

Chapter 5

Fire

The Current System

99. The existing fire formula is based on regression against past spending, based on population. It has factors for 'A' risk area (highest category of fire risk), density, coastline (because a coastal boundary means authorities can not get help from an adjacent authority), fire calls, fire safety, ACA, and pensions.

100. The formula is unsatisfactory because it contains a clear perverse incentive - funding is partly determined by the number of fire calls, so successful efforts to prevent fires through education and other measures tend to reduce the funding an authority receives. The main focus of reform is to remove this perverse incentive.

101. The formula is also unsatisfactory because it is based on regression against past (i.e. 1990-91) spending; and has a complex structure with a number of small "top sliced" elements to allocate funding for particular pressures.

The New System

102. We propose that the new fire formula would be structured as

BASIC ALLOCATION PER HEAD OF POPULATION + TOP-UPS.

103. The number of top-ups vary from option to option. The exception is the radical simplification of option FIR3, under which every authority simply receives an annual change the same as the change to the national funding allocation.

104. FIR1, FIR2, and FIR4 still rely on regression against past spending, but this has been updated to a three-year average up to 2001.

105. FIR1 is the option which takes most account of the factors that are relevant to the costs of fire services in different areas, but is more complex than FIR2. FIR3 is extremely simple, but does not attempt to reflect the different cost drivers, instead taking the existing pattern of spend as a given. FIR4 offers additional variants, such as with the fire safety top ups, on which there will need to be a judgement as to whether the extra complexity is merited.

Options

Option FIR1

106. This includes an element for the fire risk assessments that are applied to areas within each fire authority. This would give a basic amount per head of population with top ups for

- density;
- coastline;
- weighted risk area;
- fire risk index;
- fire safety (optional);
- area cost; and
- pensions.

This takes account of the factors that discussions with fire authorities and research indicate are relevant to the costs of providing fire services in different areas. This is at the expense of increased complexity.

Option FIR2

107. This makes the minimum change to the formula necessary to remove the fire calls perverse indicator. It achieves this by replacing fire calls with a fire risk index. This index is based on measures of deprivation, which are correlated with fire calls. This would give a basic amount per head of population with top ups for

- 'A' risk areas;
- density;
- coastline;
- fire risk index;
- fire safety (optional);
- area cost; and
- pensions.

Option FIR3

108. This is a radically simplified approach. Each authority would receive a flat rate increase each year, reflecting the increase in the national fire formula total. The starting point would be actual budgeted spend. The theory here is that most of the year-on-year increase in costs to the fire service relates to wage increases, which are negotiated at a national level.

Option FIR4

109. This is as FIR1 with the addition of a sparsity top-slice, increases the size of the fire safety education top-slice, and takes on a proposed technical adjustment to the way pensions are dealt with in the expenditure database. This would give a basic amount per head with top ups for

- 'A' risk areas;
- density;

- coastline;
- fire risk index;
- fire safety;
- sparsity;
- area cost; and
- pensions.

110. All four options achieve the main goal for the fire formula of removing the perverse incentive of the fire calls indicator. This is done in FIR1, FIR2, and FIR4 by replacement of the fire calls indicator with a fire risk index.

Fire Risk Index

111. This element is common to FIR1, FIR2, and FIR4. It has long been known that the number of calls a fire authority receives is linked to measures of deprivation. This has been confirmed by various reports that have also suggested other factors that are potentially related. The fire risk index picks out the key factors that are linked with fire calls and combines them into an index that avoids the perverse incentive that the use of fire calls as a direct measure can potentially have. Thus the "busyness" of a service can be reflected in the formula without perverse incentive. It is possible to use different variants of the index.

Weighted Risk Area

112. The area covered by fire authorities is split into half kilometre squares. Each of these are then assigned a risk category. Categories range from 'A' risk (major city centres and certain industrial areas) to 'D' risk (rural areas) and finally 'remote rural'. The attendance and response time targets for each of these areas have been used to calculate a weighted risk area factor. This indicator has been used within the formula for options FIR1 and FIR4.

The fire safety top-up

113. FIR1, FIR2 and FIR4 include top ups for fire safety which complicate the formula. Thus a variant to each of the options illustrated in FIR1, is the removal of the fire safety top ups, rolling back the amount distributed by these top-ups into the main formula.

Questions

114. We would like your views on:

- i) **Which of the above options for the fire formula do you prefer?**
- ii) **Are there any alternative or additional changes you would wish to see?**

and

- iii) **How far should the formula rely on weighted risk area?**
- iv) **Which of the variants, if any, that are within option FIR4 should be included?**
- v) **Should provision for fire safety be rolled back into the main formula?**

EXEMPLIFICATIONS OF FIRE OPTIONS

Baseline for exemplifications: Total 2002/03 SSA

Local Authority	2002/03 Total SSA (£m)	Change from 2002/03 Total SSA								
		Option FIR1 (£m) (%)		Option FIR2 (£m) (%)		Option FIR3 (£m) (%)		Option FIR4 (£m) (%)		
England	49762.2	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	
London area	9326.4	-29.8	-0.3%	-27.7	-0.3%	-23.0	-0.2%	-28.0	-0.3%	
Metropolitan areas	11982.9	1.8	0.0%	6.8	0.1%	-3.4	0.0%	-6.1	-0.1%	
Shire areas	28449.6	28.2	0.1%	21.0	0.1%	26.5	0.1%	34.2	0.1%	
Isles of Scilly	3.2	-0.2	-5.2%	0.0	-1.4%	-0.2	-5.3%	-0.2	-5.2%	
Inner London boroughs incl. City	3430.2	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	
Outer London boroughs	4727.7	0.0	0.0%	0.0	0.0%	0.0	0.0%	-0.1	0.0%	
London boroughs	8157.8	-0.1	0.0%	-0.1	0.0%	-0.1	0.0%	-0.1	0.0%	
GLA - all functions	1168.6	-29.8	-2.5%	-27.7	-2.4%	-22.9	-2.0%	-27.9	-2.4%	
Metropolitan districts	10695.2	-0.1	0.0%	-0.1	0.0%	-0.1	0.0%	-0.1	0.0%	
Metropolitan fire authorities	387.1	1.9	0.5%	6.9	1.8%	-3.3	-0.8%	-5.9	-1.5%	
Metropolitan police authorities	900.6	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	
Shire unitary authorities	7517.4	-1.0	0.0%	2.6	0.0%	4.2	0.1%	-0.6	0.0%	
Shire counties	16706.4	29.2	0.2%	18.4	0.1%	22.3	0.1%	34.8	0.2%	
Shire districts	2354.1	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	
Shire police authorities	1871.7	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	
Total Education authorities	43080.0	27.8	0.1%	20.8	0.0%	26.1	0.1%	33.8	0.1%	
SUMMARY BY GO REGION										
South West	4360.5	5.7	0.1%	3.4	0.1%	3.3	0.1%	7.3	0.2%	
South East	7234.7	-10.4	-0.1%	-5.7	-0.1%	3.6	0.0%	-8.1	-0.1%	
London	9326.4	-29.8	-0.3%	-27.7	-0.3%	-23.0	-0.2%	-28.0	-0.3%	
Eastern	4963.4	6.5	0.1%	4.9	0.1%	5.2	0.1%	8.3	0.2%	
East Midlands	3814.1	10.9	0.3%	7.4	0.2%	-3.8	-0.1%	11.0	0.3%	
West Midlands	5277.7	8.0	0.2%	6.9	0.1%	5.2	0.1%	6.7	0.1%	
Yorkshire and Humber	5018.8	8.5	0.2%	7.1	0.1%	-2.1	0.0%	7.2	0.1%	
North East	2689.1	-1.4	-0.1%	1.3	0.0%	7.7	0.3%	-2.9	-0.1%	
North West	7077.4	2.0	0.0%	2.5	0.0%	3.7	0.1%	-1.5	0.0%	

Local Authority	2002/03 Total SSA			Change from 2002/03 Total SSA					
	(£m)	Option FIR1 (£m)	(%)	Option FIR2 (£m)	(%)	Option FIR3 (£m)	(%)	Option FIR4 (£m)	(%)
GREATER LONDON									
GLA - all functions	1168.6	-29.8	-2.5%	-27.7	-2.4%	-22.9	-2.0%	-27.9	-2.4%
METROPOLITAN FIRE AUTHORITIES									
Greater Manchester Fire	89.6	1.4	1.5%	2.1	2.4%	-2.5	-2.8%	-1.0	-1.1%
Merseyside Fire	57.1	-1.9	-3.3%	-1.5	-2.7%	2.4	4.3%	-3.0	-5.2%
South Yorkshire Fire	40.8	2.9	7.0%	3.0	7.3%	1.1	2.8%	2.1	5.2%
Tyne and Wear Fire	42.0	-0.6	-1.3%	-0.2	-0.4%	3.0	7.1%	-1.5	-3.6%
West Midlands Fire	88.7	-0.1	-0.1%	2.4	2.7%	-3.1	-3.5%	-1.9	-2.1%
West Yorkshire Fire	68.9	0.3	0.4%	1.1	1.6%	-4.2	-6.1%	-0.7	-1.0%
West Yorkshire Police	156.6	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
ALL PURPOSE AUTHORITIES									
Bath & North East Somerset	132.6	-0.6	-0.4%	-0.2	-0.2%	-0.1	-0.1%	-0.6	-0.4%
Blackburn with Darwen	145.8	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Blackpool	143.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Bournemouth	138.3	0.2	0.1%	0.1	0.1%	0.0	0.0%	0.2	0.1%
Bracknell Forest	86.3	-0.4	-0.4%	-0.2	-0.3%	-0.1	-0.1%	-0.3	-0.4%
Brighton & Hove	235.9	-0.2	-0.1%	-0.2	-0.1%	0.2	0.1%	-0.2	-0.1%
Bristol	336.1	-1.2	-0.3%	-0.4	-0.1%	-0.2	-0.1%	-1.2	-0.3%
Darlington	89.2	0.3	0.3%	0.3	0.3%	0.5	0.6%	0.3	0.3%
Derby	214.9	0.6	0.3%	0.6	0.3%	-0.3	-0.1%	0.6	0.3%
East Riding of Yorkshire	259.4	0.9	0.4%	0.8	0.3%	0.6	0.2%	0.8	0.3%
Halton	121.6	0.1	0.0%	0.1	0.1%	0.2	0.2%	0.1	0.0%
Hartlepool	95.7	-0.5	-0.5%	-0.1	-0.1%	0.0	0.0%	-0.5	-0.6%
Herefordshire	143.8	0.6	0.4%	0.2	0.2%	0.5	0.3%	0.6	0.4%
Isle of Wight Council	123.9	0.1	0.0%	0.3	0.3%	0.9	0.7%	0.1	0.1%
Kingston upon Hull	264.1	0.6	0.2%	0.5	0.2%	0.3	0.1%	0.5	0.2%
Leicester	298.9	0.2	0.1%	0.1	0.0%	-0.6	-0.2%	0.2	0.1%
Luton	185.9	0.1	0.1%	0.1	0.1%	0.4	0.2%	0.1	0.1%
Medway	234.7	0.1	0.0%	0.2	0.1%	0.4	0.2%	0.1	0.0%
Middlesbrough	152.1	-0.7	-0.5%	-0.1	-0.1%	0.0	0.0%	-0.8	-0.5%
Milton Keynes	189.8	-0.3	-0.1%	-0.2	-0.1%	-0.4	-0.2%	-0.2	-0.1%
North East Lincolnshire	152.9	0.4	0.3%	0.3	0.2%	0.2	0.2%	0.3	0.2%
North Lincolnshire	137.8	0.4	0.3%	0.3	0.2%	0.2	0.2%	0.3	0.3%

Local Authority	2002/03 Total SSA		Change from 2002/03 Total SSA							
	(£m)	Option FIR1		Option FIR2		Option FIR3		Option FIR4		
		(£m)	(%)	(£m)	(%)	(£m)	(%)	(£m)	(%)	
North Somerset	148.9	-0.7	-0.4%	-0.2	-0.2%	-0.1	-0.1%	-0.7	-0.4%	
Nottingham	274.9	0.4	0.1%	0.3	0.1%	0.2	0.1%	0.3	0.1%	
Peterborough	153.3	0.1	0.1%	-0.1	-0.1%	-0.1	-0.1%	0.2	0.1%	
Plymouth	229.6	0.4	0.2%	0.2	0.1%	0.4	0.2%	0.5	0.2%	
Poole	107.1	0.2	0.1%	0.1	0.1%	0.0	0.0%	0.2	0.2%	
Portsmouth	180.3	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	
Reading	117.4	-0.4	-0.4%	-0.3	-0.2%	-0.1	-0.1%	-0.4	-0.3%	
Redcar and Cleveland	140.7	-0.7	-0.5%	-0.1	-0.1%	0.0	0.0%	-0.8	-0.6%	
Rutland	26.5	0.0	0.1%	0.0	0.1%	-0.1	-0.4%	0.0	0.1%	
Slough	123.3	-0.3	-0.3%	-0.2	-0.2%	-0.1	-0.1%	-0.3	-0.2%	
South Gloucestershire	190.0	-0.8	-0.4%	-0.3	-0.2%	-0.2	-0.1%	-0.8	-0.4%	
Southampton	203.1	-0.1	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	
Southend-on-Sea	163.3	0.0	0.0%	0.1	0.0%	0.2	0.1%	0.0	0.0%	
Stockton-on-Tees	175.2	-1.0	-0.6%	-0.1	-0.1%	0.0	0.0%	-1.1	-0.6%	
Stoke-on-Trent	226.6	0.6	0.3%	0.5	0.2%	0.2	0.1%	0.6	0.2%	
Swindon	151.7	0.5	0.3%	0.2	0.1%	0.4	0.2%	0.6	0.4%	
Telford and the Wrekin	140.7	0.7	0.5%	0.2	0.2%	0.9	0.6%	0.8	0.5%	
Thurrock	133.8	0.0	0.0%	0.1	0.0%	0.2	0.1%	0.0	0.0%	
Torbay	115.5	0.3	0.2%	0.1	0.1%	0.2	0.2%	0.3	0.3%	
Warrington	161.4	0.1	0.1%	0.2	0.1%	0.4	0.3%	0.1	0.1%	
West Berkshire	117.3	-0.5	-0.4%	-0.3	-0.3%	-0.2	-0.1%	-0.4	-0.4%	
Windsor and Maidenhead	109.8	-0.5	-0.5%	-0.4	-0.3%	-0.2	-0.2%	-0.5	-0.4%	
Wokingham	108.0	-0.5	-0.5%	-0.4	-0.3%	-0.2	-0.2%	-0.5	-0.4%	
York	136.4	0.7	0.5%	0.2	0.2%	-0.1	-0.1%	0.9	0.6%	
Isles of Scilly	3.2	-0.2	-5.2%	0.0	-1.4%	-0.2	-5.3%	-0.2	-5.2%	

Local Authority	2002/03 Total SSA			Change from 2002/03 Total SSA						
	(£m)	Option FIR1		Option FIR2		Option FIR3		Option FIR4		
		(£m)	(%)	(£m)	(%)	(£m)	(%)	(£m)	(%)	
SHIRE COUNTIES										
Bedfordshire	285.2	0.3	0.1%	0.3	0.1%	1.0	0.3%	0.4	0.1%	
Buckinghamshire	344.8	-0.7	-0.2%	-0.5	-0.1%	-1.0	-0.3%	-0.5	-0.1%	
Cambridgeshire	371.2	0.4	0.1%	-0.3	-0.1%	-0.4	-0.1%	0.8	0.2%	
Cheshire	478.8	0.4	0.1%	0.7	0.1%	1.6	0.3%	0.4	0.1%	
Cornwall	377.7	1.3	0.3%	1.2	0.3%	-1.5	-0.4%	1.5	0.4%	
Cumbria	372.5	1.5	0.4%	0.7	0.2%	1.9	0.5%	1.7	0.5%	
Derbyshire	528.2	2.3	0.4%	2.2	0.4%	-1.1	-0.2%	2.2	0.4%	
Devon	505.8	1.6	0.3%	0.6	0.1%	1.4	0.3%	1.8	0.4%	
Dorset	262.3	0.5	0.2%	0.3	0.1%	-0.1	0.0%	0.5	0.2%	
Durham	390.2	1.4	0.4%	1.2	0.3%	2.3	0.6%	1.2	0.3%	
East Sussex	373.5	-0.4	-0.1%	-0.5	-0.1%	0.5	0.1%	-0.3	-0.1%	
Essex	1006.9	-0.1	0.0%	0.6	0.1%	1.8	0.2%	0.1	0.0%	
Gloucestershire	400.0	1.5	0.4%	0.9	0.2%	0.5	0.1%	1.8	0.4%	
Hampshire	863.2	-0.6	-0.1%	0.0	0.0%	-0.1	0.0%	-0.4	0.0%	
Hertfordshire	813.4	-1.1	-0.1%	0.1	0.0%	-0.4	-0.1%	-0.9	-0.1%	
Kent	1055.6	0.5	0.0%	1.0	0.1%	2.6	0.2%	0.6	0.1%	
Lancashire	875.6	0.4	0.0%	0.2	0.0%	-0.2	0.0%	0.2	0.0%	
Leicestershire	410.9	0.5	0.1%	0.3	0.1%	-1.8	-0.4%	0.6	0.1%	
Lincolnshire	474.3	4.7	1.0%	2.4	0.5%	0.3	0.1%	5.1	1.1%	
Norfolk	570.0	4.2	0.7%	2.3	0.4%	2.4	0.4%	4.7	0.8%	
North Yorkshire	412.9	2.4	0.6%	0.8	0.2%	-0.3	-0.1%	2.9	0.7%	
Northamptonshire	465.1	0.9	0.2%	0.3	0.1%	-0.9	-0.2%	1.1	0.2%	
Northumberland	239.0	0.4	0.2%	0.4	0.2%	2.0	0.8%	0.5	0.2%	
Nottinghamshire	540.9	1.2	0.2%	1.1	0.2%	0.6	0.1%	1.0	0.2%	
Oxfordshire	418.1	-0.6	-0.2%	-1.1	-0.3%	-1.9	-0.5%	-0.2	0.0%	
Shropshire	206.3	1.5	0.7%	0.5	0.2%	1.9	0.9%	1.6	0.8%	
Somerset	355.8	1.4	0.4%	0.5	0.1%	1.9	0.5%	1.7	0.5%	
Staffordshire	570.2	2.4	0.4%	2.1	0.4%	0.8	0.1%	2.2	0.4%	
Suffolk	475.2	2.6	0.6%	1.6	0.3%	0.3	0.1%	2.9	0.6%	
Surrey	722.1	-3.3	-0.5%	-1.6	-0.2%	1.8	0.2%	-3.0	-0.4%	
Warwickshire	348.1	0.7	0.2%	0.2	0.1%	2.7	0.8%	0.9	0.3%	
West Sussex	533.1	-1.9	-0.4%	-1.5	-0.3%	1.5	0.3%	-1.7	-0.3%	
Wiltshire	293.2	1.4	0.5%	0.4	0.1%	0.9	0.3%	1.6	0.6%	
Worcestershire	366.2	1.7	0.5%	0.7	0.2%	1.4	0.4%	1.9	0.5%	