

**Annex B**  
**Central Government Police Revenue Funding 1995/6 – 2009/10:**  
**Technical Explanation**

**Introduction**

1. The Home Office is publishing a series of consistent police revenue funding numbers from 1995/96-2009/10. This allows comparison of funding levels over time. Due to changes in funding structures over this period, we had to adjust the raw data to ensure that numbers are directly comparable. This document explains how we made these adjustments. For a general overview and the numbers themselves, please see separate Overview document.

**Technical explanation**

2. Over the period 1995/6-2009/10 there have been two main changes in police revenue funding:
  - a move from Regional Crime Squads (RCS) funded by contributions from police forces to the National Crime Squad (NCS) which was initially funded by the forces but subsequently directly funded by the Home Office
  - the creation of the Pensions Top-Up Grant in 2006/07
3. In order to compare data over the whole period (i.e. to ensure that we are comparing like with like), the raw data needs to be adjusted for these structural changes.
4. We used statistics from the Chartered Institute for Public Finance and Accountancy (CIPFA) as a base for these adjustments (CIPFA collects and publishes detailed data on police authority finances). Background information on the various funding streams referred to within this document can be found in annual publications such as the Home Office Police Grant Report.
5. Over the same timescale, there were also a number of smaller changes (e.g. removing police responsibility for dealing with stray dogs outside standard office hours). However, these changes were minor and resulted in relatively insignificant changes in police funding. As a result, we have made not adjustments for these minor changes.

**Correcting for the change in crime squads**

6. The first of these adjustments is also the simplest. CIPFA statistics contain detailed records of the amount of funding given by forces to the Regional Crime Squads (RCS) as direct funding, and to the National Crime Squad (NCS) through the NCS levy. We deducted total crime squads funding from the Home Office Main Grant in those years in which the RCS and NCS were funded by forces rather than by the Home Office. This gives us a series of numbers which is comparable in terms of crime squads funding.

## Correcting for the change in pensions payments

7. The second adjustment is more complex. In 2006/07 the way police pensions were funded changed and the Pensions Top-up Grant was introduced. To understand how we corrected for this, we first need to understand how police pensions work and what the Pensions Top-up Grant actually is.

## Structure of police pensions

8. Police pensions are provided through an unfunded public service scheme. The scheme is national but each police authority administers the scheme for its officers. Each authority is responsible for ensuring that (a) serving officers pay pensions contributions and that (b) retired police officers receive their pensions.
9. Although there is no actual pension fund, the underlying actuarial model for police pensions acts as though there were. In the actuarial model, police officers pay contributions into a notional fund. At the same time, the police authorities pay an employer contribution into the same fund for each officer. These two contributions are set at a level intended to cover the cost of providing each officer with a pension on retirement.
10. Once the officer has retired, their pension is paid from this same notional fund. This is shown in Figure 1 below.

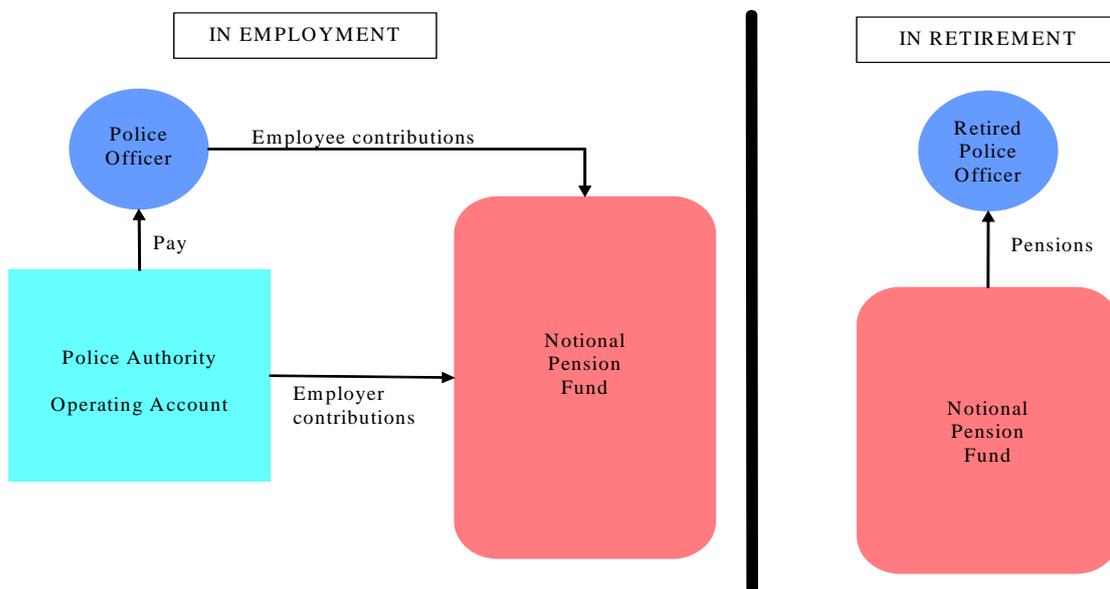


Figure 1: Actuarial model of police pensions

11. However, in order to reduce the amount of cash flowing through the system each individual authority uses the money it collects from employee and employer pension contributions to help to pay for expenditure on pensions in payment (i.e. to pay the pensions of people

## Definition of Pensions Top-up Grant

12. If the cash amount of employer and employee contributions is not sufficient to pay for pensions in payment in that year, the Home Office pay the authorities a 'Pensions Top-up Grant'. The Pensions Top-up Grant is therefore equal to the difference between outgoing pension expenditure and incoming pension contributions in a single year. This financing arrangement protects police forces from fluctuations in the number of retirees and therefore in pension expenditure.
13. Figure 2 shows how the Pensions Top-up Grant and force pensions accounts fit together. (NB the diagram includes an additional box covering other income which usually comes from transfers into the pensions scheme from other forces as officers move between forces.)

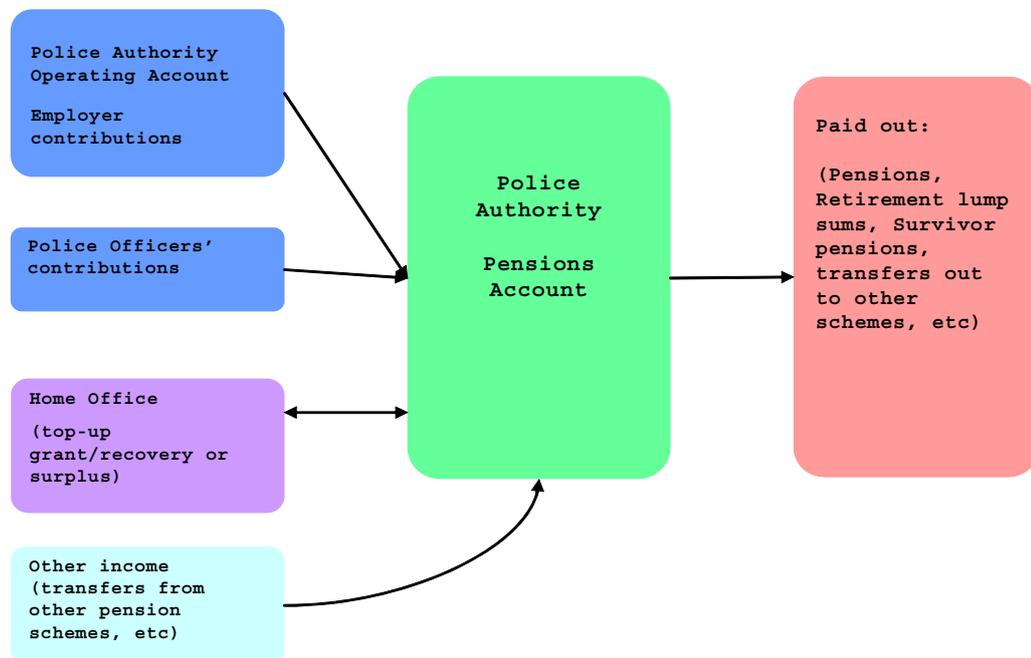


Figure 2: Cash flow for annual police pension payments

14. Prior to 2006/07 the Pensions Top-up Grant did not exist and police authorities did not pay an explicit employer contribution into a pensions account. Rather, the police authority paid for pensions directly from its operating account. Funding for these pensions came from the core settlement and other income sources.

## Calculation

15. If we want to look at a long-term series of figures for police funding, we need to make the numbers comparable. It is also most relevant to look at funding to cover current policing costs (i.e. including employer contributions), not funding related to historic policing costs (i.e. the cost of pensions for now-retired officers).

#### 2006/07-2009/10

16. This is straightforward for the years after 2006/07 because the Pensions Top-up Grant can simply be removed from the calculation of total core government funding. The difficulty comes in the years before this when the Top-up Grant did not exist. To produce a comparable set of figures for these years we need to calculate a notional Pensions Top-up Grant.

#### 2005/06

17. For 2005/06 (the final year before the Pensions Top-up Grant was introduced) a notional Pensions Top-up Grant figure and an adjusted Main Grant figure had already been calculated by the Government Actuaries Department as part of the process for creating the Pensions Top-up Grant. We used this figure in our calculations.

#### 2003/04 and 2004/05

18. For the years 2003/04 and 2004/05 CIPFA statistics do not contain information on police force spend on pensions so we averaged the actual Pensions Top-up for the three years between 2005/06 and 2007/08. In the absence of other data, we believe that this is a reasonable assumption.

#### 1995/96-2002/03

19. For the years between 1995/96-2002/03 we needed to remove pensions in payment and calculate an employer contribution (before 2005/06 police forces did not calculate employer contributions) in order to calculate a notional Pensions Top-up.
20. CIPFA provides detail of the total amount of pensions paid out by the police forces (both payments and lump sums). CIPFA also provides detail on the payments made into police pensions through employee contributions.
21. From Government Actuaries Department (GAD) assessments we knew that the total cost of the police pension scheme as a proportion of officer pensionable pay was 37% in 2009/10 and 32% in 1998/99 (no information on scheme cost exists for other years). The key driver of this increase over time was longevity.
22. To estimate the scheme costs between 1998/99 and 2009/10 we used a technique known as linear interpolation. This technique divides the change from 37% to 32% equally between the 11 years to produce an estimate of total scheme cost for each of these years.
23. For each of the years between 1995/96-1998/99 we applied the same annual change as used for the period 1998/99-2009/10. This is a reasonable assumption given longevity driver.
24. This meant that we had an estimate of total scheme cost (as a percentage of officer pensionable pay) for each year. We were then

25. CIPFA statistics contain details of the total amount (in £s) of employee contributions to pensions for all police authorities. As we already knew that this was worth 11% of pensionable pay, we were able to calculate the corresponding notional employer contribution (in £s). To do this we divided the total employee contribution (in £s) by 11% (the employee contribution rate) and multiplied this by the employer contribution rate (as a percentage of office pensionable pay) in each year.

26. The following is a worked example of this for 1998/99.

<p style="text-align: center;"><b>Total scheme cost = 32%</b></p> <p><b>Employer contribution = total scheme cost – employee contribution: 32-11 = 21%</b></p> <p style="text-align: center;"><b>11% employee contribution = £336m</b></p> <p style="text-align: center;"><b>21% employer contribution = (336/0.11) x 0.21 = £642m</b></p>
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27. To calculate a notional Pension Top-up Grant for each year we used the following formula:

<p style="text-align: center;"><b>Top-up = Pensions paid out (from CIPFA) – employee contribution (from CIPFA) – employer contributions (our estimate) – transfers in/out (CIPFA)</b></p>
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#### Adjusting the Home Office Main Grant

28. Having calculated notional Top-up Grant levels, we then subtracted this from the HO Main Grant for each of the years from 1995/96-2004/05. The following is a worked example for 1998/99.

<p style="text-align: center;"><b>11% Employee contribution = £336m</b></p> <p style="text-align: center;"><b>21% Employer contribution = £642m</b></p> <p style="text-align: center;"><b>Pensions paid out = £1,226m</b></p> <p style="text-align: center;"><b>Notional Pensions Top-up Grant = 1226-336-642 = £248m</b></p> <p style="text-align: center;"><b>HO Main Grant (RCS/NCS corrected) = £3,526m</b></p> <p style="text-align: center;"><b>HO Main Grant Final (RCS/NCS and Pensions Top-up corrected) = 3526 – 248 = £3,278m</b></p>
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29. At the end of the process we had produced a series of comparable numbers from 1995/96 to 2009/10.

30. Comments on, or suggested improvements to, the methodology used to adjust the raw data would be welcome.

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