

Chapter 8

Police

The Current System

135. The police funding formula is the basis for distributing Home Office Police Grant (currently £4.6 billion) to police authorities across England & Wales and is one of the needs formulae within the ODPM and Welsh Assembly Government Revenue Support Grant (currently around £3.1 billion). The principles behind the formula remain broadly accepted by the policing community, which had a large hand in developing it in 1994/95, and which has been actively involved in subsequent changes.

136. The current formula is based on a two stage approach. The first stage is to divide funds between different components based on a definition of policing services derived from five ACPO 'key areas' from 1995:

- call management;
- crime management;
- traffic management;
- public order and reassurance; and
- community relations.

137. A sixth component was added in 1997/98 (patrol).

138. There are also three additional components to the current formula:

- sparsity;
- provision for Dedicated Security Posts; and
- police pensions.

139. The second stage is to divide formula spending for services between police authorities using a 'workload indicator' established for each service. In general, a workload model is established by multiple linear regression analysis. Models of workload were preferred to using 'actual' figures in order to account for known variations in recording practices and to avoid any perverse incentives.

140. The current formula for the police block is given below.

Basic amounts

POLICE BASIC AMOUNT 1 £30.49

POLICE BASIC AMOUNT 2 £37.76

Top-ups

POLICE DEPRIVATION TOP-UP 1	£0.85 multiplied by POLICE INDEX I ; plus £1.28 multiplied by POLICE INDEX III ; plus £32.49 multiplied by HOUSEHOLDS RENTING ; plus £107.33 multiplied by RESIDENTS IN OVERCROWDED HOUSEHOLDS ; plus £5.47 multiplied by STRIVING POPULATION ; plus £116.36 multiplied by YOUNG MALE UNEMPLOYMENT-RELATED BENEFIT CLAIMANTS ;
POLICE DEPRIVATION TOP-UP 2	£1.24 multiplied by POLICE INDEX II ;
POLICE DENSITY TOP-UP 1	£0.79 multiplied by POPULATION DENSITY ; minus £2.84 multiplied by POPULATION SPARSITY ;
POLICE DENSITY TOP-UP 2	£2.43 multiplied by POPULATION DENSITY
POLICE SPARSITY TOP-UP	£4.69 multiplied by POPULATION SPARSITY

141. The full formula used to calculate the *Police* element is:

Police	
(a)	DAYTIME POPULATION multiplied by the result of: POLICE BASIC AMOUNT 1 ; plus POLICE DEPRIVATION TOP-UP 1 ; plus POLICE DENSITY TOP-UP 1 ;
(b)	RESIDENT POPULATION multiplied by the result of: POLICE BASIC AMOUNT 2 ; plus POLICE DEPRIVATION TOP-UP 2 ; plus POLICE DENSITY TOP-UP 2 ; plus POLICE SPARSITY TOP-UP ;
(c)	The sum of: £1,388.76 multiplied by BUILT-UP ROAD LENGTHS ; plus £13,908.75 multiplied by MOTORWAY LENGTHS ;
(d)	The results of (a) to (c) inclusive are added together and the result is multiplied by AREA COST ADJUSTMENT FOR POLICE ;
(e)	The result of (d) is then added to the sum of SECURITY EXPENDITURE and POLICE PENSIONS ;
(f)	The result of (e) is then multiplied by the result of 1 minus POLICE GRANT RATE ;
(g)	The result of (f) is then multiplied by the scaling factor given in Annex F for the Police service block.

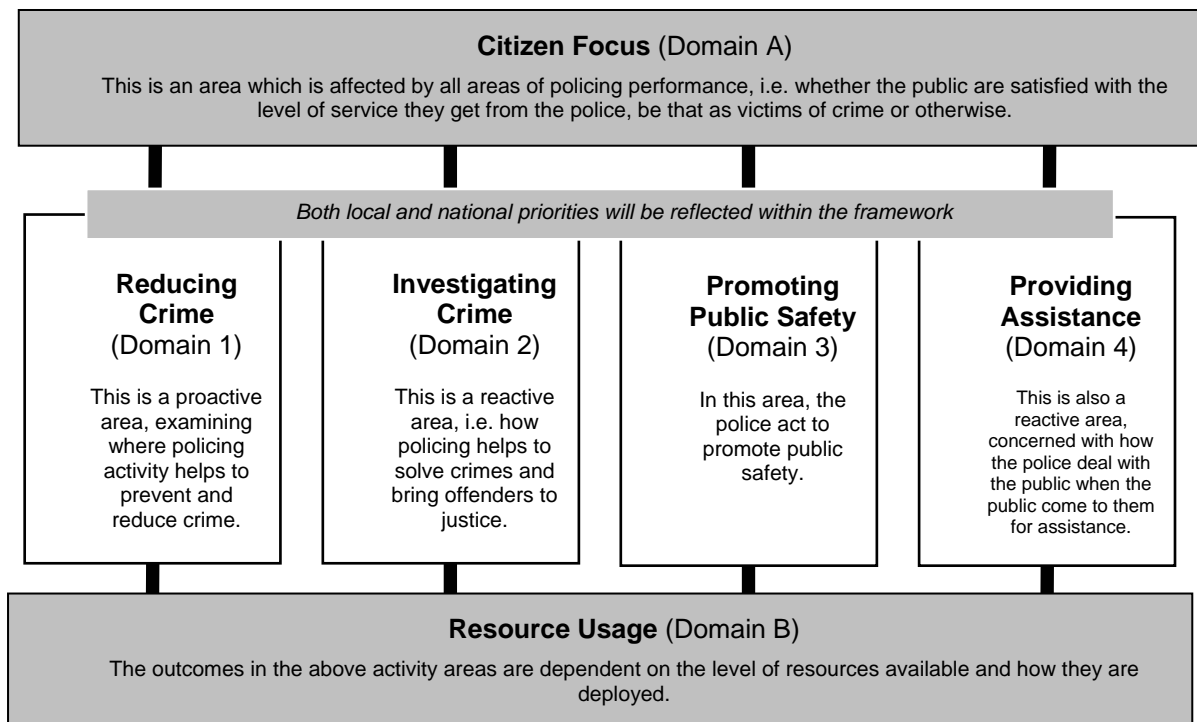
Options for a New System

142. The present formula is now 10 years old and is based on data from the early nineties. The only major change since its introduction was in 2002 when

the relative size of the weightings that divides money between the components was adjusted. We have consulted the police community at length on formula development and with the Police Allocation Formula Working Group have developed a range of options for change.

Stage One – Service components

143. The structure of policing has changed since the mid nineties. The Home Office has implemented the Police Performance Assessment Framework (PPAF), a set of national measures of performance and an associated assessment system. It provides a new structure for the definition of policing services, as follows:



144. The proposed components for the new formula set out below tie in with the PPAF domains:

Proposed PPAF - related, components	
Crime (reduction/investigation)	Domains 1 & 2
Calls for service (Incidents)	Domain 4
Traffic	Domain 3 & 4
Reassurance/Fear of Crime	Domain 3
Special events	Domain 3

145. We have continued to use information on police resource use to distribute provision between the main 'operational' components. Activity Based Costing is now in use in all forces. We have used the results for 2003/04 to apportion the provision. This is a considerable step forward

compared with the previous arrangements that relied on limited sampling in only some forces.

146. From 1 April 2006, police pensions funding arrangements will change. Instead of all pensions outgoings being met directly from authorities' revenue accounts, authorities will pay an actuarially assessed employers' contribution into a pensions account. If the annual outgoings (net of employees' contributions) exceed these contributions, the Home Office will make up the difference; if an employer's contributions exceed its outgoings, the difference will be payable to the Home Office. The net effect is expected to be a transfer of funding from authorities to the Home Office; the advantages will include less volatility in local spending and a much sharper focus on operational requirements. The first exemplification of the revised police formula (POL1) shows the effect of removing pensions from the current system, estimated as for 2003/04, the basis of the Consultation paper earlier this year on Police Pensions. All further police exemplifications have no formula component for police pensions and are based against this recalculated 2005/06 FSS. **This amount is not a forecast of the actual transfer for 2006/07 or 2007/08.**

147. We also wish to consult on the future of Dedicated Security Posts (DSPs) funding.

148. DSP funding currently represents 2.3 per cent. of the funding formula. We wish to take the opportunity to consult on whether, in a time of heightened security, funding should continue to be allocated as part of general grants or should be removed from the formula and distributed as a specific grant. This possible change has not been exemplified at this stage.

149. There is a small separate element in the formula for sparsity. This will remain unchanged.

Stage Two – Distribution of Formula Spending and Home Office Police Grant between police authorities

150. In dividing funds for services between forces, 'workload indicators' have again been identified based largely upon the outcome measures established within PPAF. Again, in general, multiple linear regression analysis has been performed to establish models of workload.

Formula Component	Workload Indicator
Reducing/Investigating Crime	Number of recorded crimes
Providing assistance (Incidents)	Number of calls for service (incidents)
Traffic	Number of recorded road traffic casualties
Providing public reassurance	Combined BCS fear of crime and perception of disorder measures

Formula Component	Workload Indicator
Special events	This component would be distributed in proportion to the daytime population (residents plus commuters)

151. There have been many changes since the current funding formula was created; populations and other socio demographic factors such as levels of population density or deprivation have changed. The National Crime Recording Standard (NCRS) has also been introduced which will in future result in more consistent data on lower level crime being made available.

Options

152. There is a range of options which provide a spread of outcomes.

Option POL2: Full Review – 7 categories of crime

153. This option uses a workload weighting for different types of crime based on seven crime categories:

- serious violence and sexual crime;
- robbery;
- less serious violence;
- domestic burglary;
- vehicle;
- other crime: high cost; and
- other crime: low cost

154. This option is based on review and updating of all police formulae. It uses fairly complex formulae to take account of the police community's concern for the formula to reflect relative needs as closely as reasonably possible.

155. The formula is given below.

Basic amounts

POLICE BASIC AMOUNT £106.02

Top-ups

POLICE CRIME TOP-UP 1 £15.76 multiplied by **DAYTIME NET INFLOW PER HEAD**; plus
£1.76 multiplied by **LN OF BARS PER 100HA**; plus
£96.51 multiplied by **INCOME SUPPORT**; plus
£2.03 multiplied by **SINGLE PARENT HOUSEHOLDS**

POLICE CRIME TOP-UP 2 £0.17 multiplied by **POPULATION DENSITY**; plus
£489.68 multiplied by **LONG-TERM UNEMPLOYED**

POLICE CRIME TOP-UP 3	£0.34 multiplied by LN OF BARS PER 100HA ; plus £0.05 multiplied by POPULATION DENSITY ; plus £8.18 multiplied by NES GROUPS 6,7 AND 8 ; plus £0.47 multiplied by SINGLE PARENT HOUSEHOLDS ; plus £3.76 multiplied by DAYTIME NET INFLOW PER HEAD
POLICE CRIME TOP-UP 4	£0.97 multiplied by LN OF BARS PER 100HA ; plus £0.41 multiplied by SINGLE PARENT HOUSEHOLDS ; plus £1.26 multiplied by STUDENT HOUSING ; plus £0.06 multiplied by HARD PRESSED
POLICE CRIME TOP-UP 5	£1.79 multiplied by LN OF BARS PER 100HA ; plus £1.98 multiplied by STUDENT HOUSING ; plus £783.49 multiplied by YOUNG MALE UNEMPLOYED
POLICE CRIME TOP-UP 6	£28.80 multiplied by DAYTIME NET INFLOW PER HEAD ; minus £3.19 multiplied by LN OF OA SPARSITY ; plus £9.71 multiplied by LN OF OVERCROWDING
POLICE CRIME TOP-UP 7	£25.75 multiplied by DAYTIME NET INFLOW PER HEAD ; plus £1.67 multiplied by STUDENT HOUSING ; minus £0.19 multiplied by WEALTHY ACHIEVERS
POLICE INCIDENTS TOP-UP	£234.35 multiplied by INCOME SUPPORT ; plus £0.63 multiplied by TERRACED
POLICE FEAR OF CRIME TOP-UP	£1.71 multiplied by LN OF BARS PER 100HA ; plus £0.10 multiplied by HARD PRESSED
POLICE TRAFFIC TOP-UP	£9.02 multiplied by OUTPUT AREA SPARSITY
POLICE SPARSITY TOP-UP	£5.18 multiplied by POPULATION SPARSITY
POLICE SPECIAL EVENTS TOP-UP	£5.70 multiplied by the result of: RESIDENT POPULATION ; plus DAY-TIME NET INFLOW

156. The full formula used to calculate the *Police* element is:

Police	
(a)	RESIDENT POPULATION multiplied by the result of: POLICE BASIC AMOUNT ; plus POLICE CRIME TOP-UP 1 ; plus POLICE CRIME TOP-UP 2 ; plus POLICE CRIME TOP-UP 3 ; plus POLICE CRIME TOP-UP 4 ; plus POLICE CRIME TOP-UP 5 ; plus POLICE CRIME TOP-UP 6 ; plus POLICE CRIME TOP-UP 7 ; plus POLICE INCIDENTS TOP-UP ; plus POLICE FEAR OF CRIME TOP-UP ; plus POLICE TRAFFIC TOP-UP ; plus POLICE SPARSITY TOP-UP
(b)	POLICE SPECIAL EVENTS TOP-UP ;

Police

- (c) The results of (a) and (b) are added together and the result is *multiplied by* **AREA COST ADJUSTMENT FOR POLICE**;
- (d) The result of (c) is then added to **SECURITY EXPENDITURE**;
- (e) The result of (d) is then *multiplied by* the result of 1 *minus* **POLICE GRANT RATE**;
- (f) The result of (e) is then *multiplied by* the scaling factor given in Annex F for the Police service block.

Option POL3: Full Review – 6 categories of crime

157. As Option POL2, but with 6 crime categories. Robbery has been amalgamated with serious violence and sexual crimes to reflect the importance of robbery in certain parts of the country. Therefore the Basic Amount and Police Crime Top-Up 1 differ from option POL2, and the Police Crime Top-Up 2 is abolished. Minor changes occur to the remaining crime coefficients, everything else remains unchanged.

158. The Basic Amount and Police Crime Top-Up 1 formulae are given below.

Basic amounts

POLICE BASIC AMOUNT £103.19

Top-ups

POLICE CRIME TOP-UP 1 £2.76 *multiplied by* **OUTPUT AREA DENSITY**; *plus* £2,544.28 *multiplied by* **LONG-TERM UNEMPLOYED**

POLICE CRIME TOP-UP 3 £0.33 *multiplied by* **LN OF BARS PER 100HA**; *plus* £0.05 *multiplied by* **POPULATION DENSITY**; *plus* £7.98 *multiplied by* **NES GROUPS 6,7 AND 8**; *plus* £0.46 *multiplied by* **SINGLE PARENT HOUSEHOLDS**; *plus* £3.67 *multiplied by* **DAYTIME NET INFLOW PER HEAD**

POLICE CRIME TOP-UP 4 £0.95 *multiplied by* **LN OF BARS PER 100HA**; *plus* £0.40 *multiplied by* **SINGLE PARENT HOUSEHOLDS**; *plus* £1.23 *multiplied by* **STUDENT HOUSING**; *plus* £0.05 *multiplied by* **HARD PRESSED**

POLICE CRIME TOP-UP 5 £1.75 *multiplied by* **LN OF BARS PER 100HA**; *plus* £1.93 *multiplied by* **STUDENT HOUSING**; *plus* £765.01 *multiplied by* **YOUNG MALE UNEMPLOYED**

POLICE CRIME TOP-UP 6 £28.12 *multiplied by* **DAYTIME NET INFLOW PER HEAD**; *minus* £3.12 *multiplied by* **LN OF OA SPARSITY**; *plus* £9.48 *multiplied by* **LN OF OVERCROWDING**

POLICE CRIME TOP-UP 7 £25.14 *multiplied by* **DAYTIME NET INFLOW PER HEAD**; *plus* £1.63 *multiplied by* **STUDENT HOUSING**; *minus* £0.19 *multiplied by* **WEALTHY ACHIEVERS**

Option POL4: Full Review - Simple Formulae - 7 categories of crime

159. This option simplifies the police formula using 6 variables rather than 15 and 16 respectively in Options POL2 and POL3 to create the formulae. It trades simplicity off against the more technically precise Options POL2 and POL3. This variation is more in line with other formulae used in local government.

160. The basic amount and top-up formulae are given below. Note that the traffic element is subsumed within the basic amount as this is allocated purely on a £ per head basis.

Basic amounts

POLICE BASIC AMOUNT	£137.17
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Top-ups

POLICE CRIME TOP-UP 1	£14.48 multiplied by DAYTIME NET INFLOW PER HEAD ; plus £2.45 multiplied by LN OF BARS PER 100HA ; plus £382.50 multiplied by UNEMPLOYMENT RELATED BENEFIT CLAIMANTS
POLICE CRIME TOP-UP 2	£0.64 multiplied by LN OF OVERCROWDING ; plus £0.17 multiplied by POPULATION DENSITY ; plus £144.39 multiplied by UNEMPLOYMENT RELATED BENEFIT CLAIMANTS
POLICE CRIME TOP-UP 3	£3.28 multiplied by DAYTIME NET INFLOW PER HEAD ; plus £0.65 multiplied by LN OF BARS PER 100HA ; plus £1.19 multiplied by LN OF OVERCROWDING ; plus £82.47 multiplied by UNEMPLOYMENT RELATED BENEFIT CLAIMANTS
POLICE CRIME TOP-UP 4	£2.21 multiplied by DAYTIME NET INFLOW PER HEAD ; plus £1.25 multiplied by LN OF BARS PER 100HA ; plus £87.75 multiplied by UNEMPLOYMENT RELATED BENEFIT CLAIMANTS
POLICE CRIME TOP-UP 5	£2.04 multiplied by LN OF BARS PER 100HA ; plus £165.68 multiplied by UNEMPLOYMENT RELATED BENEFIT CLAIMANTS
POLICE CRIME TOP-UP 6	£27.36 multiplied by DAYTIME NET INFLOW PER HEAD ; minus £9.08 multiplied by LN OF OVERCROWDING ; plus £2.38 multiplied by LN OF RETAIL OUTLETS PER 100HA ; plus £154.30 multiplied by UNEMPLOYMENT RELATED BENEFIT CLAIMANTS
POLICE CRIME TOP-UP 7	£25.79 multiplied by DAYTIME NET INFLOW PER HEAD ; plus £2.22 multiplied by LN OF BARS PER 100HA ; minus £111.83 multiplied by UNEMPLOYMENT RELATED BENEFIT CLAIMANTS
POLICE INCIDENTS TOP-UP	£543.67 multiplied by UNEMPLOYMENT RELATED BENEFIT CLAIMANTS

POLICE FEAR OF CRIME TOP-UP	£1.46 multiplied by LN OF BARS PER 100HA ; plus £101.72 multiplied by UNEMPLOYMENT RELATED BENEFIT CLAIMANTS
POLICE SPARSITY TOP-UP	£5.18 multiplied by POPULATION SPARSITY
POLICE SPECIAL EVENTS TOP-UP	£5.70 multiplied by the result of: RESIDENT POPULATION ; plus DAY-TIME NET INFLOW

Option POL5: Partial Review – 7 categories of crime

161. In this version, the crime material is updated as in Option POL2, but the component formula for 'incidents' has been left unchanged. This takes account of concerns among Police Allocations Formula Working Group about the quality of data used to update the 'incidents' component. The quality of data will improve when the National Standard of Incident Recording has been fully implemented. Therefore the basic amount and incidents top-up differ from option POL2, whilst everything else remains the same.

162. The basic amount and incidents top-up is given below.

Basic amounts

POLICE BASIC AMOUNT 1	£101.59
POLICE BASIC AMOUNT 2	£31.48

Top-ups

POLICE INCIDENTS TOP-UP	£1.03 multiplied by POLICE INDEX 1
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163. Note that under this model the Police Incidents Top-up is added to Police Basic Amount 2 which are both multiplied by Daytime Population.

Summary of options

Option POL1

Removing pensions from the existing formula. This forms the base position for all the other police options.

Option POL2

Full review – seven categories of crime.

Option POL3

Full review – six categories of crime.

Option POL4

Full review – seven categories of crime – simple formulae using 6 variables.

Option POL5

Partial review – seven categories of crime – incident model remains unchanged.

Questions

164. We would like your views on:

Question 14: Which of the four police options POL2, POL3, POL4 or POL5 do you prefer?

Question 15: Do you agree that dedicated security funding should be switched from general to specific grant?