Communities and Local Government

Fire and Rescue Service partnership working toolkit for Local Area Agreements

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February 2008
Department for Communities and Local Government

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Contents

The following active spreadsheets are available separately on the Communities and Local Government website

Chapter 1

Overview

1.1 Introduction

The Local Government White Paper *Strong and Prosperous Communities*, published in October 2006, heralded a challenging new agenda for local government and the role of partners, including the Fire and Rescue Service, in delivering better outcomes for communities.

Local Strategic Partnerships (LSPs) will provide the forum for setting the strategic vision for an area, for capturing that vision in the Sustainable Community Strategy, and for agreeing priorities for improvement in Local Area Agreements (LAAs). Upper tier and unitary local authorities will have a duty to consult partner authorities, including Fire and Rescue Authorities (FRAs), when preparing or modifying their Sustainable Community Strategies. In addition, local authorities which are "responsible authorities" under the Local Government and Public Involvement in Health Act 2007 ("the Act") – that is those with responsibility for preparing LAAs – will have to consult "partner authorities" (including FRAs) which are those named at section 104 of the Act. As partner authorities, FRAs must co-operate with the responsible authority in determining the improvement targets specified in draft LAAs.

The purpose of this toolkit is to support FRAs in making the most of the new local performance framework. This toolkit is not statutory guidance and does not replace published or consultation documents. As such, it is entirely at the discretion of FRAs as to whether they have regard to this toolkit.

A central plank of the toolkit is the technical material in Chapter 2. This was commissioned by the Department and carried out by Greenstreet Berman Ltd with the aim of supporting FRAs in making the most of the new local performance framework through the provision of technical examples, graphs and case studies. The material in Chapter 2 responds directly to the areas where the Service has requested support and FRAs have been closely involved in the development of its content.

FRAs will wish to periodically review and evaluate the outcomes both of programmes and partnerships in which they are engaged, not least to ensure that they continue to represent best value for the FRA concerned. Some examples of approaches to review by authorities are set out in Chapter 3.

This toolkit has been developed following input from the Fire and Rescue Service at seminars held by the Department on 4th September in London and on 17th October 2007 in Manchester. The Department is grateful to have been provided with a range of material from various sources for the purpose of compiling the toolkit.

1.2 National Indicator Set

Each LAA will include a maximum of 35 priority improvement targets for the local area, to be agreed by Local Strategic Partnerships (LSPs) with the relevant regional Government Office. These targets will be drawn from a set of 198 national indicators agreed as part of the 2007 Comprehensive Spending Review.

From April 2008 existing Best Value Performance Indicators for Local Government and the Fire and Rescue Service will be replaced by the new set of national indicators (NI).

The list of 198 indicators can be found on the Department's website at:
www.communities.gov.uk/publications/localgovernment/nationalindicator

There are a number of indicators in the national set which are of relevance to FRAs of which two directly measure fire outcomes:

- NI 33 – Arson incidents (deliberate fires); and
- NI 49 – Number of primary fires and related fatalities and non-fatal casualties, excluding precautionary checks.

1.3 Comprehensive Area Assessment (CAA)

A new framework for performance assessment will be introduced to support the delivery of LAAs. From April 2009, Comprehensive Performance Assessment (CPA) will be replaced by Comprehensive Area Assessment (CAA). Further information is available on the Audit Commission's website: www.audit-commission.gov.uk

1.4 Further information

A new draft National Framework for the Fire and Rescue Service has been published for consultation[1] which sets out in more detail what the new performance framework means for the Service in the context of national performance expectations and the support government will provide. The National Framework is clear that key to this is that the new performance framework offers the opportunity for FRAs to build on the work they are already doing with local partners to deliver local priorities and to further discuss, shape, and influence them with others. More information about how the performance framework will affect FRAs is available in the "sectoral narrative[2]" published on 21 December 2007 alongside the suite of narratives explaining the impact of the new agenda on named partners.

The first part of the two-stage guidance on the process for negotiating new LAAs was published on 18 September 2007 and is available on the Department's website at:

www.communities.gov.uk/publications/localgovernment/negotiatingnewlaas

The second part, published in November 2007, can be found at:

www.communities.gov.uk/publications/localgovernment/laaoperationalguidance

A consultation draft of the statutory guidance Creating Strong, Safe and Prosperous Communities to support the Local Government and Public Involvement in Health Act 2007 was issued in November. This is available on the Department's website at: www.communities.gov.uk/publications/localgovernment/statutoryguidance

1.5 Further sources of support

The Government Offices (GOs) represent central government in the regions, and support local authorities and partners in the LSP in their negotiation of the national priority targets. The (GOs) represent directly 11 government departments. In addition to seeking to reflect all aspects of government policy in negotiating LAAs, their role is to assist authorities in joining-up and aligning Departmental policies and programmes to ensure coherence in delivery. After three LAA rounds and the piloting for new LAAs, the GOs have developed significant expertise on getting the best results from the LAA process.

[1] www.communities.gov.uk/publications/fire/nf200811consultation
[2] 'The crucial role of the new local performance framework' is available at: www.communities.gov.uk/publications/localgovernment/fire

Central and Local Government have committed to developing a new, joint approach to supporting excellent performance which is owned and driven forward by local authorities (LAs) and their partners. Through the National Improvement and Efficiency Strategy, the Department will increasingly jointly agree priorities for improvement and development with LAs and partnerships and seek to focus central and local resources on those priorities. Regional Improvement and Efficiency Partnerships (RIEPs) will be at the heart of local arrangements for supporting local partnerships, enabling them to take a stronger lead on performance and improvement and supporting them in the development of their own capacity. FRAs have access through RIEPs to mutual support, regional funds and national programmes of capacity building.

1.6 Toolkit review

This toolkit is being published as a 'living' document on which the Department would welcome feedback/suggestions for further development on an ongoing basis. This approach is intended to allow the Service to take ownership of the document and for the toolkit to remain relevant as the LAA agenda continues to develop. We will work with stakeholders to review the toolkit in the light of feedback received with a view to considering the issue of an updated version in due course. Please e-mail any such comments for consideration to: Clara.McHugh@communities.gsi.gov.uk quoting the subject heading as 'Toolkit review'.

Chapter 2

Technical examples (Produced by Greenstreet Berman Ltd)

2.1 Introduction

The aim of this chapter of the toolkit is to offer FRAs technical examples, tools and case studies which may assist them in working with partners within the LSP.

As mentioned in Chapter 1, there is a set of 198 national indicators which will be used in setting up to 35 priority targets in any LAA. Two of the indicators measure directly fire related outcomes, the first focusing on Primary Fires *(NI 49 Number of primary fires and related fatalities and non-fatal casualties excluding precautionary checks)*. The second is Arson Incidents Indicator *(NI 33)* which is a Home Office led shared indicator but based on deliberate primary and secondary fire data.

The Fire and Rescue Services Act 2004 set out the duties and responsibilities for FRAs to promote fire prevention. It also gave statutory effect to other Fire and Rescue Service activities, particularly with regards to Road Traffic Collisions.

Integrated Risk Management Plans (IRMPs) aim to identify local risks and outline the FRA's strategy to utilise appropriate programmes of protection, prevention and response to address them. The priorities and risks set out in the IRMP action plan may usefully inform FRA engagement with LSPs.

FRAs are currently working effectively in partnership to achieve targets related both to FRA core activities, such as community fire safety, and to help achieve targets that relate to relevant wider social issues such as reducing youth offending.

Additional areas likely to be of particular relevance to FRAs and which will influence wider outcomes within the set of 198 indicators include:

- Prevention of RTCs
- Reduction of anti-social behaviour, including nuisance hoax fire calls and deliberate fires[3] (especially fires in abandoned cars, rubbish fires and bin fires)
- Crime reduction, especially of higher value cases of arson

[3] The term deliberate fire is used in cases where data is collected by FRAs. The term arson is used when the data is collected from Police crime figures.

- Neighbourhood renewal – by improvement of the community environment (such as reduction in fires in abandoned cars, rubbish fires and bin fires), reduction in fear of crime and protection of community assets such as schools
- Youth work
- Helping people live independently
- Reducing accidental fires, fatalities and non-fatal casualties.

It is important to note that even if fire is not included as one of the 35 targets agreed with the GO within the LAA, members of LSPs will still have to report against all 198 indicators.

Supporting information

Later sections of this chapter include the following:

- Performance benchmarking tools
- Case studies
- Examples of research on the link between fire and wider social problems
- A simple 'cost of risk calculator' – this can be useful if your LSP focuses on economic regeneration rather than on social issues
- Examples of targets used by FRAs
- Approaches used by FRAs to define measurable targets.

2.2 Identifying local performance trends

Using benchmarks

FRAs who have participated in earlier LAA rounds have found it helpful to have current data and benchmarks concerning incidents and trends for each local area. This has helped support identification of areas where fire or FRA related issues required attention, provided that the information has been clear and easy to understand for other partners.

Some FRAs have found it useful to:

- Compare the rates of dwelling fire, and/or dwelling fire non-fatal casualties across all of the LAAs that the FRA is engaged with, as in **Example 1**; or
- Compare the rates of dwelling fire, and/or dwelling fire non-fatal casualties against national benchmarks, such as the average rate of dwelling fire in England.

These examples use the **rate** of incidents, rather than the **number** of incidents, which vary according to the size and population of an area. It is common to express the rate of dwelling fire and/or casualty as a rate per million population (pmp), to provide an easy-to-read result.

Rates can also be expressed as a rate per 10,000 people. Comparing rates across LAAs within a single FRA area can provide a 'local feel' to the benchmarking. This has some disadvantages though, including:

- The range in the rates of fire within the FRA area may be limited
- The highest rate of fire in an FRA area may be relatively low compared to other parts of England
- Some FRAs are relatively small with relatively few incidents in each LAA. This can cause significant volatility in the data, with incident rates spiking and dipping from one year to the next.

Where FRAs have had concerns about data volatility or about the quality of data (or have not felt confident in making a judgement about it), they have instead based the benchmarks on the two to three year period preceding the LAA, rather than just the previous year.

Example 1 is taken from a London borough – it outlines how they benchmarked against other London Boroughs and what actions they took in their area. This example has been included to demonstrate how a FRA has carried out benchmarking with those LAAs that they are engaged with. As the London LSPs might perceive themselves to be a peer group of partnerships, and noting that each of the London boroughs has a LSP, it is reasonable to benchmark across such a group of LSPs. Some FRAs have found it preferable to benchmark against national data such as national benchmarks, found later on in this section, to ensure that the benchmarks are representative of England.

Example 1

Identifying priority areas and targets by benchmarking

London Borough of Barking and Dagenham's Crime and Disorder Strategy 2005-2008

Excerpts from the Crime and Disorder Strategy

"Barking and Dagenham has a high number of non-accidental fires compared to other London Boroughs and is ranked the third-highest Borough for non-accidental serious fires in Greater London…"

"Barking and Dagenham also has the second highest number of crime-related smaller fires in London. These include things like dustbin fires and other deliberate fire where there was no threat to people. Barking and Dagenham had the highest rate of crime-related vehicle fires for the years 2000-2005."

"The Community Strategy will deal with the fundamental issues that we know to cause crime such as poverty, educational failure, the general environment, discrimination and low community cohesion."

The strategy includes a target to reduce Primary fires, which include residential fires, by 12 per cent over the next 3 years. As part of the *Safer Homes and Streets Strategy* the fire service will:

- Survey all tower blocks (with the Housing and Health Department) within the Borough to identify where security grills have been installed, and to offer professional advice, guidance and direction
- Provide smoke detectors and advice on fire safety in the home
- Work with the Youth Offending Teams (YOT) and Youth Inclusion and Support Panels (YISPs) to identify offenders in wards who have committed a high number of incidents of arson. Once identified the fire service educate via LIFE and Young Fire setters to address behaviour traits
- Give advice to parents and guardians on dealing with young people in their care who have a predilection for starting fires – through the "Fire-setters Scheme"
- Notify the council of vehicles in need of removal, to ensure removal from the highway within 24 hours of the notice. The local authority will inspect all abandoned vehicles reported to them within 48 hours and deal with them subject to current legislation.

www.london-fire.gov.uk/fire_safety/media/cdact03_barking_dagenham.pdf

Public consultation

Local priorities will also emerge from local consultation and surveys of residents. In particular, surveys of local 'fear of crime' and community issues help identify priorities that are not revealed by incident data. **Example 2** outlines a situation where local residents were concerned about crime, despite statistics indicating it was a low crime area. The FRS developed a target to reduce hoax calls as part of the response to this expressed concern.

Example 2

Identifying local priorities from public consultation

London Borough of Westminster Crime and Reduction Strategy 2005-2008

The London Borough of Westminster made use of an audit that analysed trends, patterns and results of previous consultations against nationally and locally identified priorities. It also compared Westminster's trends with other London Boroughs and against public perceptions.

18,000 summary reports of the Audit were distributed to a total of 1,370 public places, organisations, events and meetings. An additional 8,262 people were encouraged to access the audit and survey online through emails and newsletters.

Altogether there were 699 online and hard copy responses to Westminster's Crime, Disorder and Drug Audit consultation survey. An additional 360 people took part in the electronic voting at Area Forum meetings across Westminster.

The Westminster City Survey 2004 questioned a representative sample of nearly 1,000 people on their feelings of safety and priorities for tackling crime and disorder.

The strategy included six crime and disorder priorities. One of the priorities covered anti social behaviour and within this there was a target to reduce non-accidental fires by 10 per cent.

www3.westminster.gov.uk/docstores/publications_store/CDRS2005-08.pdf

London borough of Harrow Crime, Disorder and Drug Strategy 2005-2008

Whilst Harrow was rated as the second safest Borough in London, fear of crime emerged as the number one issue in a residents' survey and was identified as being abnormally high, particularly taking into account the actual crime rate.

FRA data showed that 43 per cent of Fire Service incidents since 2001 were non-accidental, mainly hoax calls and deliberate fires, so the FRA agreed a target with their local partners to reduce hoax calls (malicious false alarms) by 5 per cent over the next three years.

www.london-fire.gov.uk/fire_safety/media/cdact17_harrow.pdf

Dwelling fire benchmarks

Two approaches are outlined here on how local rates of dwelling fires could be benchmarked. The first compares the local rate against the national average and enables direct comparison with the rate of (for example) dwelling fires in an LAA area with the national average. This option is a very simple way to benchmark.

A second option could be to use the rate of fire benchmarks in the Fire Service Emergency Cover toolkit (FSEC) provided by Communities and Local Government. These benchmarks are based on Communities and Local Government recognised criteria for judging what a high or low rate of incidents is. The criteria also reflect that used in public safety regulation. This option has the additional advantage of allowing FRAs to use the FSEC results to identify LSPs with high risk areas.

Simple national benchmarks

Table 1 shows the average rates of accidental dwelling fire incidents pmp in England in 2005 plus rates for fatalities and non-fatal casualties.

Care must be taken in benchmarking fatality rates due to the high level of volatility in this measure (ups and downs) – the rate of fire is less volatile. The rate of non-fatal casualties may also be used, depending on the size of the area and the volatility of this measure in the area.

Although data on fatalities and non-fatal casualties is provided in Table 1, they are subject to a lot of volatility.

Table 1: Average rate of dwelling fire incidents pmp in England[4]

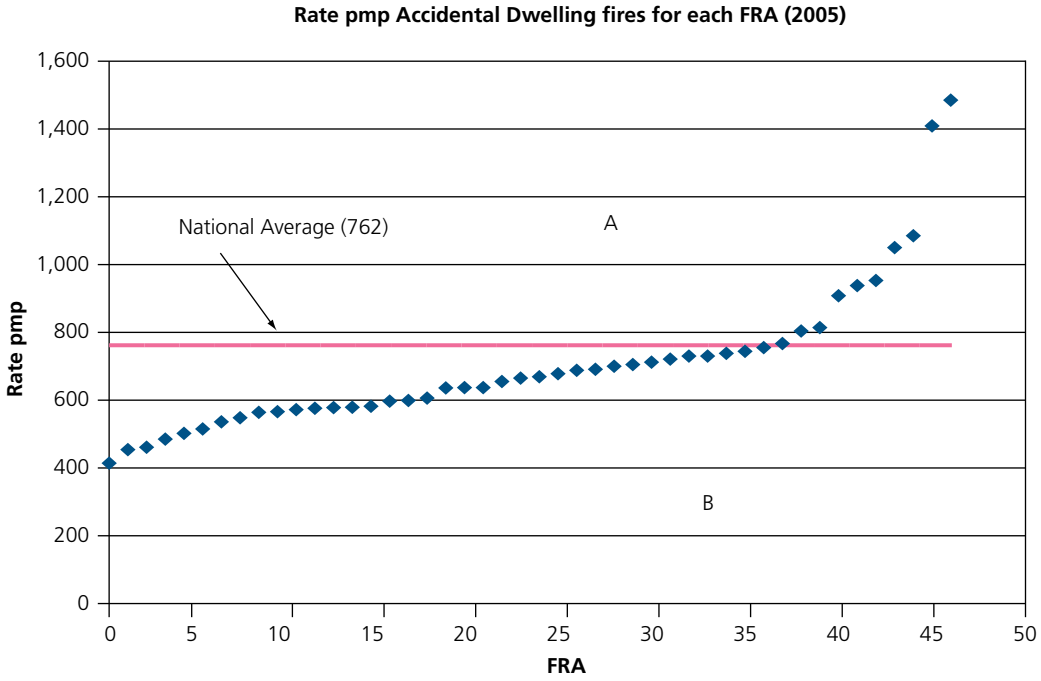
Measure	Average for England (2005)		
	Accidental	Deliberate	ALL
Rate of dwelling fire fatalities pmp	5	1	6
Rate of dwelling fire non-fatal casualties pmp[5]	153	29	182
Rate of dwelling fires pmp	763	162	925

[4] Fire Statistics Monitor Q2 2006: www.communities.gov.uk/documents/fire/xls/323098

[5] The UK National Fire Statistics include precautionary checks in their data on non-fatal casualties for England. These accounted for 42 per cent of non-fatal casualties in the UK in 2005. So, the non-fatal casualty rate excluding precautionary checks in England was probably in the order of 106 pmp in England in 2005.

Figure 1 uses a national average rate of accidental dwelling fire during 2005 (762 – pink line) and compares this with the range in rates of dwelling fire for each FRA in England (blue dots).

Figure 1: Rate of accidental dwelling fire pmp in FRAs ranked from highest to lowest rate[6]



A More accidental dwelling fires than the national average
B Fewer accidental dwelling fires than the national average

Those FRAs above the pink line (A) have a higher rate of accidental dwelling fires than the national average and those below the pink line (B) have a lower rate of accidental dwelling fires than the national average. This means that those FRAs with a higher rate than the national average may be classed as a higher priority than those FRAs below the line.

In practice, if this approach is adopted, FRAs would need to calculate the rate of accidental fires in the area that the LAA covers, not the FRA as a whole and compare the LAA rate with the benchmark.

[6] Fire Statistics Monitor Q2 2006: www.communities.gov.uk/documents/fire/xls/323098

FSEC criteria

Table 2 provides the FSEC criteria on which benchmarks can be based.

For example, an area with a rate of dwelling fire non-fatal casualties of 850 pmp would be classed as having a very high rate of fire.

Table 2: FSEC criteria for benchmarking rates of dwelling fire (all causes) incidents (rates pmp) per year

Term	Dwelling fires	Dwelling fire non-fatal casualties[7]	Dwelling fire fatalities	
Very high	More than 10,000	More than 800	Well above average	More than 20
High	5,000 to 10,000	400 to 800	Above average	10 to 20
Average	2,666 to 4,999	200 to 399	Average	6.6 to 10
Low	1,350 to 2,665	100 to 200	Below average	5 to 6.6
Very low	Less than 1,350	Less than 100	Well below average	Less than 5

Deliberate fire benchmarks

FRAs can also benchmark against the rate of deliberate fires. Below are some examples of benchmarking against deliberate primary fires, against other deliberate fires and against malicious false alarms.

Deliberate primary fires

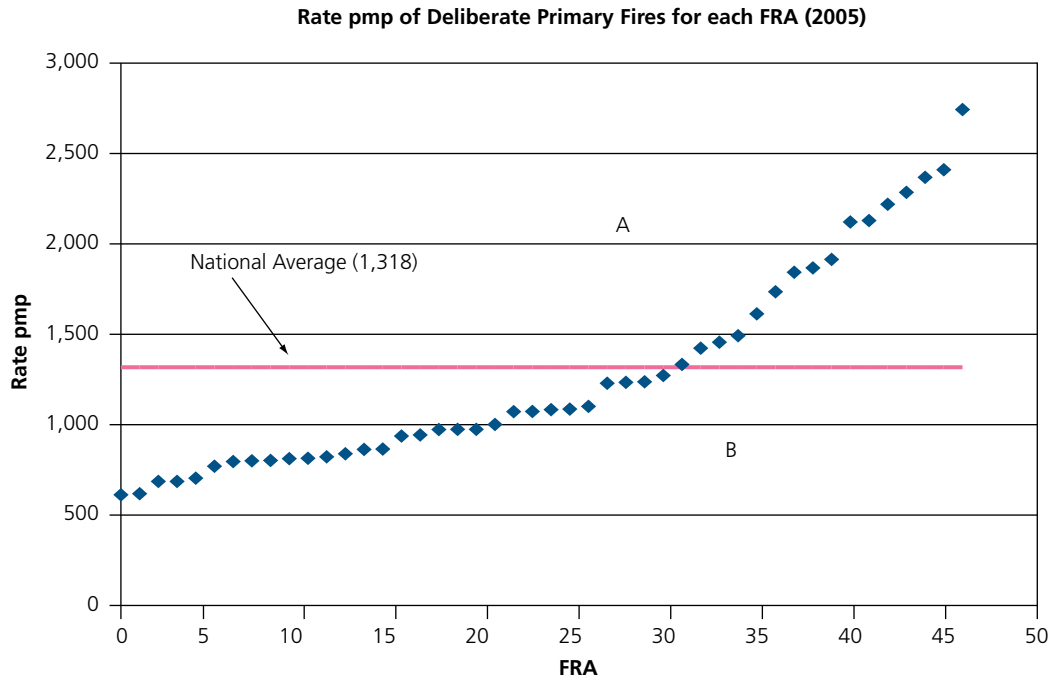
The average rate of deliberate primary fires was 1,318 pmp in 2005, with a range from above 2,700 to about 600 pmp, as shown in **Figure 2**.

Those FRAs above the pink line (A) have a higher rate of deliberate primary fires than the national average and those below the pink line (B) have a lower rate of deliberate primary fires than the national average.

It could be argued that those FRAs with a higher rate than the national average are higher priorities for reducing deliberate primary fires than those FRAs below the line.

[7] FSEC includes precautionary checks in its calculation of non-fatal casualty rates.

Figure 2: Rates of deliberate primary fire in FRAs, ranked from lowest to highest rate[8]



A **More deliberate primary fires than the national average**
B **Fewer deliberate primary fires than the national average**

[8] Fire Statistics Monitor: Q2 2006, www.communities.gov.uk/documents/fire/xls/323101

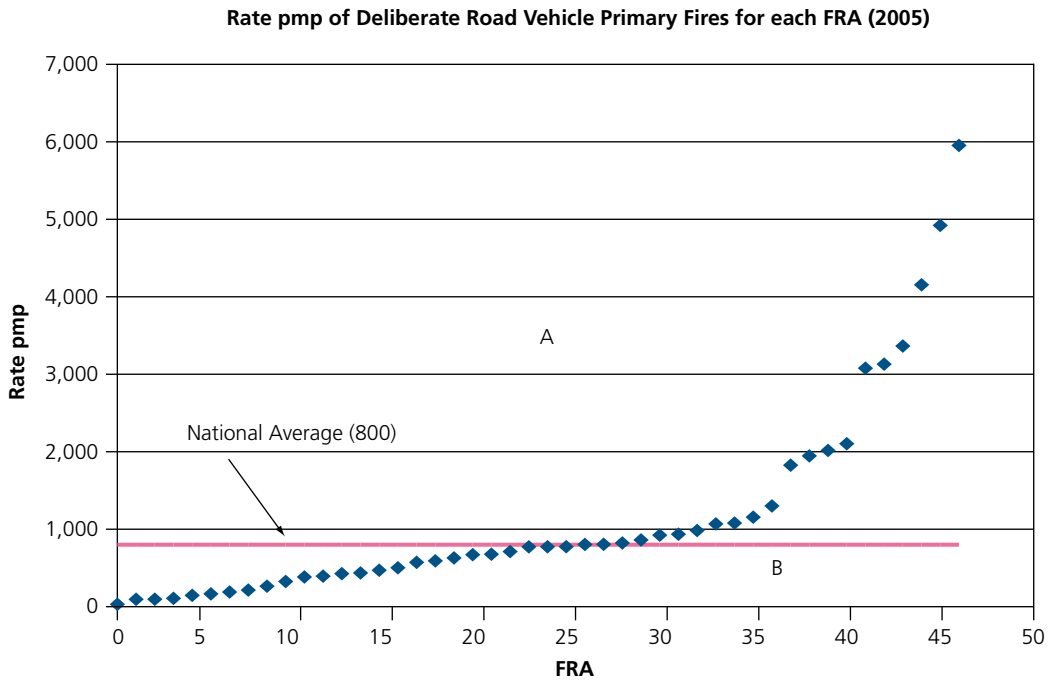
Deliberate car fires

The average rate of deliberate road vehicle primary fires in England was 800 pmp in 2005. The range is shown in **Figure 3** for English FRAs along with the average, ranging from nearly 6000 to 30 pmp.

Those FRAs above the pink line (A) have a higher rate of deliberate road vehicle primary fires than the national average and those below the pink line (B) have a lower rate of deliberate road vehicle primary fires than the national average.

It could be argued that those FRAs with a higher rate than the national average are a higher priority for reducing deliberate car fires than those FRAs below the line.

Figure 3: Rate pmp of deliberate road vehicle primary fires in FRAs, ranked from lowest to highest rate[9]



A More road vehicle primary fires than the national average
B Fewer road vehicle primary fires than the national average

[9] Fire Statistics Monitor: Q2 2006, www.communities.gov.uk/documents/fire/xls/323101

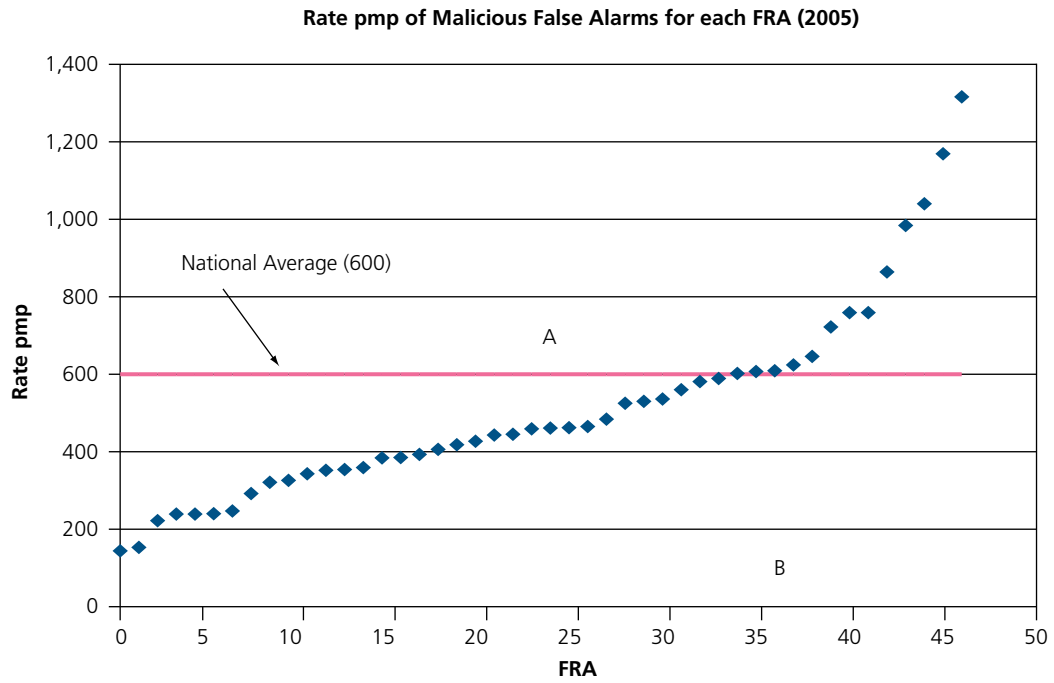
Malicious false alarms

The average rate of malicious false alarms was 600 pmp in 2005 for England, with the highest rate close to 1,400 and the lowest rate under 200 pmp in English FRAs. The range is shown in **Figure 4**, along with the average.

Those FRAs above the pink line (A) have a higher rate of malicious false alarms than the national average and those below the pink line (B) have a lower rate of malicious false alarms than the national average.

It could be argued that those FRAs with a higher rate than the national average might want to set a higher target for reducing malicious false alarms than those FRAs below the line.

Figure 4: Rate pmp of malicious false alarms in FRAs, ranked from lowest to highest rate[10]



A More malicious false alarms than the national average
B Fewer malicious false alarms than the national average

[10] Fire Statistics Monitor: Q2 2006, www.communities.gov.uk/documents/fire/xls/323095

2.3 Non-fire risks

As set out in Section 2.2 under 'Public consultation', local priorities will often emerge from 'fear of crime' surveys and other local consultation of residents. When considering non-fire risks, FRA experience suggests that public consultation on the perception of the risks should be coupled with obtaining data on the issue.

Table 3 offers information on the wider issues of other partners that FRAs may wish to link in with. The table provides National Indicator (NI) numbers for each of the issues for ease of reference.

Identifying indicators that FRAs may contribute towards

FRAs will be discussing with LSPs the main issues in their area and how the FRA may be able to help with making progress against an indicator or target in that area. Table 3 provides a list of indicators that FRAs could potentially become involved with and offers examples of how FRAs might contribute to each of the indicators listed.

Table 3: Examples of possible FRA contribution to non-fire indicators

Selected National Outcome and Indicator Number	Example of possible FRA contribution
NI 5 Overall general satisfaction with local area	Prevention of arson (abandoned cars, rubbish fires, outdoor fires, fires in buildings) so as to improve local community environment
NI 6 Participation in regular volunteering	Use of volunteers to conduct community fire safety work
NI 17 Perceptions of anti-social behaviour	Prevention of 'anti-social' fire crimes, such as arson of abandoned cars
NI 19 Rate of proven re-offending by young offenders	FRA youth work with offenders
NI 23 Perceptions that people in the area treat one another with respect and dignity	Prevention of 'anti-social' fire crimes, such as arson of abandoned cars and FRA youth work
NI 30 Re-offending rate of prolific and priority offenders	FRA youth work with offenders or arsonist counselling
NI 35 Building resilience to violent extremism	FRA capability to respond to violent incidents, for example urban search and rescue capacity
NI 37 Awareness of civil protection arrangements in the local area	FRA consultation with community regarding FRS civil protection arrangements

Table 3: Examples of possible FRA contribution to non-fire indicators *(continued)*

Selected National Outcome and Indicator Number	**Example of possible FRA contribution**
NI 45 Young offenders engagement in suitable education, employment or training	FRA youth work with offenders
NI 47 People killed or seriously injured in road traffic accidents	FRA Road Traffic Collision (RTC) prevention and response activities
NI 48 Children killed or seriously injured in road traffic accidents	FRA RTC prevention and response activities
NI 70 Hospital admissions caused by unintentional and deliberate injuries to children and young people	FRA fire and RTC prevention and response activities
NI 138 Satisfaction of people over 65 with home and neighbourhood	FRA conduct of home fire safety checks and prevention of 'anti-social' fire crimes, such as arson of abandoned cars and FRS youth work
NI 139 People over 65 who say that they receive the information, assistance and support needed to exercise choice and control to live independently	FRA conduct of home fire safety checks targeted at people over 65.
NI 142 Number of vulnerable people who are supported to maintain independent living	FRA conduct of home fire safety checks that cater for special needs, for example alarms for deaf persons, domestic sprinklers for bed ridden persons, etc.
NI 195 Improved street and environmental cleanliness (levels of graffiti, litter, detritus and fly posting)	Prevention of arson (abandoned cars, rubbish fires, outdoor fires, fires in buildings) to improve local community environment including car clearances

Road traffic collisions benchmarks

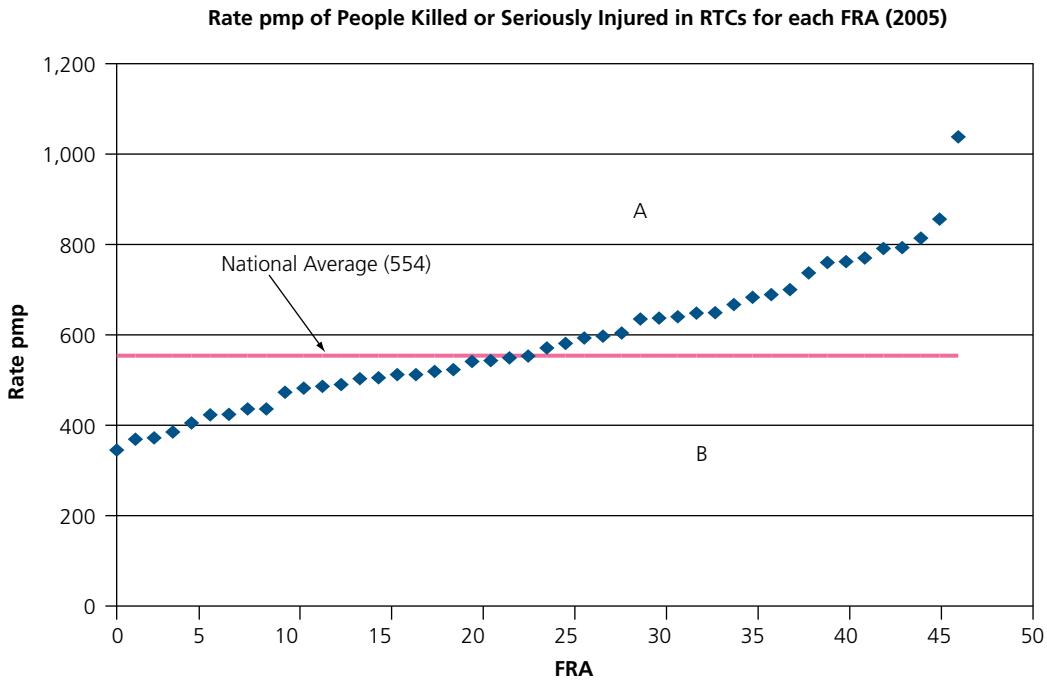
The average rate pmp of people killed or seriously injured (KSI) in road traffic collisions (RTCs) in England was 554, using 2005 data[11].

Figure 5 provides the rate of KSI pmp for each English FRA. It shows that the highest rate of KSI is almost double the average, while the lowest rate is half that of the national average.

Those FRAs above the pink line (A) have a higher rate of people KSI in RTCs than the national average and those below the pink line (B) have a lower rate of people KSI in RTCs than the national average.

Those FRAs with a higher rate than the national average might be considered to be higher priorities for reducing the rate of people KSI in RTCs than those FRAs below the line

Figure 5: Rate of people KSI in RTCs for FRAs ranked from lowest to highest



A More people KSI in RTCs than the national average
B Fewer people KSI in RTCs than the national average

[11] Road Casualties English Local Authority Tables: 2005, www.dft.gov.uk/172974/173025/221412/221549/228019/228024/ sectionon countyandunitaryaut1847#Tab1.3c!A1

Crime benchmarks

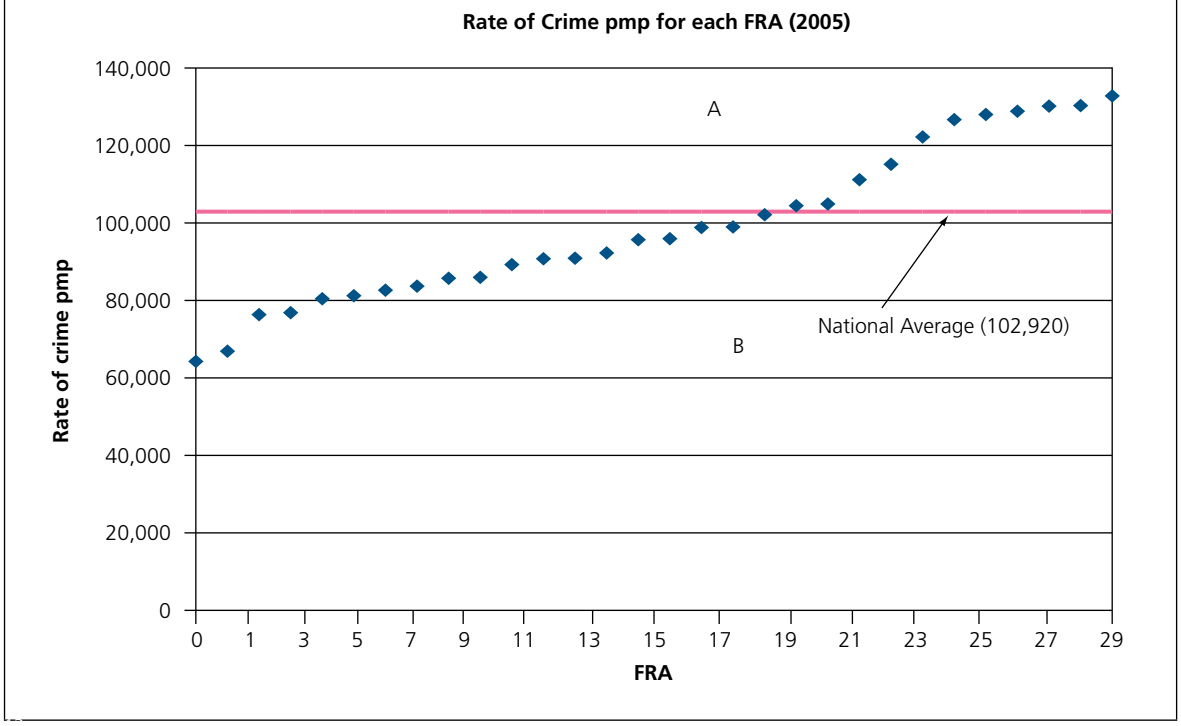
The average rate pmp of all crime in England was 102,920, using 2005 data[12].

Figure 6, provides the rate of crime for some English FRAs. It shows that the highest rate of crime is about three times the average, while the lowest rate is half that of the national average.

Those FRAs above the pink line (A) have a higher rate of crime than the national average and those below the pink line (B) have a lower rate of crime than the national average.

This means that those FRAs with a higher rate than the national average may consider reducing the crime rate a higher priority issue than those FRAs below the line.

Figure 6: Rate of crime for FRAs ranked from lowest to highest[13]



A **Higher crime rate than the national average**
B **Lower crime rate than the national average**

Statistics for crimes committed in regions in England in 2005 did not cover all FRAs; therefore not all FRAs are represented in Figure 6.

[12] Crime in England and Wales 2005/06, www.homeoffice.gov.uk/rds/pdfs06/hosb1206.pdf (data available at FRA level)
[13] Home Office - Research Development & Statistics Directorate www.crimereduction.homeoffice.gov.uk/asbos/asbos2(la)dec05.xls

ASBO benchmarks

The average rate pmp of Anti-Social Behaviour Orders (ASBOs) in England was 67, using 2005 data[14].

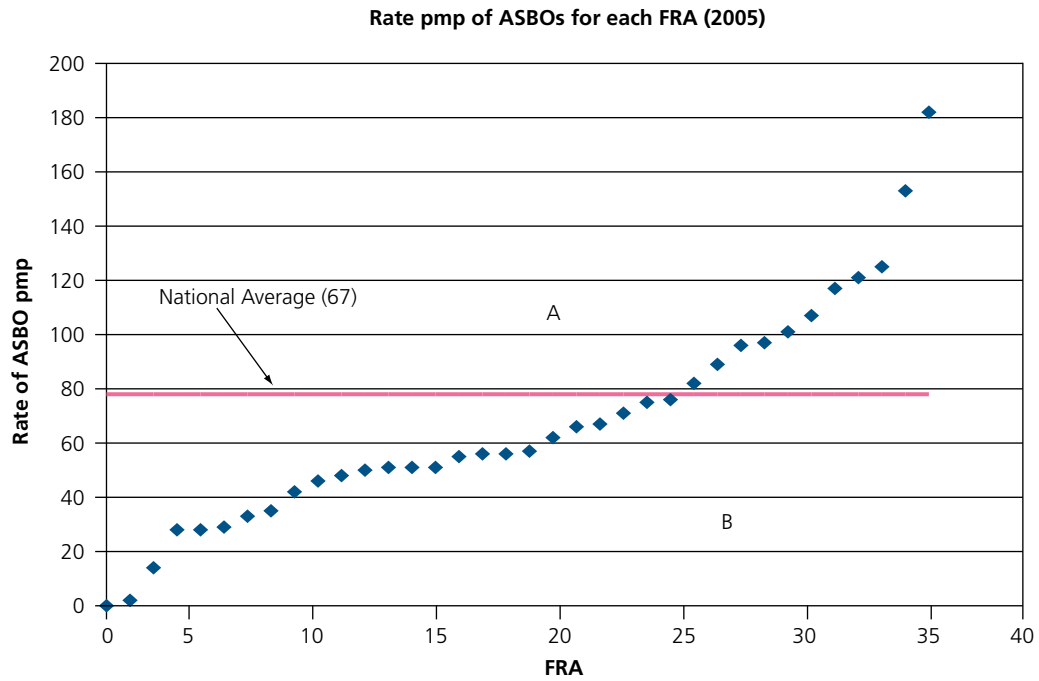
Figure 7 below provides the rate of ASBOs for some English FRAs. It shows that the highest rate of ASBOs is about three times the average, while the lowest rate is half that of the national average.

Those FRAs above the pink line (A) have a higher rate of ASBOs than the national average and those below the pink line (B) have a lower rate of ASBOs than the national average.

This means that those FRAs with a higher rate than the national average may consider reducing the ASBO rate a higher priority than those below the line.

Statistics for ASBOs in regions in England in 2005 did not cover all FRAs; therefore not all FRAs are represented in Figure 7.

Figure 7: Rate of ASBOs for FRAs ranked from lowest to highest



A Higher ASBO rate than the national average
B Lower ASBO rate than the national average

[14] Home Office - Research Development & Statistics Directorate www.crimereduction.homeoffice.gov.uk/asbos/asbos2(la)dec05.xls

2.4 Demonstrating FRA contribution to non-fire targets

The case studies in this section highlight how FRAs can help partners to achieve their objectives, as well as seeking partners' help in achieving FRA objectives. In this way the FRA and their partners work together to achieve a range of shared objectives reflecting the broader needs of communities. This is sometimes called 'positioning', which is where an organisation aims to communicate to other organisations what role it can play.

In this case, 'positioning' may include raising awareness of how the FRA can help to prevent other incidents such as RTCs and achieve wider social objectives such as community regeneration.

Some FRAs with experience of LAAs have identified some of the main elements of being an effective partner:

Elements of being an effective community partner

- Being active within the community eg providing facilities within fire stations for the public
- Being a visible partner within the community
- Being seen to deliver what has been agreed.

The following case studies provide examples of where other FRAs have contributed to targets related to community issues, to address both fire and other targets at the same time, including:

- Improving community fire safety and working with other partners on issues such as security, winter heating and slips and trips in the home, especially for the elderly
- Working with young people to reduce offending
- Reducing deliberate fires as part of drives to reduce crime and anti-social behaviour, thereby supporting community regeneration
- Prevention of RTCs.

Examples of FRA contributions to non-fire targets

This section provides a series of case studies outlining work of FRAs who have contributed to wider social issues through partnership working with LSPs.

Issues covered in this section include:

- Youth work
- Preventing RTCs.

Youth work

The following case studies provide examples of FRAs that have worked with young people including:

- Young people at risk of exclusion from school to build their confidence and to encourage them to take responsibility for their actions
- 7-12 year olds to contribute to a programme educating children about risks in the modern world, including how to react to a house fire
- 12-19 year olds to reduce the number of fires and ASBOs among this group.

Case Study 1

Cheshire FRA Youth Work

Cheshire FRA carried out work with young people in their local area who had been excluded from school or who were at risk from exclusion.

The work aimed to build self-confidence and to increase motivation and self-esteem in young people. The work also encouraged young people to take responsibility for themselves and their actions and to develop respect for not only themselves but also for others around them. After the scheme was implemented there was a reduction in fire related crime. Qualitative focus groups were carried out with the youth attending the scheme. The main findings from these focus groups were as follows:

- Young people reported enjoying the course
- There was increased self-esteem amongst those who attended
- There was an increase in respect for the Fire and Rescue Service from youth; and
- There was a positive impact on the environment and sense of community well-being.

www.cheshirefire.gov.uk/Assets/fire%20authority/06cfapaperyouthengagementwork0207.pdf

Case Study 2

Buckinghamshire – Safety Centre

Buckinghamshire FRA have, with Thames valley Police, created a 'Safety Centre' (www.safetycentre.co.uk) for children.

Known as 'Hazard Valley' its aim is to educate children aged 7-12 years about the modern world.

While it does have links with the national curriculum, its main aim is to teach children how to react in situations such as house fires, being confronted with an oncoming train and basic first aid skills.

www.safetycentre.co.uk/

Case Study 3

North Yorkshire LIFE Scheme

North Yorkshire FRA previously carried out a scheme called LIFE. This involved working with 12-19 year olds within the local community and giving these children a chance to work with fire fighters for five days.

The scheme was aimed at addressing fire safety and anti-social behaviour issues in young people in the local community.

An evaluation of this work showed that of those who attended the course there was a 90 per cent non-offending rate 6 months after the course had finished.

There was a 46 per cent reduction in deliberate fires and a 76 per cent reduction in attacks on fire fighters.

www.northyorksfire.gov.uk/community_fire_safety/local_intervention_fire_education_l_i_f_e_/index.html

Preventing road traffic collisions (RTCs)

This section provides case studies of FRAs that have worked with their partners in preventing RTCs.

Case Study 4

Road Traffic Collision Reduction Strategy (West Sussex FRA)

West Sussex FRA has been involved with a project to improve public safety on the roads through prevention, protection and intervention. Its key priorities are to reduce the numbers of deaths and serious injuries; minimise the number of RTCs; reduce calls to the FRA; improve the intervention standards within West Sussex; and to ensure a well-trained and safe workforce.

Specific campaigns, schemes and initiatives were designed to change people's driving behaviour including:

- Road Traffic Collision Course: a road safety education programme delivered by Youth Initiative teams such as Fire Cadets and Firebreak. The course is aimed at excluded young people who are at risk of involvement in car crime.
- Fit Safe Sit Safe: aimed at reducing deaths and injury of infants/children. The FRA and partnership agencies worked together to raise awareness of the correct provision and fitting of child seats and harnesses.

www.westsussex.gov.uk/ccm/cmsservice/stream/asset/?asset_id=2805831

Case Study 5

Road Traffic Collision Reduction Strategy (Merseyside FRA)

Merseyside FRA aimed to reduce the number of people killed or seriously injured as a result of RTCs. In order to do this they needed to work with partners to provide a safe highway network for all users, paying particular attention to the most vulnerable user.

They identified the most at-risk groups of being killed or seriously injured as those aged between 15-25 and motorcyclists.

Some of the partnerships they have formed have been with those working with target groups such as Youth Parliaments, RoadPeace, local authority road safety departments and the police. Examples of the partnership schemes include:

- Drive 2 Arrive: the FRA partnered with Liverpool Highways Department, Liverpool Neighbourhood Renewal Fund and River Media. They have been delivering interactive presentations (supported by a resource pack) aimed at 15-25 year olds allowing them to explore issues and to challenge attitudes.

www.merseyfire.gov.uk/aspx/pages/reports/pdf/CFS_RTC_Strat_07.pdf

Case Study 6

Shropshire Community Safety Road Safety Strategy 2006-2009 (Shropshire FRA)

To feed into the Government's Safer Roads Target (2010), Shropshire FRA used historical data to identify high, medium and low areas at risk of RTCs within the county.

The FRA is now using this information to position its resources more effectively and to target prevention work, concentrating on areas where it can make the most impact.

For RTC **prevention** the aim is to:

- Increase awareness about road safety issues through access to high risk groups
- Work with partners to identify high risk patterns on the county's roads
- Work with the police and local authority road safety officers to promote education and awareness programmes that can be offered in place of fines or penalty points
- Evaluate interventions to help influence further interventions and track the impact of what the FRA and its partners do.

For RTC **protection** work the FRA aims to:

- Increase awareness of benefits of seat belt usage
- Increase awareness of importance of giving exact locations of incidents when reporting them in order for the rescue teams to arrive more quickly
- Work with partners to increase knowledge of basic first aid within the general public to increase accident victims' survival chances.

For RTC **responses** the FRA aims to:

- Pre-plan for RTCs through the application of Geographical Information Systems, incident data and through liaison with other partner agencies, to ensure that they have the correct resources across the county to meet their RTC attendance standards
- Ensure quick identification of incidents
- Ensure drivers know the location of and routes to incidents
- Ensure crews are effectively directed once they arrive at RTCs
- Ensure crew are safe and effective whilst carrying out RTC work.

www.shropshirefire.gov.uk/website/Docs/Policies/safer-communities/Road%20Traffic%20Collision%20Operational%20Plan%2006-09%20(v3%20no%20figures).pdf

2.5 Negotiating targets: links between fire, deliberate fires and wider social problems

The experience of FRAs suggests that most have some issues in common with other LSP partners that can be tackled together. In order to do this, FRAs have thought about and demonstrated through robust outcome data:

- How fires can influence and contribute to wider social issues (and which ones)
- How the FRS could help to have an impact on the target for those issues
- What kind of impact they might have (eg reduction in number of incidents).

Example of issues that FRAs have considered include whether there are any overlaps in the causes of car fires and anti-social behaviour; how abandoned burnt-out cars can contribute to other forms of anti-social behaviour; and links between deliberate fires and the wider community. FRAs have found it important to consider both the likelihood of an event and the severity of the outcome – for example school fires tend to be a low instance (relative to other crimes) but high impact form of deliberate fires.

This section is designed to show how FRAs may be able to demonstrate links with wider social issues by providing information and graphs showing the link between the incidence of fire and other indicators (eg social issues); and case study examples of how other FRAs have worked with LSPs.

There are two approaches to demonstrate the links between fire and other social issues that are outlined as examples in this toolkit:

1. Identifying the factors contributing to fires, such as alcohol and disability, and how these are common to other social problems such as sickness and deprivation; and
2. Producing analyses of the co-incidence of high rates of fire with high rates of other social problems.

Approach 1

An example using the first approach is discussed in *Learning Lessons from Real Fires: Findings from Fatal Fire Investigation Reports (Research Bulletin no. 9, June 2006)*[15]. The study identified factors such as:

- Depression
- Alcohol
- Living alone
- Limited physical mobility.

The research also found that many fire victims had some previous contact with public services, such as social services, demonstrating the overlap in the FRA and other agencies' service users.

Approach 2

The second approach is discussed in greater detail below.

Examples of analyses of co-incidence of fire with other social issues

Below (see pages 36-42) we provide a number of graphs (scatter plots) that visually demonstrate the link between fire incidents and various other community concerns. Using these tools may help you to identify common issues. It can help to understand what these graphs mean statistically, but you don't need to have an in-depth understanding of statistics to use the graphs to show other members of the LSP the contribution you can bring to making progress against an indicator or target.

[15] www.communities.gov.uk/documents/fire/pdf/151012

What are correlations?

A correlation is a statistical way of working out if there is a link between two events. When the events involve numbers, a positive correlation means that as one increases, the other increases as well. A negative correlation means that as one increases, the other decreases.

For example, a positive correlation would be if the number of lone parents increases so does the number of dwelling fires. A negative correlation would be if the number of lone parents increases, the number of dwelling fires decrease; or if the number of lone parents decreases, the number of dwelling fires increases.

This method also determines the strength of the correlation or the link. For example one that is close to +1 or -1 is a strong link. A weak correlation would be nearer zero. The table below shows the strength of correlation. Where there is a high correlation, this suggests that a link exists between fire incidents and the issue, eg lone parents.

Correlation	Strength of correlation	As number of fires increase, so does the issue eg number of lone parents	As number of fires increase, the issue decreases eg the number of lone parents
0.8 – 0.99	Very strong	+	–
0.6 – 0.79	Strong	+	–
0.4 – 0.59	Moderate	+	–
0.2 – 0.39	Weak	+	–
0 – 0.19	Very weak	+	–

Statistically, the method involves providing a graph of fire incidents plotted against the socio-demographic or local community factor you are concerned with, for example lone parents.

It is important to note that if you find a strong positive correlation between for example being a lone parent and the likelihood of experiencing a fire incident, this does not mean that being a lone parent will in itself cause you to have a fire. It does mean that areas with many lone parents, may have more fires. Correlation does not imply that one of these events causes the other. It is sensible however to investigate strong correlations further to determine the causes.

Other issues or socio-demographic factors which FRAs have used to demonstrate the link between fire and wider social issues include:

- Assaults
- Crime and criminal damage
- Deprivation
- Domestic violence
- Lone parents
- Poor health
- Sickness and disability
- Unemployment.

National data exists for some of these social concerns. Graphs are provided on the following pages which FRAs have found useful in demonstrating the links between fire and wider social issues. An alternative approach could be to produce a similar set of graphs for an FRA's own local area using data for each area within the FRA's catchment, and for the social issues not covered in this toolkit.

The graphs are produced by plotting the rate of incidents in each area against one of the issues. For example, the rate of fires is plotted against the rate of unemployment. It is important to use rates (such as the rate of fire pmp and the rate of unemployment as a percentage of the population), as the **number** of fires is likely to be linked to the **number** of residents. Areas with more unemployed people may have more fires simply because these areas have more people. Using a rate of fire and a rate of the other factors overcomes this statistical problem.

It is important however to be aware that it can be difficult to produce these graphs within smaller FRAs, as the fire data can be less reliable or more variable because there will be fewer incidents. It may therefore be necessary to either use the type of graphs provided here, using national data, or to produce regional level analyses.

The data used to produce the scatter plots below and associated correlations are from the 2001 census, FDR1 fire data from Communities and Local Government and the Home Office Statistical Bulletin[16].

[16] Crime in England and Wales 2005/06 (Walker, Kershaw and Nicholas), www.homeoffice.gov.uk/rds/pdfs06/hosb1206.pdf

Dwelling fire and lone parents

Figure 8 looks at the rate of dwelling or home fires (on the vertical axis) by the percentage of lone parents[17] (on the horizontal axis). If lone parents make up 2 per cent of the population, you would expect to have a rate of fire of 500 pmp. Areas where lone parents make up 4 per cent of the population typically have a rate of fire of about 1300 pmp.

Figure 8: Link between rate of dwelling fires and percentage of lone parents with children[18]

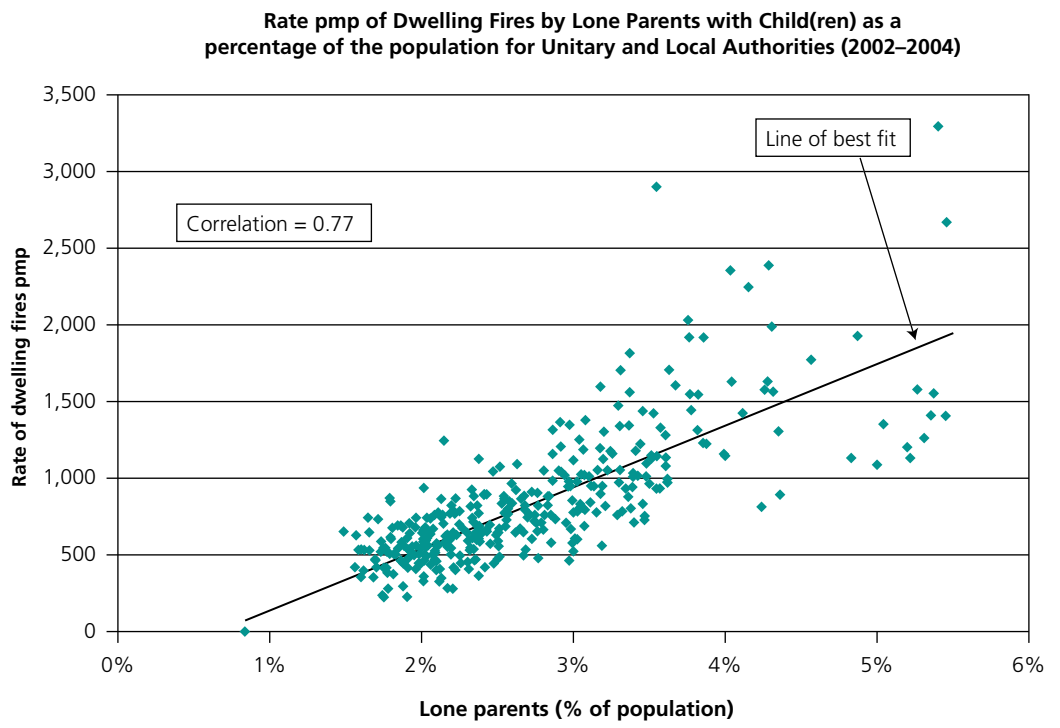


Figure 8 shows a correlation of 0.77 which means there is a strong correlation (a strong relationship) between fires in the home and being a single parent. As it is a positive number, this means that when the rate of fire is high, so is the rate of lone parents.

Note that the 'line of best fit' is used in statistics to show the pattern within a set of data more clearly. For the graph above it demonstrates more clearly the link between the rate of fire and the rate of single parents.

Crime and deliberate fires

Areas with high levels of visual neighbourhood issues such as graffiti, litter and chewing gum, poor street lighting, fly tipping and criminal damage can seem uncared for and lead to decreased respect for the environment. People can feel more vulnerable in such areas and their fear of crime can increase, regardless of the real probability of criminal activity.

[17] Census 2001, www.statistics.gov.uk/census2001/census2001.asp (NOTE: if your FRA uses FSEC, you will find Census 2001 data relevant to your FRA area included)

[18] Census 2001, www.statistics.gov.uk/census2001/census2001.asp (NOTE: if your FRA uses FSEC, you will find Census 2001 data relevant to your FRA area included)

Anti-social behaviour is behaviour which causes or is likely to cause harassment, alarm or distress to one or more people who are not in the same household as the perpetrator, including criminal damage such as arson.

Reducing car fires, rubbish fires, bin fires and fires in derelict buildings is a part of resolving anti-social behaviour and creating a community environment that people respect. It is also important to identify the causes and tackle the symptoms through activities or initiatives such as youth work.

Figure 9 looks at the rate of crime (on the horizontal axis) by the rate of deliberate fires (on the vertical axis). The rate of fires is again pmp. Crime here refers to all forms of crime.

Figure 9: Link between crime and rate of deliberate fires[19]

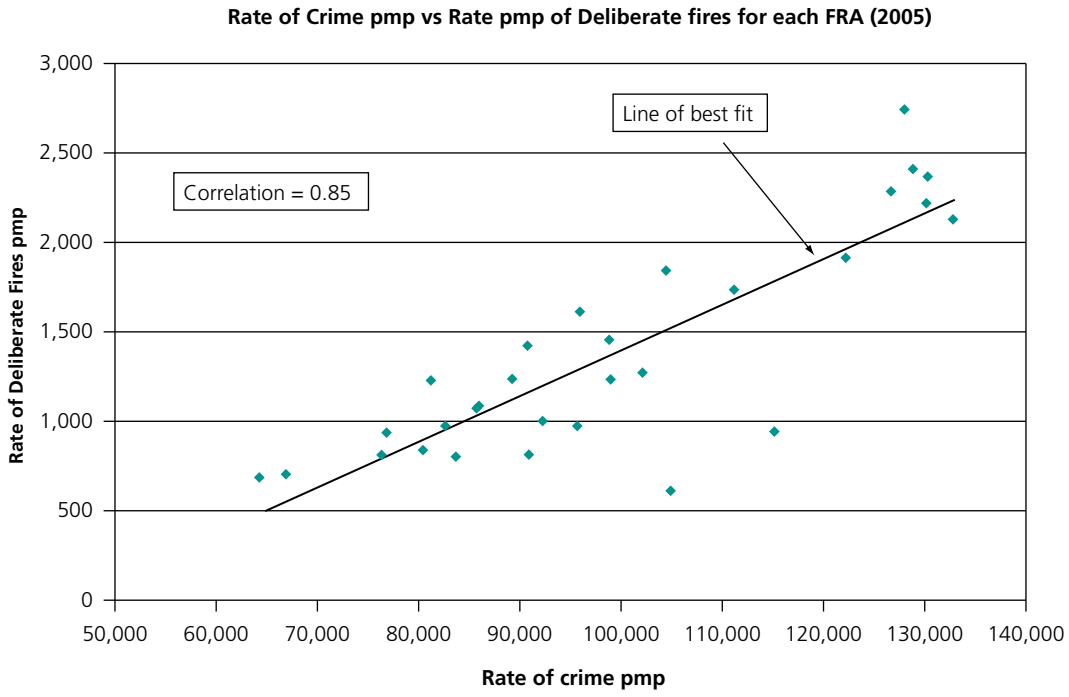


Figure 9 shows a correlation of 0.85 which means there is a very strong correlation between the crime rate in an area and the number of deliberate fires. It is a positive number, which means that where a high rate of crime is found, a high rate of deliberate fires will also be found (similarly if the crime rate is low, it is likely that the rate of deliberate fires will also be low).

In this instance if the LSPs in your local area agreed a target relating to reducing the crime rate in your area and you found a similar correlation to the one above using your local data, this could be useful in demonstrating your potential contribution to achieving this target.

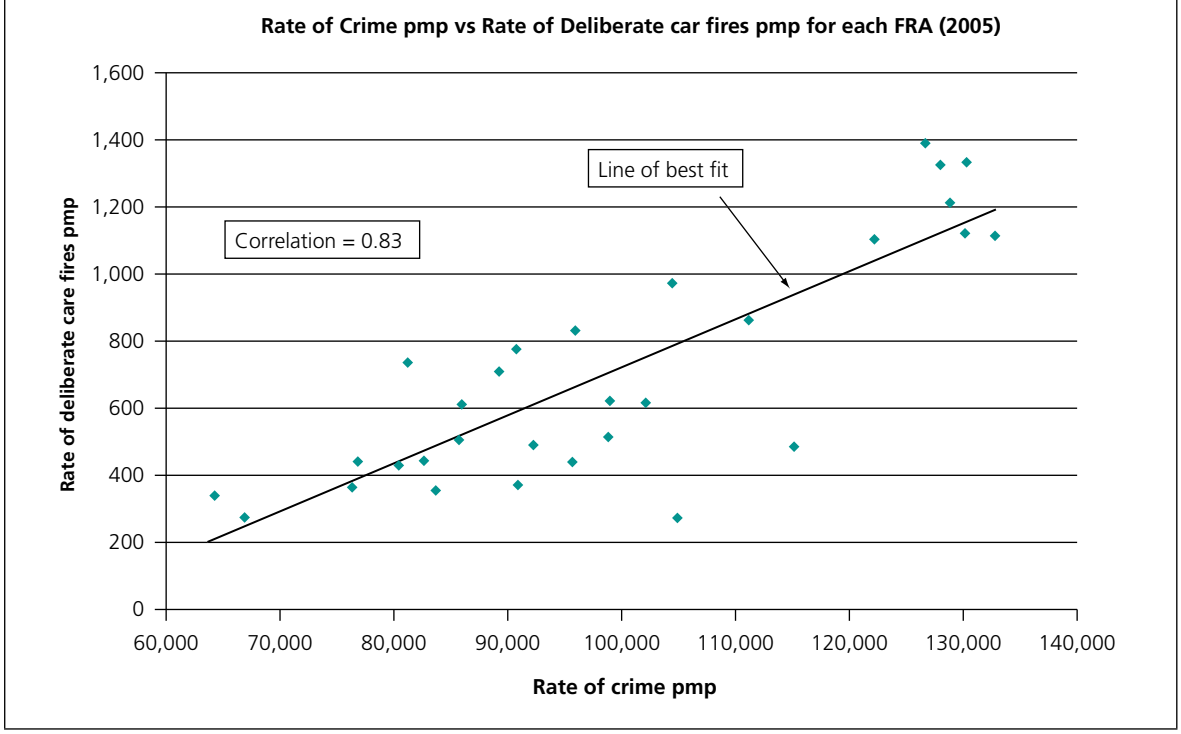
[19] Fire Statistics Monitor: Q2 2006, www.communities.gov.uk/documents/fire/xls/323101 and Crime in England and Wales 2005/06, www.homeoffice.gov.uk/rds/pdfs06/hosb1206.pdf (data available at FRA level)

Crime and deliberate fires in relation to other road vehicles

Figure 10 below looks at the link between the rate of crimes pmp and the rate of deliberate car fires.

The graph shows a correlation of 0.83 which means there is a very strong correlation between the crime rate in an area and the number of deliberate fires in relation to other road vehicles. As the number is again positive, this means that as the crime rate goes up, so does the rate of deliberate car fires.

Figure 10: Link between crime and deliberate car fires[20]



[20] Fire Statistics Monitor: Q2 2006, www.communities.gov.uk/documents/fire/xls/323101 and Crime in England and Wales 2005/06, www.homeoffice.gov.uk/rds/pdfs06/hosb1206.pdf

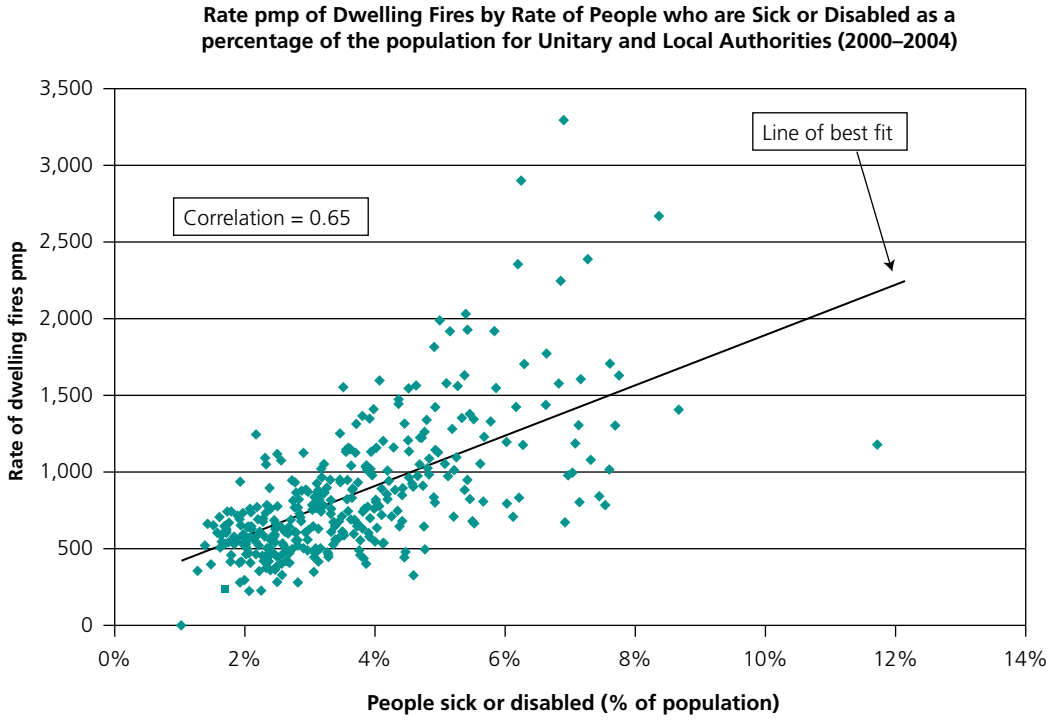
Fire, sickness and disability

Figure 11 looks at the percentage of people who are sick or disabled[21] (on the horizontal axis) by the rate of dwelling or home fires (on the vertical axis). The rate of fires is again pmp.

Figure 11 shows a correlation of 0.65 which means there is a strong correlation between the rate of dwelling fires in an area and the percentage of disabled or sick people. It is a positive number (+0.65 rather than –0.65), which means that where there is a high rate of sickness and disability, there is likely to also be a high rate of dwelling fires (similarly if the rate of sickness and disability is low, it is likely that the rate of dwelling fires will also be low).

In this instance if the LSPs in your local area agreed a target relating to improving the safety of those who are sick or disabled in your area and you found a similar correlation to the one above using your local data, this could be useful in demonstrating your potential contribution to achieving this target.

Figure 11: Link between permanently sick/disabled and the rate of dwelling fires[22]



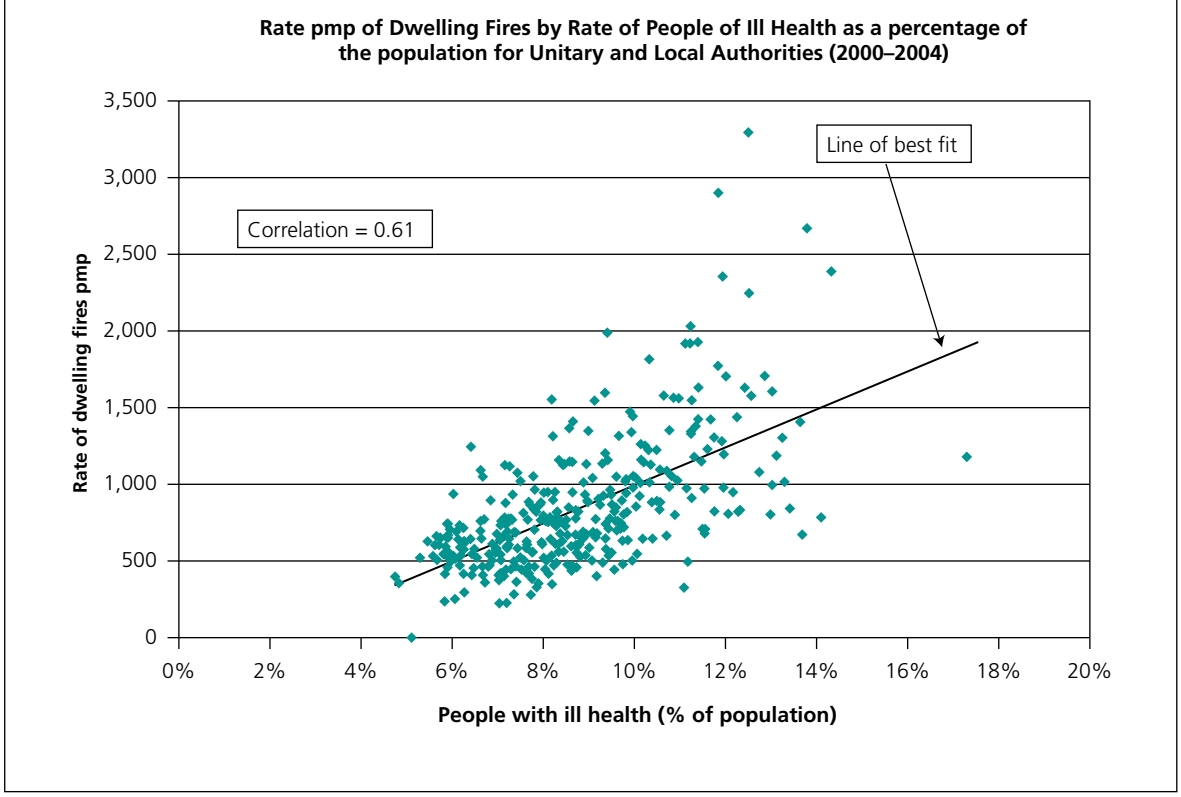
[21] This is the proportion of people whose economic activity is classed as "permanently sick/disabled" (economically inactive).
[22] Census 2001, www.statistics.gov.uk/census2001/census2001.asp (NOTE: if your FRA uses FSEC, you will find Census 2001 data relevant to your FRA area included)

Fire and poor health

Figure 12 below, looks at the percentage of people suffering long term limiting illness[23] (on the horizontal axis) by the rate of dwelling or home fires (on the vertical axis). The rate of fires is pmp. Figure 11 and Figure 12 display different factors within the Census (2001).

Figure 12 shows a correlation of 0.61 which means there is a strong correlation between the rate of dwelling fires in an area and the rate of people not of good health. It is a positive number (+0.61 rather than -0.61), which means that where there is a high percentage of people with ill health, there is likely to also be a high rate of dwelling fires (similarly if the percentage of ill health is low, it is likely that the rate of dwelling fires will also be low).

Figure 12: Link between percentage of people with a long term limiting illness and the rate of dwelling fires[24]



[23] This is the proportion of people who perceive they have a long term limiting illness, health problem or disability which limits their daily activities or the work they can do, including problems due to old age.

[24] Census 2001, www.statistics.gov.uk/census2001/census2001.asp (NOTE: FSEC includes Census 2001 data)

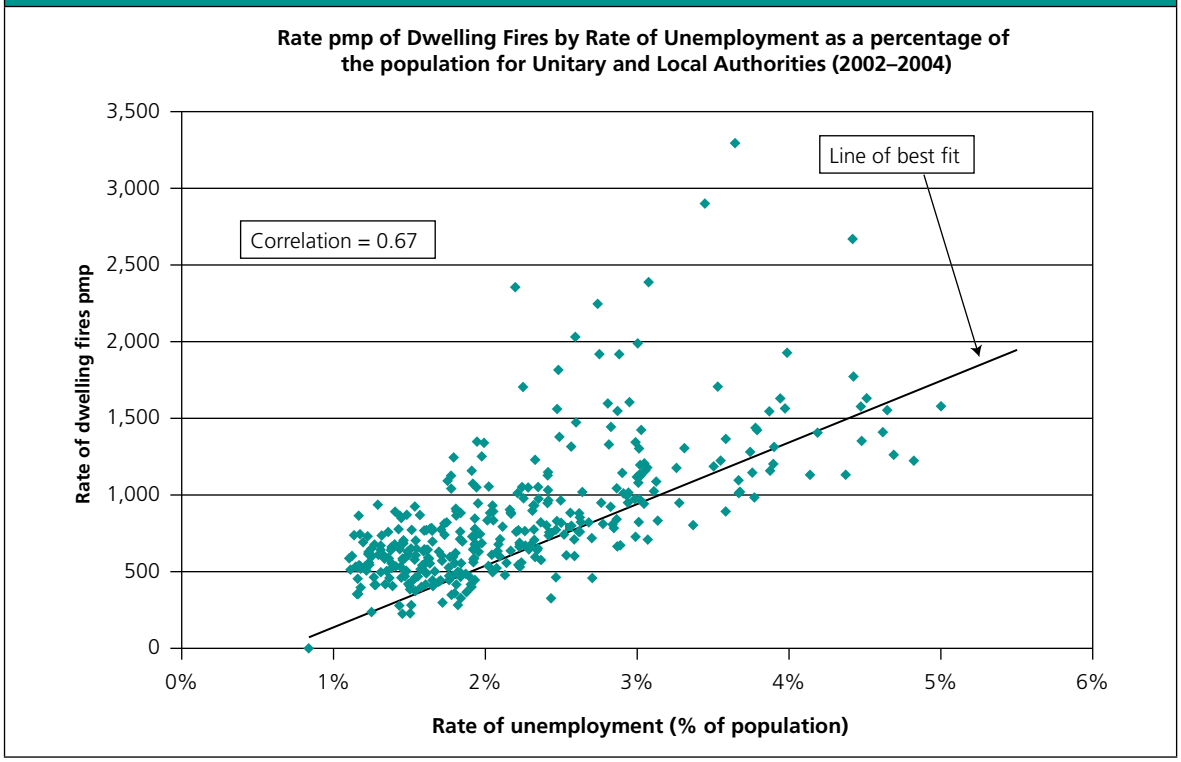
Fire and unemployment

Figure 13 below looks at the rate of unemployment (on the horizontal axis) by the rate of dwelling or home fires (on the vertical axis). The rate of fires is pmp.

Figure 13 shows a correlation of 0.67 which means there is a strong correlation between the rate of dwelling fires in an area and the rate of unemployment. As the figure is a positive one (+0.67) this means that where the rate of dwelling fires is high, the rate of unemployment is also likely to be high.

In this instance if the LSPs in your local area agreed a target relating to increasing quality of life or improving the safety of unemployed people in your area and you found a similar correlation to the one above using your local data, this could be useful in demonstrating your potential contribution to achieving this target.

Figure 13: Link between unemployment and the rate of dwelling fires[25]



[25] Census 2001, www.statistics.gov.uk/census2001/census2001.asp (NOTE: if your FRA uses FSEC, you will find Census 2001 data relevant to your FRA area included)

Fire and deprivation

Figure 14 looks at deprivation (on the horizontal axis – indices of multiple deprivation[26] (IMD)) by the rate of dwelling or home fires (on the vertical axis). The rate of fires is pmp.

Figure 14: Link between deprivation and the rate of dwelling fires[26]

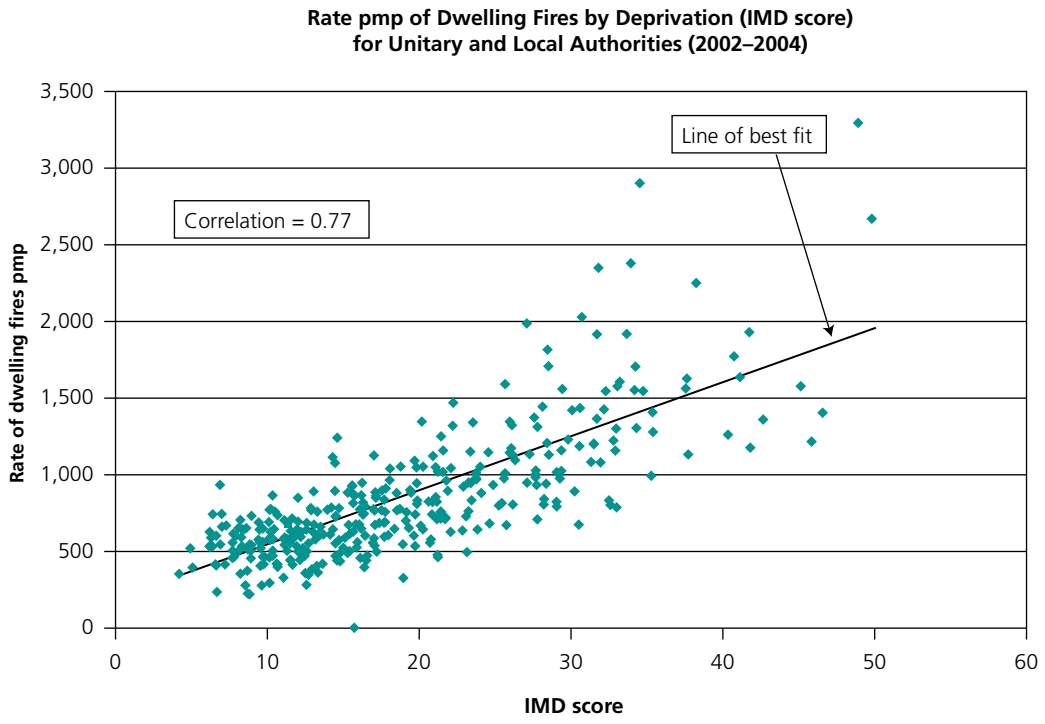


Figure 14 shows a correlation of 0.77 which means there is a strong correlation between the rate of dwelling fires in an area and deprivation. As the figure is also a positive one (+0.77) this means that where the rate of dwelling fires is high, the rate of deprivation is also likely to be high.

Cost of fires

sometimes an LSP will prioritise economic regeneration. Some FRAs have found that providing an estimate of the cost of fire helps to demonstrate the relative importance of fire prevention in an LAA.

Below are some examples of costs of fires to society and communities:

- The **cost of fire to society** (in the UK) in terms of damage, human suffering and criminal justice system costs was estimated at **£4,263m** in 2004 *(The Economic Cost of Fire: Estimates for 2004,* page 22).

[26] Census 2001, www.statistics.gov.uk/census2001/census2001.asp (NOTE: if your FRA uses FSEC, you will find Census 2001 data relevant to your FRA area included)

- The average consequential **costs per fire** (excluding false alarms and vehicle fires) was £25,866 in 2004 *(The Economic Cost of Fire: Estimates for 2004,* page 22*)*
- It is estimated that 23 per cent of households do not have contents insurance and 37 per cent do not have buildings insurance, meaning they directly bear the cost of fires in the home *(The Economic Cost of Fire: Estimates for 2004,* page 22*)*.
- It is fair to assume these are mostly lower income households, meaning the loss has an even greater impact on them.

Where you have sufficiently robust up-to-date local data this can be provided to the LSP. Alternatively, you can download the Economic Cost of Fire Report published by Communities and Local Government from this web address:
www.communities.gov.uk/documents/fire/pdf/144524

The following case, **Example 3**, describes the cost of one fire incident. It offers an example of how information about the cost of a school fire has been presented to local partners in a clear and interesting way.

Example 3

The cost of school fires

"A large school fire devastates. Its aftermath lingers for years. The long term disruption that follows puts staff and pupils under stress and imposes large financial, educational and administrative costs. It is a price that no school can afford to pay. The odds on your school experiencing such a fire *[requiring fire service attendance]* are about 1 in 20. Historically, 40 to 50 are termed serious fires, involving insured building losses in excess of £50,000. Around 20 of these involve losses over £250,000.

The consequential losses, only some of which are covered by insurance can be as serious as the fire damage to the buildings. They include loss of course work which may have been assessed, loss of teachers' aids and records, the long term effect on pupils, particularly small children, and staff stress."

www.teachernet.gov.uk/management/resourcesfinanceandbuilding/schoolbuildings/stat/fire/

Cost of fire ready-reckoner

A simple 'cost of risk calculator' is provided for FRA use.

Although the costs include a 'value' placed on the harm and suffering of both the victims of fire and their relatives, clearly it is not possible to place an actual value on life. As such, this value represents how much society is normally willing to spend on reducing the risk from events such as fire.

The cost of damage is also estimated and includes both insured and uninsured fire loss. Given some values such as business disruption and the cost of uninsured fires cannot be accurately known, some assumptions have been made with this part of the calculation.

Table 4 provides the average cost to the community per event following a fire incident, using estimates from The Economic Cost of Fire: Estimates for 2004 (increased to match 2007 prices)[27]. These values have been built into a simple Excel based 'ready-reckoner' for estimating the cost of fire in an LAA. This is available on the Communities and Local Government website as an active spreadsheet (Annex 3).

The value does not take into account fire safety prevention and response costs as it is assumed that LSPs will be interested in costs to the community that may be avoided by prevention work, rather than costs incurred by the Fire and Rescue Service. However, in some cases LSPs may be interested in the wider costs, as these may put pressure on council tax.

Table 4: Typical values of fire outcomes

Outcome	Value per case (2007 prices)
Fatalities	£1,546,688
Non fatal injury involving burns	£174,354
Non fatal injury involving overcome by smoke or fumes	£44,019
Other (precautionary check ups, physical injury)	£574
Fires (property damage)	£8,507
Fires (commercial property damage)	£33,624
Fires (public sector property damage)	£30,570
Fires (vehicle property damage)	£2,458
False alarms	£848

The values are based on average costs across the UK. They can be used, therefore, to provide an indicative cost of fire to a local community. Individual fires may cost far more or far less than these averages.

[27] The Economic Cost of Fire: Estimates for 2004 place no value on outdoor fire damage

When working out the average number of events, it is usually a good idea to use average data over a longer period, such as three years, to take into account any 'blips' in the figures. This average number can then be multiplied by the values given in **Table 4**.

In all cases, the values apply to fires attended by FRAs and reported via FDR1s.

Cost of deliberate fires

The following, **Example 4**, shows how the cost of deliberate fires on schools has been presented to partners.

Example 4

1 in 8 schools suffer some form of arson attack each year

"The number of arson attacks on schools has increased steadily over the years. It is now the largest single cause of fires in schools, with 60 per cent of all school fires classified as deliberate."

"Recent press reports have attracted a considerable degree of media attention and focused efforts to address the issue. As many as one in eight schools nationally suffer some form of arson attack each year…"

"The HMT Economic Cost of Fire estimates for 2003 put the average cost of school fires at around £49,600."

www.crimereduction.gov.uk/arson/arsonminisite06.htm

Some FRAs have found it beneficial to estimate the cost of deliberate fires. Whilst deliberate fires are a small fraction of all crimes, the cost per event is significant. Many deliberate fire attacks on buildings are preceded by graffiti and vandalism attacks. **Table 5** provides typical values for deliberate fire incidents.

Table 5: Cost per case of deliberate fires

Event	Cost per event (2007 prices)
Domestic deliberate fires	£20,869
Commercial deliberate fires	£42,070
Public sector deliberate fires	£41,905
Vehicle deliberate fires	£3,575

These values may also be used to help support the costs of an intervention. For example, an FRA may wish to suggest a target to reduce fires by (for example) 10 per cent per year. If the cost of fire has been estimated as (for example) £3m per year, this would give a saving of £300,000 per year, which can be compared alongside the cost of the intervention[28].

Demonstrating FRA record of delivery

FRAs have found it important to show partners that they will deliver effective outcomes through programmes of action. Key to this is robust data based on effective programme evaluation and evidence of "what works". This has helped to persuade LSPs of the value of FRA involvement.

Below are some examples of where FRAs have agreed targets and how these have been met.

FRAs may find that these case studies also generate ideas of possible initiatives and activities relevant to their own areas.

Community fire safety

Case Study 7

East Sussex – CFS work

East Sussex Fire & Rescue Service (ESFRS) and East Sussex Social Services are working to improve the quality of life of their elderly community, making it easier for them to live at home.

As part of this project, ESFRS are training approximately 80 social services staff in the basic concepts and application of fire risk assessments in order to help reduce dwelling fires among the elderly.

www.esfrs.org/about_us/FOI%20pdfs/Organisation/5Performance/bvpp07-08_Section1.pdf

[28] If an intervention is assumed to lead to ongoing savings, the value of the savings in future years should be discounted by 1.5 per cent for injuries and 3.5 per cent for property damage for each year and then summed up to give a total saving for the period impacted by the intervention.

Deliberate fires, crime and anti-social behaviour

Case Study 8

Avon 'Car Clear' project (Avon FRA)

The aim of this project was to identify the main areas of deliberate fires and remove stolen/abandoned vehicles. Avon FRA partnered with their local police force and the local authority. The purpose of the partnership was to:

Develop approaches to reduce deliberate vehicle fires in residential and commercial premises; and

To remove unwanted vehicles from owners to reduce the likelihood of cheap end-of-life vehicles being resold.

Local media campaigns were also used to create public awareness of the issue.

The scheme reduced deliberate vehicle fire statistics by 40 per cent over three years.

www.communities.gov.uk/documents/fire/pdf/321209

Case Study 9

Cambridgeshire Arson Task Force (Cambridgeshire FRA)

The Cambridgeshire Arson Task Force has developed the use of Arson Liaison Officers in all districts. The FRA works in partnership with these officers and with district teams to implement interventions.

The task force is involved with reviewing and improving fire investigation; developing a media strategy; producing a county-wide protocol for abandoned vehicles; developing regional Task Force links; updating and reinforcing the memorandum of understanding between fire and police services; establishing smaller local Arson Task Forces in districts; developing a police training package; and increasing effective data use.

www.communities.gov.uk/documents/corporate/pdf/145135

Case Study 10

Muckley (1997) scheme (Tyne and Wear FRA)

FRA staff are offered two-day training courses and a manual to help assess the different types of fire-setter to decide which agencies to contact and what intervention is required, although the main focus of this scheme is counselling. Parents also receive fire safety advice while the fire-setter receives basic education.

Tyne and Wear FRA are currently developing the Muckley scheme in partnership with the Kolvin Clinic, a Northern Forensic Mental Health Service for Young People. The clinic accepts referrals from throughout the country and will specifically address fire-setting behaviour. Training in assessment techniques is offered to FRAs by the clinic.

www.communities.gov.uk/documents/corporate/pdf/145135

Case Study 11

Juvenile Fire-setters Intervention Scheme (London)

It is estimated that children start approximately 1 in every 4 fires in London. The Juvenile Fire-setters Intervention Scheme aims to tackle this issue as part of the overall strategy to reduce deliberate fires. The main elements of the scheme are that it:

Offers education and advice for children and young people up to the age of 17 and their parents/guardians

Deals only with the fire-setting behaviour of the child or young person

Ensures that all advisors, including firefighters and administrative staff, are employed by the London Fire Brigade and are fully trained as volunteers.

Advisors work in pairs and the first visit aims to find out more information about the child or young person involved and to establish a trusting relationship. The advisors meet either at the child or young person's home or at a community centre – wherever the young person feels more comfortable. The number of visits and the way in which the person is dealt with depends on the circumstances and problems involved.

www.london-fire.gov.uk/fire_safety/juv_firesetters.asp

2.6 Defining measures

Options for baseline and final data

FRAs participating in LSPs have found that it is important to measure robustly the initial baseline number of incidents so that these can be compared with the figures throughout and at the end of the programme.

One way of establishing baseline data is to take an average of the data to be measured for the three years leading up to the new LAA. Given that fire and casualty data can be variable (figures can often go up and down for no observable reason), it can be a good idea to use a three year average as the baseline rather than just using data for one year.

For more information on final data, go to section 2.8 under 'Options for baseline and final data'.

Measures of fire

Where FRAs agree to contribute towards LAA targets, they may also wish to agree with partners how to measure any changes to demonstrate whether the target has been achieved.

Experience suggests that for the measure to be meaningful to partners and communities, it is generally more relevant if it is based on the **outcome** (for example, the number of fires) rather than on a process or input (for example, the number of Home Fire Risk Checks).

Some options of measures which have been used include:

- Measuring all primary fires or a sub-set of primary fires;
- Measuring fire fatalities versus fire non-fatal casualties versus fires;
- A count of all non-fatal casualties or to exclude precautionary checks; or
- Using a single year's data versus an average of a number of years.

In considering these options experience suggests that attention needs to be given to:

- Whether the measure includes types of fire that are not relevant to the LAA priority
- Whether the measure includes causes that cannot be prevented by the FRA
- Whether the number of incidents is enough to provide a robust measure
- Whether the measure is prone to reporting errors or inconsistencies in reporting practices;
- The extent to which the number of incidents fluctuates from one year to the next.

Commonly all the measures use incidents reported via FDR1s.

FRAs have generally found that fire fatalities do not provide a reliable measure at the level of LAAs because of the low number of them in comparison to other possible measures.

Some possible advantages and disadvantages of options are summarised in **Table 6**. Examples of the kinds of data which could be used for different circumstances and within different LAA areas with different priorities are outlined below. There is a legal duty on partner authorities including FRAs to have **regard** to LAA targets that they have agreed when exercising their functions. This means that they should keep these targets in mind in their day to day functions (for example through business planning processes). There is, however, no legal duty on partner authorities and responsible authorities to **meet** targets they have agreed in the LAA and these examples should not be taken to imply otherwise.

Measure 1

As car fires can be a significant proportion of all primary fires, a primary fire target may be skewed by the number of car fires. This means that the final data will be based mainly on car fires as opposed to other primary fires.

If the LAA priorities focus on community safety, using primary fire data may provide an unrealistic perception of the need for FRA involvement as most casualties occur in dwelling fires (not car fires).

A measure of dwelling fires is likely to be the more statistically robust than dwelling fire non-fatal casualties and dwelling fire fatalities, although dwelling fire non-fatal casualties may be a reliable measure in larger or higher risk LAs.

Measure 2

As car fires and other outdoor deliberate fires are a key part of improving the community environment, these may be preferred if the LAA focuses on community regeneration and fear of crime.

Measure 3

Malicious false alarms, while being a fraction of all false alarms, may be a preferred measure of anti-social fire behaviour (along with car fires and other deliberate fires).

Table 6: Possible advantages and disadvantages of each option		
Measure	Advantages	Disadvantages
All primary fires	Easily measured by FRA Covers all causes of fires	The number can be dominated by car fires which may not reflect LSP priority of community safety
Other building fire fatalities	Useful if LSP focuses on issues such as safety of the elderly	Relative infrequency means it is not a robust measure within individual LAA
Other building fires	Useful if LSP focuses on community assets, regeneration or deliberate fires	Relative infrequency – it may not be a robust measure at LAA level
Other building non-fatal fire casualties	Useful if LSP focuses on issues such as safety of the elderly More reliable than Other Building fire deaths	Relative infrequency means it may not be a robust measure at LAA or MAA levels
Dwelling fire fatalities	High degree of face validity	Relative infrequency –not usually a robust measure at LAA level
Dwelling fires	Simple Focuses on obvious measures of community safety Not skewed by volatile/variable rate of fatalities Avoids contention about inconsistency of reporting casualties	Does not reflect risk posed by fires in Other Buildings
Dwelling fire non-fatal casualties excluding precautionary checks	Simple Focuses on obvious measures of community safety Not skewed by volatile rate of fatalities. Avoids contention about consistency of reporting of precautionary checks	If only non-fatal casualties are measured this option becomes more volatile If precautionary checks are excluded then the measure is more statistically volatile due to smaller number of non-fatal casualties

Table 6: Possible advantages and disadvantages of each option (continued)

Measure	Advantages	Disadvantages
All deliberate fires (cars, dwellings, other buildings)	Less volatile than measure of any one type of deliberate fire	Less sensitive to reduction in any one category of deliberate fire
Specific types of deliberate fire, eg car fires, dwelling fires	Enables most common cause (such as car fires) to be prioritised Face validity as a measure of anti-social behaviour	Either need a suite of targets or accept that some types of deliberate fires are excluded Some categories (for example dwellings) may be less measurable due to smaller numbers in small LAAs
All deliberate non-fatal fire casualties	Less volatile than measure of any one type of deliberate fire	Less sensitive to reduction in any one category of deliberate fire Less statistically reliable than number of deliberate fires
Malicious false alarms	Simple Face validity as a measure of anti-social behaviour	Represent a small percentage of false alarms
Targets for eg young people or elderly persons non-fatal fire casualties	Aligns with possible LAA focus on an age group	Volatile due to reduction in number of incidents counted

Rates or number of incidents

A measure can be expressed as either a number of incidents or as a rate of incidents per million population (pmp), for example:

- A number such as 50 fires per year; or
- A rate such as 500 fires pmp per year.

The advantages and disadvantages of using rates or numbers of incidents are presented below.

Use of rates

Throughout this toolkit, the use of rates has been advised from FRA experience as a better option for identifying priorities and measuring performance.

If the population is prone to change, such as a large number of people moving into or out of the area, then there is advantage in using a rate of incidents pmp, as this will allow for changes in the population when measuring performance. Therefore, rates should be used when comparing sets of data with different populations. However, if there is no population data, number of incidents should be used.

Use of numbers

For the purpose of tracking progress towards targets, FRAs may wish to express measures in numbers as it can be more meaningful to other partners and to the public and it can also be seen as more transparent.

For example, if you have 15 per cent of fires leading to non-fatal casualties and you have decided to reduce this by 10 per cent, some people may think that this means the figure should go down to 5 per cent while others may think it should go down to 13.5 per cent (10 per cent of 15 per cent is 1.5 per cent, so 15 minus 1.5 is 13.5).

If, however, you use numbers, for example 100 fires lead to casualties and you have decided to reduce this by 10 (10%), most people will know that this means the figure should go down to 90. It will be much clearer what the targets mean in the real world.

However, FRA experience has shown that care must be exercised if using numbers of incidents. If the population, traffic or other factors change significantly, the fall in the number of incidents may falsely indicate success.

FRA contribution to non fire targets

Where an FRA makes a contribution, as an LSP partner, to non-fire targets (such as a reduction in people killed or seriously injured in RTCs) the FRA may wish to measure its input to these activities by defining an 'intermediate outcome' measure – that is the part of the measure that is relevant to the FRA's work, in addition to the overall measure. Some of the measures for these purposes may need to be activity based rather than outcome based.

Some examples are shown in **Example 5** overleaf.

Example 5

'Intermediate outcome' measures

- Rate of HFRCs pmp as a contribution to community safety ie improving the quality of life for vulnerable groups such as the elderly, those with disabilities and drug users going through rehabilitation
- Rate of school visits per 100 schools (or per 1,000 pupils) for fire safety promotion – as a contribution to community safety
- Number of youth placements – as a contribution to youth offending targets;
- Rate of re-offending (as a percentage of offenders enrolled) after FRA youth schemes – as a contribution to youth offending targets
- Rate of re-offending (as a percentage of offenders enrolled) after RTC collision schemes – as part of a RTC prevention target
- Conviction or clear-up rate of deliberate fires – as part of a crime reduction target
- Rate of abandoned car clearance within 24 hours (as a percentage of all reported abandoned cars) – as part of an anti-social behaviour or community regeneration target.

Fear of crime

In those cases where the LSP has set a target related to reducing fear of crime, or a similar survey based measure, the measure is likely to be a change in the community's perception.

For more information on public perceptions see section 2.2 under 'Public consultation'.

2.7 Possible approaches to setting targets

This section looks at different approaches used by FRAs to set targets. Experience suggests that targets should be:

- Achievable
- Over and above the current trend
- Linked to the baseline level of incidents.

Three options are discussed here:

Simple

Not related to baseline risk or inequality in risk eg 10 per cent over three years

Risk-related

Could relate to FSEC risk assessment or other benchmarks

Trend plus

Stretch target

Some larger FRAs have found that each of their local authorities can have different targets because of the different influences within each area. Therefore, it is down to the individual area to know the risks and the influences in each local area in order to decide where and how to set targets.

What is achievable?

Two approaches which have been used to judge what may be an achievable target taking into account available resources are outlined below:

- Reviewing the amount of change in areas previously targeted by the FRA
- Reviewing the amount of change in areas previously targeted by other FRAs.

Analysis of trends for English FRAs suggests that realistic reductions which have been achieved are around 5 per cent per year for dwelling fire non-fatal casualties (15% over three years); and 10 per cent per year for dwelling fires (30% over three years). Some FRAs have achieved greater reductions such as 10 per cent per year.

Option One: simple

This option is not related to the FRA's baseline level of risk and does not take into account any inequalities. It is a simple percentage reduction over the three year LAA period.

For example, the target may be to reduce dwelling fires by 10 per cent over the three years of the LAA. This is consistent with previous achievements.

Option Two: risk-related

One approach which has been used by FRAs to set targets is to look at the groups of people or areas where a fire is more likely to occur and to focus activities on those areas in order to reduce inequalities.

This is likely to provide links to indicators that are not fire-specific as well as focusing on fire-specific outcomes.

Non fire-specific example

An example of a non fire-specific link could be that as fire and accidents occur more in deprived areas and among single parent families, activities could focus on these social issues. Through effective programmes working with partners, the FRA may help to break the link between deprivation and fire/fire injury by reducing incidents in the targeted areas.

It is possible, however, that fire and injury may **contribute** to deprivation and inequality, for example by fires causing financial loss in uninsured households; car fires contributing to social problems; or arson deterring new businesses in deprived areas. By reducing fires and injury, the FRA may have a direct impact on alleviating deprivation and inequality. Some FRAs have therefore set targets related to higher risk groups or areas, with greater targets in areas of higher risk and lower targets in areas of lower risk.

Reducing inequalities

Example 6 overleaf uses hypothetical data for four LAA areas. Each area has a different rate of dwelling fires for the period 2000-2007. Some have higher rates, others have lower rates. In order to bring them all to the same level and to make them more equal (to reduce any inequalities), it could be argued that they would each need different targets to be set. **Figure 15** within the example overleaf demonstrates how this might be achieved.

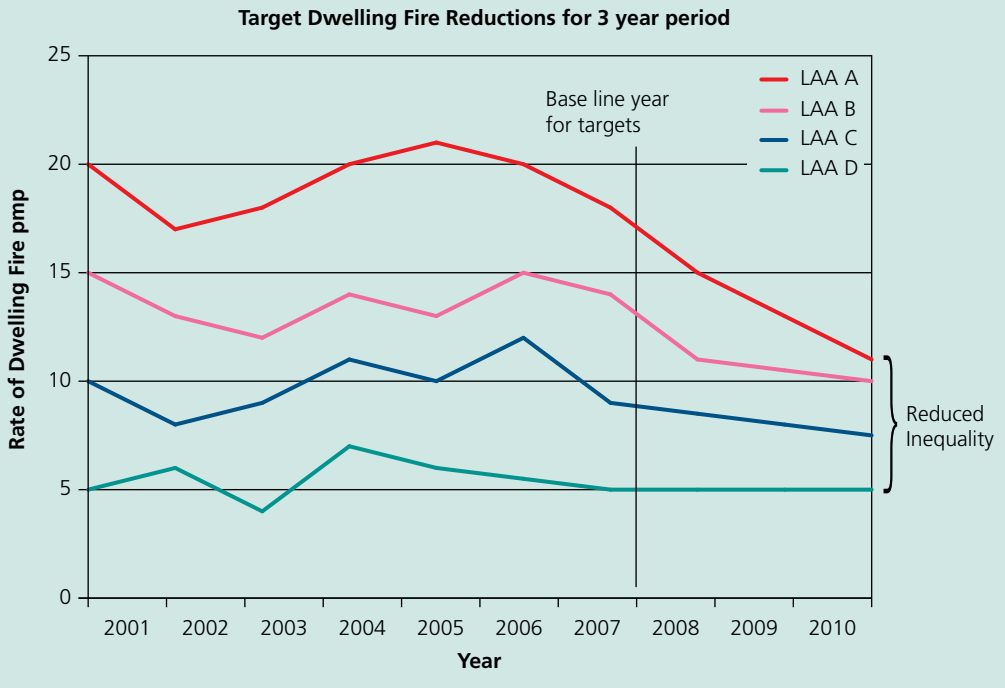
Example 6

Reducing inequalities

This example uses hypothetical data for four LAAs. The four LAAs have different rates of dwelling fire in the period 2000-2007. To reduce the inequality, the different LAAs would need to set different targets to achieve.

- LAA A (red line – with the highest rate of dwelling fire) has a target to reduce the rate of fire by nearly 50 per cent
- LAA B (pink line – with the second highest rate of dwelling fire) has a target to reduce fires by 30 per cent or by just under a third
- LAA C (blue line – with a lower rate of dwelling fire) has a target to reduce the rate of fire by around 16 per cent
- LAA D (green line – with the lowest rate of dwelling fire) has a target to reduce the rate of fire by about 9 per cent

Figure 15: The hypothetical example applies the target over a 3 year period, at the end of which the 'inequality' in the rate of fire is far less than at the baseline year in 2007



Linking to FSEC criteria

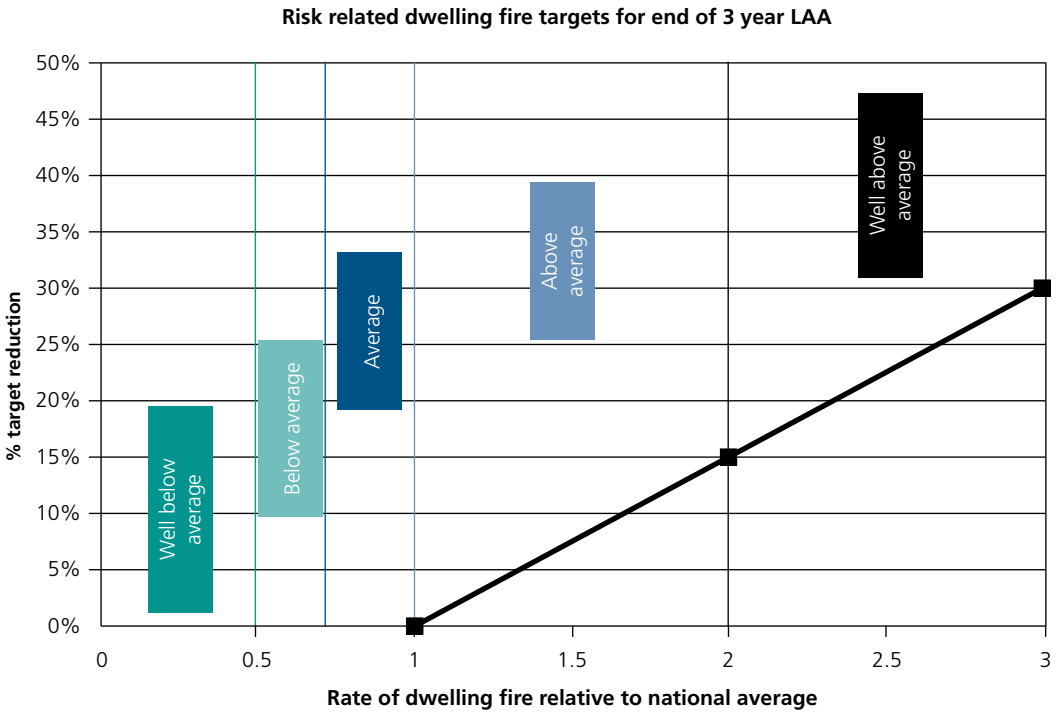
An alternative could be to link the target to the criteria in FSEC. Two technical examples are described below which relate targets to risk. Both options are based on the assumption that areas where risk is double the national average should halve the risk in 10 years and that targets in other areas should be proportionate to their risk. The assumption of halving risk in 10 years is consistent with FRAs previously achieving 5 per cent reduction per year.

The first example is illustrated in **Figure 16** below. The chart presents the concept of having more demanding targets for areas where the rate of dwelling fire is higher than the national average. The chart also presents the FSEC criteria for what is classed as 'well above' and 'above' average risk. Once you have determined your relative rate of fire you can ascertain whether it is above average by reference to the chart.

The suggested targets are based on the following assumptions:

- That areas with risk double the national average should aim to reduce the rate of incidents, at 5 per cent per year
- That a stretched target of 10 per cent per year is advised for areas three times the national average
- That areas where baseline rate of incidents is at or below national average do not have a target.

Figure 16: Relating target to relative rate of fire (example 1)

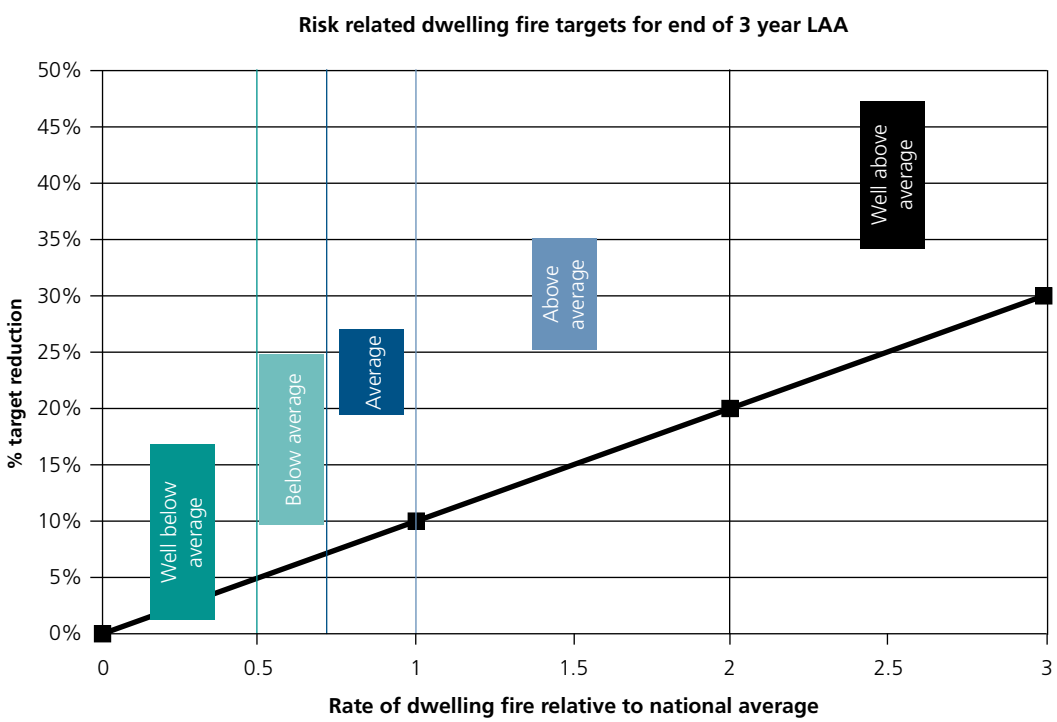


The second technical example is shown in **Figure 17**. It again presents the concept of having more demanding targets for areas where the rate of dwelling fire is higher than the national average. As before, once you have determined your relative rate of fire you can ascertain whether it is above average by reference to the chart.

However, the suggested targets are based on the following different assumptions:

- A stretched target of 10 per cent per year is suggested for areas three times the national average
- The targets should be proportional to the baseline rate of incidents
- All areas should have a target to reduce incidents, with lower targets for areas where baseline rate of incidents is at or below national average.

Figure 17: Relating target to relative rate of fire (example 2)



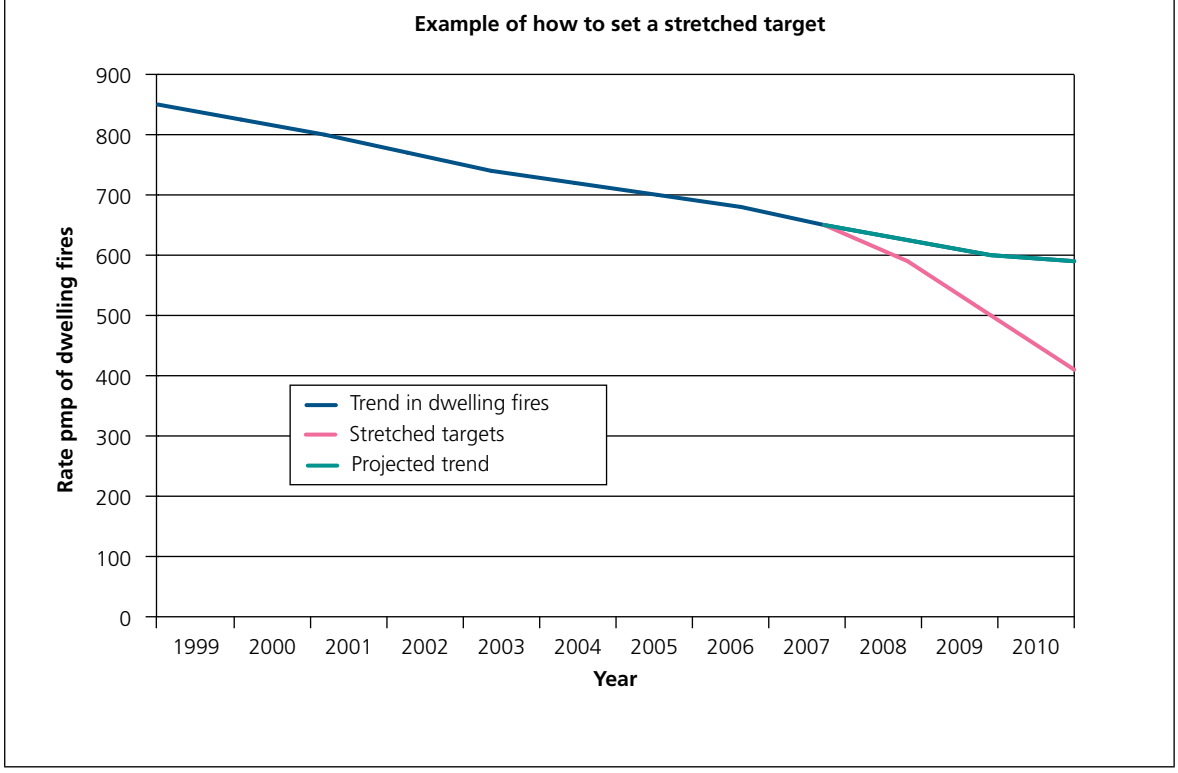
Two active spreadsheets are provided on the Communities and Local Government website (as Annexes 4 and 5) that indicate a target for an area – the first spreadsheet replicates Figure 16, the second uses a different 'line' which provides a target for lower risk areas and replicates Figure 17. You simply enter the number of incidents and population to get a suggested target. Each spreadsheet offers targets for dwelling fire deaths and non-fatal casualties (all causes of fire).

Option Three: trend plus stretched targets

A 'trend plus stretched target' is one that goes beyond the current trend. To set a stretched target FRAs have found it helpful to work out the current trend first (for example the number of dwelling fire non-fatal casualties). Some FRAs have found it helpful to create a graph to do this as this makes it clearer what the trend is and what you will need to do to 'stretch' your target.

For example, **Figure 18** below shows a trend where the number of dwelling fire non-fatal casualties has decreased from 1999 to 2007 (blue line). A trend plus stretch target could involve aiming for a decrease greater than for previous years (pink line). If you continue with the blue/green line, something is clearly having an impact, but it is likely to be whatever was having an impact from 1999 to 2007, rather than your intervention.

Figure 18: Example of stretched target

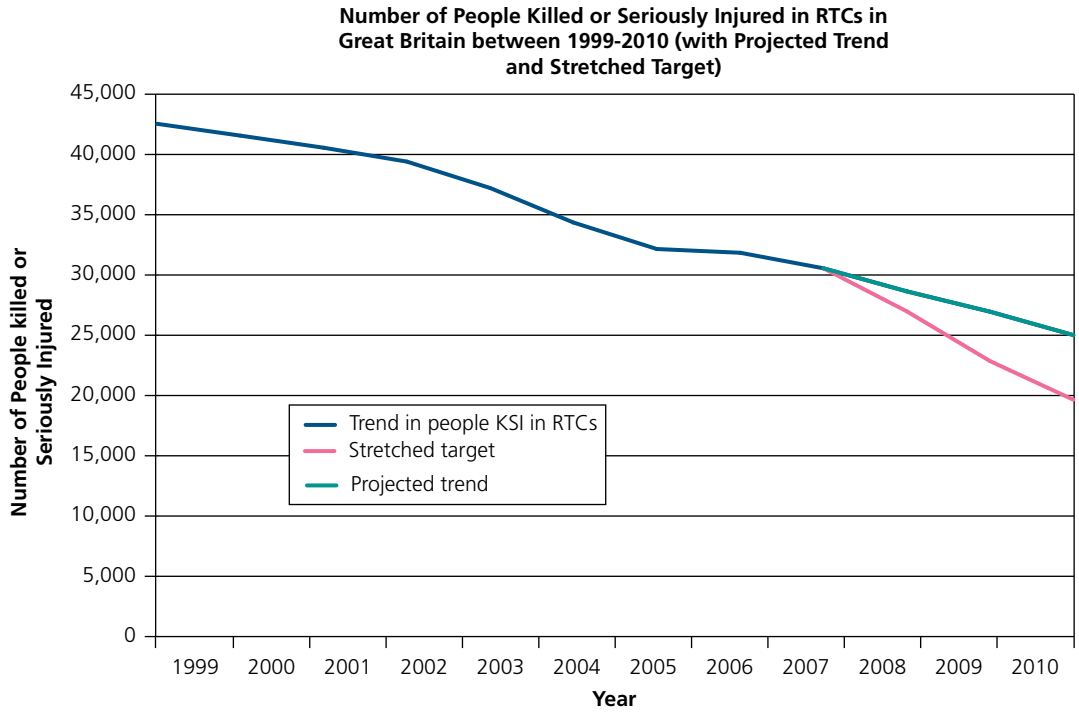


Another example is outlined in **Figure 19** on the next page using national RTC data.

Figure 19 shows the trend in people killed or seriously injured (KSI) in England. It shows that the number of KSIs has fallen steadily, at about 2.2 per cent per year (when measured as a rate pmp) and at about 4 per cent a year (when measured as a rate per million vehicles).

Figure 19 highlights that a target of 6.6 per cent reduction pmp over a three year period would simply continue the current trend. It also demonstrates what a stretched target could look like (pink line).

Figure 19: Trend in number of people killed or seriously injured in road traffic collisions in Great Britain[29]



Target Setting Case Studies

A number of case studies of how FRAs have set targets in LAAs are given below. They include targets from 3.4 per cent to 34 per cent. There is information provided in these case studies concerning what targets were set and in some cases why they were set.

[29] www.dft.gov.uk/pgr/statistics/datatablespublications/accidents/tsgbchapter8casbytype181.xls#'8.1'!A1

Case Study 12

Manchester Borough of Trafford – Reduction in the number of deliberate fires across Trafford Borough – Stretched target

Arson has been identified as a significant issue within the Borough of Trafford, so a target was set to reduce the number of deliberate fires by 5% over three years.

As part of Trafford's business case they highlighted the different types of arson and people's motivation for committing arson. Trafford also calculated the economic saving of reducing deliberate fires by 5% to support the case for using the target.

Case Study 13

Dorset FRA – Reducing arson – Setting stretched targets

Dorset FRA set a stretched target to reduce arson in Bournemouth by 20%. This was calculated by looking at the past years' trend in deliberate fires. The baseline was calculated as the three years of deliberate fire data prior to the start of the LAA. Looking at the FRA's own projected trend it appeared that they could achieve a 10% reduction in deliberate fires. Indeed a 20% target looked achievable from the projected trend. Therefore this was the figure that was agreed on for the target. As part of the FRA's business case for this target they also calculated the community benefit in terms of the economic cost of fire.

Case Study 14

Dorset FRA – Reduction of accidental dwelling fires

Poole set a target to reduce the number of accidental dwelling fires. Their aim was to reduce accidental dwelling fires, deaths and injuries.

As part of the FRA's business case they had to demonstrate that by working in partnership with other agencies they could access more hard to reach and vulnerable members of the community.

Dorset FRA had already set up an automatic system based on their monthly fire data that allowed them to check if they were on track to achieve their targets and to alert them to any potential problems. Poole was therefore able to promote the data monitoring capability that Dorset FRA had as part of its negotiations with the LAA.

This particular target was also popular as it promoted independent living and provided reassurance for the members of the community, leading to a stronger community.

Case Study 15

West Midlands FRA – Setting stretched targets

Birmingham set three stretched targets. The baseline figures used were taken from the three years prior to the start of the LAA.

The target was measured as the average performance over three years. **Table 7** displays the stretched targets set by Birmingham – these targets were set by establishing what the previous trend had been for the three years prior to the start of the LAA and 'stretching' the target from the current trend.

Table 7: Examples of previous stretched targets set by FRAs

FRA	Area	Targets	Baseline	Target	Percentage reduction
West Midlands	Birmingham	Accidental dwelling fires	1216	1111	-9%
West Midlands	Birmingham	Vehicle arson	2048	1361	-34%
West Midlands	Birmingham	Arson and other buildings	398	353	-11%

2.8 Measuring performance against targets

Comprehensive Area Assessment

Performance against targets will be assessed on an area basis rather than on an organisation by organisation basis.

This part of the toolkit provides some advice on measuring performance over the three year period of an LAA.

Options for baseline and final data

For more information on baseline data, check back to section 2.6 under 'Options for baseline and final data'.

The final data may be either:

- An average of the number of incidents over the three year period of the LAA, or;
- The number of incidents in either the final or subsequent year of the LAA.

The first option has the advantage of avoiding 'blips' and 'dips' in the number of incidents, but has the disadvantage of diluting the final year's achievement by averaging it with previous years.

The reasoning behind taking the year after the LAA as a final data measure, is that the benefit of an initiative may only become observable after it has been fully implemented. For example, with Home Fire Risk Checks, the benefit may only be measurable after a three year programme has been completed, which means that any achievements may not be visible before the fourth year and therefore will not be reported on.

Working with volatile trends

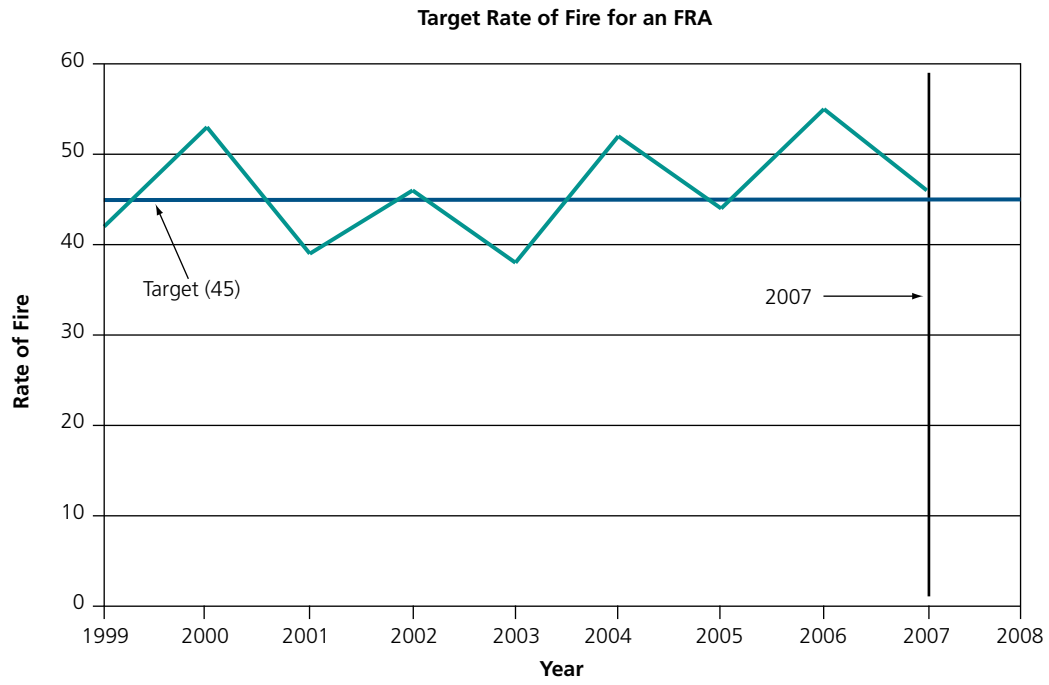
Volatile trends

Fire data fluctuate by quite a large amount – for example, even if the number of fires overall are going down, there can be a 10 per cent drop one year and then a 10 per cent increase another year.

It is possible to find the overall trend among these fluctuations, but FRAs have found that it is important to ensure that when you set your target, you take into account fluctuations in the figures.

Using the example in **Figure 20** you can see that although setting a target of 45 would seem like a significant drop from 55, looking at previous years' data it appears that a drop to 45 may be expected given the data ranges from 38 to 57 over previous years.

Figure 20: Hypothetical example of volatile fire data for an FRA



Confidence intervals

These fluctuations can be measured as 'confidence intervals', which is a statistical term. A confidence interval indicates the range that, in this case, past incidents come within.

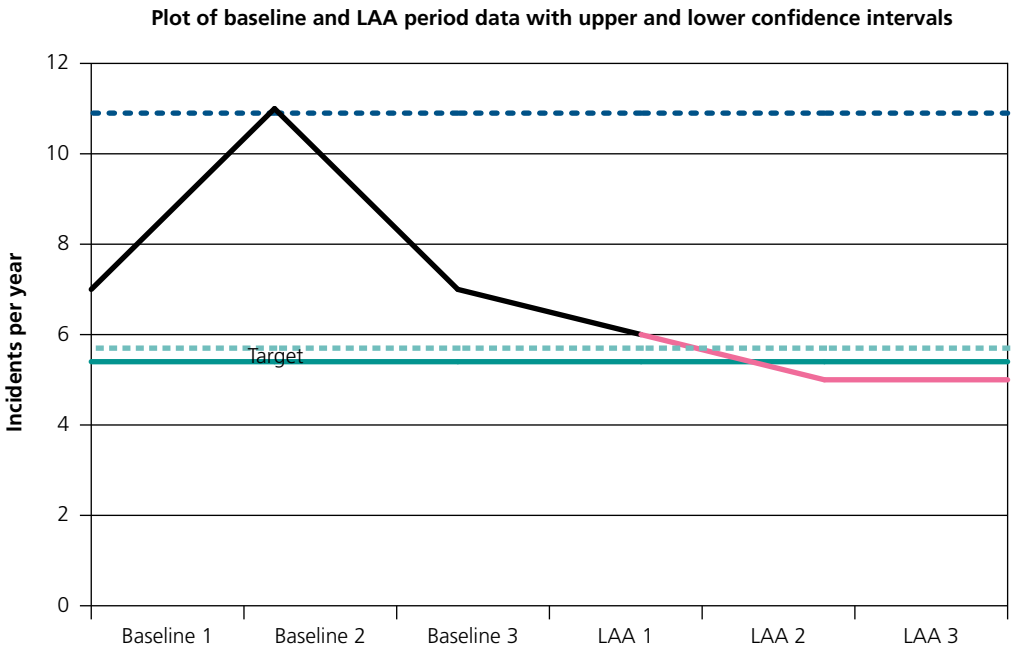
In order to conclude that a reduction in incidents is significant rather than just 'a dip' in data, the number of incidents should be below the lower 5 per cent confidence level.

Figure 21 shows the upper and lower confidence intervals as blue (upper) and green (lower) lines along with the incident rate as a black baseline and a red LAA period[30]. The target is shown as a turquoise line.

If your target comes within the confidence interval, this makes it difficult to be sure if you have achieved the target, unless your performance falls below the lower interval line.

If your performance is below the lower confidence interval (and below the target) you can be more confident that the target has been truly met.

Figure 21: Year on year variation in number of dwelling fire injuries for a FRA



[30] Ideally, for statistical reasons, confidence intervals would be based on more than three data points (ie more than three year's of data). However, fire data from more than three years ago may no longer reflect recent performance.

Changes in population and traffic levels

Another important aspect of measuring targets is to take into consideration changes in population and traffic levels. These changes can influence what it is you are measuring. You may think you are measuring changes in the number of incidents, but actually you are measuring changes in population, traffic or other factors.

For example, if a by-pass is built around a town, meaning that traffic is diverted away from the town, this may reduce the number of people KSI purely because there are fewer cars on the road not because of the RTC intervention scheme currently being run there.

These are just two examples, but it is important to remember that changes in population and other factors should be considered for any indicator outcome or measure.

An active spreadsheet is provided on the Communities and Local Government website (Annex 6) which automatically plots your baseline, the LAA period of data and the target, to allow you to view outcomes. It also calculates and shows Confidence Intervals for you.

2.9 Glossary to Chapter 2

CAA	Comprehensive Area Assessment
Correlation	A correlation is concerned with the link between two events. When the events involve numbers, a positive correlation means that as one increases, the other increases as well (this is also true of a decrease in the numbers relating to both events). A negative correlation means that as one increases, the other decreases. Correlation does not imply that one of these events causes the other. It would be sensible however to investigate strong correlations further to determine the causes.
FRA	Fire and Rescue Authority
FRS	Fire and Rescue Service
FSEC	Fire Service Emergency Cover
HFRC	Home Fire Risk Check
IRMP	Integrated Risk Management Plan
KSI	Killed or seriously injured (in reference to road traffic collisions)
LAA	Local Area Agreement
LSP	Local Strategic Partnership
MAA	Multi Area Agreements
NI	National Indicator – one of 198 indicators – see www.communities.gov.uk/publications/localgovernment/nationalindicator Each NI has a number and can be referred to by this label eg NI 17 – Perceptions of anti-social behaviour.
PMP	Per million population
RTC	Road traffic collision

Chapter 3

Review and evaluation of partnership arrangements

3.1 Introduction

Fire and Rescue Authorities (FRAs) will wish to periodically review and evaluate their partnerships. Firstly, to ensure that the partnership is contributing to the aims and objectives of the FRA set out in its strategic planning process and Integrated Risk Management Plan. Secondly, to provide assurance about the effectiveness of the arrangements and the value of the FRA's investment of public funds (whether in hard cash or in other forms, such as staff time).

This review process should enable partnership arrangements to be continually refined to deliver best value and to decide if withdrawal from or closure of the partnership is appropriate. Just as with evaluating any other programme of activity, robust evaluation of outcomes delivered through the activities commissioned by the partnership is an essential building block.

The process of reviewing and evaluating partnership activity is necessarily circular in that partnership activity should both flow from and feed into FRA's strategic planning priorities. This implies a continuous cycle whereby all new partnerships should be assessed at the outset in the context of this overarching framework and then reviewed on a regular basis to ensure that they continue to meet the FRA's objectives. The approaches set out in this chapter suggest a way of linking an FRA's objectives for its partnership activity with the systematic review of the accompanying costs and benefits both of individual partnership programmes and the FRA's overarching partnership strategy.

The key test of any partnership is whether the extra benefits that come from working in partnership are greater than the cost involved in doing so. In assessing this added value, regard should be given to all the potential areas where a partnership may be able to achieve more than the FRA could on its own. This should include factoring in less obvious costs and benefits such as the opportunities for establishing effective and ongoing relationships with key partners. There may also be occasions when FRAs will be asked to demonstrate this added value to the public.

Whilst there is no substitute for monitoring ongoing progress, full reviews of each partnership arrangement should be undertaken at regular intervals to ensure continuing relevance and benefit to the FRA. The frequency of such reviews will vary from case to

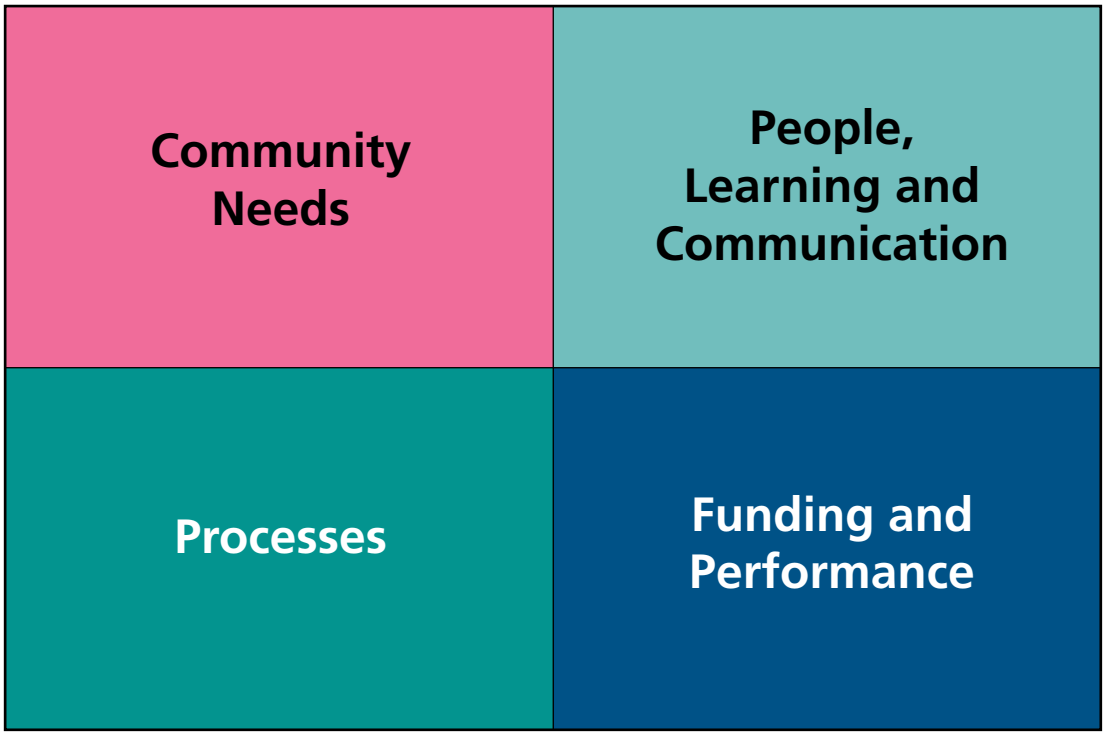
case depending on the size, risks and significance of the partnerships, and it is for the FRA to decide and put appropriate mechanisms in place. However, a number of FRAs with active review processes have suggested a 12 month interval between reviews may be a reasonable guideline. Where significant concerns arise between planned reviews, the FRA's involvement should be examined to ensure that it is still achieving its short, medium and long-term goals through relevant partnerships.

It may be helpful to score the effectiveness of FRA involvement in each partnership under separate themes (for example the extent to which particular FRA objectives are being achieved and whether or not the call on resources is in line with original expectations) or to use a traffic light rating system to prioritise future involvement.

Two alternative examples of specific processes that may be followed for reviewing and evaluating partnership involvement are set out in detail below.

3.2. Partnership working framework (provided by South Yorkshire Fire and Rescue Authority)

South Yorkshire Fire and Rescue Authority commissioned PricewaterhouseCoopers (PwC) to advise on a suitable framework for managing their partnership working. PwC suggested using a balanced scorecard framework[31], as set out below.



[31] Use of this balanced scorecard framework is subject to the disclaimer reproduced in Annex 2.

The main message of this performance framework is that attention needs to be given to all the quadrants of the scorecard in order to achieve sustainable improvements in partnership working. An organisation will usually put great effort, rightly, into meeting Community Needs (the top left hand box), but will often see limited success due to deficiencies in work on People, Learning & Communication, Processes, and Funding & Performance.

PwC clarified each of the quadrants as follows:

Community needs

This quadrant of the scorecard represents what could be described as the "bottom line" for partnership working. If partnership working is to be successful, it must meet the specific needs of individual communities across the geographic area served by the FRA as well as the needs of the whole FRA catchment area.

Two key documents are recommended for forming the foundations of partnership activity:

1. A corporate policy document

2. An 'Improvement by Partnerships' strategy document.

The corporate policy document is designed to explain what the FRA means by a partnership, why the FRA gets involved in and values partnership working, and how it manages its involvement in partnerships. This document is not about specific activities. It is about underlying values, operations and processes that lead to action.

The 'Improvement by Partnerships' strategy document should explain the issues that the FRA faces locally, and where / how it is choosing to invest in certain partnerships to address these issues. It should be a relatively dynamic document, as it needs to contain details of partnership activity that should be kept up to date. The mapping work on partnerships, outcomes, costs and benefits (described under the Funding and Performance quadrant below) will form the core of this strategy document.

As community needs are met, then outcomes will consequentially improve. This will include outcomes that are specifically related to the Fire and Rescue Service (for example, number of deaths and injuries in accidental dwelling fires; number of malicious false alarm calls). In many ways the other three quadrants of the scorecard should be aligned so as to best support the ultimate delivery that meets community needs.

People, learning and communication

This quadrant of the scorecard is about equipping officers and members engaged in partnership working with the knowledge and skills to do an excellent job. This includes sharing information and learning across the FRA; across different geographic locations within the FRA's catchment area and across the different functions of the FRA. Knowledge sharing and learning need to take place at initial / induction stages and also on an ongoing basis.

Local Strategic Partnerships (LSPs) bring together senior people from partner organisations, all with a stake in the partnership's work. Senior levels in a partnership can work together and identify issues that need addressing as well as producing good ideas about how to address them. However if partnership working is not embedded throughout all constituent organisations, such ideas stand much less chance of being translated into action by the partnership. Some form of Neighbourhood Action Group is particularly valuable here.

It may be worth considering the value of structuring the FRA geographically along the same boundaries as LSPs in order to give a firm foundation from which to build partnerships and partnership working.

Processes

This quadrant of the scorecard is about the processes, or sets of activities that need to be in place to ensure the FRA **manages** partnership working effectively. This is more of a "background" piece of work, but nonetheless very important in shaping work that is being done, stopping some work, and starting others.

A database of partnerships is an essential foundation for good management of partnership working. This needs to be associated with processes (and associated documentation) covering both starting work in a partnership and reviewing existing partnerships. These are the two key points to facilitate control of the FRA's participation in partnerships. They indicate to all staff that:

- partnership work cannot simply be started on an individual whim but that a series of checks must first be undertaken
- there is a need to give regular accounts of progress in working with partnerships
- changes in the level and ways of participation by the FRA may be required.

Partnership registers need to capture specific performance related data as well as general information. This should include:

- **Outputs** from the partnership. For example, installing [number] of smoke alarms over a specified period of time

- **Outcomes** that these outputs are anticipated to impact upon. For example, a reduction of [number] per cent in the number of injuries in accidental dwelling fires in the coming year for the geographical area in question
- **Resources** that will be put into the partnership by the FRA. For example, in the coming year a [Station Manager's] time for [number] of hours per week, and [number] of smoke alarms per month. It is only by costing the resources which go into partnership working at the outset that it is possible to demonstrate whether or not the benefits achieved are commensurate with the level of investment.

Funding and performance

This quadrant of the scorecard is about collecting and using the right information to measure and then manage performance from partnership working. An important part of performance assessment is the funding or resources invested in the work.

A key aspect of this quadrant is the systematic review of partnership work, based on the processes / documentation put in place as part of the previous Processes quadrant.

Partnerships on the register should be reviewed on a regular basis with the aid of a calendar system to plan when reviews are to take place, and monitoring / performance systems for ensuring that the reviews actually happen.

In order to make the most of the information collected through the Processes quadrant of the scorecard, it is recommended that the following three pieces of performance and funding related work be undertaken:

1. Map outcome measures, alongside the partnership work tackling these outcomes (from data on the Partnership database). This should be a fairly short piece of work. However, it will be significant in that it will show, at a glance, in areas where partnership working is taking place whether it is having an impact on community needs. There may be some areas where there are gaps. Information of this nature can be valuable in suggesting where new partnership work should best be targeted.

   The action of some partnerships will not be focussed on specific outcomes. For example, some work in schools may be about building general fire safety awareness for children and young people that will last them to adulthood. Additional categories of impact may need to be created for such partnerships, but wherever possible specific outcomes should be used.

2. Add to the previous map, to detail performance against the outcome measures, and resourcing for the partnership working. Having established a map of the areas where partnership working is taking place, the next step is to see what the impact is, and to see the effort required to have this impact. So this is basically overlaying the map with data.

3. Use the mapping information to report on partnership costs and benefits. The previous two pieces of work lay the foundation for analysis of costs and benefits from partnership working. This will feed naturally into the development of the' Improvement by Partnerships' strategy document (recommended under the Community Needs quadrant above).

3.3 Introduction to partnership evaluation toolkit (provided by Cheshire Fire & Rescue Service)

Cheshire was the first Fire and Rescue Service (FRS) to win a beacon award for its community cohesion work. It has developed a series of local initiatives, including the Halton Project, where the FRS works with a number of partners to carry out community safety and community cohesion work locally. The Improvement & Development Agency (IDeA) worked with Cheshire FRS to identify the cohesion impact of this scheme, what worked, what didn't work and what the impact of the project was on the community. An 'Evaluation Toolkit' was developed from this work to be used for continuous evaluation of the value and benefits of partnership working arrangements.

The toolkit is used at various stages of a partnership. At the beginning, it helps evaluate whether the partnership is something the FRS should become involved in, its intrinsic value, and what the benefits of involvement could be. The toolkit is submitted, along with a paper, to the senior management team to state what the benefits are to the FRS and the partnership as whole. The toolkit recommends that the FRS undertakes a full or a light touch evaluation of the partnership at regular intervals.

This focus on performance managing partnerships has enabled the FRS to take stock of progress, emerging issues, and develop potential solutions. It looks at whether the resources involved are used economically, efficiently and effectively, as well as what the impacts are on the community. The toolkit recommends that evaluators put in place actions to implement the recommendations of the evaluation and to regularly report on progress. Evaluators are also encouraged to identify the key learning points to share across the FRS and partners, so that future projects can be run more efficiently. It is then easier to take decisions once an evaluation has been completed because it is an unbiased, methodological analysis of how the partnership is performing and where the main issues lie. It also demonstrates to partners that the FRS takes partnership working seriously.

The evaluations normally take place annually. The evaluation will look at a number of areas including: whether the partnership allows the FRS to meet corporate objectives; consideration of equality issues; and how well the partnership contributes to reducing dangerous and anti-social behaviour. The evaluation uses a number of criteria which partnership lead officers (one from the FRS and the other from a different organisation) score the partnership against and provide 'evidence' to support their score against each

statement. This then provides the lead officers with an opportunity to brainstorm solutions and list the barriers to effective working. Cheshire FRS has audited all its partnerships in this way, including the LSP and the Crime and Disorder partnership.

Cheshire's evaluation toolkit is attached at **Annex 1**.

Annex 1

Cheshire Fire and Rescue Service (FRS): Partnership toolkit

Part 1 – Evaluating a Partnership

Section 1 – Contribution to Cheshire FRS objectives			
Relevant Cheshire FRS objective	Partnership support Yes/No	Commentary – how	Method of evaluation
Prevent dangerous anti-social and careless behaviour			
Protect life, property and other interests			
Deploy emergency teams according to risks			
Deal effectively with emergency incidents			
Develop a workforce fit to realise our vision			
Ensure services meet the needs of all local communities through inclusive consultation & communication			
Ensure value for money and maximise investment in front line services			

Section 2 – Accountability and scrutiny		
Control	Yes /No	Details
Is there a clear formal and legal status for the partnership?		
Does the partnership have a shared set of values and a clear, agreed long-term vision of what it wants to achieve?		
Does it keep under review relevant needs, problems and opportunities using appropriate performance indicators?		
Has it identified and taken into account the views and opinions of all relevant stakeholders?		
Was legal advice sought before setting up the partnership?		
Is there an accountable body? Is this understood by partners?		
Are performance arrangements in place to monitor and measure the success and impact of the partnership?		
Are the auditing arrangements for the partnership clear (internally and jointly)?		
Are there arrangements for the external scrutiny of the partnership's decisions?		
Are Members appropriately involved?		
Is there clarity on which functions and decisions can be delegated, and to whom?		
Is there a requirement to declare, and a system for recording, conflicts of interest?		

Section 3 – Risk and information		
Control	Yes/No	Action
Will the work of the partnership have an impact on Cheshire FRS's existing corporate strategies for communications, consultation, equality and diversity, and information communication technology?		
Are systems/processes in place to assess partnership risk?		
Is it clear how risks are to be managed?		
Are risk owners allocated and appropriate and monitoring arrangements clear?		
Have information sharing protocols been devised with partners?		
Have data protection issues been addressed?		
Is there clarity on confidentiality within meetings and on handling of confidential information between partners?		
Is there a clear procedure for complaints compliments and comments?		
Is there agreement over approval of promotion and publicity materials?		
Is there agreement on contact with public media?		

Section 4 – Human Resources		
Control	Yes/No	Action
Are roles and responsibilities and expected behaviour clear and agreed?		
Is there an agreed structure?		
Have any secondments been made by or to the partnership?		
Is there a clear set of procedures to guide secondment arrangements?		
Is there a policy on recruitment to the partnership? Is it clear whose recruitment procedures are to be used?		
Are staff supervision arrangements clear and appropriate for partnership staff?		
Have staff development procedures (appraisal, training planning) been clarified to partnership staff?		
Is it clear how issues of staff conduct will be addressed between partners?		
Does the partnership have a succession / exit strategy?		
Have staffing issues been addressed in any such planning?		

Section 5 – Finance		
Control	Yes/No	Action
Is there a detailed financial plan that is based on the project plan?		
Is it clear whose standing orders/financial regulations/Constitution are to be used and who has overall responsibility for managing partnership finances?		
Has action been taken to assess and ensure compliance?		
Are financial monitoring and reporting arrangements clear?		
Have procedures for managing and monitoring pooled budgets been developed?		
Is the process for approving spending clear, documented and agreed by the partnership?		
Is the procedure for applying for grants and external funding clear?		
Is it clear how grant claims should be processed and accounted for?		
Has thought been given to insurance requirements of partnership?		
Is there a system of internal financial control which is agreed and understood?		
Are Cheshire FRS systems used? If not are the systems adopted appropriate to the partnership?		
Is there a clear policy on procurement within the partnership?		
Where resources are jointly purchased or commissioned, is there clarity over ownership, responsibilities, etc.?		

Part 2 – Reviewing partnership effectiveness

Criteria *(please tick)*	Possible Solutions
☐ Issues ☐ Targeting ☐ Objectives ☐ Action ☐ Outcomes ☐ Impact ☐ Status	
Barriers	
Action for improvement	

ISSUES		
3	**2**	**1**
The partnership has a clear understanding of the issues facing Cheshire FRS and is actively addressing these by aligning its own activities to them.	There is some understanding of what Cheshire FRS is trying to achieve. However, other partners' issues are seen as a priority which makes progress difficult.	There is little or no understanding or will to work in partnerships in order to address Cheshire FRS' issues.
Evidence		
List Issues:	*List Issues:*	*List Issues:*

TARGETING		
3	**2**	**1**
The partnership has a very clear idea, based on evidence of what the specific problems are and what is causing them. We have been able to link into these in our planning.	The partnership has some evidence of what the problems are locally. While we have some understanding, a more joined up approach would be more effective.	Ideas of specific problems are based on anecdotal rather than clear evidence. The partnership has not made effective links over the cause of the problem and our presence is ineffective.
Evidence		
List Issues:	*List Issues:*	*List Issues:*

OBJECTIVES		
3	**2**	**1**
We have been able to set realistic objectives which are contained in the partnership's plan while assisting other partners achieve their objectives.	We have been able to set some targets which are contained in the partnership's plan. We are not fully integrated in partnership working which hinders us in helping others to achieve their objectives.	While we are aware locally of the problems facing the Fire and Rescue Service, we have been unable to have objectives integrated into the partnership's plans and there is little understanding of how we can help others.
Evidence		
List Issues:	*List Issues:*	*List Issues:*

ACTION		
3	**2**	**1**
The actions being taken to address objectives are known to be the best way forward and are assisting others with meeting their objectives.	Some of the actions being taken are known to be the best way forward in tackling objectives and are having a limited effect on other partners' objectives.	There is little evidence that the actions being taken are proven to tackle objectives and the approach is having no impact on other partners' objectives.
Evidence		
List Issues:	*List Issues:*	*List Issues:*

OUTCOMES		
3	**2**	**1**
The performance targets set were challenging, yet realistic and have been achieved. Other partners have been assisted in achieving their targets.	Targets might have been overly ambitious or not stretching enough and have mainly been achieved. We could have rendered more assistance in helping others achieve their targets.	Clear targets were not set and there is little joined up working to assist overall partnership objectives. Many targets were not achieved.
Evidence		
List Issues:	*List Issues:*	*List Issues:*

IMPACT		
3	**2**	**1**
It is clear that the effect of local problems on black, minority ethnic and other disadvantaged groups has been assessed based on good quality evidence. What is being done to tackle problems can be assessed according to the groups affected and will have a positive impact on them.	It is clear that the effect of local problems on black, minority ethnic and other disadvantaged groups has been considered. What is being done to tackle problems can be assessed according to the groups affected and will have a positive impact on them.	How local problems affecting black, minority ethic and other disadvantaged groups specifically has not been considered. What is being done to tackle problems cannot be assessed according to impact on minority groups.
Evidence		
List Issues:	*List Issues:*	*List Issues:*

STATUS		
3	**2**	**1**
We are having a major impact on Fire and Rescue Service issues. Partnership working is going very well and there is clear evidence that all governance, management and reporting arrangements are being followed.	We are having an impact on Fire and Rescue Service issues. Partnership working is effective and there is some evidence that governance, management and reporting arrangements are being followed.	We are having a limited effect on Fire and Rescue Service issues and partnership working is not going well. There is little evidence that governance, management and reporting arrangements are being followed.
Evidence		
List Issues:	*List Issues:*	*List Issues:*

Annex 2

Disclaimer for Chapter 3 material provided by PricewaterhouseCoopers

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