



GAD

Government Actuary's Department
www.gad.gov.uk

NORTHERN IRELAND TEACHERS' SUPERANNUATION SCHEME

**ACTUARIAL REVIEW
AS AT 31 MARCH 2001**

**REPORT BY
THE GOVERNMENT ACTUARY**

July 2005



INVESTOR IN PEOPLE

Government Actuary's Department Finlaison House 15-17 Furnival Street London EC4A 1AB

Switchboard: +44 (0)20 7211 2600/2601 E mail: enquiries@gad.gov.uk

**TEACHERS' SUPERANNUATION REGULATIONS
(NORTHERN IRELAND) 1998
REPORT BY THE GOVERNMENT ACTUARY
ON THE TEACHERS' SUPERANNUATION SCHEME
(NORTHERN IRELAND)
1996-2001
July 2005**

CONTENTS

1. Introduction
2. Developments since the 1996 report
3. Changes under SCAPE
4. Data
5. Valuation methodology
6. Financial assumptions
7. Demographic assumptions
8. Results
9. Conclusions

APPENDICES

- A. Summary of benefits
- B. The Superannuation Account, 1996-2001
- C. Data
- D. Demographic experience
- E. Demographic assumptions



To: *The Department of Education, Northern Ireland*

I am pleased to present my report on the actuarial investigation of the Northern Ireland Teachers' Superannuation Scheme (NITSS or "the Scheme") as at 31 March 2001, carried out in accordance with Regulation G4 of the Teachers' Superannuation Regulations 1998 (S.R. 1998 No. 333), as amended by the Teachers' Superannuation (Amendment) Regulations 2003 (S.R. 2003 No. 147) and the Teachers' Superannuation (Amendment) Regulations 2005 (S.R. 2005 No.181).

1. INTRODUCTION

- 1.1 Regulation G4 of the (amended) Regulations requires the Government Actuary to carry out an actuarial review of the Teachers' Superannuation Account as at 31 March 2001. The previous report related to the five-year period ending on 31 March 1996.
- 1.2 Membership of the Scheme is open to teachers in schools and other educational establishments in Northern Ireland which are maintained or grant-aided out of money either provided by Parliament or raised by local boards, and to teachers in many independent schools and establishments of further education. Appendix A summarises the current benefit provisions of the Scheme.
- 1.3 Under the Regulations, an account is maintained, known as the Teachers' Pension Account ("the Account"), to which contributions from members and employers are credited and from which expenditure on benefits is debited. However, all contributions (from members and employers) are paid to the Exchequer, and the Exchequer effectively meets the cost of all benefits.
- 1.4 Under the Regulations, debits for benefits paid prior to 1 April 2001 exclude pension increases under the Pensions (Increase) Acts. The Regulations state that, with effect from 1 April 2001:
 - the debits to the account in respect of benefits paid will include pension increases under the Pensions (Increase) Acts, and
 - the notional investments (ie the balance in the Account) will earn a real rate of return (in excess of price increases) specified by the Government Actuary.

In addition, for the purposes of the actuarial review as at 31 March 2001, the balance in the Account as at that date shall be such that the value of the scheme assets equals the value of the scheme liabilities. The scheme assets consist of the notional investments and the future contributions in respect of existing members.
- 1.5 The Government Actuary is required to determine the employers' contribution rate in two parts. First, a standard contribution rate is determined; employers pay the balance of the standard contribution rate in excess of contributions paid by the members (at the rate of 6% of salary). Second, the employer contribution rate is adjusted on account of any difference between the value of the scheme liabilities and the value of the scheme assets. However, for this review, the adjustment will be zero because the values of assets and liabilities will be equal.
- 1.6 This report has been prepared in accordance with the requirements of Guidance Note No. 9 (version 7.0) issued by the Faculty and Institute of Actuaries, except that a discontinuance valuation has not been carried out, as explained in paragraph 5.6.

2. DEVELOPMENTS SINCE THE 1996 REPORT

- 2.1 At the 1996 valuation, the standard contribution rate (excluding the cost of pension increases) was assessed to be 13.0%, of which the employers' share was 7.0%. This rate was implemented with effect from 1 April 2004.
- 2.2 An interim review of the Scheme, as at 31 March 2003, was carried out in October 2004. The standard contribution rate (including the cost of pension increases) was assessed to be 20.0%, of which the employers' share was 14.0%. The interim review was not a full valuation and did not determine a supplementary contribution rate. The employers' contribution rate of 14.0% was implemented with effect from 1 April 2005. Thus, employers are already paying a contribution rate including the cost of pension increases.
- 2.3 Table 1 summarises the contribution rates paid from 1 April 1996 to 31 March 2006.

Table 1
Contributions from April 1996 to March 2006

Period	Standard contribution rate		Supplementary contribution	Total employer rate
	Total	Employer		
April 1996 to March 2004 *	13.6	7.6	0.25	7.85
April 2004 to March 2005 †	13.0	7.0	-	7.0
April 2005 to March 2006 ‡	20.0	14.0	-	14.0

* Determined at the 1986 valuation.

† Determined at the 1996 valuation.

‡ Determined at the 2003 interim review.

Consolidated Account, 1 April 1996 to 31 March 2001

- 2.4 Table B1 of Appendix B summarises the consolidated Account for the period from 1 April 1996 to 31 March 2001, and Table B2 sets out the principal items of income and outgo for each year. The notional investment returns shown in Tables B1 and B2 were determined by reference to the notional investments, in accordance with the Regulations.
- 2.5 From Table B2, it can be seen that, throughout the period, expenditure on benefits (excluding pension increases) exceeded contribution income. This is an indication of the increasing maturity of the Scheme. However, taking account of notional investment returns, total income substantially exceeded expenditure (excluding pension increases) over the period, and so the balance increased significantly.
- 2.6 It is important to recognise that an excess of income over expenditure does not necessarily indicate that an actuarial review will result in a valuation surplus. The balance in the Account can be considered as corresponding to the assets of a conventionally funded pension scheme, in which contributions must be accumulated during the working lifetime of members in order to provide benefits after retirement.

3. CHANGES UNDER SCAPE

Introduction

- 3.1 The Teachers' Superannuation (Amendment) Regulations (Northern Ireland) 2005 (S.R. No. 181) (the 2005 Amendment Regulations) introduced significant changes to the operation of the Account with effect from April 2001, with consequential implications for actuarial reviews (including the current review, as at 31 March 2001).
- 3.2 Future actuarial reviews of the Scheme (including the current review) will be carried out on an approach known as "Superannuation contributions adjusted for past experience" (or SCAPE). Under SCAPE, the notional investments will be credited with a rate of return (expressed in real terms, in excess of price increases) specified by the Government Actuary. The specified real rate of return also forms the basis for determining the standard contribution rate and the valuation liabilities (both of which will include the cost of pension increases).
- 3.3 The Government Actuary, in consultation with HM Treasury, will periodically review the rate of return in view of past experience and future long-term considerations. The rate of return will be chosen by reference to the reasonable expectation of real rates of return on secure bond investments (such as index-linked gilts) over the long term. It should be recognised that the specified rate will not be based directly on current market rates of return, although market rates will be taken into account along with other factors.

The Account

- 3.4 The balance in the Account as at 31 March 2001 shall be such that, in the current review, the value of the scheme assets equals the value of the scheme liabilities. (The balance will not be equal to that shown in Appendix B, which was determined under the 1998 Regulations.) The scheme assets consist of the notional investments and the future contributions in respect of existing members. Thus, the balance in the Account as at 31 March 2001 will be determined as the difference between the value of the scheme liabilities and the value of future contributions. It should be noted that this will be a notional credit to the Account; there will not be a transfer of real money (or funds) to the Account.
- 3.5 With effect from 1 April 2001, the Account will be credited with the specified real rate of return (in excess of price increases): this is equivalent to assuming that the balance in the Account is invested in notional investments that produce that real rate of return.

Actuarial reviews

- 3.6 The employers' standard contribution rate determined at the current review will be implemented with effect from April 2006. As noted in paragraph 1.5, the employers' contribution rate payable from 1 April 2006 will not be adjusted on account of any difference between the values of the assets and the liabilities.

- 3.7 At future reviews, the contribution rate will be adjusted in respect of differences in the value of assets and liabilities arising from the experience since 1 April 2001. Future investment experience should not lead to surplus or deficiency because investment returns will be credited to the Account in accordance with the specified real rate of return. Thus, future contribution adjustments will primarily reflect the Scheme's demographic experience (or changes to the benefit provisions).

4. DATA

- 4.1 The Department of Education supplied data in respect of the following:
- (i) members in service as at 31 March 2001 and salaries payable at 1 April 2001;
 - (ii) pensions in payment as at 31 March 2001;
 - (iii) members entering and leaving service during the five years ended 31 March 2001;
 - (iv) new awards and cessations of pension in the five years ended 31 March 2001;
 - (v) members with preserved (or deferred) benefits as at 31 March 2001.

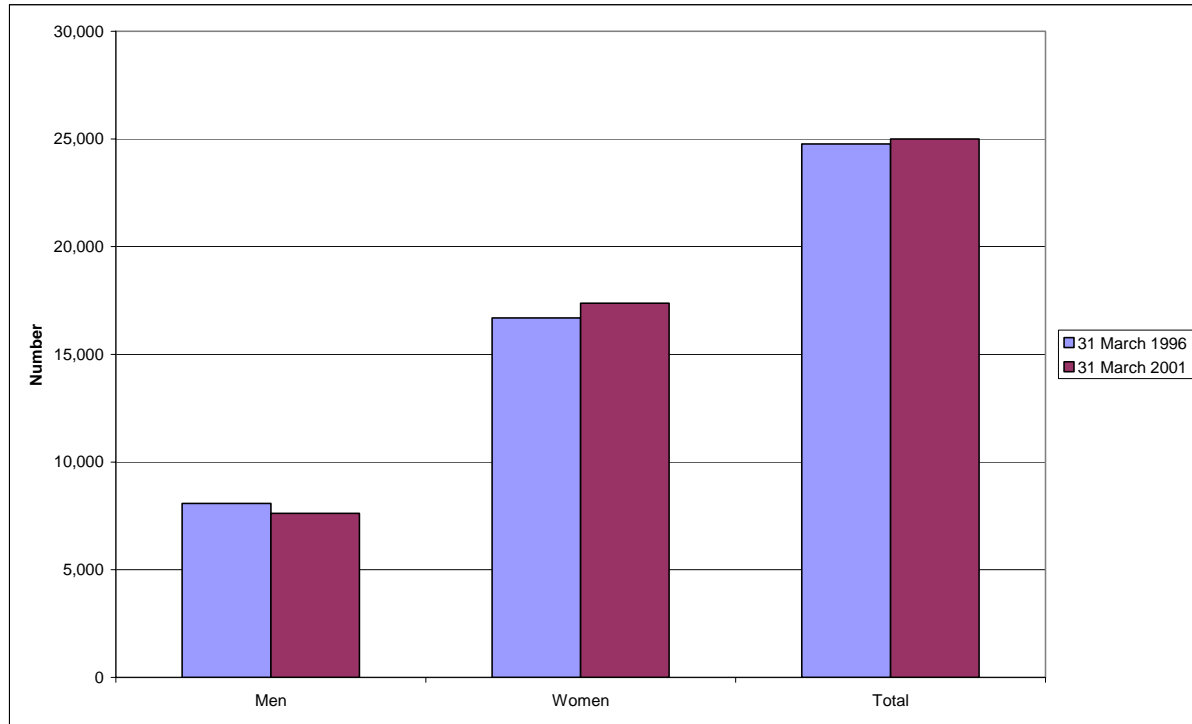
DENI also provided membership data as at each 31 March for the years 1997 to 2000, and numbers as at 1 April 1996.

- 4.2 In order to improve the quality of the membership data for this valuation, DENI carried out a substantial data-cleansing exercise on the individual data records. There has also been considerable discussion between DENI and GAD regarding the quality and accuracy of the data.
- 4.3 Based on the data supplied, we have fully reconciled the end-year numbers and movements over the five years ending 31 March 2001. However, because of the corrections to the data records, it was not possible to fully reconcile the numbers as at 1 April 1996 with those supplied for the 1996 valuation as at 31 March 1996. Following the data-cleansing exercise, we believe that the data supplied for the 2001 valuation is more reliable than that supplied for the 1996 valuation.
- 4.4 The total salary roll as at 31 March 2001 reconciled satisfactorily with that derived from the accounts for the financial year 2000/01 (based on contributions paid during the year).
- 4.5 The total pensions in payment to retired members as at 31 March 2001 was about 2% lower than expected in comparison to the total shown in the accounts for the year 2000/01. The total dependants' pensions and the pension increases on dependants' pensions were even lower by comparison with the accounts. DENI has confirmed that a small number of records is missing. Accordingly, the pension in payment data has been scaled up so as to reconcile with the amounts shown in the accounts, and any residual effect of the missing records should be negligible.
- 4.6 Taking account of the adjustments made to the data, I believe that the data forms a reliable basis for this actuarial review.
- 4.7 The following paragraphs summarise the important features of the data (after any adjustments).

Active membership

4.8 Figure 1 shows the active membership data as at 31 March 1996 and 31 March 2001.

Figure 1
Active membership as at 31 March 1996 and 31 March 2001



4.9 Table C1 of Appendix C summarises the numbers of contributing members, and total salaries, as at 1 April 2001, together with the corresponding numbers and salaries as at 1 April 1996.

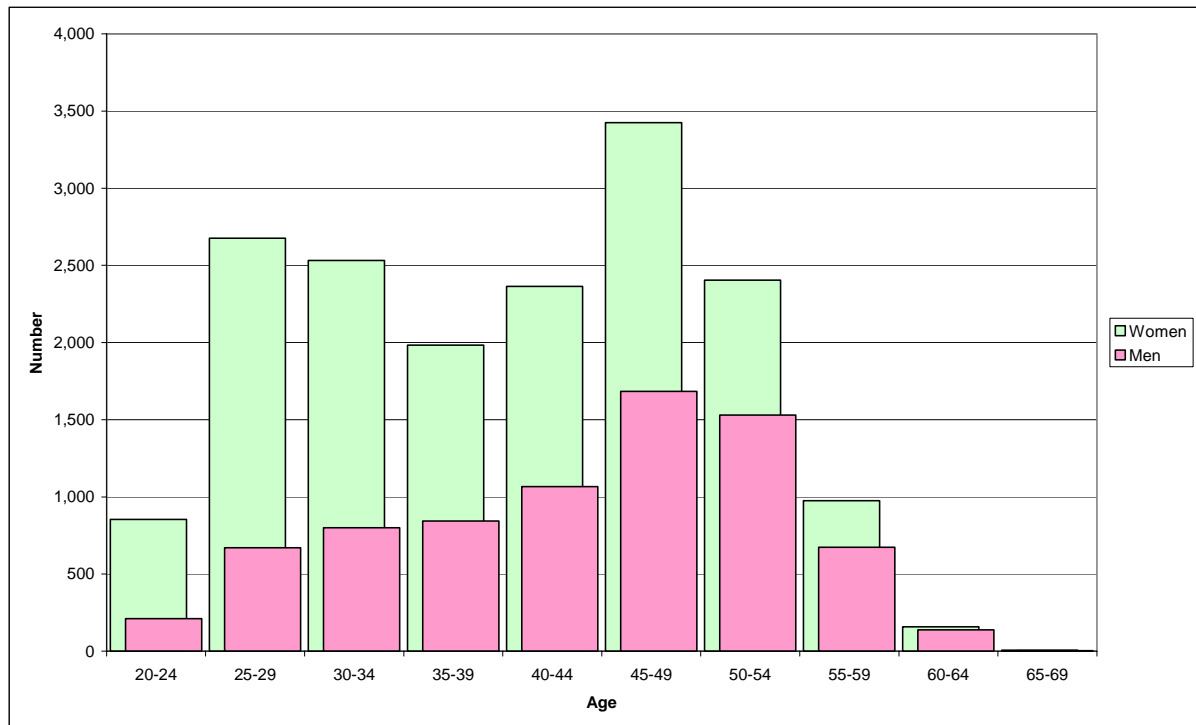
4.10 The numbers as at 1 April 1996, as shown in both Figure 1 and Table C1 of Appendix C, are significantly lower than those shown in the previous valuation report. This is because some active members who had already left the Scheme were still classified as active as at 31 March 1996. The data cleansing exercise carried out prior to the production of data for the 2001 valuation corrected this problem. As a result, the salaries shown in Table C1 as at 1 April 1996 are derived from the data for the previous valuation, but adjusted for the reduction in numbers.

4.11 Over the quinquennium, the number of active members increased slightly (by under 1%). This reflects a reduction of about 6% for men and an increase of about 4% for women. By 31 March 2001, women comprised almost 70% of the active membership.

4.12 Total salaries increased by about 32% (from £522 million to £686 million) over the quinquennium, while average salaries increased by some 30%, to about £27,500 pa at 1 April 2001. This increase in average pay corresponds to average annual increases of about 5½% a year since 1 April 1996.

4.13 Figure 2 illustrates the age distribution of male and female active members.

Figure 2
Age distribution of active membership as at 31 March 1996 and 31 March 2001

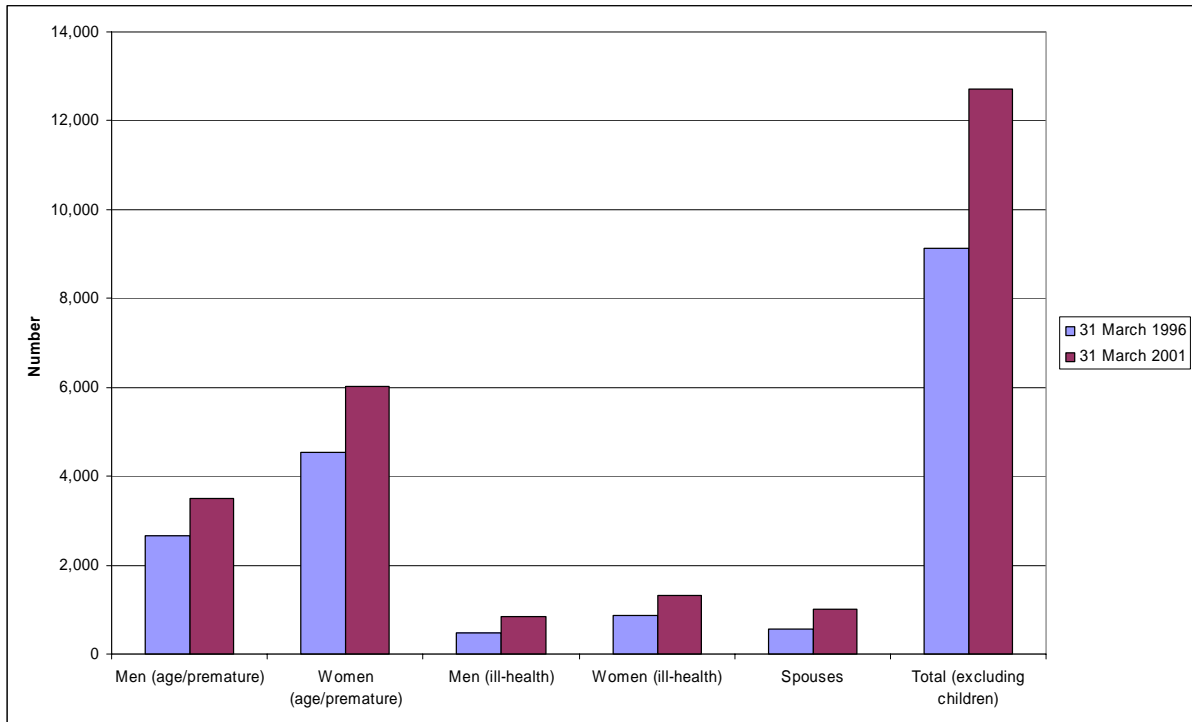


4.14 Table C2 of Appendix C summarises the changes in the active membership from 31 March 1996 to 31 March 2001.

Pensioners and dependants

4.15 Figure 3 shows the numbers of pensions in payment as at 31 March 1996 and 31 March 2001.

Figure 3
Numbers of pensions in payment as at 31 March 1996 and 31 March 2001



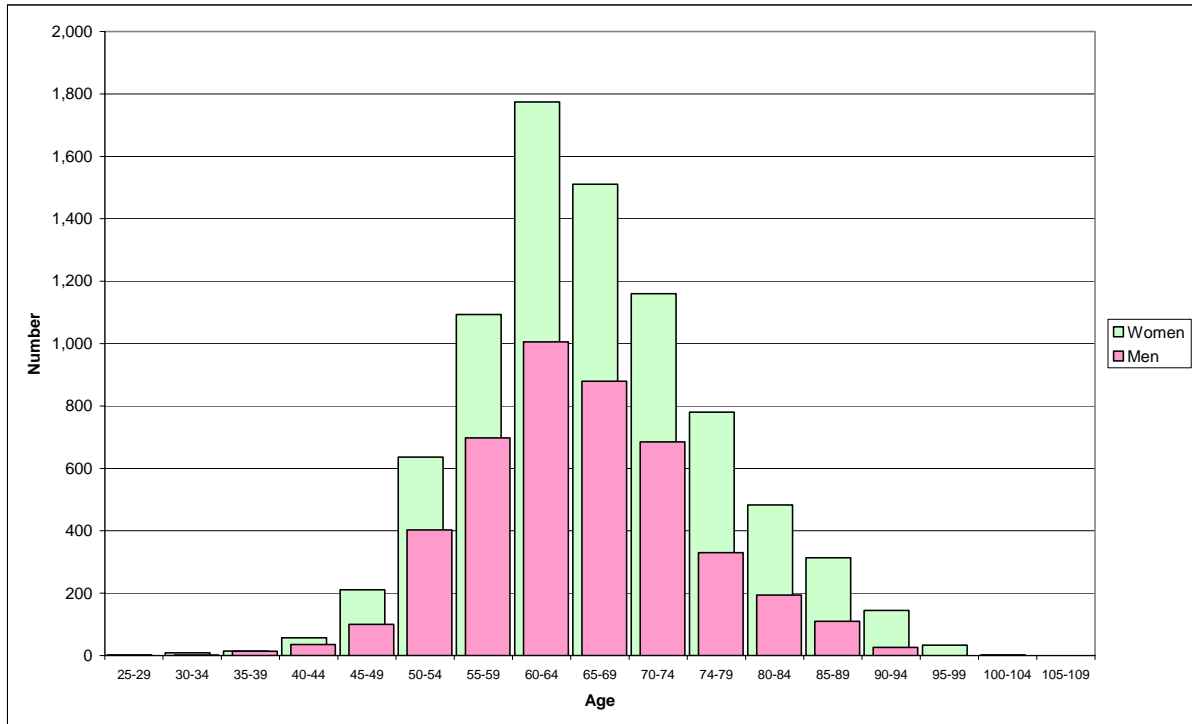
4.16 Table C3 of Appendix C summarises the number and amounts of pensions in payment (including pension increases) as at 31 March 2001, together with the corresponding numbers and amounts as at 31 March 1996.

4.17 Over the quinquennium, the number of pensions in payment increased by about 39% and, as at 31 March 2001, represented about 51% of the active membership (37% at 31 March 1996). This increase reflects the increasing maturity of the Scheme as well as the greater longevity of pensioners.

4.18 Total pensions in payment (including pension increases) increased by about 64% over the quinquennium, while the average pension in payment increased by about 18% to £9,500 p.a. at 31 March 2001.

4.19 Figure 4 illustrates the age distribution of the numbers of male and female pensions in payment.

Figure 4
Age distribution of the numbers of pensions in payment
as at 31 March 1996 and 31 March 2001



Deferred membership

4.20 Members who leave active service before retirement age with more than two years' service are awarded preserved (or deferred) benefits, payable at age 60. (Those who leave service with less than two years' pensionable service may choose to take a return of member's contributions (at 6%) with interest.) A significant proportion of deferred members (leaving with either more or less than two years' previous service) return for a further period of service before age 60. As at 31 March 2001, there were about 2,800 men and 7,250 women with preserved benefits, equivalent in total to about 40% of the active membership.

5. VALUATION METHODOLOGY

- 5.1 The review has been carried out using a “*prospective benefits*” valuation methodology known as the “Entry Age Method”. This is the same method as used at previous actuarial valuations of the Scheme.

The Entry Age Method

- 5.2 Under this approach, the objective is to meet the cost of members’ benefits by means of a stable contribution rate (the “standard contribution rate”), expressed as a percentage of salary, payable during active service. The standard contribution rate (known as the new entrant contribution rate) is calculated to be the rate required to meet the cost of the benefits expected to accrue throughout the career of a typical new entrant joining the Scheme at the assumed normal entry age.
- 5.3 The actuarial valuation is carried out by reference to the total prospective service of the membership at the review date. The liability in respect of active members is based on both past and future service, allowing for future increases in earnings. The liability in respect of deferred members is based on past service and future service after re-entry to the Scheme, again allowing for future increases in earnings. The liability in respect of pensioners and dependants is based on the pensions in payment (and contingent pensions) at the review date. For consistency, the assets consist of the notional investments plus the future contributions (at the standard contribution rate) arising from the future service of the membership as at the valuation date (including contributions payable in respect of deferred members after re-entry to the Scheme).

Main features of the Entry Age Method

- 5.4 Provided that the future experience is in accordance with the actuarial assumptions adopted to calculate the standard contribution rate, then the contributions should be just sufficient to meet the cost of benefits arising from the service of a typical new entrant. The standard contribution rate should remain broadly stable over time provided that the actuarial assumptions (including the assumed distribution by age and sex of members entering service) remain broadly unchanged.
- 5.5 If the assets (including future contributions) exceed (*or* fall short of) the liabilities in respect of total service, then the actuarial surplus (*or* deficiency) would be addressed by an adjustment to the standard contribution rate. The Regulations state that a surplus should be eliminated by means of a contribution reduction (*or* that a deficiency should be eliminated by means of a supplementary contribution) spread over a period of fifteen years.

Discontinuance valuation

- 5.6 The Entry Age valuation described in paragraphs 5.1 to 5.5 assesses the Scheme as an ongoing entity. Because the Scheme is a statutory scheme with the benefits effectively guaranteed by the government, it is not considered necessary to assess the position if the Scheme were to be discontinued.

6. FINANCIAL ASSUMPTIONS

The Account

- 6.1 Under the previous regulations, the valuation as at 31 March 2001 would have been based on the Account maintained from 1 April 1996 to 31 March 2001. As at 31 March 2001, the balance in this Account was £1,551 million. However, as a result of the 2005 Amendment Regulations, and as explained in paragraph 3.4, this balance (of £1,551 million) will not be used for the current actuarial review.
- 6.2 Instead, as explained in Section 3, the initial balance in the Account (ie as at 31 March 2001) will be determined by the current review such that the valuation assets and liabilities are in balance. In effect, the balance in the Account as at 31 March 2001 will be determined as the difference between the value of the scheme liabilities and the value of future contributions in respect of existing members. With effect from 1 April 2001, the Account will be credited with a specified notional investment return.

Specified rate of return (in excess of price increases)

- 6.3 As explained in paragraph 3.2, future actuarial reviews (including that as at 31 March 2001) will be carried out using the same (real) rate of return that is specified by the Government Actuary for the purposes of crediting investment returns to the Teachers' Superannuation Account.
- 6.4 For the purposes of the actuarial review as at 31 March 2001, and in accordance with the considerations set out in paragraph 3.3, I have decided that the real rate of return will be 3½% a year (in excess of price increases).

Other financial assumptions

- 6.5 Although the liabilities after retirement are linked to price increases, the liabilities accruing during active service are related to general increases in earnings. Accordingly, it is also necessary to consider the rate of return in relation to earnings increases. Historically, there has been a reasonably close correlation between price increases and general earnings increases, and so real earnings growth (in excess of price increases) has remained relatively stable by comparison to the individual rates of increase of prices and earnings. It has been assumed that the rate of investment return in excess of general earnings increases will be 2% a year, which is equivalent to assuming that real earnings growth will be about 1½% a year. (Section 7 considers career increases in salaries on account of promotion and other factors.)
- 6.6 Pensions accrued during the period from 1978 to 1997 include an element of pension (known as the Guaranteed Minimum Pension or GMP) on which the State pays some (or all) pension increases. An assumed gross rate of return is required in order to value GMPs. For the purposes of the actuarial review as at 31 March 2001, it has been assumed that the long-term gross rate of return will be 7% a year. (This assumption has a relatively minor bearing on the outcome of the valuation).

Summary

6.7 Table 3 summarises the financial assumptions adopted for the current valuation and, for comparison, those adopted for the 1996 valuation.

Table 3
Summary of financial assumptions

Assumption	2001 valuation	1996 valuation
Gross rate of return	7%	8½%
Real rate of return in excess of:		
Prices	3½%	3½%
Earnings	2%	2%
Rate of real earnings growth *	1½%	1½%

* in addition to increases arising from salary progression, promotion etc.

6.8 The assumed real rates of return (of 3½% in excess of prices and 2% in excess of earnings) are the same as were adopted at the 1996 review. However, the assumed gross rate of return of 7% a year is lower than that assumed in 1996 (of 8½% a year), reflecting the continuing fall in interest rates. Whilst these assumed rates of return may appear high in comparison with current market rates of interest, the liabilities of the Scheme will not emerge for many years. The financial assumptions adopted for the review are based on long-term considerations.

7. DEMOGRAPHIC ASSUMPTIONS

7.1 This Section summarises the demographic assumptions adopted for the current review. Paragraphs 7.2 to 7.6 summarise the assumptions relating to mortality after retirement. Paragraphs 7.7 to 7.13 summarise the additional demographic assumptions adopted in order to determine the standard contribution rate and value the liabilities of active members.

Pensioner mortality after age and premature retirement

7.2 Since the 1996 valuation, the actuarial profession has published new standard mortality tables, known as PMA92 (men) and PFA92 (women). These tables include allowance for greater future mortality improvement than the PMA80 and PFA80 tables (used for the 1996 valuation). Taking account of the Scheme's recent experience, the assumed mortality rates for current pensioners are as in the PMA92 and PFA92 tables but with a reduction of one year of age. (This implies greater longevity than the unadjusted standard tables.) These are the same mortality rates as used in the 2003 interim valuation. Table 4 shows the life expectancy of current pensioners on this basis.

Table 4
Life expectancy of current pensioners

Age at valuation date	Years	
	Men	Women
60	25	28
65	20	23
70	15½	18½
75	12	14½
80	8½	11

7.3 In respect of future pensions that will be paid to current active and deferred members, the mortality rates in the standard tables have been projected to the calendar year 2025. The assumed life expectancy of future pensioners at age 60 is 26 years for men and 29 years for women.

Pensioner mortality after ill-health retirement

7.4 The mortality of both existing and future ill-health pensioners is expected to be heavier than that of the unadjusted standard tables. The assumed mortality rates for ill-health pensioners are approximately similar to the PMA92 and PFA92 tables but with an addition of two years of age. (This implies shorter longevity than the unadjusted standard tables.)

- 7.5 It has been assumed that, for men, mortality in the first year after ill-health retirement will be 50% greater than for those of the same age who have been retired more than one year. For women, allowance has been made for an excess of 100% in the first year and 50% in the second year, as compared to those of the same age who have been retired for two years or more.

Spouses' mortality

- 7.6 For widows' mortality, I have adopted the standard mortality table WA92 (published by the actuarial profession), but with a reduction of two years of age. For widowers' mortality, I have adopted the same rates as for male pensioners after age retirement. The assumed proportions of members married, and therefore eligible for spouse's benefits, are a little lower than those adopted for the 1996 valuation at younger ages, and a little higher at older ages.

Active members

- 7.7 The assumed rates of retirement (on age grounds) are the same as were adopted for the 1996 valuation. On average, men are assumed to retire at about age 63 and women at age 62. The assumed rates of ill-health retirement are also the same as those adopted for the 1996 valuation.
- 7.8 At the 1996 valuation, it was assumed that the Scheme would meet the cost of premature retirements (continuing at broadly the same level as that prior to the valuation) until the end of the year 2005/06. The level of premature retirements has since 1996 has not changed significantly. For this review, the Department of Education has supplied actual numbers of premature retirements for the years 2001/02 to 2004/05 and projected numbers to the end of the year 2006/07. The Department of Education has asked me to assume that premature retirements taking place after April 2007 will no longer be a liability of the scheme. Table E6 of Appendix E shows the assumed numbers of premature retirements up to 2006/07.
- 7.9 For both men and women, the assumed rates of death-in-service are a little lower than those adopted for the 1996 valuation.
- 7.10 Withdrawal rates tend to be higher in the early years of service and decrease as service increases. It has been assumed that, in general, higher withdrawal rates will apply for the first two years of service (previously assumed to be five years' service). The assumed withdrawal rates for the first two years of service are broadly similar in effect to those adopted for the first five years of service at the 1996 valuation. After two years' service, the assumed withdrawal rates for both men and women are higher than at the 1996 valuation, particularly for women.
- 7.11 On re-entry to the Scheme after withdrawal, a member may aggregate the earlier period of service with the service subsequent to re-entry. The valuation includes allowance for this contingency in the period between withdrawal and age 60, and for benefits in respect of the service before and after re-entry to be based on the salary at the final date of exit from the Scheme. It is assumed that other deferred members receive benefits from age 60.

- 7.12 In addition to the allowance for general increases in salary (see paragraph 6.5), the valuation also includes allowance for increases in salary arising from increments and promotion. For both men and women, the assumed promotional scale is the same as that adopted for the 1996 valuation, although the full effect of recent changes to the salary structure (such as the introduction of threshold payments) will not be clear until the next valuation. However, the Department of Education has informed me that, once these changes are fully in force, it expects that salary increases arising from the changes will generally occur relatively early in a member's career. On this understanding, the likely effect of these changes on the standard contribution rate at the next valuation may not be material.
- 7.13 It is assumed that new entrants join the Scheme at a range of ages. On average, the assumed entry age is about 29 for men and about 26 for women. It is assumed that about 70% of new entrants are female. These are similar to the assumptions adopted at the previous valuation, the average entry age for men having increased slightly.
- 7.14 Appendix D discusses in greater detail the demographic experience over the five years ending 31 March 2001 and the assumptions. Appendix E tabulates the assumptions at specimen ages and the assumed numbers of premature retirements until 2006/07.

8. RESULTS

8.1 This section sets out the results of the valuation, assuming that premature retirements taking place until April 2007 will continue to be a liability of the Scheme.

Standard contribution rate

8.2 The standard contribution rate (including the cost of pension increases) as at 1 April 2001 is assessed as 20.15% of salary, of which the employer's share is 14.15% (taking account of member contributions of 6%).

8.3 The standard contribution rate at the 1996 valuation was assessed to be 13.0% of salary. However, this did not include the cost of pension increases. If this cost had been included, then the standard contribution rate would have been 19.0% of salary.

8.4 Thus, the standard contribution rate at this valuation is 1.15% higher than the corresponding rate (including pension increases) at the 1996 valuation. The main factor underlying the increase is the changes to the demographic assumptions adopted for the current valuation, particularly the greater allowance for future mortality improvement. (The 2003 interim review anticipated most of the changes, resulting in the standard contribution rate of 20.0% that is currently in payment.)

Valuation result

8.5 The valuation has been carried out using the Entry Age Method, as described in Section 5. The standard contribution rate has been determined so as to meet the cost of benefits arising in respect of new entrants joining the Scheme after 1 April 2001 although it will not be payable until 1 April 2006. Thus, the valuation does not include any liabilities (or contributions payable) in respect of new entrants. However, a small adjustment is required on account of the contributions payable in respect of new entrants between 1 April 2001 and 31 March 2006, during which period the full standard contribution rate will not be payable.

8.6 The contributions payable after 1 April 2001, and taken into account for the valuation, are as follows:

- (i) *in respect of existing members*: standard contributions of 13.6% of salaries until 31 March 2004, 13.0% for the year to 31 March 2005, 20.0% for the year to March 2006 and 20.15% thereafter;
- (ii) *in respect of new entrants*: a shortfall for standard contributions, which have been at the same rate as for existing members (instead of 20.15%) until 31 March 2006; and
- (iii) *in respect of all contributing members*: supplementary contributions of 0.25% to 31 March 2004.

8.7 As explained in paragraph 3.4, the value of the notional investments as at 31 March 2001 has been determined so that the value of the liabilities is equal to the sum of the values of the notional investments and the future contributions from members and employers.

- 8.8 Table 5 summarises the result of the valuation as at 31 March 2001, including the liabilities arising from premature retirements until 31 March 2007.

Table 5
Valuation statement as at 31 March 2001

Present value of:	£ million
<u>Liabilities</u>	
Benefits in respect of:	
Pensions in payment	1,777
Deferred members (including liabilities after re-entry to service)	360
Benefits to active members:	
In respect of service before 31 March 2001	2,144
In respect of service after 1 April 2001	1,853
Total liabilities	6,134
<u>Assets</u>	
Standard contributions:	
By existing active members	496
By employers of existing active members	1,015
In respect of existing deferred members (after re-entry to service)	108
Shortfall in respect of new entrants until 1 April 2006	-3
Supplementary contributions (until 31 March 2004):	
In respect of all members	4
Added years contributions	2
Notional investments to be credited as at 31 March 2001[‡]	4,512
Total assets	6,134
Balance of assets less liabilities	Nil

[‡] Such that the total assets equal the total liabilities

- 8.9 **Balance in the Account as at 31 March 2001**
Table 5 shows that the notional amount required in the Account (ie the value of the notional investments) as at 31 March 2001, in order to balance the valuation assets and liabilities, is £4,512 million. (In effect, this assumes that the notional investments will earn a future real rate of return of 3½% a year with effect from 1 April 2001.)

- 8.10 **Total contribution rate**
As was intended under the 2005 Amendment Regulations, the valuation assets and liabilities are in balance as at 31 March 2001, and so there is no requirement to adjust the contribution rate with effect from 1 April 2006. Thus, the total contribution rate

payable from 1 April 2006 is the standard contribution rate of 20.15% of salary, of which the employer's share is 14.15% of salary.

Increase in liabilities 1996 to 2001

- 8.11 At the 1996 review, the total service liabilities (excluding the cost of pension increases) amounted to £2,684 million, as compared to £6,134 million (including the cost of pension increases) at the current review (as shown in Table 5). Table 6 summarises the main factors contributing to the increase in the total service liabilities (of some £3.5 billion) over the period 31 March 1996 to 31 March 2001.

**Table 6
Increase in liabilities, 1996 to 2001**

Factor	£ million
Liabilities at 31 March 1996 (excluding pension increases)	2,685
(i) Value of pension increases at 31 March 1996	1,450
Liabilities at 31 March 1996 (including pension increases)	4,135
(ii) Interest on initial total service liability (@ 8½%)	2,080
(iii) Total service liability of new entrants 1996 to 2001	490
(iv) Expenditure on benefits 1996 to 2001	-740
(v) Salary increases lower than expected	-420
(vi) Price increases lower than expected	-230
(vii) Change in mortality basis	360
(viii) Other changes to demographic basis	-110
(ix) Reduction of 1½% in gross rate, to 7%	170
(x) Effect of error in deferred data at 1996 valuation	430
(xi) Other experience and miscellaneous (including premature retirement experience)	-30
All factors	3,450
Liabilities as at 31 March 2001	6,135

Cost of premature retirements

- 8.12 Paragraph 8.9 explains that the notional amount required in the Account (i.e. the value of the notional investments) as at 31 March 2001 is £4,512 million. This amount includes the cost of premature retirements taking place from April 2001 until the end of the year 2006/07.

- 8.13 If the cost of premature retirements after April 2001 were to be excluded from the valuation, then the (notional) amount required in the Account would be £4,309 million. That is, the cost of premature retirements from April 2001 until the end of the year 2006/07 is estimated to be £203 million. This cost (of £203 million) is equivalent to a supplementary contribution of 2.6% of total salaries, payable for a period of 15 years from 1 April 2006.
- 8.14 Thus, alternatively, the Account could be credited with the (notional) amount of £4,309 million (excluding the cost of premature retirements from April 2001 to 2006/07), in which case a supplementary contribution of 2.6% of salaries would be required in addition to contributions at the standard contribution rate.

Period until next review

- 8.15 Under the Regulations, the Account will be credited as at 31 March 2001 with notional investments of £4,512 million (including the cost of premature retirements). Provided that, over the period until the next valuation,
- (i) the Account is credited with a real rate of return of 3½% a year, and
 - (ii) contributions are credited to the Account at the rates shown in paragraph 8.6,

then the Account at the next valuation should be out of balance only to the extent that the other actuarial assumptions are not borne out over the intervening period.

9. CONCLUSIONS

Standard contribution rate

- 9.1 The standard contribution rate, payable from 1 April 2006, is 20.15% of salary (including the cost of pension increases). This is an increase of 1.15% over the corresponding standard contribution rate determined in the 1996 report, mainly because of the increase in assumed longevity.

Balance in the Account as at 31 March 2001

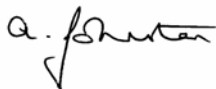
- 9.2 The notional balance in the Account (ie the value of the notional investments) as at 31 March 2001 will need to be set to £4,512 million in order to cover the liabilities including the cost of premature retirements in the period until 31 March 2007. If the liabilities for premature retirements after 1 April 2001 were not to be covered, then the notional balance in the Account would be set to £4,309 million. With effect from 1 April 2001, the notional investments will earn a real rate of return of 3½% a year.

Supplementary contribution

- 9.3 Under the provisions of the amending regulations, the balance in the Account as at 31 March 2001 has been determined so that the values of the assets and liabilities are equal. Provided that the balance in the Account is set so that it covers the liabilities for premature retirements until 31 March 2007, no supplementary contribution is payable with effect from 1 April 2006. However, if the balance in the Account as at 31 March 2001 was set so that it does not cover the liabilities for premature retirements until 31 March 2007, then a supplementary contribution of 2.60% would be payable for a period of 15 years from 1 April 2006.

Employers' contribution rate

- 9.4 If the notional investments under the Regulations are set so as to cover the costs of the premature retirements until 31 March 2007, then the total recommended rate of contribution payable by employers from 1 April 2006 is 14.15% of salary.
- 9.5 If the notional assets investments are set so that they do not cover the costs of the premature retirements until 31 March 2007, then the total recommended rate of contribution payable by employers from 1 April 2006 is 16.75% of salary.



A I Johnston, FIA
Deputy Government Actuary

pp **C D Daykin, CB FIA**
28 July 2005

Government Actuary's Department
London

APPENDIX A

Summary of the main provisions of the Teachers' Pension Scheme

1. This Appendix summarises the principal provisions of the Scheme as provided under the Teachers' Superannuation (Regulations) 1998 (amended by subsequent Regulations). The Scheme is contracted-out of the state second tier pension provision (*S2P*).

Eligibility for membership

2. All full-time and part-time teachers in state schools, accepted independent schools and further education colleges are eligible for membership of the Scheme.

Contributions

3. Members contribute at the rate of 6% of salary (which includes some allowances but excludes payments in respect of overtime and extra duties).

Retirement age

4. Pensions are normally payable from age 60 although many members continue to work after that age. Pensions may be payable from age 50 (at the scheme's expense) where employment has been terminated prematurely on redundancy or efficiency grounds. Such pensions may be enhanced by up to 6 2/3 years service, under the Teachers' (Compensation for Redundancy and Premature Retirement) (Amendment) Regulations (Northern Ireland) 2002, and at the employer's discretion.

Benefits on retirement at or after age 60

5. Subject to a qualifying period of two years, the pension is 1/80th of pensionable salary per year of service, where pensionable salary is the best year's pay in the last three years of service. A lump sum of three times the pension is also payable.

Pension on retirement due to ill-health

6. On retirement due to ill-health with more than two years' service, an immediate enhanced pension is payable. A lump sum of three times the pension is also payable.

Lump sum on death in service

7. On death in service, a lump sum is payable of two years' pensionable salary.

Benefits on withdrawal

8. A member who leaves with less than two years' service may take a refund of contributions (of 6%) with interest at any time before age 60. A member who leaves with greater than two years' service is entitled to a preserved pension payable from age 60 together with a lump sum of three times the pension payable at age 60. On re-entry to the Scheme, earlier service may be aggregated with the new period of service for the purpose of calculating benefits at retirement provided that the member has not taken a refund of contributions or transfer value.

Spouses and children's benefits

9. If a married member dies after retirement, a spouse's pension is payable at the rate of one half of the member's pension. (For widows, the member's service after 31 March 1972 reckons towards the widow's pension whereas, for widowers, only service after 5 April 1988 is reckonable.) On death after retirement, a higher short term pension is payable and a supplementary grant may also be payable. Spouse's pensions cease on remarriage. Children's pensions are payable in respect of dependent children.

Pension Increases

10. Pensions in payment and preserved benefits are subject to the provisions of the Pensions (Increase) Act 1971, and so, in general, are increased in line with price increases. The cost of Pension Increases is to be met from the Account from 1 April 2001.

APPENDIX B

Table B1

Consolidated Account, 1 April 1996 to 31 March 2001

	£ million
Balance at 1 April 1996	1,237
<u>Income</u>	
Contributions	
Employees	169
Employers	221
Transfers, CEPs & miscellaneous	14
Notional investment return	408
Total income	812
<u>Outgo</u>	
Benefits (excluding pensions increases)	493
Refunds, transfers, CEPSs	14
Total outgo	507
Adjustment †	10
Balance at 31 March 2001 *	1,551

* The balance in the Account represents the cost (or book value) of the notional investments according to the regulations prior to the 2005 Amendment Regulations and benefit expenditure excludes pension increases.

† The 1998/99 Account was adjusted to reflect the understatement of receipts in previous periods.

APPENDIX B

Table B2

Details of income and expenditure for period 1 April 1996 to 31 March 2001

(£ thousands)

Year ending 31 March	Income				Expenditure				Balance of Account at end of year *
	Contributions	Notional investment income	Other income	Total income	Annual pensions	Lump sum payments	Other payments	Total outgo	
1996									1,236,680
1997	72,761	115,125	1,044	188,930	58,476	20,892	2,056	81,424	1,344,186
1998	74,707	84,025	2,792	161,524	65,719	26,937	1,996	94,652	1,411,058
1999	76,648	60,291	4,227	141,166	73,556	25,407	2,779	101,742	1,460,482 [†]
2000	80,688	74,835	3,675	159,198	80,547	24,146	4,169	108,862	1,510,818
2001	85,003	73,446	2,608	161,057	88,232	29,020	3,350	120,602	1,551,273

* The balance in the Account represents the cost (or book value) of the notional investments according to the regulations prior to the 2005 Amendment Regulations and benefit expenditure excludes pension increases.

[†] includes an adjustment of £10 million for understatements of receipts in previous periods.

APPENDIX B

Table B3

Notional investments deemed to be held as at 31 March 2001

Notional stock (all British Government securities)			Cost (book value)
Fixed-interest			
3½%	Funding Stock	1999-2004	7,329
5½%	Treasury Stock	2008-2012	53,244
7¾%	Treasury Loan	2012-2015	46,153
12%	Exchequer Stock	2013-2017	27,227
12½%	Treasury	2003-2005	8,585
13½%	Treasury	2004-2008	17,944
9½%	Conversion	2002	20,546
11¾%	Treasury	2003-2007	14,350
Total fixed-interest			195,378
Index-linked			
2½%	Treasury I-L	2003	41,583
2%	Treasury I-L	2006	73,424
2½%	Treasury I-L	2009	42,771
2½%	Treasury I-L	2011	60,838
2½%	Treasury I-L	2013	80,394
2½%	Treasury I-L	2016	53,871
2½%	Treasury I-L	2020	54,766
2½%	Treasury I-L	2024	79,206
4⅞%	Treasury I-L	2030	667,830
Total index-linked			1,154,682
All investments			1,350,060

APPENDIX C

Table C1
Active members, 1996 and 2001

	31 March 1996		31 March 2001	
	Number	Total salaries* £000's	Number	Total salaries† £000's
Men	8,075	183,664	7,620	225,627
Women	16,692	338,019	17,378	460,729
Total	24,767	521,683	24,998	686,356

* payable from 1 April 1996.

† payable from 1 April 2001.

Table C2
Changes in active membership, 1996 to 2001

	Men	Women	Total
Number at 31 March 1996	8,075	16,692	24,767
<i>Plus</i>			
New entrants	1,508	4,166	5,674
Re-entrants	660	2,527	3,187
Other entrants	28	222	250
<i>Less</i>			
Deaths in service	24	31	55
Premature retirements	842	1,108	1,950
Ill-health retirements	384	656	1,040
Age retirements	258	470	728
Other exits	1,143	3,964	5,107
Number at 31 March 2001	7,620	17,378	24,998

Note: The membership at 31 March 1996 was derived from the data supplied for this valuation and is, in total, significantly lower than shown in the previous report. Salary data as at 31 March 1996 was derived from the 1996 valuation data and adjusted pro-rata to the change in the numbers.

APPENDIX C

Table C3
Pensions in payment, 1996 and 2001

Retirement category	31 March 1996		31 March 2001	
	Number	Annual pensions £000's*	Number	Annual pensions £000's*
Age and premature				
Men	2,662	27,324	3,511	42,499
Women	4,544	34,877	6,009	55,308
Ill-health				
Men	488	4,068	838	8,474
Women	865	5,999	1,329	11,409
Spouses	571	1,393	1,021	3,115
Total (excl. children)	9,130	73,661	12,708	120,806

* including pensions increases

APPENDIX D

Demographic experience and assumptions

1. This Section considers the demographic experience over the period 1 April 1996 to 31 March 2001, and the demographic assumptions adopted for the current review.

Pensioner mortality after age and premature retirement

2. Current pensioners may have retired at age 60 (or over) or retired prematurely at age 50 (or over). The mortality experience in the period 1996-2001 was somewhat lighter than the mortality rates adopted for the previous review, which were based on standard tables of mortality rates for men and women, published by the Faculty and Institute of Actuaries and known as PMA80 and PFA80. These tables included allowance for future mortality improvement.
3. Since the 1996 valuation, the actuarial profession has published new standard mortality tables, known as PMA92 (men) and PFA92 (women). These tables include allowance for greater future mortality improvement than the PMA80 and PFA80 tables and I consider it appropriate to adopt the PMA92 and PFA92 tables for this valuation. For current pensioners, the assumed mortality rates are as in the PMA92 and PFA92 tables, but adjusted to take account of the Scheme's recent experience - a reduction of one year of age from the published tables.
4. In respect of future pensions that will be paid to current active and deferred members, the mortality rates in the standard tables have been projected to the calendar year 2025. Table E1 of Appendix E shows the assumed age retirement mortality rates (for future pensioners) at specimen ages.

Pensioner mortality after ill-health retirement

5. The number of ill health pensioners in the NITSS is too small to allow a full analysis of experience of mortality experience after ill-health retirement so only a limited analysis of experience was made. The assumptions took into account the results of this limited analysis together with the experience of the largest group of UK teachers for which statistics were available. The mortality of both existing and future ill-health pensioners is expected to be heavier than that of the unadjusted standard tables. The assumed mortality rates for both current and future ill-health pensioners are approximately similar to the PMA92 and PFA92 tables but with an addition of two years of age. Table E1 of Appendix E shows the assumed ill-health retirement mortality rates at specimen ages.
6. Experience of the largest group of UK teachers for which statistics are available indicates that ill-health retirement pensioners experience heavier mortality in the early years after retirement than those of the same age but who have been retired for some time. Thus, as at the 1996 valuation, it has been assumed that, for men, mortality in the first year after retirement will be 50% greater than for those of the same age who have been retired more than one year. For women, allowance has been made for an excess of 100% in the first year and 50% in the second year, as compared to those of the same age who have been retired for two years or more.

APPENDIX D

Spouses' mortality

7. An analysis of mortality experience was carried out for widows although the number of widow pensioners in the NITSS is too small to give full credibility to the results. The number of widowers receiving pensions from the scheme was too low to allow an analysis of mortality. We have therefore taken some account of the experience of the largest group of UK teachers for which statistics are available as well as of the scheme's own experience when setting the assumptions. For widows' mortality, I have adopted the recently published WA92 standard mortality table but with a reduction of two years of age. For widowers' mortality, I have adopted the same rates as for male pensioners after age retirement. Table E2 of Appendix E shows the assumed mortality rates for future spouses at specimen ages.
8. The data was insufficient to allow an analysis of the proportions of members at each age who are married, and therefore eligible for spouse's benefits. The assumed proportions were a little lower than the assumptions adopted for the 1996 valuation at younger ages and a little higher at older ages. This is in line with trends in the proportions married of the wider population. Table E4 of Appendix E shows the proportions assumed to be married at specimen ages.

Active members

9. Paragraphs 10 to 20 discuss the demographic assumptions adopted in order to determine the standard contribution rate and to value the liabilities of active members.

In-service decrements

10. Age retirements were analysed excluding those who retired on premature grounds. Age retirements during the period 1996 to 2001 were, on average, at very similar ages to those assumed in the 1996 basis. The assumed rates of age retirement are the same as were adopted for the 1996 valuation. Table E2 of Appendix E shows the assumed rates of retirement from active service. On average, men are assumed to retire at about age 63 and women at age 62.
11. The level of premature retirements over the period 1996-2001 was similar to that over the period 1991-96. For this valuation the Department of Education has supplied actual numbers of premature retirements for the years 2001/02 to 2004/05 and projected numbers to the end of the year 2006/07. The Department of Education has asked me to assume that premature retirements taking place after April 2007 will no longer be a liability of the scheme. Table E6 shows the assumed numbers of premature retirements from 2001/02 to 2006/07.
12. Over the period 1996 to 2001, the number of ill-health retirements was broadly in line with that expected under the assumptions adopted for the 1996 review. The assumed rates of ill-health retirement adopted for the 1996 valuation have been retained for this valuation. Table E2 of Appendix E shows the assumed ill-health retirement rates at specimen ages.
13. The data from a scheme of this size is insufficient to allow a credible analysis of the death-in-service experience. The assumed rates of death-in-service were based on the experience of the largest group of UK teachers for which statistics were available. Table E2 of Appendix E shows the assumed death-in-service rates at specimen ages.
14. The rates of withdrawal from service could be analysed only for the first three years of the intervalation period due to a problem with the data from one school sector. Over the period 1996 to 1999, withdrawals from service by men were somewhat higher than expected on the 1996 basis, and the withdrawals by women were significantly higher than expected.

APPENDIX D

15. Withdrawal rates tend to be higher in the early years of service and decrease (as service increases). In earlier reviews, it has been assumed that withdrawal rates in the first five years of service are, in general, higher than the rates at the same age for members with at least five years' service. However, the more recent evidence for teachers across the UK indicates that, after two years' service, there is not a significant difference between the withdrawal rates of members of the same age. (This may be partly due to the reduction in qualifying service for benefits, from five to two years.)
16. It has been assumed that higher withdrawal rates will, in general, apply for the first two years of service. The assumed withdrawal rates for the first two years of service are broadly similar in effect to those adopted for the first five years' of service at the 1996 valuation. After two years' service, the assumed withdrawal rates for both men and women are higher than at the 1996 valuation, more significantly for women. Table E2 of Appendix E shows withdrawal rates for members with more than two years' service at specimen ages. Table E3 of Appendix E shows withdrawal rates for members with less than two years' service at specimen ages.
17. A member may re-enter the Scheme after withdrawing from service. On re-entry to the Scheme, a member may aggregate the earlier period of service with the service subsequent to re-entry. The valuation includes allowance for this contingency in the period between withdrawal and age 60, and for benefits in respect of the service before and after re-entry to be based on the salary at the final date of exit from the Scheme. It is assumed that other deferred members receive benefits from age 60.

Progression of average salary with age

18. In addition to the allowance for general increases in salary (see paragraph 6.5), it is also necessary to allow for increases in salary arising from increments and promotion. Salaries in payment at 31 March 2001 were analysed by age and duration of service. The analysis (which reflected, to some extent, recent changes to the salary structure such as the introduction of threshold payments), but the progression of salaries at 31 March 2001 was not clear with only one year of data. The full effect of the recent changes will be clearer at the next valuation. The DENI has informed me that, once these changes are fully in force, it expects that salary increases arising from the changes will generally occur relatively early in a member's career.
19. For both men and women, the assumed promotional scale is the same as that adopted for the 1996 valuation. Table E5 of Appendix E shows the promotional salary scale at specimen ages. If a member has a break in service between the valuation date and the date that benefits are awarded, then it is assumed that the final pensionable salary will be lower than if service had been continuous.

Entry age

20. It is assumed that new entrants join the Scheme at a range of ages. The average age of male new entrants during the period 1996-2001 was slightly higher than assumed at the last valuation. The assumed distribution of entry ages has been adjusted to reflect this. The average entry age for women was broadly in line with expectations and so the assumed distribution of entry ages has been maintained. On average, the assumed entry ages are 29 for men and 26 for women. It is assumed that 70% of new entrants are female.

APPENDIX E

Table E1
Assumed rates of mortality for future pensioners

Age last birthday at beginning of year	Age (or premature) retirement		Ill-health retirement (more than two years)		Spouses	
	Men	Women	Men	Women	Widows	Widowers
22			.0051	.0011	.0002	.0001
27			.0051	.0011	.0002	.0001
32			.0051	.0011	.0003	.0001
37			.0051	.0011	.0004	.0001
42			.0052	.0012	.0006	.0002
47			.0055	.0014	.0009	.0003
52	.0006	.0006	.0060	.0019	.0014	.0006
57	.0013	.0011	.0071	.0027	.0021	.0013
62	.0029	.0024	.0103	.0051	.0034	.0029
67	.0071	.0054	.0170	.0097	.0064	.0071
72	.0159	.0114	.0300	.0183	.0116	.0159
77	.0326	.0223	.0527	.0330	.0204	.0326
82	.0610	.0409	.0881	.0565	.0352	.0610
87	.1044	.0699	.1378	.0910	.0593	.1044
92	.1641	.1118	.2003	.1378	.0977	.1641
97	.2374	.1678	.2703	.1962	.1573	.2374

APPENDIX E

Table E2
Assumed rates of death, withdrawal and retirement in year following age stated

Age last birthday at beginning of year	Death in service		Withdrawal (at least 2 years' service)		Ill-health retirement		Age last birthday at beginning of year	Age retirement	
	Men	Women	Men	Women	Men	Women		Men	Women
22	.0002	.0002	.0330	.0570	.0000	.0001	59	0.10	0.31
27	.0003	.0002	.0330	.0570	.0002	.0004	60	0.15	0.28
32	.0005	.0003	.0231	.0540	.0005	.0008	61	0.20	0.17
37	.0006	.0004	.0171	.0372	.0013	.0015	62	0.20	0.18
42	.0008	.0007	.0145	.0282	.0035	.0033	63	0.15	0.22
47	.0013	.0012	.0118	.0225	.0097	.0080	64	0.55	0.39
52	.0023	.0019	.0115	.0180	.0198	.0224	65	0.99	0.78
57	.0043	.0026	.0112	.0180	.0280	.0325	66	1.00	1.00
62	.0062	.0036	.0000	.0000	.0000	.0000	67	1.00	1.00
							68	1.00	1.00
							69	1.00	1.00

APPENDIX E

Table E3
Probability of withdrawal during first 2 years

Age last birthday at entry	Probability of withdrawal in first year of service		Probability of withdrawal in second year of service	
	Men	Women	Men	Women
22	0.04	0.04	0.04	0.05
27	0.06	0.07	0.05	0.07
32	0.04	0.04	0.04	0.05
37	0.04	0.03	0.03	0.03
42	0.04	0.04	0.03	0.04
47	0.05	0.05	0.04	0.04
52	0.06	0.07	0.05	0.04
57	0.08	0.09	0.06	0.05

Table E4
Assumed proportion married

Age last birthday	Proportion married	
	Men	Women
22	0.03	0.04
27	0.17	0.18
32	0.32	0.31
37	0.47	0.44
42	0.60	0.53
47	0.70	0.64
52	0.76	0.71
57	0.82	0.72
62	0.84	0.64
67	0.85	0.62
72	0.83	0.57
77	0.79	0.46
82	0.74	0.32
87	0.62	0.18
92	0.43	0.07
97	0.24	0.01

APPENDIX E

Table E5
Salary scale for active members

Age last birthday	Salary scale	
	Men	Women
22	83	82
27	100	100
32	129	126
37	148	135
42	159	141
47	168	147
52	172	151
57	175	154

Table E6
Numbers of premature retirements 2001/02 to 2006/07

Financial year	Number
2001/02	405
2002/03	423
2003/04	440
2004/05	414
2005/06	425 *
2006/07	425 *

* projected by DENI

Government Actuary's Department
July 2005