## **Cambridge Colleges Federated Pension Scheme**

### **Report on the**

## Actuarial Valuation as at 31 March 2005

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# Introduction

Background	This report on the actuarial valuation of the Cambridge Colleges Federated Pension Scheme ("the Scheme"), as at 31 March 2005, has been prepared as required by legislation and in accordance with the Scheme Trust Deed (Clause 18.2 of the Deed dated 9 March 2004). The previous actuarial valuation was carried out by me, as at 31 March 2002. This report is addressed to the Management Committee of the Scheme.		
	The calculations in this report are only appropriate for the purposes described below. If calculations are required for other purposes, those in this report should not be considered appropriate.		
	If this report is made available to a third party with the consent of the Management Committee or otherwise no responsibility or liability can be accepted by me to any third party who relies on the contents of this report without obtaining my prior written agreement to acceptance of responsibility for the purpose for which the report is required.		
<b>Purposes of</b>	The main purposes of the report are:		
Report	• to review the financial condition of the Scheme as at the valuation date:		
	$\Rightarrow$ for funding purposes;		
	$\Rightarrow$ for Minimum Funding Requirement (MFR) purposes;		
	⇒ for the purpose of the statutory test for surplus required under Schedule 22 of the Income and Corporation Taxes Act 1988;		
	• to set out the level of the Colleges' contributions for the period until the next valuation; and		

	• to satisfy the statutory requirements concerning disclosure of information and regulations relating to the MFR.
	This report has been prepared in accordance with the professional guidelines for actuarial reports (Guidance Note 9 v7.0) issued by the Institute and Faculty of Actuaries and current as at the date of signature of the report.
Highlights	The highlights of the report are as follows:
	• The result of this valuation is that there is a funding deficiency of £18.5 million (compared to a deficiency of £3.6 million in the previous valuation) when the actuarial value of the assets is compared to the value of the past service liabilities. This represents a funding level of 80% (94% in the previous valuation).
	A full College breakdown can be found in Section 15.
	• I have calculated that the average College contribution rate required to fund for future service benefits for all members is 17.8% of Contribution Pay (17.6% of Contribution Pay in 2002). The cost of death in service insurance premiums and the 0.75% normal administration expense allowance have been included in this contribution rate but Permanent Health Insurance (PHI) costs are excluded. Also excluded are the Pension Protection Fund (PPF) levy costs which will need to be paid in addition. No adjustment has been made for the deficiency.
	A full College breakdown can be found in Section 14
	• A separate valuation has been carried out on the Minimum Funding Requirement (MFR) assumptions. The Scheme is 92% funded on the MFR assumptions as at the valuation date (101% previously). The deficiency when the value of the assets is compared with the value of the past service liabilities is £6.0 million.
	• Following discussions between the Management Committee and the Colleges, the Colleges will pay

Contribution Rates as set out in Section 14, inclusive of expenses and life insurance premiums. PHI premiums and PPF levies will be paid by the Colleges in addition to this rate.

- There is no statutory surplus on the assumptions set out by the Government Actuary. This means there is no legal requirement to reduce contribution rates or increase benefits.
- As required by recent changes to the Actuarial reporting requirements, I have carried out a valuation on an approximate buy out basis. This gives an estimate of the position should the Scheme wind up and need to purchase deferred annuities and immediate annuities from an insurance company. This basis is our best estimate of what an insurance company may have used to quote for the buy out as at the valuation date. This valuation shows that the Scheme is currently 54% funded on this basis, with a deficiency of £61.7million.

A full College breakdown can be found in Section 15 under the heading "Solvency Basis".

• At the valuation date the invested assets are held by Foreign & Colonial in a range of funds.

The overall equity related allocation within the Scheme is around 65% with 32% in bonds and cash, and the remainder in property. The past service liabilities on the Funding basis are split 57% for active members, 10% for deferred members and 33% for pensions already in payment.

The net current assets (which are included in the bond and cash element) amount to a sizeable proportion of the overall assets (11%) - this is mainly due to a large cash holding which is awaiting investment.

I would recommend that the Management Committee continue to review these investments to ensure that they continue to meet their needs.

Timescales &This report should be made available to the Colleges withinRequirements1 week of the Management Committee receiving this report.

The Management Committee are then required to agree a Schedule of Contributions with the Colleges such that, at the <u>date of certification by the Scheme Actuary</u>, the MFR obligations are met. This Schedule must be signed within 8 weeks from the date of signing this report as shown below.

The Schedule of Contributions will then need to be certified by the Scheme Actuary within a further 4 weeks (i.e. 12 weeks in total) from the date of signature of this report.

The next valuation should be carried out no later than 31 March 2008.

Signature.....

Date: 10 March 2006

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# Background

The Scheme	There are 25 participating Colleges in the Scheme. 19 of the Colleges are contracted out of the State Second Pension (S2P) using the Reference Scheme Test.		
	The Scheme has been approved by HM Revenue & Customs (previously the Inland Revenue Savings, Pensions & Share Schemes) under Chapter I of Part XIV of the Income & Corporation Taxes Act 1988.		
Benefits	The benefits valued are those defined in the Trust Deed and Rules of the Scheme, announcements to Members and in the membership handbook effective as at the valuation date, but taking into account overriding legislative changes in force at that date. A summary of the Scheme's benefits as at the valuation date is set out in Section 10.		
	I am not aware of, nor have I taken account of, any discretionary benefits awarded by the Management Committee to Members in addition to those benefits described.		
	I have not taken into account any options that the Members may have at retirement, in particular, I have not allowed for Members who commute part of the pensions for tax free cash.		
	The death in service lump sum is fully insured by the Management Committee.		
	Members may pay Additional Voluntary Contributions (AVCs) to increase benefits payable from the Scheme, in the form of added years' service. Past service liabilities and assets in this report include appropriate allowance for AVCs.		
Membership Data	Summaries of the membership data used for the valuation are given in Section 11.		
	The accuracy of our calculations is dependent upon the accuracy of the data supplied by the Management Committee. I was supplied with member data and audited accounts and		

asset figures by the Scheme Office. I have checked the data for reasonableness against previous Scheme accounts and for consistency with the previous valuation as well as carrying out other general data checks. The data appears to be in very good order and any queries have been resolved satisfactorily.

# Assets At the valuation date the invested assets are held by F & C Management Ltd in a range of funds.

Details of these assets as at the valuation date, and the calculation of their actuarial value, are described in Section 12.

F & C Management Ltd were replaced by Schroder Investment Management Ltd as investment manager in June 2005.



# Pensions Act 2004

The Pensions Act 2004 was granted Royal assent on 18 November 2004. Most of the provisions of the Act came into force in April 2005. Some of the main areas covered in this Act are outlined below:

- Pension Protection Fund (PPF) an insurance-type scheme to meet up to 100% of pensions in payment and up to 90% of the accrued pensions of active and deferred Members should a scheme wind up with an insolvent sponsor.
- Scheme wind up solvent sponsors will need to provide sufficient funds to buy out benefits.
- A new Pensions Regulator. The new Regulator has extensive powers including all of those previously held by the Occupational Pensions Regulatory Authority (OPRA), which has been dissolved.
- Scheme Funding requirement the MFR is to be replaced with a new funding standard and schemes will be required to hold sufficient and appropriate assets to meet their technical provisions (the new term for Past service Liabilities). This is to be phased in from 22 September 2005. All valuations with an effective date of on or after this date must be based on the new basis.
- Statement of Funding Principles the Management Committee will be required to have a written statement setting out how they intend to secure the Statutory Funding Objective.
- The Management Committee will have to follow statutory compliance procedures before preparing or revising a Statement of Investment Principles.
- Interim actuarial reports as well as triennial actuarial valuations, Scheme Actuaries will be required to produce an annual update for the Management Committee, setting out information on the development of scheme liabilities. The first interim report will be due one year after your next full triennial valuation due as at 31 March 2008.
- Limited Price Indexation (LPI) for pensions in payment

	can be capped at 2.5% p.a. in respect of future service (rather than 5% p.a., as at present). This applies only if the Scheme rules are changed to reflect this reduction.
	• Member nominated trustees - schemes will be required to have at least one third Member nominated trustees or, in the case of trustee companies, one third Member nominated directors. The Secretary of State has been granted powers to increase the proportion to half at some point in the future.
	• AVC facilities – it will no longer be compulsory for schemes to provide these in future. However, as Members cannot transfer out their existing AVCs without their main scheme benefits, any AVCs already in place will need to be maintained.
Finance Act 2004	The Finance Act 2004 received Royal Assent in July 2004. This lays the foundation for a simplified taxation regime for pensions from April 2006. The eight existing tax regimes will be replaced by a single lifetime allowance, which will be set at £1.5 million for the first year from April 2006, rising to £1.8 million by 2010. All but the highest earners will be able to invest up to 100% of salary in the pension scheme.



Funding Method	The previous valuation of the Scheme was carried out as at 31 March 2002. The actuarial method used then to determine the contribution rate was the Projected Unit Method. I have adopted the same actuarial method for most Colleges in this valuation, which I believe is suitable for valuing the benefits of an on-going scheme. However, for those Colleges participating in the Scheme who have closed their section to new entrants I have moved over to the Attained Age Method. More details of both methods are set out in Section 6.			
Main Assumptions	The main actuarial assumptions have been changed as follows:			
		2002	2005	
	Rate of interest:			
	• before retirement	7.0% p.a.	7.0% p.a.	
	• after retirement	7.0% p.a.	5.0% p.a.	
	Rate of salary increases:	5.0% p.a.	4.5% p.a.	
	<ul><li>Rate of pension increases in payment:</li><li>linked to increases in the Retail Prices Index</li></ul>	4.0% p.a.	3.0% p.a.	
	<ul><li>Rate of pension increases in deferment:</li><li>Excess pension over GMP</li></ul>	4.0% p.a.	3.0% p.a.	

Contributions	I understand that contributions have been paid in accordance with the agreed Schedule of Contributions since the previous valuation.				
	The actual amounts paid by the Colleges over the intervaluation period are £4,232,000 (year ended 31 March 2003), £6,216,000 (2004) and £5,403,000 (2005).				
Analysis on Movement in Surplus	There has been a significant deterioration in the funding position of the Scheme since the 2002 valuation was carried out. The reasons for this are quantified in the tab below.				
	Surplus/(Deficiency) as at 31 March 2002	(£3,576,000)			
	Interest on deficiency at 7.0% p.a.	(£805,000)			
	Effects of lower than expected Investment Returns	(£9,077,000)			
	Effects of changing Economic and Demographic assumptions at this valuation	(£7,778,000)			
	Effects of higher than expected expenses and life assurance premiums	(£600,000)			
	Effects of contributions in excess of the future service contribution rate	£4,641,000			
	<ul> <li>Miscellaneous items, including</li> <li>experience gains/losses on items such as salary increases and pension increases, and</li> <li>member movements such as retirements, withdrawals and deaths</li> </ul>	(£1,295,000)			
	Surplus/(Deficiency) as at 31 March 2005	(£18,490,000)			

# **Funding Objective and Associated Risks**

# **Objective** The Management Committee's agreed funding objective adopted for the Scheme is that the value of the assets at any date should be at least equal to the value of the liability for benefits accrued before that date (based on projected earnings for active Members).

Should the value of the assets be less than the value of the liabilities then the Management Committee aim to meet the deficiency within 15 years.

Each College determines the level of its future contributions in consultation with the Management Committee.

#### Method

The method employed to achieve this objective involves regular assessments of the Funding Level (defined in Section 7) and the contribution rates using the valuation methods and assumptions detailed in Section 6. In normal circumstances, provided that the appropriate contributions are made, this method will ensure the funding objective is met and that the contribution rate paid by the Colleges is reasonably stable as a percentage of Contribution Pay.

Other methods of calculating funding levels within the Scheme, namely the Statutory Surplus, MFR and Solvency bases, provide different results to those of the Funding Basis. These methods are designed to answer specific statutory requirements and, in the case of the Solvency basis, to provide Management Committee with information should the Scheme go into Wind-up. They are generally calculated on either weaker or stronger sets of assumptions than the Funding Basis and as such will produce smaller or greater deficiencies. I would not necessarily consider them to be suitable bases on which to fund a pension scheme.

# **Risks** Circumstances in which either the funding objective may not be met or the contribution rate paid by the Colleges may not be stable might be as follows:

- the appropriate contributions are not made;
- the financial or demographic experience of the Scheme differs significantly from the valuation assumptions; or
- the benefits provided by the Scheme are changed (as a result of either legislation or a decision by the Colleges/Management Committee).



# Valuation Method and Assumptions

#### Economic Assumptions

The valuation assumptions are given in Section 13. The assumptions that can have most impact on the results of the valuation are the economic assumptions.

I should point out that the values assigned to various assumptions are as important as the relationship between the assumptions. For example, the difference between the valuation rate of interest before retirement and the rate of salary increases prior to retirement of 2.5 % per annum compound is just as important as the absolute amounts of 7.0% and 4.5% per annum compound respectively.

In conditions as at March 2005, the annual rate of price inflation (2.9% to 3.1% per annum), the general rise in average earnings (3.8% to 4.5% per annum) and the return on long term fixed interest securities (4.5% to 4.7% per annum) are similar to the valuation assumptions. The important point to note is that the value of the liabilities depends on:

- the difference between the assumed rate of interest before retirement and the assumed rate of salary increases, and
- the difference between the assumed rate of interest after retirement and the assumed rate of increases to pensions in payment.

These differences are not inconsistent with the differences implied by the valuation assumptions.

#### **Demographic** Assumptions

- The key demographic assumptions used in this valuation are:
- rates of mortality before and after retirement;
- age at retirement;
- proportion of Members who are married; and
- the age difference between Members and dependants.

# Member In this valuation, as in the previous valuation, I am assuming that should a Member decide to commute part of his pension

Options	for cash then it would be on a cost neutral basis. Should the actual basis be different to cost neutral then a small surplus/deficiency is likely to accrue within the Scheme on each commutation. I have not taken into account any other options Members may have in valuing their benefits.
Method	The Scheme is open to new entrants for 18 of the College participants. However, it is closed to new entrants for 7 of the College participants.
	The approach I have used for this valuation is to use a different funding <b>method</b> for Colleges depending on whether or not that College's section of the Scheme is closed to new entrants.
	For Colleges where the Scheme is open to new members, the Actuarial Method used in determining the Past Service Liability and Future Service Cost is the Projected Unit Method (PUM). This method is, in my opinion, suitable for a scheme open to new members.
	For Colleges where the Scheme is closed to new members, the Actuarial Method used in determining the Past Service Liability and Future Service Cost is the Attained Age Method (AAM). This method is, in my opinion, suitable for a scheme closed to new members.
	The only exception to this is King's College. At the date of calculation King's had indicated that their section was open to new entrants whereas it is now closed to new entrants. I have therefore used the Projected Unit method for King's section on this occasion.
	The Actuarial Value of the Assets is consistent with the value of the liabilities.
	The valuation methods used to determine the assets and liabilities are described below and are, in my opinion, compatible.
Past Service Liability	For both actuarial methods, this is defined as the actuarial present value of all benefits prospectively payable in respect of members' service prior to the valuation date:

	<ul> <li>for <u>active members</u> the benefits are based on Pensionable Service up to the valuation date and Final Pensionable Salary estimated at Pensionable Age (PA) or earlier death; and</li> <li>for <u>deferred pensioners</u> (i.e. members who have left Pensionable Service prior to the valuation date with entitlement to deferred benefits) the benefits are the deferred pensions payable on retirement or earlier death;</li> </ul>
	<ul> <li>for <u>pensioners</u> the benefits are the benefits currently payable.</li> </ul>
Future Service Cost (PUM)	For the PUM, this is defined as the actuarial present value of benefits accruing <i>in the year</i> after the valuation date in respect of all active members, based on Final Pensionable Salary estimated at PA or earlier death.
Future Service Cost (AAM)	For the AAM, this is defined as the actuarial present value of benefits accruing <i>in all years after the valuation date</i> in respect of all active members, based on Final Pensionable Salary estimated at PA or earlier death.
	There is no Future Service Cost for either deferred pensioners or pensioners.
	In all cases, the above liabilities include amounts in respect of benefits contingently payable to members' dependants and increases in pensions at the rates guaranteed in the Rules of the Scheme.
	The calculation of the Past Service Liability and the Future Service Cost requires assumptions to be made, inter alia, in respect of future investment returns and salary progression.

Actuarial Value of the	The Actuarial Value assigned to the assets should be consistent with the value assigned to the liabilities. The assets of the Scheme are invested in a variety of managed funds held with Foreign & Colonial. In addition, cash is held within a Scheme bank account and a deposit account. The value is taken as the surrender value of funds plus the value of the cash as at the valuation date.			
Assets				
<b>Deficiency</b> <b>Adjustment</b>	If the Actuarial Value of the Assets is less than the Past Service Liability, the difference is termed a deficiency. This will be dealt with by a Deficiency Adjustment which will commonly be an increase in the contribution rate for an agreed period.			
College Contribution Rate	The College Contribution Rate is calculated as the Future Service Cost adjusted by the Deficiency Adjustment, less the employees' contribution rate, where applicable. This is compared with the minimum contribution rate required to maintain the assets of the Scheme at the level of at least 100% of the liabilities as required by the MFR. The contribution rate payable must be at least as great as the minimum contribution rate required under the MFR.			
Differences in Objectives between Funding, MFR & Solvency	<ul> <li>The formal actuarial report must contain details of the results of at least 4 valuations, namely: Funding, MFR, Solvency and Statutory Surplus.</li> <li>To avoid confusion I state here the different objectives of the various methods:</li> <li>1) Funding – the aim is to ensure that the Scheme has</li> </ul>			
	<ul> <li>sufficient resources, both now and in the future, to meet all pension payments as they arise. It is calculated on a prudent basis.</li> <li>2) Solvency – this basis is designed to show the approximate cost of buying out the Scheme benefits with an insurance company should the Scheme wind up. It is calculated on, currently, a very strong basis</li> </ul>			

placing a much higher value on liabilities than the Funding Basis.

- 3) **MFR** is a minimum funding requirement designed by the Government to try and ensure that the Scheme has sufficient assets to meet the liabilities should the Scheme close. This is calculated on a very weak discredited basis, placing a much lower value on Scheme liabilities than the Funding Basis.
- 4) **Statutory Surplus** is a HM Revenue & Customs funding requirement. It is designed to ensure that the Scheme is not overfunded and therefore being used as a tax avoidance shelter.

# **7** Financial Condition of the Scheme

**Funding Level** The Funding Level is the ratio of the Actuarial Value of the Scheme's assets to the Scheme's Past Service Liability.

Past service (service to 31 March 2005)		Basis 1 (Funding)	Basis 2 (MFR)	Basis 3 (Solvency)
Value of Past Service Liability				
Active Members Deferred Members Pensioners Expense Reserve		£52,427,000 £8,700,000 £30,102,000 £684,000	£42,142,000 £7,416,000 £26,793,000 £3,054,000	£82,116,000 £16,949,000 £33,435,000 £2,650,000
Total	[a]	£91,913,000	£79,405,000	£135,150,000
Actuarial Value of Assets	[b]	£73,423,000	£73,423,000	£73,423,000
Surplus/(Deficiency)	[b]-[a]	(£18,490,000)	(£5,982,000)	(£61,727,000)
Funding Level	[b]/[a]x100%	80%	92%	54%

The position according to College for the above can be found in Section 15.

#### College Contribution Rate

Ignoring the surplus/deficiency disclosed by the Funding and MFR valuations, the College Contribution Rates required to fund the future service liabilities of Scheme members are shown below as percentages of Contribution Pay. This is derived as shown in the following table.

<b><u>Future service</u></b> (service after 31 March 2005)		Basis 1 (Funding)	Basis 2 (MFR)
JOINT Contribution Rate as % of Contribution Pay (including administration expenses and life insurance premium)	[a]	23.8%	18.4%
Employees' Contribution Rate as % of Contribution Pay	[b]	6.0%	6.0%
Colleges' Contribution Rate as % of Contribution Pay	[c] =[a]-[b]	17.8%	12.4%

Notes:

- 1. The Employees' contribution rate is the average rate paid by all members.
- 2. The above average Employees' contribution rate assumes the Employees' contribution rates as at 31 March 2005. Some Colleges have increased Employee contribution rates after that date.
- 3. The expenses exclude PHI premiums and the Pension Protection Fund Levy premiums which vary by College and are payable in addition to the rates shown above.

The position according to each College is set out in Section 14.

Funding Deficiency	The overall Funding deficiency, if spread over the next ten years and based on the current membership, would equate to an increase in the overall Colleges' contribution rate of approximately 10.6% p.a. of future Contribution Pay.				
	This is one method of spreading the deficiency. Alternatively, a lump sum plus a reduced additional percentage of Contribution Pay could be paid.				
Actual Future Contribution Rate	Following discussions with the Management Committee, the Colleges intend paying an average future contribution rate of 23.3% of Contribution Pay, inclusive of expenses and life insurance premiums. PHI premiums and PPF levy expenses will be paid by the Colleges in addition to this rate.				
	I estimate that the maximum period over which the deficiency will be paid off in respect of any individual College's section is 15 years.				
Statutory Surplus Test	HM Revenue & Customs requires that the financial condition of the Scheme is determined in accordance with guidelines laid down by the Government Actuary to establish the level of statutory surplus, if any. These guidelines require the use of the same method of valuing the liabilities as used in the calculation of the Funding Level, but using assumptions that result in liabilities lower than those calculated on the funding basis by around 15%. The prescribed method and assumptions for valuing the assets results in a value lower than the Actuarial Value of the Assets.				
	If the ratio of the value of the assets to the value of the liabilities using the Government Actuary's basis is less than 105%, no action is required. I can confirm that the ratio is less than 105% for the Scheme at the valuation date.				
	A statement to this effect is made in Section 17 at the end of this report.				

Minimum	The Pensions Act 1995 introduced the MFR, the purpose of
Funding	which is to seek to ensure that the Scheme maintains sufficient
Requirement	assets to meet its liabilities using prescribed assumptions.
(MFR)	Should a College's section be under-funded on the MFR basis then future contributions need to be sufficient to get the College's section back to at least 100% funded within a specified time frame.
	As at the valuation date, the Scheme as a whole was under- funded, with the vast majority of Colleges being under-funded (see Section 15).
	Colleges must pay contributions at least in line with the MFR future service contribution rate after the deficiency is amortised.

**Solvency** To calculate the solvency of the Scheme, the liabilities of the Scheme are calculated on a buyout basis. This is my best estimate of the basis an insurance company would use to calculate the cost of deferred and immediate annuities and is based on a discount rate of the gross redemption yield on appropriate Gilts. The post-retirement interest rate is based on a deduction of ½% pa, whereas the pre-retirement interest rate, allowing for much lower reinvestment, is based on a deduction of 1% pa. The actual buyout cost will only be known when a quotation is received from an insurance company.

Section 15 sets out the position according to College.

I have quantified the effect that the funding level on the Solvency Basis has on the winding up priority order, using the priority order in the Pensions Act 1995 modified appropriately. The results are shown below and by College in Section 18.

Benefit	Percentage Covered
Additional Voluntary Contributions	100%
Pensioners (excluding increases)	100%
Actives and deferred pensioners (excluding increases)	60.6%
Actives, deferred pensioners and pensioners (increases only)	0.2%
Total	54%

Please note that if contributions are to be paid on the standard Funding Basis in future then the actual solvency position of the Scheme is likely to worsen if all assumptions are met in practice. This is because the recommended contribution rates are calculated on the Funding Basis which is weaker (i.e. places a lower value on benefits accruing) than the Solvency Basis.



# **Sensitivity Analysis**

#### Sensitivity Analysis

I am required to carry out various sensitivity analyses, so that the Management Committee may better understand the impact of actual economic assumptions being different from those set out in our Funding basis (Basis 1). The sensitivity analysis has been performed assuming that one, and only one, of the key assumptions is changed at any one time. The changes are as follows:

- Basis 4 assumes that the rate of interest before and after retirement is reduced by 1/2% pa compound.
- Basis 5 assumes that the rate of salary increase is increased from 4.5% pa compound to 5% pa compound.
- Basis 6 assumes that the rate of increase in price inflation is increased from 3.0% pa compound to 3.5% pa compound, with a knock on effect on pension increases in deferment and retirement.
- Basis 7 assumes that the mortality rates improve by 10% both pre and post retirement.

Finally, Basis 8 uses the same assumptions as those used in the previous valuation but allowing for the changes in benefit structure and member contributions since April 2004.

The results are shown on the following pages.

<u>Past Service</u> (service to 31 March 2005)		Basis 1 (Funding)	Basis 4 (interest rate less <sup>1/2</sup> %)	Basis 5 (5% salary increases)	Basis 6 (3.5% inflation)	Basis 7 (mortality rates fall by 10%)	Basis 8 (previous basis)
Value of Past Service Liability (£'000s): Active Members Deferred Members Pensioners Expense Reserve		£52,427 £8,700 £30,102 £684	£58,517 £9,803 £31,696 £750	£55,343 £8,781 £30,102 £707	£55,284 £9,695 £31,573 £724	£54,002 £8,933 £31,101 £705	£48,408 £8,591 £26,914 £222
Total	[a]	£91,913	£100,766	£94,933	£97,276	£94,741	£84,135
Actuarial Value of Assets (£'000s):	[b]	£73,423	£73,423	£73,423	£73,423	£73,423	£73,423
Surplus/(Deficiency) (£'000s):	[b]-[a]	(£18,490)	(£27,343)	(£21,510)	(£23,853)	(£21,318)	(£10,712)
Funding Level	[b]/[a]x 100%	80%	73%	77%	75%	77%	87%

<u>Future service</u> (service on or after <u>1 April 2005)</u>		Basis 1 (Funding)	Basis 4 (interest rate less <sup>1/2</sup> %)	Basis 5 (5% salary increases)	Basis 6 (3.5% inflation)	Basis 7 (mortality rates fall by 10%)	Basis 8 (previous basis)
Joint Contribution Rate as % of Contribution Pay (including administration expenses and life insurance premium)	[a]	23.8%	26.5%	25.0%	25.0%	24.4%	22.6%
Employees' Contribution Rate as % of Contribution Pay	[b]	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Colleges' Contribution Rate as % of Contribution Pay ( <b>before</b> amortisation of deficiency)	[c] =[a]-[b]	17.8%	20.5%	19.0%	19.0%	18.4%	16.6%
Adjustment for amortisation of deficiency over the next 10 years based on the existing membership	[d]	10.6%	15.3%	12.0%	13.6%	12.2%	6.0%
Colleges' adjusted Contribution Rate as % of Contribution Pay ( <b>after</b> amortisation of deficiency)	[e] = [c]+[d]	28.4%	35.8%	31.0%	32.6%	30.6%	22.6%



# **Accounting Requirements**

#### Accounting Requirements

It is necessary to determine pension costs to be charged to profit in respect of UK corporate accounts under the accounting standard FRS 17, and it may be necessary in respect of US corporate accounts under the accounting standard FAS 87.

These accounting issues are the subject of discussions and reports separate from that governing the determination of a funding strategy, and are <u>specifically not included</u> within this report. Such information can be provided, if requested.



# **Summary of Benefits and Member Contributions**

This benefit structure is for benefits accrued up to 31 March 2004. Any changes to these benefits for service after this date are reflected in the Table at the end of this section.

1. Effective Date	31 March 2005
2. Eligibility	Each College has its own eligibility conditions.
3. Pensionable Age (PA)	65th birthday for males and females
4. Offset Removal Date (ORD)	The date a College removed the single person's Basic State Pension (BSP) entitlement from the definition of Contribution Pay. The table at the end of this Section sets out those Colleges which have removed the BSP Offset and those which have not.
5. Contribution Pay	<ul> <li>For Pensionable Service prior to ORD</li> <li>Gross taxable earnings for the week or month minus:</li> <li>(a) if paid weekly, the current weekly rate of the single person's flat rate state retirement pension, or</li> <li>(b) if paid monthly, 41/3 x the current weekly single person's flat rate state retirement pension in force on the last day of the month.</li> </ul>
	<b>For Pensionable Service on or after ORD</b> Gross taxable earnings for the week or month
6. Insured Salary	Current rate of annual salary or the gross taxable earnings for the previous tax year, whichever is larger.
7. Final Pensionable Salary	The best average of 3 consecutive years Contribution Pay in the last 13 years before the date of exit, increased in line with the RPI to the date of exit
8. Pensionable Service	Service from date of joining the Scheme in years and completed months <u>plus</u> Service granted on transfer in <u>plus</u>

	Service secured by AVCs
9. Member's contributions	See table at end of this Section. Members may pay AVCs to secure added years of service.
10. Normal Retirement Pension	1/60th of Final Pensionable Salary times Pensionable Service
11. Early Retirement Pension in Normal Health	Members may retire between age 50 and 60 with the consent of their College.
	Members retiring at or after age 60: 1/60th of Final Pensionable Salary times Pensionable Service
	Members retiring between age 50 and 60: 1/60th of Final Pensionable Salary times Pensionable Service
	The pension in this case is reduced by an actuarial factor depending on the period to age 60.
12. Retirement Cash	<b>For Pensionable Service prior to ORD:</b> In addition to the pension payable a tax free lump sum is payable equal to the first year's pension.
	<u>For Pensionable Service on or after ORD</u> : Nil
13. Early Retirement Pension in Ill-Health or on grounds of Incapacity	Generally, there is no early retirement pension from the Scheme in these circumstances. An insured permanent health benefit will be paid outside the Scheme.
14. Exchange of pension for cash	Part of the retirement pension may be commuted for a tax free cash lump sum, in addition to the Retirement Cash in 12, subject to Inland Revenue limits.
15. Benefits on death after retirement	<ul> <li>(a) The balance, if any, of the first 5 years' payments of the member's pension, is paid as a lump sum to dependants <b>plus</b></li> <li>(b) a spouse's pension of one half of the member's pension before any exchange for cash.</li> </ul>

<ul> <li>(a) A lump sum of 2 times Insured Salary at the date of death</li> <li>plus</li> <li>(b) a spouse's pension of 25% of Insured Salary</li> <li>plus</li> <li>(c) a child's pension of 12.5% of Insured Salary for each child (maximum of 2) while below age 18 or, if later, receiving full time education.</li> </ul>
Nil
3% pa compound (or the increase in the RPI if lower)
The increase in the RPI in the year ending each September, applied at 1 November
5% pa compound (or the increase in the RPI if lower)
<ul> <li>(a) If the member has completed less than 2 years of Pensionable Service, an appropriate payment is made to National Insurance Contributions Office (NICO) to reinstate the member into the State Second Pension (S2P), and a refund of the member's contributions is paid to the member less the member's share of the payment to NICO, less tax.</li> <li>(b) If the member has completed 2 or more years</li> </ul>
<ul> <li>Pensionable Service, the pension at termination is: 1/60th of Final Pensionable Salary for each year (and proportionately for months) of Pensionable Service</li> <li>The pension in excess of the GMP will be revalued between termination and PA at 5% pa compound or the</li> </ul>

increase in RPI if lower. The GMP will be revalued in line with statutory increases.

#### 19. State Second Pension (S2P)

The following table sets out those Colleges which are contracted-out of S2P and those which are not. Those members who are not contracted-out of S2P receive lower benefits than shown in this summary.

			<u>n or after</u> il 2004	<u>Death in service benefits</u>		<u>Employee</u> contribution <u>rate</u>
	<u>Offset Removal Date</u>	Members at 31 March 2004	<u>Members joining</u> <u>on or after 1</u> <u>April 2004</u>	<u>Members at 31</u> <u>March 2004</u>	<u>Members joining</u> on or after 1 April <u>2004</u>	<u>On or after 1</u> <u>April 2005</u>
Contracted-out Co	olleges with BSP Offset I	Removed				
Emmanuel	1 June 2001	1	2	Unchanged	Unchanged	8%
Girton	1 June 2001	1	3	Unchanged	Unchanged	6%
Pembroke	1 June 2001	1	3	Unchanged	5	6.35%
Peterhouse	1 June 2001	1	3	Unchanged	5	6%
Selwyn	1 June 2001	1	3	Unchanged	Unchanged	6%
				-	-	increasing to 6.35% from 1 April 2006
St John's	1 April 2002	1	3	Unchanged	6	6%
Downing	1 June 2001	1 up to 31 March 2005, 2 thereafter	4	Unchanged	N/A	6.35%
Newnham	1 June 2001	1	4	Unchanged	N/A	6% increasing to 8% from 1 April 2006
Gonville & Caius	1 April 2002	2	2	Unchanged	Unchanged	6.35%
Magdalene	1 June 2001	2	2	Unchanged	Unchanged	6%
Queens'	1 June 2001	2	2	Unchanged	Unchanged	6% increasing to 6.35% from 1 April 2006
Trinity Hall	1 June 2001	2	2	Unchanged	Unchanged	6%
Christ's	1 June 2001	2	3	Unchanged	6	6.35%
Corpus Christi	1 June 2001	2	4	Unchanged	N/A	6% increasing to 8% from 1 April 2006
Churchill	1 June 2001	3	3	5	5	6.35%
St Catharine's	1 April 2002	3	3	Unchanged	Unchanged	6%
New Hall	1 June 2001	3	4	5	N/A	6.35%

Contracted-out Colleges with BSP Offset Retained						
King's	N/A	1	4	Unchanged	N/A	6%
Robinson	N/A	3	3	Unchanged	Unchanged	6.35%
Contracted-in Colleg	ges with BSP Offset R	emoved				
Darwin	1 June 2001	1	3	Unchanged	Unchanged	2%
Wolfson	1 June 2001	1	3	Unchanged	Unchanged	3% increasing to 4% from 1 April 2006
Clare Hall	1 June 2001	2	2	Unchanged	Unchanged	5%
St Edmund's	1 June 2001	2	3	Unchanged	Unchanged	2%
Lucy Cavendish	1 June 2001	3	4	Unchanged	N/A	2% increasing to 4.17% from 1 April 2006
Contracted-in Colleg	ges with BSP Offset R	etained				
Hughes Hall	N/A	1	4	Unchanged	N/A	2% increasing to 5% from 1 August 2005

#### Key

1 Existing Benefits

2 Cap maximum service at 40 years and pay unreduced pensions from 65

3 As (2) above, but increase pensions in payment in line with RPI up to 5% pa

4 Alternative arrangements for future service

5 No lump sum and 50% of prospective pension

6 No lump sum and 50% of accrued pension

# **11** Summary of Membership Data

The 2002 valuation figures are shown in brackets below the 2005 figures.

ACTIVE MEMBERS	<u>Males</u>	<u>Females</u>	<u>Total</u>
Number of members	727	668	1,395
	(774)	(726)	(1,500)
Total Contribution Pay p.a.	£13,992,923	£9,920,704	£23,913,627
	(£12,839,636)	(£9,516,019)	(£22,355,655)
Average Contribution Pay p.a.	£19,247	£14,851	£17,142
	(£16,589)	(£13,107)	(£14,904)
Average past service (years)	10.8	7.8	9.4
	(11.5)	(6.8)	(9.2)
Average age	48.3	48.1	48.2
	(47.5)	(46.3)	(46.9)

DEFERRED PENSIONERS			
Number	236	277	513
	(176)	(194)	(370)
Total deferred pensions p.a.	£374,714	£350,885	£725,599
payable as at valuation date	(£234,867)	(£207,673)	(£442,540)
Average deferred pension p.a. payable as at valuation date	£1,588	£1,267	£1,414
	(£1,334)	(£1,070)	(£1,196)
Average age	44.2	44.6	44.4
	(43.6)	(44.1)	(43.9)

PENSIONERS			
Number	430	351	781
	(370)	(259)	(629)
Total pensions p.a.	£1,252,482	£725,502	£1,977,984
payable from valuation date	(£912,179)	(£428,802)	(£1,340,981)
Average pension p.a.	£2,913	£2,067	£2,533
payable from valuation date	(£2,465)	(£1,656)	(£2,132)
Average age	72.9	70.9	72.0
	(72.9)	(71.0)	(72.1)

#### Notes:

- 1. The accounts show that there were 1,401 Active Members compared to our figure of 1,395. I have liaised with the administrators of the Scheme and believe my figure is correct.
- 2. The Deferred Pensioner data includes 15 members who are due a refund of contributions only and who have no deferred pension liability. The accounts show that there were 498 Deferred Pensioners compared to our figure of 513. After liaising with the administrators I believe my figure is correct.
- 3. The accounts show that there were 782 Pensioners compared to our figure of 781. Again, after liaising with the administrators I believe my figure is correct.
- 4. Please note that there are several Pensioners included in the above statistics who have exchanged the whole of their pension for cash. There is however a contingent reversionary spouse's pension payable.


The actuarial value of the assets has been calculated as follows – also shown is the method of allocating those assets to individual Colleges:

Asset	Method of allocation	Actuarial Value of Assets (£)
Invested funds under management – F&C units	Units held by College allocated to that College	61,959,677
Cash held by F&C	Allocated to College in proportion to number of F&C units held	3,321,571
Cash held in bank accounts and net current assets attributable to individual College	Allocated to College in accordance with schedule given by administrator	7,197,912
Net current assets <b>NOT</b> attributable to individual College	Allocated to College in proportion to number of F&C units held	943,424
	Total	73,422,584

## Notes:

1. The above figures have been obtained from the audited accounts and include the value of Additional Voluntary Contributions, as do the liabilities.

2. The following table summarises the asset position by College.

(£)           Contracted-out Colleges with BSP Offset Removed           Christ's         4,308,903           Churchill         5,029,881           Corpus Christi         2,784,521           Downing         2,193,741           Emmanuel         2,714,427           Girton         3,695,221           Gonville & Caius         5,121,876           Magdalene         2,702,732           New Hall         2,434,621           Newnham         1,554,676           Pembroke         2,757,773           Peterhouse         3,247,619           Queens'         3,247,619           Selwyn         2,936,450           St Catharine's         2,678,488           St John's         7,909,158           Trinity Hall         3,464,649           Contracted-out Colleges with BSP Offset Retained         2,747,172           King's         5,747,172           Robinson         4,404,338           Contracted-in Colleges with BSP Offset Retained         224,166           Ucy Cavendish         124,728           St Edmund's         224,166           Wolfson         1,338,891           Contracted-in Colleges with BSP Offset Retained         1,338,		Market Value of Total Assets as at 31 March 2005
Christ's       4,308,903         Churchill       5,029,881         Corpus Christi       2,784,521         Downing       2,193,741         Emmanuel       2,714,427         Girton       3,695,221         Gonville & Caius       5,121,876         Magdalene       2,702,732         New Hall       2,434,621         Newnham       1,554,676         Pembroke       2,757,773         Peterhouse       3,247,619         Queens'       2,936,450         St Catharine's       2,678,488         St John's       7,909,158         Trinity Hall       3,464,649         Contracted-out Colleges with BSP Offset Retained       2         King's       5,747,172         Robinson       4,404,338         Clare Hall       557,486         Darwin       896,493         Lucy Cavendish       224,166         Wolfson       1,338,891         Contracted-in Colleges with BSP Offset Retained       224,166		(£)
Churchill         5,029,881           Corpus Christi         2,784,521           Downing         2,193,741           Emmanuel         2,714,427           Girton         3,695,221           Gonville & Caius         5,121,876           Magdalene         2,732           New Hall         2,434,621           Newnham         1,554,676           Pembroke         2,757,773           Peterhouse         3,247,619           Queens'         4,334,278           Selwyn         2,936,450           St John's         7,909,158           Trinity Hall         3,464,649           Contracted-out Colleges with BSP Offset Retained         4,404,338           Contracted-in Colleges with BSP Offset Removed         257,486           Darwin         896,493           Lucy Cavendish         324,166           Wolfson         124,728           St Edmund's         224,166           Wolfson         1,338,891	Contracted-out Colleges with BSP Offset Removed	
Churchill         5,029,881           Corpus Christi         2,784,521           Downing         2,193,741           Emmanuel         2,714,427           Girton         3,695,221           Gonville & Caius         5,121,876           Magdalene         2,732           New Hall         2,434,621           Newnham         1,554,676           Pembroke         2,757,773           Peterhouse         3,247,619           Queens'         4,334,278           Selwyn         2,936,450           St John's         7,909,158           Trinity Hall         3,464,649           Contracted-out Colleges with BSP Offset Retained         4,404,338           Contracted-in Colleges with BSP Offset Removed         257,486           Darwin         896,493           Lucy Cavendish         324,166           Wolfson         124,728           St Edmund's         224,166           Wolfson         1,338,891		
Corpus Christi         2,784,521           Downing         2,193,741           Emmanuel         2,714,427           Girton         3,695,221           Gonville & Caius         5,121,876           Magdalene         2,702,732           New Hall         2,434,621           Newnham         1,554,676           Pembroke         2,777,773           Peterhouse         3,247,619           Queens'         3,247,619           Selwyn         2,936,450           St Catharine's         2,678,488           St John's         7,909,158           Trinity Hall         3,464,649           Contracted-out Colleges with BSP Offset Retained         2           Clare Hall         557,486           Darwin         896,493           Lucy Cavendish         124,728           St Edmund's         224,166           Wolfson         1,338,891	Christ's	4,308,903
Downing         2,193,741           Emmanuel         2,714,427           Girton         3,695,221           Gonville & Caius         5,121,876           Magdalene         2,702,732           New Hall         2,434,621           Newnham         1,554,676           Pembroke         2,757,773           Peterhouse         3,247,619           Queens'         3,247,619           Selwyn         2,936,450           St Catharine's         2,678,488           St John's         7,909,158           Trinity Hall         3,464,649           Contracted-out Colleges with BSP Offset Retained	Churchill	5,029,881
Emmanuel         2,714,427           Girton         3,695,221           Gonville & Caius         5,121,876           Magdalene         2,702,732           New Hall         2,434,621           Newnham         1,554,676           Pembroke         2,757,773           Peterhouse         3,247,619           Queens'         4,334,278           Selwyn         2,936,450           St Catharine's         2,678,488           St John's         7,909,158           Trinity Hall         3,464,649           Contracted-out Colleges with BSP Offset Retained	Corpus Christi	2,784,521
Girton       3,695,221         Gonville & Caius       5,121,876         Magdalene       2,702,732         New Hall       2,434,621         Newnham       1,554,676         Pembroke       2,757,773         Peterhouse       3,247,619         Queens'       4,334,278         Selwyn       2,936,450         St Catharine's       2,678,488         St John's       7,909,158         Trinity Hall       3,464,649         Contracted-out Colleges with BSP Offset Retained         King's       5,747,172         Robinson       4,404,338         Contracted-in Colleges with BSP Offset Removed       224,166         Darwin       896,493         Lucy Cavendish       124,728         St Edmund's       224,166         Wolfson       1,338,891	Downing	2,193,741
Gonville & Caius       5,121,876         Magdalene       2,702,732         New Hall       2,434,621         Newnham       1,554,676         Pembroke       2,757,773         Peterhouse       3,247,619         Queens'       4,334,278         Selwyn       2,936,450         St Catharine's       2,678,488         St John's       7,909,158         Trinity Hall       3,464,649         Contracted-out Colleges with BSP Offset Retained         King's       5,747,172         Robinson       4,404,338         Contracted-in Colleges with BSP Offset Removed	Emmanuel	2,714,427
Magdalene       2,702,732         New Hall       2,434,621         Newnham       1,554,676         Pembroke       2,757,773         Peterhouse       3,247,619         Queens'       4,334,278         Selwyn       2,936,450         St Catharine's       2,678,488         St John's       7,909,158         Trinity Hall       3,464,649         Contracted-out Colleges with BSP Offset Retained         King's       5,747,172         Robinson       4,404,338         Clare Hall       557,486         Darwin       896,493         Lucy Cavendish       124,728         St Edmund's       224,166         Wolfson       1,338,891	Girton	3,695,221
Magdalene       2,702,732         New Hall       2,434,621         Newnham       1,554,676         Pembroke       2,757,773         Peterhouse       3,247,619         Queens'       4,334,278         Selwyn       2,936,450         St Catharine's       2,678,488         St John's       7,909,158         Trinity Hall       3,464,649         Contracted-out Colleges with BSP Offset Retained         King's       5,747,172         Robinson       4,404,338         Clare Hall       557,486         Darwin       896,493         Lucy Cavendish       124,728         St Edmund's       224,166         Wolfson       1,338,891	Gonville & Caius	
New Hall         2,434,621           Newnham         1,554,676           Pembroke         2,757,773           Peterhouse         3,247,619           Queens'         4,334,278           Selwyn         2,936,450           St Catharine's         2,678,488           St John's         7,909,158           Trinity Hall         3,464,649           Contracted-out Colleges with BSP Offset Retained           King's         5,747,172           Robinson         4,404,338           Contracted-in Colleges with BSP Offset Removed         557,486           Darwin         896,493           Lucy Cavendish         124,728           St Edmund's         224,166           Wolfson         1,338,891           Contracted-in Colleges with BSP Offset Retained	Magdalene	
Newnham         1,554,676           Pembroke         2,757,773           Peterhouse         3,247,619           Queens'         4,334,278           Selwyn         2,936,450           St Catharine's         2,678,488           St John's         7,909,158           Trinity Hall         3,464,649           Contracted-out Colleges with BSP Offset Retained         5,747,172           King's         5,747,172           Robinson         4,404,338           Contracted-in Colleges with BSP Offset Removed         557,486           Darwin         896,493           Lucy Cavendish         124,728           St Edmund's         224,166           Wolfson         1,338,891	-	2,434,621
Pembroke         2,757,773           Peterhouse         3,247,619           Queens'         4,334,278           Selwyn         2,936,450           St Catharine's         2,678,488           St John's         7,909,158           Trinity Hall         3,464,649           Contracted-out Colleges with BSP Offset Retained            King's         5,747,172           Robinson         4,404,338           Contracted-in Colleges with BSP Offset Removed            Clare Hall         557,486           Darwin         896,493           Lucy Cavendish         124,728           St Edmund's         224,166           Wolfson         1,338,891           Contracted-in Colleges with BSP Offset Retained	Newnham	
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Contracted-in Colleges with BSP Offset Removed         Clare Hall         Darwin         Lucy Cavendish         St Edmund's         Wolfson         Contracted-in Colleges with BSP Offset Retained	5	
Clare Hall 557,486 Darwin 896,493 Lucy Cavendish 124,728 St Edmund's 224,166 Wolfson 1,338,891	Robinson	4,404,338
Darwin Lucy Cavendish Lucy Cavendish St Edmund's Wolfson Contracted-in Colleges with BSP Offset Retained	Contracted-in Colleges with BSP Offset Removed	
Darwin896,493Lucy Cavendish124,728St Edmund's224,166Wolfson1,338,891		
Lucy Cavendish       124,728         St Edmund's       224,166         Wolfson       1,338,891		
St Edmund's       224,166         Wolfson       1,338,891         Contracted-in Colleges with BSP Offset Retained	-	
Wolfson 1,338,891		
Contracted-in Colleges with BSP Offset Retained		
	vvoiison	1,338,891
Hughes Hall 260,296	Contracted-in Colleges with BSP Offset Retained	
	Hughes Hall	260.296
		200,200



Basis 1 is the recommended basis for funding the Scheme. Basis 2 is the set of prescribed assumptions required by the Minimum Funding Requirement (MFR). Basis 3 is our assessment of the assumptions an insurance company might use if the Scheme were wound up and annuities purchased.

<u>Economic (% per annum</u> <u>compound)</u>	Basis 1 (Funding)	Basis 2 (MFR)	Basis 3 (Solvency)
<ul><li>Rate of interest:</li><li>before retirement</li></ul>	7.0%	9.0%	3.5%
• after retirement	5.0%	8.0%	4.0%
• overage members - MFR liabilities only	N/A	4.66%	N/A
Rate of salary increases:	4.5%	6.0%	N/A
Rate of Earnings Cap increases:	3.0%	4.0%	3.0%
Rate of increase in pensions in payment:			
• Guaranteed Minimum Pension (GMP) earned for service before 6 April 1988	0.0%	0.0%	0.0%
• GMP earned for service between 6 April 1988 and 5 April 1997	2.25%	2.75%	2.25%
• pension in excess of GMP earned to 31 March 2004	3.0%	4.0%	3.0%
<ul> <li>pension earned after 31 March 2004</li> </ul>	3.0% or 2.5%	4.0% or 3.5%	3.0% or 2.5%
• Overage members - MFR liabilities only – where an increase is applicable	N/A	As per Funding	N/A

	Basis 1 (Funding)	Basis 2 (MFR)	Basis 3 (Solvency)
<ul><li>Rate of increases in pensions in deferment:</li><li>GMP</li></ul>	Statutory revaluation	Statutory revaluation	Statutory revaluation
• Excess pension over GMP	3.0%	4.0%	3.0%
Assets & Expenses			
Valuation of assets:	Surrender value of the assets	Surrender value of the assets	Surrender value of the assets
Expenses: • past service	0.75% of Past Service Liability excluding expenses	4.0% of Past Service Liability excluding expenses	2.0% of Past Service Liability excluding expenses
• future service	0.75% of Contribution Pay	0.75% of Contribution Pay	N/A
Death in Service Premiums:	% of Contribution Pay. Varies by College and benefit	% of Contribution Pay. Varies by College and benefit	N/A
<ul><li>Pension Protection Fund levies:</li><li>with effect from April 2005:</li></ul>	<ul> <li>Initial Levy (for 12 months only)</li> <li>Administration Levy</li> </ul>	<ul> <li>Initial Levy (for 12 months only)</li> <li>Administration Levy</li> </ul>	N/A
• with effect from April 2006:	<ul> <li>Scheme Based Levy</li> <li>Risk Based Levy</li> <li>Administration Levy</li> </ul>	<ul> <li>Scheme Based Levy</li> <li>Risk Based Levy</li> <li>Administration Levy</li> </ul>	N/A
	Basis 1 (Funding)	Basis 2 (MFR)	Basis 3 (Solvency)

## **Demographic**

<ul><li>Rate of mortality:</li><li>before retirement</li></ul>	AM92 for males and AF92 for females both rated down 2 years	PA90 table, rated down 2 years	AM92 for males and AF92 for females both rated down 2 years
• after retirement	PMA92C20 table for males and PFA92C20 for females	PA90 table, rated down 2 years	PMA92C20 table for males and PFA92C20 for females
Age at Retirement:			
• For service to 31 March 2004	Males 65 and Females 60	Males 60 and Females 60	Males 60 and Females 60
<ul> <li>For service from 1 April 2004</li> </ul>	Males 65; and Females 60 or 65 depending on College	Males 60 or 65; and Females 60 or 65 depending on College	Males 60 or 65; and Females 60 or 65 depending on College
Proportion Married:	Males and females 90%	Males 80% Females 70%	Males and females 90%
Withdrawal Rates:	Nil	N/A	N/A
Age Difference:	Wives 3 years younger than their husbands	Wives 3 years younger than their husbands	Wives 3 years younger than their husbands
Member Options allowed for:	None	None	None



## **College Contribution Rates**

	Future Service Cost	Future Service Cost	Rate at	New rate from	
College	(Funding)	(MFR)	31 March 2006	1 April 2006	
	(% Contribution Pay)	(% Contribution Pay)	(% Contribution Pay)	(% Contribution Pay)	
Contracted-out Colleges	with BSP Offset I	Removed			
Christ's	16.45%	11.63%	23.00%	19.29%	
Churchill	15.04%	10.42%	17.31%	21.75%	
Corpus Christi	20.33%	11.01%	16.26%	27.45%	*
Downing	18.97%	13.49%	20.29%	23.61%	*
Emmanuel	17.16%	13.23%	13.87%	22.97%	
Girton	18.44%	14.38%	16.12%	16.47%	
Gonville & Caius	17.16%	11.68%	23.91%	23.41%	
Magdalene	17.12%	10.65%	17.32%	19.20%	
New Hall	16.55%	9.45%	24.92%	25.63%	*
Newnham	21.86%	17.38%	22.09%	19.86%	*
Pembroke	18.17%	12.38%	25.06%	25.02%	
Peterhouse	16.35%	10.29%	16.14%	15.49%	
Queens'	16.80%	11.34%	14.26%	23.39%	
Selwyn	18.12%	11.59%	14.55%	29.17%	
St Catharine's	16.36%	10.85%	19.19%	23.50%	
St John's	17.76%	12.57%	16.76%	26.76%	
Trinity Hall	15.93%	10.01%	13.04%	15.30%	
Contracted-out Colleges	with BSP Offset I	Retained			
King's	23.51%	19.52%	33.85%	36.79%	
Robinson	17.75%	13.73%	26.11%	23.90%	
Contracted-in Colleges	with BSP Offset Re	emoved			
Clare Hall	14.87%	9.38%	15.02%	13.37%	
Darwin	18.07%	14.62%	16.68%	25.66%	
Lucy Cavendish	18.74%	11.12%	15.82%	17.85%	*
St Edmund's	18.04%	12.15%	21.88%	23.58%	
Wolfson	17.96%	12.62%	15.38%	23.00%	
Contracted-in Colleges	with BSP Offset R	etained			
Hughes Hall	19.15%	16.79%	34.21%	36.50%	*
* Closed to New Entrants					



## **College Funding Levels**

		Funding B	asis			MFR Bas	is			Solvenc	y Basis	
College	Past Service Liabilities	Market Value	Surplus	Funding	Past Service Liabilities (Tatal)	Market Value of	Surplus	Funding	Past Service Liabilities (Total)	Market Value of Assets	Surplus	Funding
College	(Total)	of Assets	(£)	Level (%)	(Total)	Assets (£)	(£)	Level	(Total) (£)		(£)	Level (%)
	(£)	( <b>£</b> )	( <b>t</b> )	(%)	(£)	( <b>t</b> )	( <b>t</b> )	(%)	(t)	(£)	( <b>t</b> )	(%)
Contracted-out Colle	ges with BSP Offs	et Removed										
Christ's	5,348,580	4,308,903	-1,039,677	81%	4,800,829	4,308,903	-491,926	90%	7,465,968	4,308,903	-3.157.064	58%
Churchill	6,154,951	5,029,881	-1,125,071	82%	5,487,052	5,029,881	-457,172	92%	8,493,710	5,029,881	-3,463,830	59%
Corpus Christi	3,531,294	2,784,521	-746,773	79%	3,049,626	2,784,521	-265,106	91%	5,357,915	2,784,521	-2,573,395	52%
Downing	2,591,584	2,193,741	-397,843	85%	2,204,784	2,193,741	-11,044	99%	4,158,645	2,193,741	-1,964,904	53%
Emmanuel	3,533,447	2,714,427	-819,020	77%	3,001,958	2,714,427	-287,531	90%	5,578,611	2,714,427	-2,864,184	49%
Girton	4,403,260	3,695,221	-708,039	84%	3,801,488	3,695,221	-106,268	97%	6,656,068	3,695,221	-2,960,848	56%
Gonville & Caius	6,281,664	5,121,876	-1,159,788	82%	5,622,375	5,121,876	-500,499	91%	9,113,258	5,121,876	-3,991,382	56%
Magdalene	3,455,280	2,702,732	-752,548	78%	2,996,507	2,702,732	-293,776	90%	4,957,248	2,702,732	-2,254,516	55%
New Hall	2,932,759	2,434,621	-498,138	83%	2,560,530	2,434,621	-125,909	95%	4,142,396	2,434,621	-1,707,776	59%
Newnham	2,030,503	1,554,676	-475,828	77%	1,809,256	1,554,676	-254,580	86%	2,806,388	1,554,676	-1,251,713	55%
Pembroke	3,605,432	2,757,773	-847,659	76%	3,221,635	2,757,773	-463,862	86%	5,167,761	2,757,773	-2,409,987	53%
Peterhouse	3,707,542	3,247,619	-459,923	88%	3,042,840	3,247,619	204,779	107%	5,682,950	3,247,619	-2,435,331	57%
Queens'	5,273,790	4,334,278	-939,512	82%	4,552,916	4,334,278	-218,638	95%	8,595,115	4,334,278	-4,260,836	50%
Selwyn	3,705,443	2,936,450	-768,993	79%	3,157,452	2,936,450	-221,002	93%	5,182,733	2,936,450	-2,246,283	57%
St Catharine's	3,563,095	2,678,488	-884,607	75%	3,048,046	2,678,488	-369,557	88%	5,091,619	2,678,488	-2,413,130	53%
St John's	10,447,266	7,909,158	-2,538,108	76%	8,617,034	7,909,158	-707,876	92%	15,392,140	7,909,158	-7,482,981	51%
Trinity Hall	4,153,711	3,464,649	-689,062	83%	3,521,584	3,464,649	-56,935	98%	6,305,494	3,464,649	-2,840,845	55%
Contracted-out Colle	ges with BSP Offs	et Retained										
King's	7,232,512	5,747,172	-1.485.340	79%	6,398,493	5,747,172	-651.321	90%	10.603.474	5,747,172	-4.856.303	54%
Robinson	5,724,601	4,404,338	-1,320,263	77%	4.913.044	4.404.338	-508,706	90%	8,486,276	4.404.338	-4.081.938	52%
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Contracted-in Colleg	· ·											
Clare Hall	495,477	557,486	62,009	113%	460,787	557,486	96,700	121%	721,552	557,486	-164,066	77%
Darwin	1,162,663	896,493	-266,170	77%	988,992	896,493	-92,499	91%	1,634,523	896,493	-738,030	55%
Lucy Cavendish	175,519	124,728	-50,791	71%	136,366	124,728	-11,638	91%	247,230	124,728	-122,502	50%
St Edmund's	290,061	224,166	-65,895	77%	249,115	224,166	-24,949	90%	429,991	224,166	-205,825	52%
Wolfson	1,714,014	1,338,891	-375,123	78%	1,425,267	1,338,891	-86,376	94%	2,385,041	1,338,891	-1,046,149	56%
Contracted-in Colleg	es with BSP Offset	Retained										
	· · · · · · · · · · · · · · · · · · ·		-138.084	65%	337.041	260.296	-76.745	77%	493.612	260.296	-233.315	53%
Hughes Hall	398,381	260,296	-138,084	65%	337,041	260,296	-76,745	77%	493,612	260,296	-233,315	

Actuarial Statement for the purposes of Regulation 30 of the Occupational Pension Schemes (Minimum Funding Requirement and Actuarial Valuations) Regulations 1996

Name of Scheme:	Cambridge Colleges Federated Pension Scheme
Effective Date of Valuation:	31 March 2005

## 1. Security of prospective rights

In my opinion the resources of the Scheme are likely in the normal course of events to meet in full the liabilities of the Scheme as they fall due. In giving this opinion, I have assumed that the following contributions will be paid to the Scheme:

by the employees:	see attached schedule
by the employer:	see attached schedule for contributions payable until at least the next actuarial valuation due as at 31 March 2008, at which time the contribution rates will be reassessed

## 2. Summary of methods and assumptions used

Actuarial liabilities and contributions have been determined according to the Projected Unit Method for College sections open to new entrants and the Attained Age Method for College sections closed to new entrants, assuming:

- an investment return prior to retirement of 7% per annum compound;
- an investment return after retirement of 5% per annum compound;
- increases in earnings of 4.5% per annum compound;
- price inflation of 3.0% per annum compound; and
- standard mortality tables.

Assets were valued as the value shown in the Scheme's audited accounts.

Further details of the method and assumptions used are set out in my report on the actuarial valuation addressed to the Management Committee dated March 2006.

Signature.....

Date: 10 March 2006

Paul R Barnes Fellow of the Institute of Actuaries Barnes & Sherwood Limited Barnes & Sherwood House 95, Maybury Road Woking Surrey GU21 5JL

College	Member's Contribution Rate (until 31 March 2006)	College's Contribution Rate (until 31 March 2006)	Member's Contribution Rate (from 1 April 2006)	College's Contribution Rate (from 1 April 2006)	
	(% Contribution Pay)	(% Contribution Pay)	(% Contribution Pay)	(% Contribution Pay)	
Contracted-out Colleges	with BSP Offset I	Removed			
Christ's	6.35%	23.00%	6.35%	19.29%	
Churchill	6.35%	17.31%	6.35%	21.75%	
Corpus Christi	6.00%	16.26%	8.00%	27.45%	*
Downing	6.35%	20.29%	6.35%	23.61%	*
Emmanuel	8.00%	13.87%	8.00%	22.97%	
Girton	6.00%	16.12%	6.00%	16.47%	
Gonville & Caius	6.35%	23.91%	6.35%	23.41%	
Magdalene	6.00%	17.32%	6.00%	19.20%	
New Hall	6.35%	24.92%	6.35%	25.63%	*
Newnham	6.00%	22.09%	8.00%	19.86%	*
Pembroke	6.35%	25.06%	6.35%	25.02%	
Peterhouse	6.00%	16.14%	6.00%	15.49%	
Queens'	6.00%	14.26%	6.35%	23.39%	
Selwyn	6.00%	14.55%	6.35%	29.17%	
St Catharine's	6.00%	19.19%	6.00%	23.50%	
St John's	6.00%	16.76%	6.00%	26.76%	
Trinity Hall	6.00%	13.04%	6.00%	15.30%	
Contracted-out Colleges	with BSP Offset I	Retained			
King's	6.00%	33.85%	6.00%	36.79%	
Robinson	6.35%	26.11%	6.35%	23.90%	
Contracted-in Colleges v	with BSP Offset Re	emoved			
	<b>5</b> 000/	45.000/	= 000/	40.070/	
Clare Hall	5.00%	15.02%	5.00%	13.37%	
Darwin	2.00%	16.68%	2.00%	25.66%	÷
Lucy Cavendish	2.00%	15.82%	4.17%	17.85%	*
St Edmund's	2.00%	21.88%	2.00%	23.58%	
Wolfson	3.00%	15.38%	4.00%	23.00%	
Contracted-in Colleges	with BSP Offset R	etained			
Hughes Hall	2.00% increasing to 5.00% from 1 August 2005	34.21%	5.00%	36.50%	*

# **17** Certificate for the purposes of Paragraph 2(3) of Schedule 22 to the Income and Corporation Taxes Act 1988

This certificate is given to the Commissioners of Inland Revenue for the purposes of Paragraph 2(3) of Schedule 22 to the Income and Corporation Taxes Act 1988

Name of Scheme:	The Cambridge Colleges Federated Pension Scheme
PSO Reference number:	49/13101

I hereby certify that:

- 1) in my opinion, as at 31 March 2005, the value of the assets of the Scheme did not exceed 105 per cent of the value of the liabilities of the Scheme;
- 2) the assets and liabilities to which paragraph 1) refers have been determined in accordance with the requirements prescribed by the Pension Scheme Surpluses (Valuation) Regulations 1987.

Signature.....

Date: 10 March 2006

Paul R Barnes Fellow of the Institute of Actuaries Barnes & Sherwood Limited Barnes & Sherwood House 95, Maybury Road Woking Surrey GU21 5JL

## **18** Actuarial Statement for the purposes of Regulation 14 of the Occupational Pension Schemes (Minimum Funding Requirement and Actuarial Valuations) Regulations 1996

Name of scheme: The Cambridge Colleges Federated Pension Scheme

Effective date of valuation: 31 March 2005

## 1. Compliance with minimum funding requirement

In my opinion, on the effective date, the value of the assets for each College participating in the Scheme is the percentage shown on the attached Schedule of the amount of the corresponding Scheme liabilities of the College.

## 2. Security of preferential liabilities

In my opinion, on the effective date, the assets of each College participating in the Scheme were sufficient to satisfy the Colleges' liabilities in the Scheme mentioned in Section 73(3) of the Pensions Act 1995 (which lists the liabilities of the Scheme in the order in which they are to be met on a winding up) to the following extent.

## **Description of liability within section 73(3)**

Percentage satisfied

Additional voluntary contributions
 Pensioners (excluding increases)

see schedule below

3)Actives and deferred pensioners (excluding increases)4)Actives, deferred pensioners and pensioners (increases only)

#### 3. Valuation principles

The Scheme's assets and liabilities are valued in accordance with section 56(3) of the Pensions Act 1995, the Occupational Pension Schemes (Minimum Funding Requirement and Actuarial Valuations) Regulations 1996 and the mandatory guidelines on minimum funding requirement (GN 27), prepared and published by the Institute of Actuaries and the Faculty of Actuaries.

Signature: ..... Date: 10 March 2006

Name: Paul R Barnes Qualification: Fellow of the Institute of Actuaries

Address: Barnes & Sherwood House 95, Maybury Road Woking Surrey GU21 5JL Name of Employer: Barnes and Sherwood Limited

#### Note:

The valuation of the amount of the liabilities of the Scheme does not reflect the cost of securing those liabilities by the purchase of annuities, if the Scheme were to have been wound up on the effective date of the valuation.

## Schedule to Actuarial statement made for the purposes of Regulation 14 of the Occupational Pension Schemes (Minimum Funding Requirement and Actuarial Valuations) Regulations 1996

College	Solvency Funding Level	(1)	(2)	(3)	(4)
Contracted-out Coll	eges with BSP Offs	et Removed			
Christ's	58%	100%	100%	64%	0%
Churchill	59%	100%	100%	54%	0%
Corpus Christi	52%	100%	100%	62%	0%
Downing	53%	100%	100%	68%	0%
Emmanuel	49%	100%	100%	60%	0%
Girton	56%	100%	100%	63%	0%
Gonville & Caius	56%	100%	100%	63%	0%
Magdalene	55%	100%	100%	57%	0%
New Hall	59%	100%	100%	57%	0%
Newnham	55%	100%	100%	61%	0%
Pembroke	53%	100%	100%	54%	0%
Peterhouse	57%	100%	100%	66%	0%
Queens'	50%	100%	100%	64%	0%
Selwyn	57%	100%	100%	58%	0%
St Catharine's	53%	100%	100%	56%	0%
St John's	51%	100%	100%	52%	0%
Trinity Hall	55%	100%	100%	61%	0%
Contracted-out Coll	eges with BSP Offs	et Retained			
King's	54%	100%	100%	65%	0%
Robinson	52%	100%	100%	57%	0%
Contracted-in Colle	ges with BSP Offset	Removed			
Clare Hall	77%	100%	100%	100%	26%
Darwin	55%	100%	100%	63%	0%
Lucy Cavendish	50%	100%	100%	60%	0%
St Edmund's	52%	100%	100%	65%	0%
Volfson	56%	100%	100%	73%	0%
Contracted-in Colle	ges with BSP Offset	t Retained			
Hughes Hall	53%	100%	100%	50%	0%

Security of Preferential Liabilities Description of liabilities within section 73 (3)