%
176	Î	9%
216	1	3%

0
0
65
162
209

#### Fire Attendance

LI24	Total number of fire calls attended	8876	8382	7952	7864	5315	6422	Î	26%	5102
LI25	Number of primary fires excluding road vehicles (part 1 of Ll29)	1558	1533	1401	1332	1178	1127	1	-2%	1149
LI26	Number of primary fires involving road vehicle (part 2 of LI29)	1017	877	736	620	523	469	1	-8%	509
LI29	Number of primary fires attended	2575	2408	2137	1942	1701	1596	$\uparrow$	-4%	1658

## Appendix A Performance summary of all Local Indicators for 2013/14

Α	Α	Α	Α	Α
08/09	09/10	10/11	11/12	12/13

Actual	Against	% from		
13/14	12/13?	target		

Target 2013/14

#### **Accidental Fires**

LI8	Number of accidental fires in dwellings
LI9	Number of accidental kitchen fires (part 1 of LI8)
LI10	Number of accidental non kitchen fires (part 2 of LI8)

704	710	649	574	589
476	422	410	355	360
228	288	239	219	229

568	1	-1%
361	Î	3%
208	1	-7%

57	3
35	0
22	3

#### **Deliberate Fires**

LI33	Number of deliberate primary fires and secondary fires
LI16	Number of deliberate secondary fires
LI18	Number of refuse fires started deliberately

7007	6423	6068	6010	3807
5645	5272	5156	5173	3159
4115	3685	3580	3796	2515

4800	Î	33%
4200	Î	40%
2818	Î	18%

3617
3001
2389

#### **False Alarms**

LI22	Number of false alarm calls due to automatic fire alarms from non-domestic premises
LI23	Number of false alarms due to automatic fire detection from domestic premises
LI21	Number of malicious false alarm calls ATTENDED

2667	3475	3438	3094	2671
2502	2451	2381	2445	2671
596	282	271	260	268

2450	1	-5%
2556	1	-1%
241	1	0%



# Appendix B: Analysis of Deliberate Secondary fires

**Data and Information Team** 

April 2014

Data and Information Audit				
Data compiled by: Jon Bell				
Checked by:	Mark Hedley			
Data valid at:	01 Apr 2014			



#### **Appendix B: Analysis of Deliberate Secondary Fires**

#### 1. Introduction

- 1.1. There is a higher risk of fires being set deliberately in Tyne and Wear than in most other parts of the country. Reduction of deliberate fires remains one of our key strategic priorities.
- 1.2. In the SMT Performance Report 2013/14 it was highlighted that despite recording an increase in deliberate secondary fires when compared to last year we are seeing a downward trend in these incidents (see figure 1).

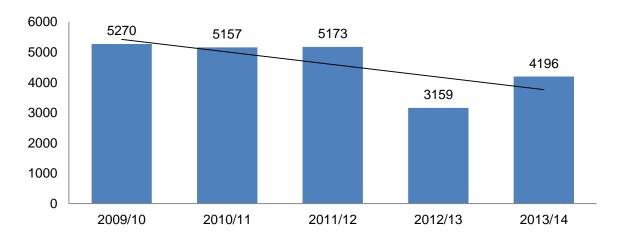


Fig 1. Deliberate secondary fires in Tyne and Wear 2009/10 - 2013/14

1.3. There is a similar trend shown by the other Metropolitan FRS (Met) but their reduction is greater than ours. This is shown in figure 2 (below) and means that we continue to be one of the lowest performing Met FRS.

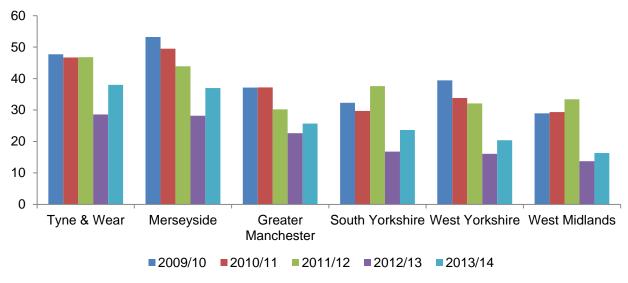


Fig 2. Met FRS deliberate secondary fires 2009/10 - 2013/14 (per 10,000 pop.)

- 1.4. This report presents what we know about the deliberate secondary fires that have occurred in Tyne and Wear over the last five years. It contains comparisons with data from the Met FRS (highlighting areas of concern), initiatives undertaken to reduce deliberate secondary fires, external influences and comparison with antisocial behaviour (ASB) reported to the police. By presenting the data in this manner SMT will gain a fuller picture of the current situation concerning deliberate secondary fires.
- 1.5. The most recently published Fire Statistics Monitor further demonstrates the enormity of the problem by showing that at 72%; Tyne and Wear's proportion of deliberate to all fires ratio is the highest in England (figure 3). The average is 45%.

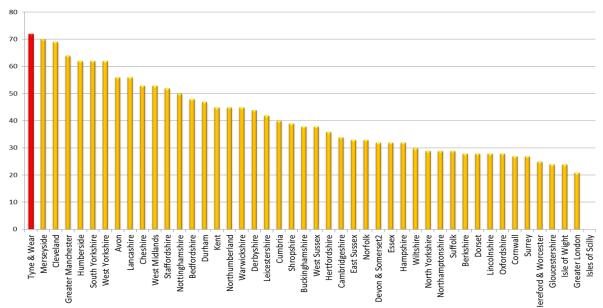


Figure 3. Percentage of all fires which are deliberate 2012/13.

1.6. When making comparisons with Met FRS data London Fire Brigade has not been included in this report because of their unique reporting process which would skew the overall results. There are also some variations in the recording conventions used by the Met FRS, making it difficult to provide direct comparisons in some sections of this report. Where this occurs individual analysis has been provided.

#### 2. Definitions

- 2.1. A deliberate secondary fire relates to the probable cause or motive as well as the location of the fire.
- 2.2. The IRS states "a deliberate fire is a fire started deliberately such as suspected arson and some fires started by children, psychiatric patients, suicides and attempted suicides. If a child, aged nine years or younger, starts a fire then this should be classed as accidental unless there is evidence to suggest otherwise".

2.3. A secondary fire is defined as all fires not involving property, structures, vehicles, recues and injuries by fire.

#### 3. Data Overview

3.1. The following population figures have been used in this report:

	Greater Manchester	Merseyside	South Yorkshire	Tyne and Wear	West Midlands	West Yorkshire
Population	2,682,528	1,385,666	1,352,144	1,104,825	2,736,460	2,226,058

Figure 4. Metropolitan FRS population figures.

3.2. The number of deliberate secondary fires was gathered from each Met FRS. This showed that the overall trend is showing a reduction, despite all showing an increase when this year's figures are compared to last year's.

	2009/10	2010/11	2011/12	2012/13	2013/14	Total
<b>Greater Manchester</b>	9961	9970	8102	6071	6885	40989
Merseyside	7376	6860	6083	3901	5127	29347
South Yorkshire	4368	4013	5082	2266	3196	18925
Tyne & Wear	5270	5157	5173	3159	4196	22955
West Midlands	7913	8035	9144	3758	4492	33342
West Yorkshire	8772	7531	7148	3577	4541	31569

<sup>\*</sup> Forecast

Figure 5. Metropolitan FRS Deliberate Secondary Fires 2009/10 - 2013/14

3.3. When we compare data with the Met FRS, the actual figures are divided by population; this is to ensure an effective comparison can be made. The following table shows the number of deliberate secondary fire per 10,000 population. This is called normalisation.

	2009/10	2010/11	2011/12	2012/13	2013/14
<b>Greater Manchester</b>	37.13	37.17	30.20	22.63	25.67
Merseyside	53.23	49.51	43.90	28.15	37.00
South Yorkshire	32.30	29.68	37.58	16.76	23.64
Tyne & Wear	47.70	46.68	46.82	28.59	38.00
West Midlands	28.92	29.36	33.42	13.73	16.30
West Yorkshire	39.41	33.83	32.11	16.07	20.40

Figure 6. Met FRS Deliberate Secondary Fires per 10,000 population 2009/10 - 2013/14

3.4. We have the lowest population figures compared to the other Met FRS. However, we do not have the lowest number of deliberate secondary fires but when the figures are normalised we are the lowest performing Met FRS as shown in figure 6.

#### 4. Comparison to Other Metropolitan FRS

- 4.1. We compare a number of performance indicators with the Met FRS to allow benchmarking to be carried out. To support this benchmarking a Met FRS Performance Management Steering Group was established over five years ago. This group meets regularly to discuss performance, statistics and other service related intelligence. This section uses the information gathered from the group.
- 4.2. When we compare the time of day that deliberate secondary fires occur we can see there is a similar pattern occurs across all of the Met FRS. Incidents begin to increase at 10:00 peaking around 19:00 and are at their lowest from midnight until 10:00.

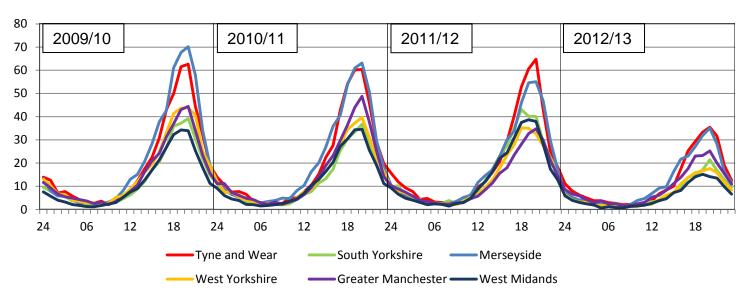


Figure 7. Met FRS deliberate secondary fires: time of day 2009/10 – 2012/13

- 4.3. The general pattern over the months of the year is similar across the various services, showing peaks in April and November. December sees the lowest number of incidents across all of the Met FRS. An example of this pattern is shown in figure 8 for 2013 (calendar year). The peaks in April and November are apparent and coincide with the lighter night's period (when the clocks go forward) and the Bonfire period. There is also another peak in July when the schools term ends.
- 4.4. Looking at the highest months for each of the Met FRS, Merseyside and Tyne and Wear have the highest number of incidents in April. This has been recognised and we run the Lighter Nights campaign during this period. We recognise that this also coincides with the school Easter holidays.

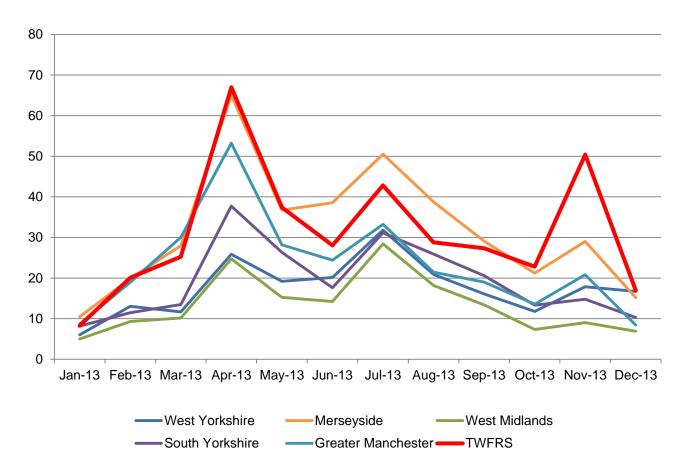


Figure 8. Mets comparison year-month deliberate secondary fires for 2013 (per 10,000 pop.)

- 4.5. Figure 9 on the next page shows that we record a high number of deliberate secondary fires in November but other Met FRS do not have such a high spike. This is highlighted when we look at the incidents other Met FRS have over the bonfire period (1-6 November) although Merseyside and Greater Manchester see the greatest reduction year on year.
- 4.6. There are a lot of bonfire night promotions across other Met FRS areas, a search on the internet found 34 events in Greater Manchester included in newspaper listings, 15 still included on websites in Merseyside and interestingly West Midlands has the Alton Towers Fireworks display which is the last 3 days that the park is open and attracts 30,000 people each day.
- 4.7. In Tyne and Wear, as part of our Bonfire Campaign, we published links to all local authority firework displays on our website and recommended attendance at these events.

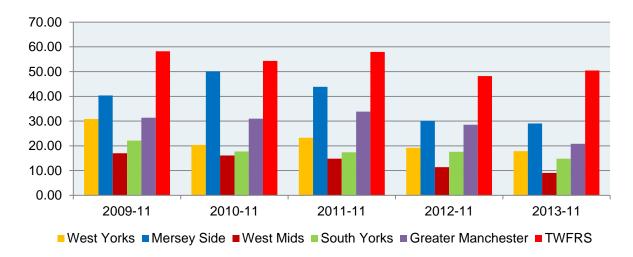


Figure 9. Met FRS Deliberate Secondary Fires November 2009 to 2013 (per 10,000 pop.)

- 4.8. The whole month of November shows the same trend when normalised to per 10,000 population. Merseyside are of particular interest as they have significantly reduced their incidents in November since 2010.
- 4.9. Merseyside FRS have introduced call challenge to certain areas, particularly in November, which establishes if the secondary fire being reported poses any risk to life or property and if it does not they do not attend the incident. This also avoids conflict with those engaging in anti-social behaviour. The call challenge also allows calls from the same area to be 'stacked' to save on resources.
- 4.10. Merseyside FRS also use Street Intervention Teams to patrol known hot spot areas to engage with likely perpetrators and discourage anti-social behaviour.

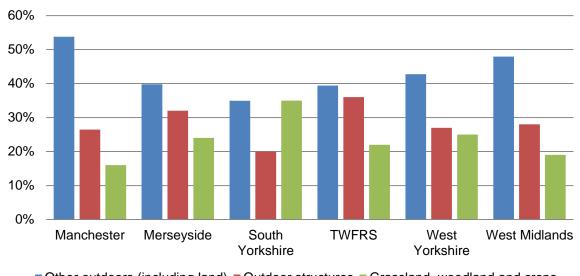
### 5. Incident Types<sup>2</sup>

- 5.1. Looking at types of incidents West Midlands have the overall lowest figures however these were the most difficult to compare to the other Met FRS, the information supplied does not match with our data and that from other Met FRS.
- 5.2. West Midlands record a lot fewer property types for deliberate secondary fires compared to the other Met FRS. The average number of property types (excluding West Midlands) is 89 types of property per Met FRS however West Midlands only have 33 property types including 306 incidents where property type is bin bag; this is not a category in IRS. Each Met FRS uses different categories, for example South Yorkshire and Merseyside use 'park' as a level 4 property type but the others do not.

-

<sup>&</sup>lt;sup>2</sup> Data relating to the property type of the incident is recorded differently by each Met FRS. We have used the property type to produce a set of summary figures to assist analysis. However, the exact classification and recording of the property type will vary across the Met FRS.

- 5.3. Between 2009/10 and 2012/13 the majority of incidents (95% or 147,976) fall under three categories (property level 2):
  - "Other outdoors (Including Land)" 45% (69,803).
  - "Outdoor Structures" 28% (43.905)
  - "Grassland, Woodland and Crops" 22% (34,268).



■ Other outdoors (including land) ■ Outdoor structures ■ Grassland, woodland and crops

Figure 10. Met FRS Top Three Property Types per 10,000 population, 2009/10 to 2012/13

- 5.4. However it has been possible to group certain property types into categories and figure 11 shows that for each Met FRS the majority of deliberate secondary fires between 2009/10 and 2012/13 were related to refuse. A further breakdown of this can be found at appendix A.
- 5.5. Grassland is also often cited as another main property type for deliberate secondary fires and whilst these account for approximately a further 11% they are not as prolific as refuse fires.

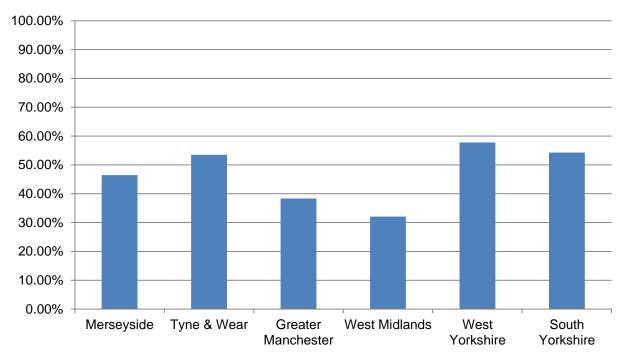


Figure 11. Property Type Level 4: refuse as a percentage of all deliberate secondary fires 2009/10 to 2012/13

#### 6. Met FRS Summary

- 6.1. To summarise the comparisons with the other Met FRS we have seen that deliberate secondary fires are decreasing but the rate of reduction is lowest in Tyne and Wear.
- 6.2. Most deliberate secondary fires occur in April and November. The time of day when these incidents peak is early evening.
- 6.3. West Midlands are consistently top performers whilst Merseyside and Tyne and Wear have the poorest performance.
- 6.4. Our performance is poorest, when compared to the other Met FRS, in November, especially around the Bonfire period.
- 6.5. Merseyside made considerable improvements in 2012. This was achieved by introducing call challenge and working with communities and partners to address anti-social behaviour.

#### 7. Initiatives to reduce anti-social behaviour/deliberate secondary fires

7.1. All of the Metropolitan Fires Services undertake prevention and education interventions including public engagement activities such as open days, school programmes, as well as YFA and Princes Trust programmes in some areas. In this section the report details some of the specific interventions relating to reducing deliberate secondary fires.

#### 7.2. Tyne and Wear

- 7.2.1. We deliver a variety of mainstream programmes to reduce deliberate ASB secondary fires including Schools Education, Safetyworks!, Young Firefighters, the Juvenile Firesetters Education programme, Prince's Trust and the Phoenix Project. Additionally we have focused initiatives that concentrate on our peaks of Bonfire night and the lighter nights in the spring.
- 7.2.2. During the Bonfire initiative in 2013, there was a 7% reduction in the total number of calls received by Service Control, a 6% reduction in the total number of incidents attended and a 3% reduction in the number of deliberate ASB secondary fires.
- 7.2.3. An ASB policy has been developed by P&E SHQ to support the work by Service Delivery with the current performance and future actions monitored by the Performance Action Groups.
- 7.2.4. All stations have planned ASB work within the Quarterly Training Plan and watches will report fly tipping, refuse build up, unsecure derelict properties and abandoned vehicles to the local authority.
- 7.2.5. Our incident statistics are passed to local authorities, in order to provide their enforcement teams with up to date information on where trends emerge in ASB fire-setting. The same information is provided to Northumbria Police and other partners at Multi-Agency meetings (LMAPs, SNGs, SNAPs, CAFs).
- 7.2.6. Specific district initiatives are also delivered such as:
  - In 2013/14, 1,780 Year 6 pupils from across the Sunderland area attended Safetyworks!. The emphasis of these sessions was ASB and its consequences. This project was delivered in partnership with Sunderland City Council and the Police.
  - Following a serious arson incident in Gateshead, the Community Safety Board partners came together to fund an interactive session at Safetyworks! aimed at increasing awareness of the problems and consequences of being involved in deliberate fire setting. 388 pupils from 15 local primary schools attended Safetyworks!. Corporate Communications and Media worked with Gateshead District and produced the "Anti-social behaviour – It's no game playing with someone's life" DVD.
  - Safe Newcastle funded an interactive targeted education programme in March 2013 at Safetyworks! aimed at bringing about a behavioural and attitudinal change among the age group most frequently involved in this type of behaviour. The "Anti-social behaviour – It's no game playing with someone's life" DVD was used. Over 200 pupils from 3 schools and the YOT attended.

- With funding from the South Tyneside Safer Neighbourhood Fund a Boldon ASB fire initiative was initiated in early 2012. This initiative involved engaging with young people not in main stream education, employment or training (NEETs) though social media and holding diversionary activities on Wednesday evenings in Boldon. This was run in conjunction with the Bored in Boldon community group project an E-communication initiative to promote diversionary activities and discuss fires safety issues. Only 2 secondary fires were reported in Boldon during April 2012 compared to 32 in April 2011.
- External funding has previously been received to run the Gibber Educational Theatre Group in Sunderland, Newcastle and North Tyneside. This was aimed at 13-14 year olds, highlighting the dangers of ASB and the risks to the community as well as other social issues such as inappropriate alcohol consumption and obtaining a criminal record through the delivery of plays tailored for the target audience. As a result in North Tyneside it was identified that the number of secondary fires reduced by 59% in the quarter following the initiative compared to the previous year, although a contributory factor was the weather during the same period.

#### 7.3. West Midlands

- 7.3.1. West Midlands FRS have a specific Arson Task Force who work closely with the police to identify areas of increased ASB as well as undertaking projects aimed at the detection and reduction of arson incidents. These include vehicle removal schemes and void property referral schemes. They issue guidance to schools and businesses regarding arson and crime prevention. West Midlands FRS attributes the success of these projects to partnership working with the chambers of commerce, local authorities, Forensic Science services and the Justice System. This has resulted in a reduction in incidents as well as financial savings.
- 7.3.2. West Midlands FRS also has a proactive, award winning schools programme which is directly attributed to the reduction in deliberate secondary fires. These include the "Big Fire Engine Activity Box" distributed to Pre-schools and reception classes and the "Spark" and "Arson Awareness" programmes delivered to Infant and Junior schools providing fire safety awareness as well as hard hitting short films on the consequences of setting fires. The "Your Choice" programme recognises the independence of secondary school pupils as peers and that school colleagues have more influence than parents and teachers. This programme includes "Arson About" a theatre group and "Feel the Heat" a DVD based on real incidents to portray the real consequences of Fire Setting. They also have a "Red Hot Education Station" which provides a unique first-hand experience of the consequences of fire and fire setting.
- 7.3.3. West Midlands CFS officers use bicycles to engage, support and educate young people congregating within parks and open spaces. This has provided positive

interactions and opportunities to prevent potential ASB. They also have a specialist dog team for arson investigation which is sponsored by private sector partners and sponsors

7.3.4. West Midlands FRS do not conduct evaluations on their campaigns

#### 7.4. West Yorkshire

- 7.4.1. In 2008 West Yorkshire FRS ran a "Enjoy a Safer Life" campaign specially aimed at the transient student population, they used a student ambassador who was a female student living in shared accommodation. They launched a bespoke website <a href="www.saferlife.co.uk">www.saferlife.co.uk</a> and a dedicated help line. The campaign included a YouTube video, posters and targeted vehicle liveries, to promote fire safety issues.
- 7.4.2. During 2009 West Yorkshire launched "Safety Central" The activities within this facility have provided a valuable insight in to how to influence specific groups as well as contributing to their Fire Safety and public engagement strategies. For example, they have used this information to create tailor made resources for the specific groups they target as well as involving the groups from conception to realisation of the projects; which included DVD, competitions and city centre demonstrations. They attribute the reduction in incidents to the success of this project.

#### 7.5. Greater Manchester

- 7.5.1. Previously arson attributed to 75% of fires attended by Greater Manchester FRS. In 2007 they launched a campaign aimed at young people; the posters stated "the latest game for idiots and losers" and replicated the design of a computer game.
- 7.5.2. There is also a Firestopper Freephone line enabling residents to anonymously report any incidents of fire related ASB.

#### 7.6. South Yorkshire

- 7.6.1. In South Yorkshire FRS deliberate fires accounted for up to 70% of all fires attended and place a strong emphasis on working towards reducing this figure. One of their engagement programmes is aimed at 13-17 year olds and provides a 5 day course for children involved in ASB, bullying and truancy. They also have the "Fire Watch Crew" programme aimed at 9-10 year olds who accompany firefighters on arson patrols. South Yorkshire FRS saw a 50% reduction in deliberate fires around the area of the school involved in the trial.
- 7.6.2. This has resulted in a 45% decrease in deliberate secondary fires between 2007/08 and 2011/12.

7.6.3. South Yorkshire FRS also identified that deliberate fires in buildings are usually preceded by vandalism such as graffiti.

#### 7.7. Merseyside

7.7.1. Apart from the call challenge initiative and the Street Intervention Teams mentioned in section 4 and the partnership working in section 9 Merseyside FRS did not provide any further information about initiatives to drive down deliberate secondary fires.

#### 8. Other Influences

#### 8.1. Weather

- 8.1.1. The Met Office data collection points do not directly match the Metropolitan Fire Service Areas. Therefore data for TWFRS was used from Durham, which is the closest collection point.
- 8.1.2. CLG's Fire Statistics Monitor: England for April 2012 to March 2013 acknowledged that much of the decrease in fire incidents in 2012/13 compared to 2011/12 was due to the levels of rainfall which were well above average in spring and summer 2012. Outdoor fires (which include the majority of deliberately started fires) account for half of fire incidents attended. Figure 12 shows the impact of rainfall against deliberate secondary fires. It is a comparison between the average Mets FRS deliberate secondary fires and average rainfall in the Met FRS areas.

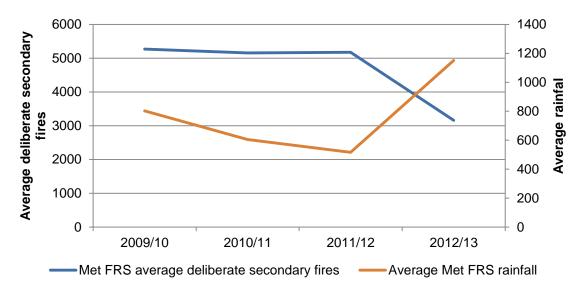


Figure 12. Met FRS average deliberate secondary fire compared to average rainfall 2009/10 – 2012/13

8.1.3. Previous analysis undertaken to investigate the possibility of a link between rainfall and deliberate secondary fires revealed a statistical correlation as shown in figure 13. There is also local intelligence support from Performance

Action Groups (PAG) that extensive rainfall reduced the incidence of these deliberate fires.

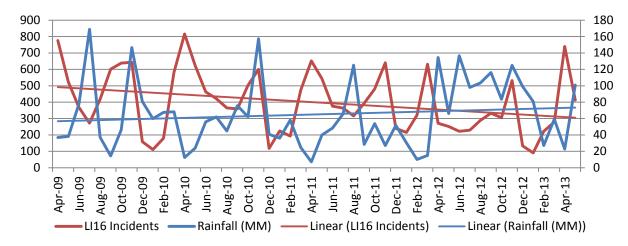


Figure 13. Average rainfall and Tyne and Wear number of LI16 Incidents

#### 8.2. Indices of Multiple Deprivation

- 8.2.1. Statistically there is a moderate correlation between deprivation and deliberate fires. With Tyne and Wear having the highest average indices of multiple deprivation (IMD) we should look at areas where we have high IMD.
- 8.2.2. To assess the relationship between the IMD ratings and incidents attended, we correlated the IMD ratings against different incident types attended between 2010/11 to 2012/13. The strongest correlation we found was between IMD and deliberate secondary fires we attend proving that there is a link between deprivation and ant-social behaviour fires.
- 8.2.3. Figure 14 on the next page shows a map where the wards with the highest (red) levels of IMD are in Tyne and Wear on the left. You will see that these areas are also where we see the deliberate secondary fires on the map on the right further demonstrating the link between deprivation and these incidents.

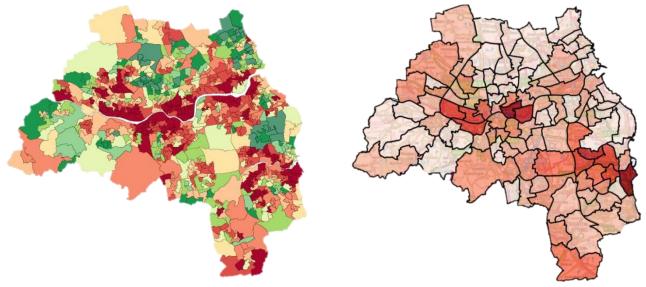


Figure 14. IMD levels by Ward compared with deliberate secondary fire count by ward

8.2.4. Local intelligence through the PAG suggest that reductions in local authority funding for initiatives to tackle ASB, particularly in deprived areas, have had a negative impact but currently we do not have any evidence to prove this.

#### 8.3. Mosaic Code Profiles

- 8.3.1. The Mosaic Public Sector codes classify all individuals, households or postcodes in the United Kingdom into a set of homogeneous lifestyle types. There are 15 groups.
- 8.3.2. Looking at the Mosaic Code profiles for two wards which are at different ends of the scale for deliberate secondary fires (but still geographically close). We chose two wards that were geographically close but with differing levels of the incidence of deliberate secondary fires one high and the other low. These wards were Hendon and St Michaels in Sunderland. They are neighbours geographically, but have very different numbers of deliberate secondary fires with Hendon having 403 more incidents since Apr 2009 than St Michaels. The Mosaic Codes for these wards were compared.
- 8.3.3. The table below highlights the main Mosaic Code differences between these two wards:

		St Michaels	Hendon
Nu	mber of deliberate secondary fires	143	787
Mo	saic Code		
Е	Middle income families living in moderate suburban semis	934	250
G	Young, well-educated city dwellers	877	1398
0	Families in low-rise social housing with high levels of benefit need	265	1730
Н	Couples and young singles in small modern starter homes	243	80
I	Lower income workers in urban terraces in often diverse areas	96	1015
Ν	Young people renting flats in high density social housing	87	666

Figure 15. Mosaic Code Comparisons St Michaels and Hendon wards

- 8.3.4. The main differences in numbers of Mosaic Code classes occur in the code classifications of O (families in low-rise social housing with high levels of benefit), N (young people renting flats in high density social housing) and I (lower income workers in urban terraces in often diverse areas) which are much fewer in St Michaels than in Hendon. The full comparison can be found at appendix B.
- 8.3.5. One theory from local intelligence is that the reduction in deliberate secondary fires could be due to engagement with technology (e.g. games console/tablet usage). Looking at the areas where we have high deliberate secondary fires the general perspectives section of the Mosaic Code description gives a percentage of the people in the a classification who 'try to keep up with technology' the codes which are high in Hendon (O,G,I between 29% and 36%) have a lower

percentage than the codes in St Michaels (E,G,B between 27% and 45%) this suggests that there are higher levels of technology usage within St Michaels compared to Hendon and could mean less ASB.

- 8.3.6. Following this we looked to see if there was a correlation with release dates for major consoles and games and less deliberate secondary fires, there does seem to be some correlation but this would need further investigation into the Mosaic Code profiles and other information.
- 8.3.7. We attempted to compare Mosaic types with other similarly performing Met FRS to see if the same Mosaic types we consistently in the top 'performing' wards, however Merseyside and Greater Manchester do not use Mosaic Codes.

#### 9. Comparison with Police Data<sup>3</sup>

9.1. The level of ASB incidents recorded by the police nationally is falling, as indicated by the yellow trend line in figure 16. However, the level of incidents in the North East, and Northumbria Police area in particular, is well above the national average.

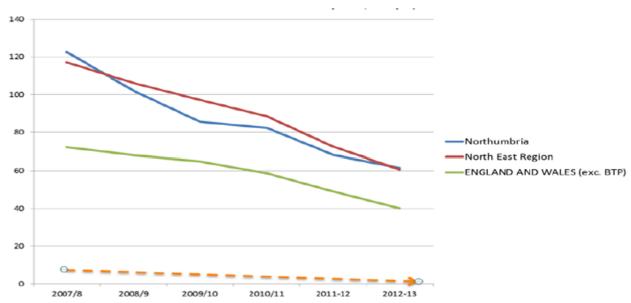


Figure 16. ASB incidents per 1,000 population: Trend

- 9.2. In 2011/12 we attended 6,010 deliberate fires as opposed to the 76 ASB incidents reported in these statistics for the whole North East region. Fire related ASB is therefore underreported.
- 9.3. Local policing summaries show the breakdown of ASB incidents by district. Incidents have reduced in all areas over the last year but remain the highest in Newcastle. This reduction is shown in figure 17 below.

<sup>&</sup>lt;sup>3</sup> Police data is available from the Police UK Data website but is only available back to December 2010. There are also known issues with the data including location accuracy, double counting of ASB and crime and constantly changing data.

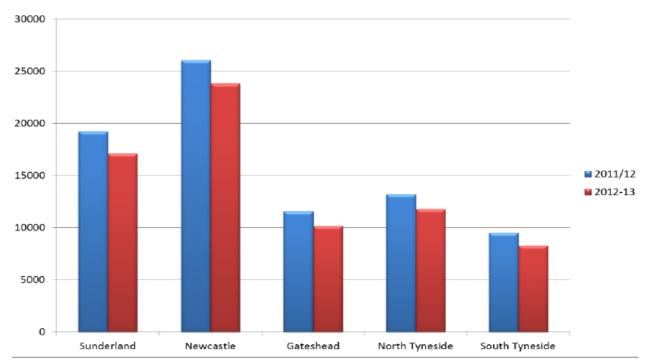


Figure 17. ASB incidents reported to police in Tyne and Wear 2011/12 – 2012/13

9.4. Looking at the geographical locations for deliberate secondary fires and Police UK data in the maps below we can see that there is a link between the areas where the police record ASB and we have recorded our ASB incidents.

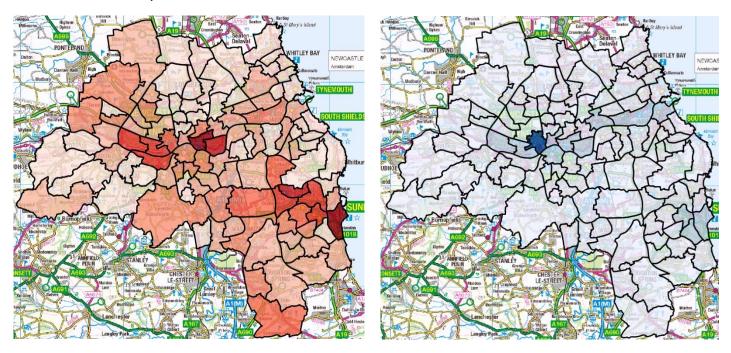
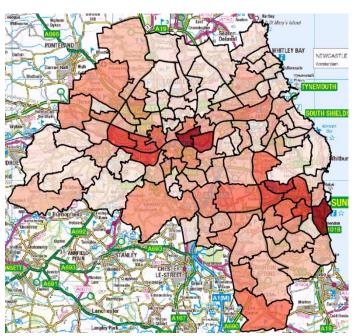


Figure 18. Tyne and Wear FRS LI16 count per ward

Police UK Data ASB count per ward

9.5. The data highlights the concentration of ASB in the city centres, particularly Newcastle and the Westgate ward.

- 9.6. By filtering the police data further (only criminal damage and arson) we can see a much more detailed view of the where the police have issues.
- 9.7. These maps correlate much more closely. Nearly matching our areas in Newcastle, Sunderland and North Tyneside.



Richards Charles Commonts Strate Commonts Commonts Strate Commonts Common

Figure 19. Tyne and Wear FRS LI16 count per ward

Police UK Data ASB only criminal damage and arson count per ward

9.8. Northumbria Police, like Met FRS, are also seeing a reduction in ASB but our deliberate secondary fires have not reduced as much over the same period.

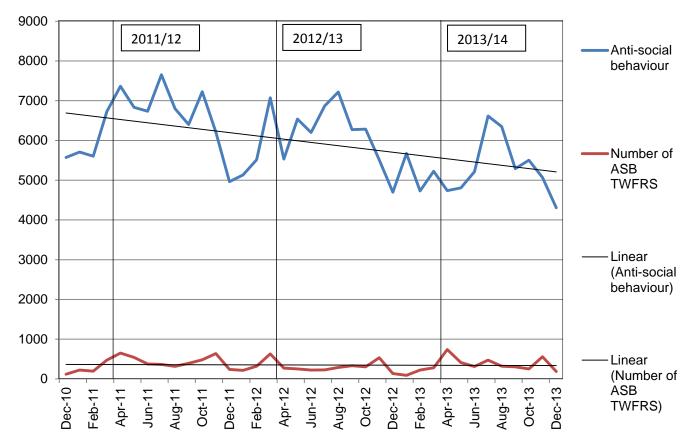


Figure 20. ASB crime compared to deliberate secondary fires 2011/12-2013/14

- 9.9. When ASB crime is compared with deliberate secondary fires the trend lines for reduction are different with crime reducing more rapidly than the line for fires.
- 9.10. However, when data for criminal damage and arson (only) is compared with deliberate secondary fires in figure 21 on the next page, the match between the downward trends is much closer. The police data shows a much 'smoother' level of incidents without the major spikes in April and November.

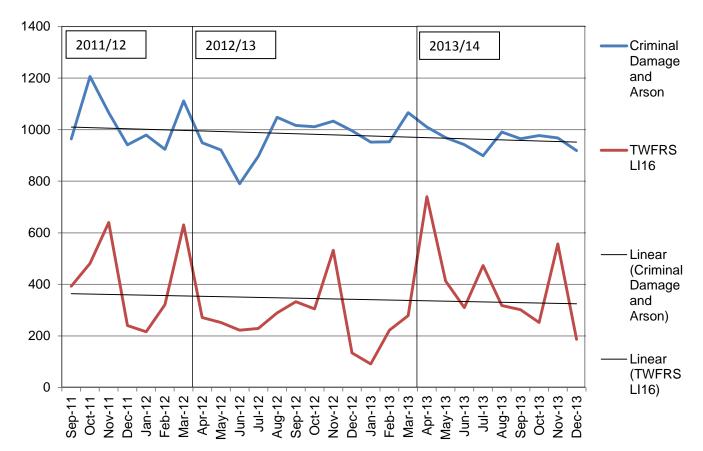


Figure 21. Crimal damage and arson compared to deliberate secondary fires 2011/12-2013/14<sup>4</sup>

- 9.11. Police UK data was also gathered for the other Met Police to look at how they compare to the FRS. We focussed on the month of November as this month was where we had a large increase in incidents but other Mets did not seem to have this increase.
- 9.12. We looked at 3 other police forces in Met FRS areas (GMC, West Midlands and South Yorkshire) to compare them to Northumbria Police. The majority have seen a reduction in criminal damage and arson (West Midlands are the only Police Force who saw an increase in November year on year. West Midlands are the best performing Met FRS). Within Tyne and Wear, Northumbria Police have seen a reduction in criminal damage and arson incidents in November.
- 9.13. Merseyside worked with their local police force to target known gangs who were responsible for deliberately starting fires and other anti-social behaviour by 'removing' their ringleaders. Once the ringleader was not there they found that the gangs broke up.

#### 10. Tyne and Wear Analysis

10.1. In this section we will look specifically at incidents in Tyne and Wear.

70

<sup>&</sup>lt;sup>4</sup> Police data for criminal damage and arson is only available since Sep 2011

10.2. The general time of day pattern of incidents between April 2009 and March 2014 shows a gradual increase from 10:00 hours until 21:00 hours, with 55% (12,712) of all incidents occurring between 17:00 hours and 21:00.

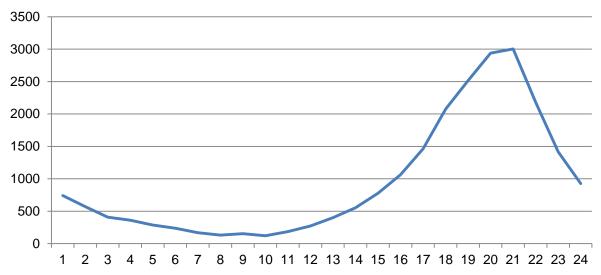


Figure 22. TWFRS deliberate secondary fires by time of day 2009/10 - 2013/14

10.3. When looking at the day of the week on which an incident occurs between April 2009 and March 2014, it is fairly evenly distributed across week days with an increase on the average of 9% on Saturdays and 14% on Sundays.

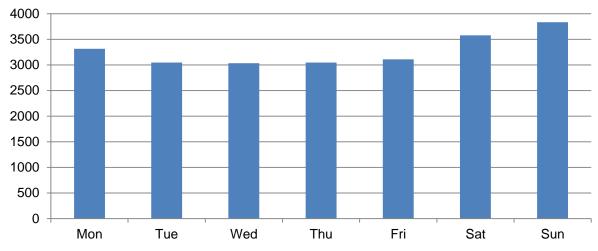


Figure 23. TWFRS deliberate secondary fires by day of week 2009/10 - 2013/14

10.4. Between April 2009 and March 2014 the total number of incidents attended in each month, show that April is the highest (14.2%) closely followed by November (12.9%). See figure 24.

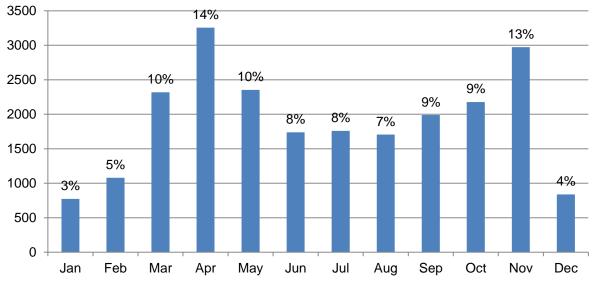


Figure 24. TWFRS deliberate secondary fires by month 2009/10 - 2013/14

10.5. When property type is examined the majority (78% or 17,822 incidents) of the deliberate secondary fires between 2009/10 and 2013/14 fall into 5 property types, as detailed in the table below

Property Level 4 Description	Number of incidents
Loose refuse (including in garden)	8,628
Small refuse/rubbish/recycle container (excluding wheelie bin)	3,556
Refuse/rubbish tip	2,182
Grassland, pasture, grazing etc.	1,995
Tree scrub (includes single trees not in garden)	1,461

Figure 25. TWFRS deliberate secondary fires top 5 property types 2009/10 - 2013/14

- 10.6. The majority of our deliberate secondary fires fall into the category of refuse or rubbish. Wheelie bin fires falls just outside of the top 5 at 6<sup>th</sup> with 1,097 incidents however consideration should be given that the category of wheelie bin was only added to IRS in 2012.
- 10.7. The following graph shows the top 3 property type categories by month of year for 2009/10 to 2012/13. We classify bonfires as "Refuse/Rubbish tip" hence the high numbers in November.

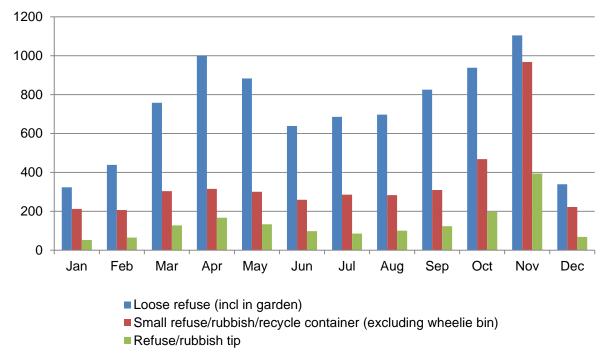


Figure 26. TWFRS deliberate secondary fires top 3 property level 3 2009/10 - 2013/14

10.8. The most incidents occur in Sunderland followed by Newcastle as shown in figure 27. All districts are showing a downward trend over the five year period although the rate of reduction varies between all of the districts.

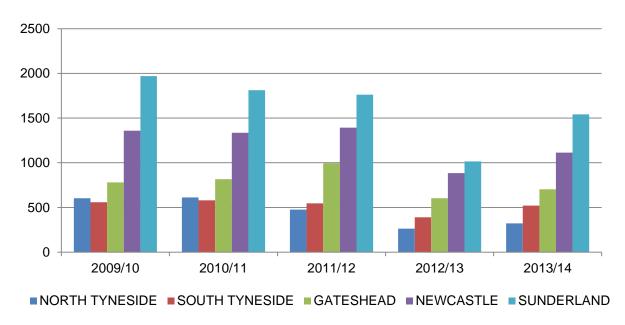


Figure 27. TWFRS deliberate secondary fire per district 2009/10 - 2013/14

10.9. Looking at figures for each year, the wards with the highest number of incidents over the last five years are:

Year	Top 5 wards with highest number of incidents 2009/10-2013/14
2009/10	Hendon, Castle, Elswick, Millfield, Benwell and Scotswood
2010/11	Walker, Hendon, Byker, Castle, Elswick
2011/12	Hendon, Castle, Walker, Elswick, Byker
2012/13	Byker, Hendon, Dunston and Teams, Millfield, Benwell and Scotswood
2013/14	Walker, Southwick, Hendon, Redhill, Benwell and Scotswood

Figure 28. Wards with highest number of incidents 2009/10 - 2013/14

- 10.10. Hendon is the only ward to appear in the above list every time over the five years, although it should be pointed out that significant reductions are being made in this ward. Other wards such as Walker, Benwell and Scotswood, Byker and Castle also appear regularly.
- 10.11. Over the last five years significant reductions have been made in the wards of Hendon, Castle, Washington West, Wallsend and Denton. If initiatives have been targeted in these wards they should be investigated to determine if they can be carried out elsewhere.
- 10.12. We compared incidents occurring during school holidays around Easter as this is typically the beginning of the lighter nights with term time in the same months. It was difficult to find historical dates for school holidays from some Local Authorities so where we were unable to confirm the data the dates for South Tyneside were used.
- 10.13. On average over the last four years during the Easter school holidays there was an increase of 7 incidents per day compared to the dates during March, April and May when there were no school holidays. The most incidents during the Easter school holidays occur on Sunday and Monday whereas during term time the most incidents occur at weekends.
- 10.14. The table below shows the difference in number of incidents per day of the week.

Day of Week	Average number of incidents per day (term time)	Average number of incidents per day (school holiday)	Difference
Monday	16.33	25.88	9.55
Tuesday	15.60	23.63	8.03
Wednesday	14.65	21.88	7.23
Thursday	14.12	20.38	6.26
Friday	15.80	20.88	5.08
Saturday	17.27	22.88	5.61
Sunday	19.02	26.38	7.36
Average	16.12	23.13	7.01

Figure 29. Comparison of incidents during school holidays with incidents during term time 2009/10 – 2012/13

#### 11. Summary

#### 11.1. To summarise this report we showed:

- Like all Met FRS we are seeing a downward trend in the number of deliberate secondary fires that we attend. However, our reduction is lower than the others.
- Incidents occur at similar times of day, days of week and months with all Met FRS showing similar peaks and troughs.
- The peak time is between 16:00 and 20:00 hours with slightly more incidents occurring on Saturday or Sunday but there is very little difference with the other days of the week.
- The peak months are April and November which is also similar to the Met FRS but our peaks appear higher than the others, with the exception of Merseyside.
- There is a spike in November compared to the other Met FRS. This is more apparent during the Bonfire period (1-6 November). Other Mets run similar campaigns to us.
- The predominant property type is refuse, linking to local authority changes impacting on incidents involving refuse. Withdrawal of grass cutting services appears to have little or no impact on the incidence of deliberate secondary fires.
- Initiatives from other Met FRS have been identified and should be considered for Tyne and Wear. For example, South Yorkshire FRS's Fire Watch Crew that engages with younger children.
- There is a link between rainfall and deliberate secondary fires. When there is more rainfall there are less deliberate secondary fires.
- There is also a link between deprivation and where deliberate secondary fires occur. Areas with lower IMD scores have more incidents.
- There is a link between Mosaic Codes and the incidence of deliberate secondary fires by comparing two geographically adjacent wards that have a different number of incidents.
- Most incidents occur in Sunderland and Newcastle, but all districts show a downward trend over the last five years.
- There is a relationship between the wards where criminal damage and arson are reported to the police and deliberate secondary fires in Tyne and

Wear. This could indicate an opportunity for joint working with both parties addressing the same problem aiming to achieve the same goal.

• Incidents increase in number during the schools' Easter holidays with the most occurring on Sunday or Monday.

Appendix A. Deliberate Secondary Fires: Property Type Level 4

West Yorkshire				
Property Type	Count	% of total incidents		
Loose refuse (incl in garden)	11318	36.90%		
Small refuse	4670	15.23%		
Grassland, pasture, grazing etc	2493	8.13%		
Tree scrub (includes single trees not in garden)	2154	7.02%		
Large refuse	1743	5.68%		
Scrub land	1186	3.87%		
Wheelie bin	808	2.63%		
Other outdoor location	649	2.12%		
Private	634	2.07%		
Wasteland	535	1.74%		

West Midlands				
Property Type	Count	% of total incidents		
Loose refuse / rubbish	6594	20.22%		
Rubbish bin / small refuse container outside	3855	11.82%		
Parkland	3422	10.49%		
Bonfire	3185	9.77%		
Wasteland	2485	7.62%		
Derelict building (secondary fire location)	1329	4.08%		
Large refuse (skip)	1315	4.03%		
Other rubbish item (e.g. dumped/discarded)	1249	3.83%		
Scrub land	1167	3.58%		
Canal or riverbank vegetation	1033	3.17%		

South Yorkshire				
Property Type	Count	% of total incidents		
Loose refuse (incl in garden)	5821	54.31%		
Grassland, pasture, grazing etc	1738	16.21%		
Large refuse/rubbish container (skip)	747	6.97%		
Private/Domestic garden/allotment (vegetation not equipment/building)	382	3.56%		
Other outdoor items including roadside furniture	181	1.69%		
Heathland or moorland	151	1.41%		
Other outdoor location	145	1.35%		
Park	141	1.32%		
Hedge	117	1.09%		
House - single occupancy	109	1.02%		

Tyne and Wear				
Property Type	Count	% of total incidents		
Loose refuse (incl in garden)	8487	37.80%		
Small refuse/rubbish/recycle container (excluding wheelie bin)	3528	15.71%		
Refuse/rubbish tip	2162	9.63%		
Grassland, pasture, grazing etc	1926	8.58%		
Tree scrub (includes single trees not in garden)	1448	6.45%		
Wheelie Bin	1023	4.56%		
Scrub land	989	4.41%		
Large refuse/rubbish container (skip)	911	4.06%		
Railings	218	0.97%		
Other outdoor items including roadside furniture	209	0.93%		

Greater Manchester				
Туре	Count of Property type	% of total incidents		
Loose refuse (incl in garden)	15388	38.34%		
Wheelie Bin	6008	14.97%		
Grassland, pasture, grazing etc	2959	7.37%		
Small refuse/rubbish/recycle container (excluding wheelie bin)	2707	6.75%		
Scrub land	2459	6.13%		
Large refuse/rubbish container (eg skip)	2089	5.21%		
Tree scrub (includes single trees not in garden)	1931	4.81%		
Other outdoor items including roadside furniture	847	2.11%		
Private/Domestic garden/allotment (vegetation not equipment/building)	583	1.45%		
Wasteland	539	1.34%		

Merseyside				
Туре	Count of Property type	% of total incidents		
Loose refuse (inc in garden)	9061	31.56%		
Small refuse/rubbish	4283	14.92%		
Tree scrub (includes single trees not in garden)	1884	6.56%		
Refuse/rubbish tip	1512	5.27%		
Large refuse/rubbish container (eg skip)	1475	5.14%		
Grassland, pasture, grazing etc	1467	5.11%		
Scrub land	1387	4.83%		
Wheelie bin	1228	4.28%		
Private/Domestic garden/Allotment (vegetation not equipment/building)	861	3.00%		
Park	697	2.43%		

### Appendix B: Mosaic Code profile comparisons between St Michael's ward and Hendon ward.

St Michaels (Sunderland)

Hendon (Sunderland)

Mosaic Code	Count	Mosaic Code	Count
E Middle income families living in moderate suburban semis	934	O Families in low-rise social housing with high levels of benefit need	1730
G Young, well-educated city dwellers	877	G Young, well-educated city dwellers	1398
B Residents of small and mid-sized towns with strong local roots	454	I Lower income workers in urban terraces in often diverse areas	1015
L Active elderly people living in pleasant retirement locations	308	N Young people renting flats in high density social housing	666
O Families in low-rise social housing with high levels of benefit need	265	M Elderly people reliant on state support	613
D Successful professionals living in suburban or semi-rural homes	261	K Residents with sufficient incomes in right-to-buy social housing	423
H Couples and young singles in small modern starter homes	243	E Middle income families living in moderate suburban semis	250
C Wealthy people living in the most sought after neighbourhoods	241	J Owner occupiers in older-style housing in ex-industrial areas	103
K Residents with sufficient incomes in right-to-buy social housing	239	H Couples and young singles in small modern starter homes	80
M Elderly people reliant on state support	234	B Residents of small and mid-sized towns with strong local roots	23
J Owner occupiers in older-style housing in ex-industrial areas	216	C Wealthy people living in the most sought after neighbourhoods	14
F Couples with young children in comfortable modern housing	129	U Unclassified	9
I Lower income workers in urban terraces in often diverse areas	96	L Active elderly people living in pleasant retirement locations	7
N Young people renting flats in high density social housing	87	A Residents of isolated rural communities	1
A Residents of isolated rural communities	15	D Successful professionals living in suburban or semi-rural homes	1
U Unclassified	10	F Couples with young children in comfortable modern housing	1