Isle of Man Pension Fund

Actuarial Valuation as at 31 March 2004

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March 2005

Executive Summary

This report sets out the results of our actuarial valuation of the Fund as at 31 March 2004 and is addressed to Borough of Douglas as administering authority to the Fund.

The main conclusions are as follows:

- The funding level (ratio of assets to past service liabilities) as at 31 March 2004 is 63% (compared to 64% as at 31 March 2001). This corresponds to a past service deficit of £9.0m.

- Without anticipating future equity out-performance, the corresponding result would be a funding level of 49%.

- The employers' average cost of future service benefits (i.e. ignoring any past service deficit) is 14.1% of pensionable pay.

- Assuming that a funding level of 100% is to be targeted over a period of 17 years on the ongoing basis (if our assumptions are borne out in practice) the common employers' contribution rate is 23.2% of pensionable pay.

- Adjustments have been made to the common rate of employers' contribution to take account of certain circumstances that are peculiar to individual employers. The *minimum* contributions to be paid by each employer from 1 April 2005 to 31 March 2008 are shown in our Rates and Adjustment Certificate at Appendix G.

- All employers are also required to make additional payments in respect of unreduced early retirements as provided for in our Rates and Adjustment Certificate.

Peter Summers FFA **Bryan Chalmers FFA**
8 March 2005

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1. Introduction

1.1 We have carried out an actuarial valuation of the Isle of Man Pension Fund ("the Fund") as at 31 March 2004 and have pleasure in presenting our report to the Borough of Douglas ("the Administering Authority") as the administering authority to the Fund.

1.2 The previous valuation was carried out as at 31 March 2001 and the results were set out in the report dated October 2002. They are summarised in the table below, with the deficit amortised over 17 years.

2001 Results Summary	**£m**
Value of Accrued (Past Service) Liabilities	
Employee Members	11.38
Deferred Pensioners	1.51
Pensioners	7.05
Total Accrued Liabilities (L)	**19.95**
Value of Fund Assets (A)	**12.82**
Surplus/(Deficit)	**(7.13)**
Funding Level [(A)/(L)]	**64.3%**
Employer Contributions	**% of pay**
(a) Future Service Funding Rate	12.7%
(b) Past Service Adjustment	8.8%
Total Common Contribution Rate [(a)+(b)]	**21.5%**

1.3 The Fund is part of the Local Government Pension Scheme (LGPS) and is a multi-employer defined benefit pension scheme. Employees' contributions are fixed (mostly at the level of 6% of pay). Employers pay the balance of the cost of the scheme. The actual cost will not be known until the final pensioner dies, and employers' contributions are set to meet the expected cost of the benefit. The employers' contributions are reviewed at a series of three yearly valuation exercises. This valuation is one of the series.

Purposes of Valuation

1.4 The main purposes of this valuation are:

- to review the financial position of the Fund against the Administering Authority's funding objectives;
- to enable completion of all relevant certificates and statements in connection with the Local Government Pension Scheme 1996 (Statutory Document No 396/96), approved by Tynwald in 1996, and operative from 2 May 1995 ("the Regulations"), and other relevant regulations; and
- to comment on the circumstances that may give rise to future volatility in the funding level of the Fund or employers' contributions.

Funding Objectives

1.5 Our valuation is based on the following overriding funding principles for the Fund:

- building up assets to provide for new benefits of current employees as they are earned;
- recovering any shortfall in assets relative to the value placed on accrued liabilities over the longer-term; and
- ensuring that there are always sufficient assets to meet the benefits as they fall due for payment to members.

Regulatory Requirements

1.6 This valuation is carried out in accordance with the Regulations, which specifies that the Administering Authority must obtain:

- an actuarial valuation of the assets and liabilities of each of the Fund as at 31 March 1998 and every three years thereafter;
- a report by an actuary; and
- a rates and adjustments certificate.

1.7 Within the rates and adjustment certificate we are required to specify:

- the employers' common contribution rate, which, in our opinion should be paid by all employers so as to ensure the Fund's solvency; and

- any individual adjustments (increases or decreases) to the common contribution rate, which, in our opinion are required by reason of any circumstances peculiar to that employer.

which for this valuation apply for each year of the period of three years beginning with 1 April 2005.

1.8 Under the provisions of the Regulations, we are required to have regard to:

- the existing and prospective liabilities of the Fund arising from circumstances common to all those bodies,

- the desirability of maintaining as nearly constant a rate as possible, and

1.9 The Fund must comply with the Inland Revenue Surplus Test (see Section 5 of this report) where the objective is to remain below a prescribed maximum level of funding.

Use of Results

1.10 This report is provided solely for the purposes of the Administering Authority and the Fund employers to fulfil their and our statutory obligations. It should not be used for any other purpose. The liability figures contained in this report are not appropriate for employer FRS17 accounting purposes. This report should not be released or otherwise disclosed to any third party except as required by law or with our prior written consent, in which case it should be released in its entirety.

1.11 Neither we nor Hymans Robertson accepts any liability to any other party unless we have expressly accepted such liability in writing.

1.12 This report has been prepared in accordance with version 7.0 of "Retirement Benefit Schemes - Actuarial Reports - GN9" published by the Institute of Actuaries and the Faculty of Actuaries. The following aspects of GN9 are not relevant to the current circumstances of the LGPS and hence our report does not comply with these aspects of GN9:

- Paragraph 2.5 of GN9 requires the actuary to state the Minimum Funding Requirement (MFR) funding level. As the MFR does not apply to the LGPS, this report does not comply with paragraph 2.5 of GN9; and

- Paragraph 2.6 of GN9 requires the actuary to report on the value of the liabilities that would arise had the Fund wound up on the valuation date (based on the cost of buying out the accrued benefits with insurance policies). As the LGPS is a statutory scheme, there is no regulatory provision for scheme wind up and the scheme members have a statutory right to their accrued benefits. Therefore the concept of solvency on a buy-out basis does not apply to the Fund. Accordingly, this report does not comply with paragraph 2.6 of GN9.

1.13 The Government's recent legislation relating to employers' obligations on the voluntary termination of their pension schemes, known as the Debt on Employer regulations, does not apply to the LGPS. The Government's new safety net system from April 2005, the Pension Protection Fund, will also not apply to the LGPS. We assume that all employers will be able to fulfil their obligations to pay contributions certified in this report. To the extent that any employer defaults on its contributions whilst the Fund is in deficit, another employer or employers in the Fund will bear any shortfall.

1.14 The membership and accounting data has been provided by the Administering Authority and we have relied on the accuracy of the information provided.

1.15 We have however carried out a number of reasonableness checks on the quality of the membership data and from the results of these we have concluded that we have no reason to doubt that the data provided is materially complete and correct.

2. Fund and Benefit Information

Benefits and member contributions

2.1 The principal elements of the benefit structure of the Fund are set out in the Regulations and are summarised in Appendix A. These benefits are common to all employers participating in the Fund.

2.2 There are a small number of discretionary powers, which may be exercised by the Administering Authority or by individual employers. The principal discretions are also summarised in Appendix A. With the exception of the employers' powers to augment benefits, normally on early retirement, we would not expect that the exercise of these powers would have a material effect on the valuation results.

2.3 Although the main benefits affecting our calculations remain unchanged since the previous valuation, there have been a number of amendments to the LGPS Regulations in the UK, under the auspices of the Government's Stocktake review of the scheme. The changes in the UK are summarised in Appendix A. The changes already made do not materially affect the results of our valuation however, possible future changes, notably the abolition of the Rule of 85 for future service, could affect the cost of future service benefits. Please see the discussion on the results in Section 6.

2.4 Most employees contribute at the rate of 6% of pay, with a closed group of manual employees who joined before April 1998 contributing at the rate of 5% of pay. The employers meet the balance of the cost of the scheme.

2.5 The cost of accruing benefits was assessed to be 12.7% at the 2001 valuation.

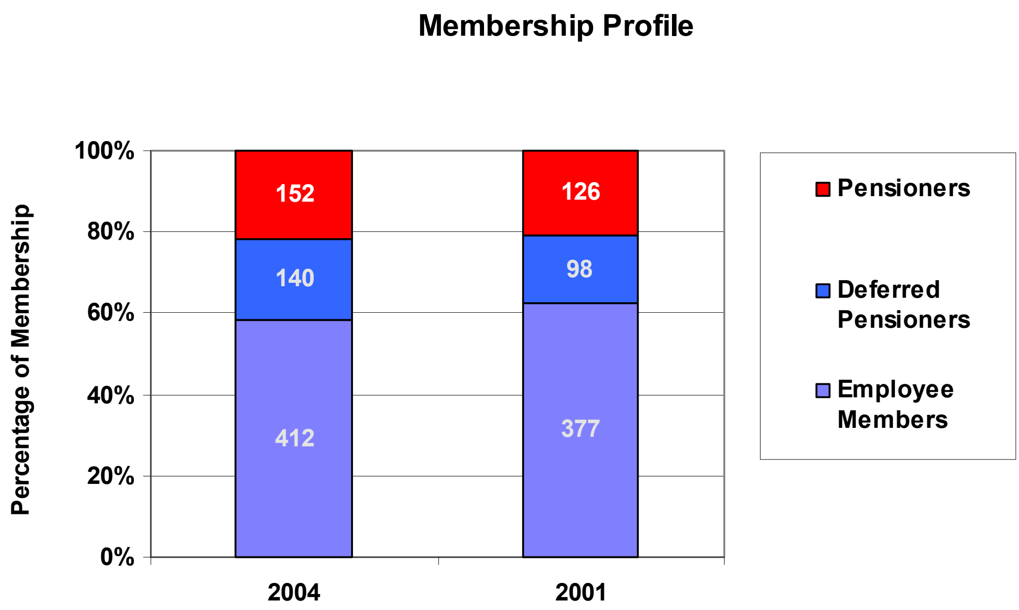
2.6 The common contribution rate payable by the employers was set at 21.5% of payroll with effect from 1 April 2002. The resulting minimum contributions to be paid were certified in the previous valuation report.

2.7 During the inter-valuation period the employers therefore paid contributions higher than the cost of the accruing benefits.

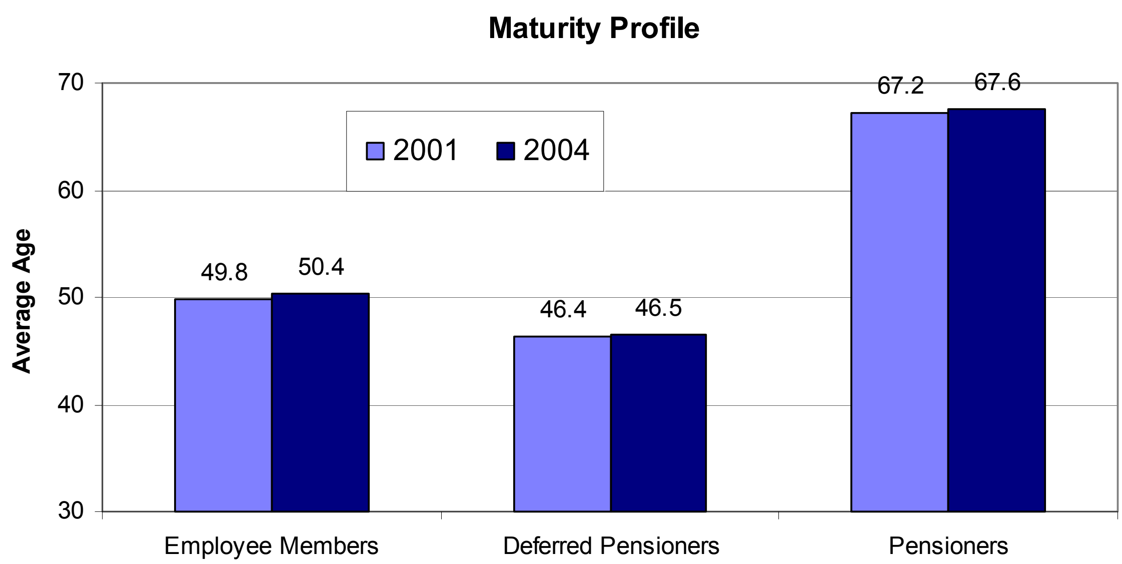
Fund membership

2.8 The membership of the Fund as at 31 March 2004, and changes since the previous valuation are summarised in Appendix B for each benefit category.

2.9 The chart below illustrates the change in the structure of the Fund's membership between 2001 and 2004. Overall, the proportion of the membership in each category has remained relatively stable.



2.10 The change in the average ages of Fund members (weighted by salary or pension) over the intervaluation period is shown in the chart below.

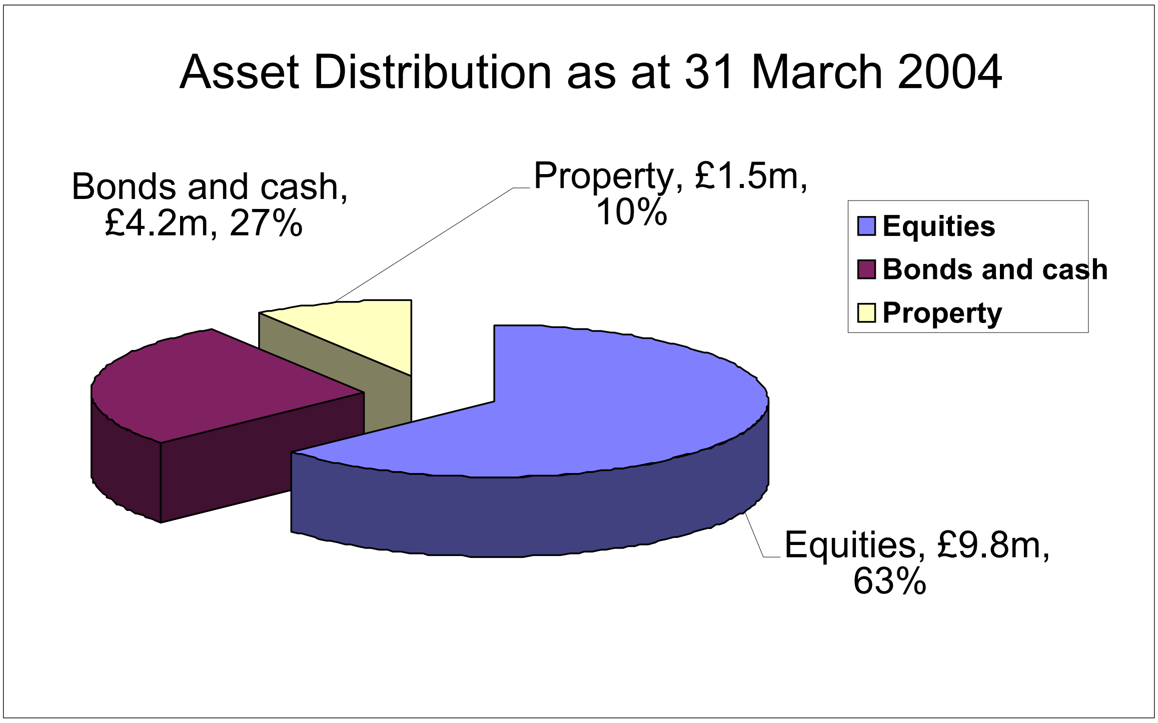


2.11 The chart shows a modest degree of maturation of the Fund.

Fund assets

2.12 The Administering Authority has provided copies of the audited accounts for the Fund for the three years from 1 April 2001. The consolidated Revenue Account is shown in Appendix C, together with our estimates of the implied return on the Fund assets in each of the three years calculated from the change in the market value of assets and net annual cashflows to the Fund.

2.13 The Fund's assets are invested by the Administering Authority. The market value of assets as at 31 March 2004 was £15.6m [1]. A simplified summary of the asset split is shown below. A more detailed breakdown of the Fund assets is provided in Appendix C.



[1] (excluding defined contribution AVC funds)

3. Method and Assumptions for 2004 Valuation

Methodology

3.1 For this valuation, as for the previous valuation, we have adopted an approach that considers separately the benefits in respect of service completed before the valuation date (past service) and benefits in respect of service expected to be completed after the valuation date (future service). This approach enables us to focus on two results:

- The *past service funding level* of the Fund. This is the ratio of the value of the assets to the value of the past service liabilities, after making allowance for future increases to members' pay. A funding level in excess of 100% indicates a *surplus* of assets over liabilities and a funding level of less than 100% indicates a *deficit*; and

- the *future service funding rate* i.e. the level of contributions required from the employers to support the cost of benefits for future service.

3.2 For this valuation we have used the *projected unit method* with a one year control period to determine the cost of benefits accruing for the Fund as a whole. This means that the contribution rate is derived as the cost of benefits accruing to employee members over the year following the valuation date expressed as a percentage of members' pensionable pay/contributions over that period. The method of valuation has not changed since the previous valuation. A description of the valuation method is set out in Appendix D.

Actuarial Assumptions

3.3 In our valuation, we must make assumptions about the factors affecting the Fund's finances such as inflation, pay increases, investment returns, how long members will live and staff turnover, etc in order to place a value on the liabilities.

3.4 The future level of pay increases will determine the level of benefits to be paid in future in respect of active members and the contributions received by the Fund. Once in payment, pension benefits are increased annually in line with the headline RPI index[2].

3.5 The cost of providing benefits depends not only upon the amount but also the incidence of benefits paid i.e. at what point in the future benefits begin to be paid and for how long they continue to be paid.

3.6 As contributions are being invested now to provide for benefits payable in the future (i.e. the benefits are being prefunded) part of the cost of providing the benefits can be met from investment returns achieved by the Fund's assets that build up from contributions.

[2] in line with the Pension (Increases) Act 1971, lower increases can apply to Guaranteed Minimum Pensions.

The higher the rate of return achieved by the assets, the lower the contribution requirement that has to be paid in future to meet the cost of the benefits.

3.7 The assumptions adopted at the valuation can therefore be considered as:-

- The demographic (or statistical) assumptions, which generally speaking are estimates of the likelihood of benefits and contributions being paid, and
- The financial assumptions such as future levels of inflation or salary increases will determine the amount of benefits and contributions payable. The future rate of investment return is used to discount future benefits and contributions to obtain their current or present value.

3.8 The key assumptions have been discussed with the Administering Authority. A summary of the assumptions used is included in Appendix E.

Financial assumptions

3.9 Since we have taken assets into account at their market value it is appropriate for us to take our lead from the market when setting the financial assumptions used to value the ongoing liabilities, to ensure compatibility of the asset and liability valuation bases. The key financial assumptions are:

- Future levels of price inflation;
- future levels of real pay increases – i.e. over and above price inflation; and
- the discount rate (investment return) that is applied to future liabilities to determine their present value[3].

3.10 We have derived our discount rate as the expected future rate of investment return from the broad categories of assets held by the Fund. In deriving this assumption we have considered what additional returns might reasonably be expected from the Fund's investments over and above the minimum risk rate of return on Government bonds. The asset allocation to be used in deriving the discount rate will be reviewed at subsequent valuations.

3.11 The key assumptions for the current valuation and previous valuation as at 31 March 2001 are set out below. The figures marked "real" are net of assumed price inflation.

[3] For this valuation we have used the same discount rate for past and future liabilities. In the previous valuation we made an allowance for slightly higher long term returns in setting the future service contribution rate to effectively build in a margin for prudence into the reserving for accrued benefits.

Financial Assumptions	**Mar 2004 Unsmoothed**		**Mar 2001 Smoothed**	
	% p.a. Nominal	**% p.a. Real**	**% p.a. Nominal**	**% p.a. Real**
Minimum Risk rate of return	4.7%	1.8%	5.0%	2.2%
Anticipated extra long-term return from:				
Equities	2.00%		1.25%	
Corporate Bonds	0.40%		0.50%	
Overall anticipated long term return from:				
Equities	6.70%	3.8%	6.25%	3.5%
Bonds (50% gilt 50% corporates)	4.90%	2.0%	5.25%	2.5%
Discount Rate	**6.3%**	**3.4%**	**6.0%**	**3.2%**
Pay Increases	**4.4%**	**1.5%**	**4.3%**	**1.5%**
Price Inflation/Pension Increases	**2.9%**	**-**	**2.8%**	**-**

Demographic assumptions

3.12 We have recently carried out a major investigation into the demographic experience of our Local Authority fund clients in England and Wales. We have used the urban assumptions derived from this study for this valuation. Details of these are included in Appendix E. The assumptions adopted at the previous valuation are shown in the report on that valuation.

3.13 Our aim is that the demographic assumptions should be as close to best estimates as is practicable. (The *prudence* required under the Funding Strategy Statement is delivered by reducing the anticipated return from the Fund's equity investments.)

3.14 In setting our assumptions, particularly mindful of the requirement to have regard to the stability of contributions, we have made allowance for life expectancy that we believe is appropriate to pensioners in 2004 (applied to pensioners and non-pensioners), in reporting the value of the accrued liabilities in the valuation balance sheet (in Section 5) and the future service contribution rate. Thus these results do not make any allowance for continuing improvements in life expectancy.

3.15 We have reported separately on the potential effect of continuing mortality improvements and the potential effect of the abolition of the Rule of 85 for service after 1 April 2005.

Comments on the valuation assumptions

3.16 There is a broad spectrum of potentially acceptable valuation assumptions.

3.17 In our opinion, the assumptions adopted for this valuation lead to an assessment of the financial position of the Fund and the long-term cost of providing the benefits for future service that just falls into the more prudent half of the spectrum.

3.18 As the valuation basis is less prudent than previously, there are fewer margins to protect employers from further contribution rises if future experience is worse than assumed. Section 6 describes how future valuation results may be affected if the actuarial assumptions are not borne out in practice. We recommend a programme of actively monitoring the developing funding position of the Fund and the potential impact on future employer contributions.

3.19 Moreover, if future experience is better than assumed in this valuation, we would recommend that the opportunity is taken to rebuild prudential margins within the valuation basis. That is, that there should be no expectation of employer contribution reductions if experience is better than assumed between 2004 and 2007.

Assets

3.20 We have taken the assets of the Fund into account at their market value as indicated in the Fund accounts for the period ended 31 March 2004.

3.21 The approach taken to valuing the Fund's assets has been changed since the previous valuation, where a smoothed market value of assets was used.

3.22 The assets of the Fund include additional voluntary contributions (AVCs) paid by members. In some cases, these AVCs are paid on a money-purchase basis, where the accumulated funds are applied at retirement to purchase benefits for the members from the Fund, or via an insurance company. In our valuation we have excluded these assets and the corresponding liabilities.

4. Experience since 2001

Results of 2001 Valuation

4.1 In the previous valuation of the Fund, the assets were valued at £12.82m and the past service liabilities on the ongoing basis amounted to £19.95m There was then a deficit of £7.13m and the funding level (ratio of assets to liabilities) was 64.3%.

Financial experience

4.2 The chart below shows the actual financial experience of the Fund during the intervaluation period compared to the assumptions adopted at this valuation:

	Nominal		Real	
	Actual % p.a.	Assumed % p.a.	Actual % p.a.	Assumed % p.a.
Investment Returns - Market Value (MV) Terms	0.9%	6.3%	-1.2%	3.4%
Investment Returns - Smoothed in 2001 to MV in 2004	-1.0%	6.3%	-3.1%	3.4%
Pay Increases	7.5%	4.4%	5.4%	1.5%
Pension Increases	2.1%	2.9%	-	-

The figures for pay increases exclude any allowance for increments and promotional pay increases. These are included within separate promotional salary scale assumptions (see Appendix E).

4.3 The principal conclusions are:

- Investment under-performance relative to the anticipated returns built into the 2001 valuation of liabilities dominates;

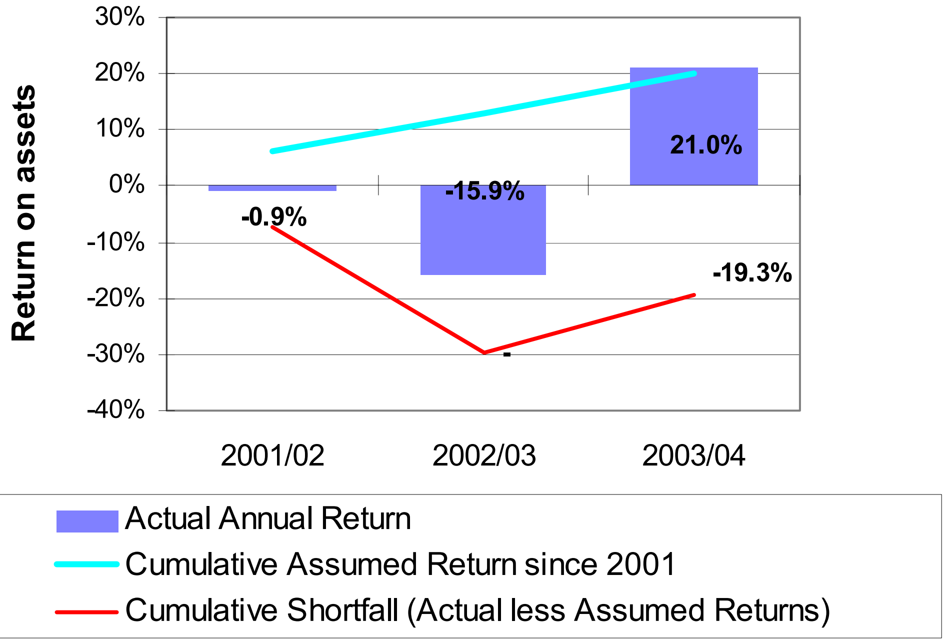
- Nominal investment returns only averaged 0.9% a year over the three year period to 31 March 2004, and -1.2% a year in real terms. This was 5.4% a year less than that assumed at this valuation, leading to an expected reduction in the funding level on a like for like basis of around 17% for this factor alone.

- Pay increases over the intervaluation period were more than expected in both nominal and real terms.

- Price inflation was relatively benign, with headline RPI only rising by 6.9%, or 2.2% a year (actual pension increases are slightly lower because of using September to September RPI for increases in the following April).

4.4 The chart below shows the actual returns on assets in each of the last three years, compared to the cumulative returns required to keep pace with the 2004 investment assumption (ignoring the smoothing of assets in 2001). By 31 March 2004, the actual returns on assets lagged the valuation assumptions by 19 percentage points.

Investment Performance Relative to 2001 Assumptions



4.5 Since the previous valuation the common contribution rate payable by the Employers to the Fund was set at the rate of 21.5% of Pay. This was more than the cost to the Employers of benefits accruing and of administration expenses.

4.6 Overall, the financial experience of the Fund during the intervaluation period compared to the assumptions adopted at this valuation was a significantly negative factor during the intervaluation period.

Demographic experience

4.7 The impact of the variation in experience relative to the demographic assumptions adopted at this valuation as a whole has not been a material factor for the Fund.

Employee Members

4.8 A comparison of the actual and expected membership movements for employee members present at 2001 and 2004 is shown below.

	Actual	Assumed	% Diff
Early Leavers	108	99	9%
Deaths	-	2	-100%
Ill Health Retirements	12	18	-32%
Early Retirements	-	-	

4.9 There were more early leavers than anticipated, which has a positive effect on the funding level, since the benefits for early leavers are lower in value than if they stayed in service due to the link with final salary being broken. There were fewer ill-health early retirements than expected, which has a positive effect on the funding level.

Pensioner Members

4.10 A comparison of the actual and expected amounts of pensions ceasing on death (expressed as amounts of pension) is shown below. The expected amounts are based on our 2004 valuation assumptions without any margins for improving mortality. A ratio of less than 100% indicates fewer deaths than expected.

2001-2004	Amounts of Pension Ceasing (£000s)		
	Actual	Assumed	% Diff
Ill Health Pensioners	27	22.0	23%
Age Pensioners			
Former Officers	34	37.5	-9%
Former Manuals	5	2.5	99%
Dependants	19	22.2	-15%
Total	**85**	**84.3**	**1%**

4.11 As the table shows, the actual amounts of pension ceasing during the intervaluation period were very much in line with our 2004 assumptions. We have illustrated the effect of modifying our assumptions at this valuation to allow for pensioners (both current and prospective) to live longer than previously assumed later in this report.

4.12 We have amended our demographic assumptions in line with the results of our demographic experience analysis across our English and Welsh clients in 2001. Taken as a whole, the change to the demographic assumptions has reduced the value placed on the past service liabilities and reduced the assessed cost of future service benefits.

5. Valuation Results

Past Service Position

5.1 One of the key funding objectives of the Fund, described in Section 3, is to build up sufficient assets to provide adequate security for members' benefits as they accrue: in other words, to target a funding level of at least 100%. The funding position as at 31 March 2004 is considerably below this target, as shown in the table below.

Accrued (Past Service) Liabilities	**£m**
Value on minimum risk rate of return:	
Employee Members	19.40
Deferred Pensioners	3.12
Pensioners	9.50
(a) Total	**32.02**
Less Credit for Anticipated Future Excess Returns:	
Employee Members	(5.18)
Deferred Pensioners	(0.96)
Pensioners	(1.29)
(b) Total Credit for Anticipated Future Returns	**(7.43)**
Net Value after Credit for Future Excess Returns:	
Employee Members	14.21
Deferred Pensioners	2.16
Pensioners	8.21
(a)-(b) Total Net Liabilities	**24.59**
Assets	
Market Value of Assets	15.55
Contributions due for augmentations/redundancies	-
Total Value of Assets	**15.55**
Surplus (Deficit)	**(9.04)**
Funding Level	63%

5.2 It should be noted that the market value of both assets and liabilities may be volatile. The results of this valuation show only a snapshot of the funding level of the Fund as at 31 March 2004 and this result should be seen in the context of market levels before and since then.

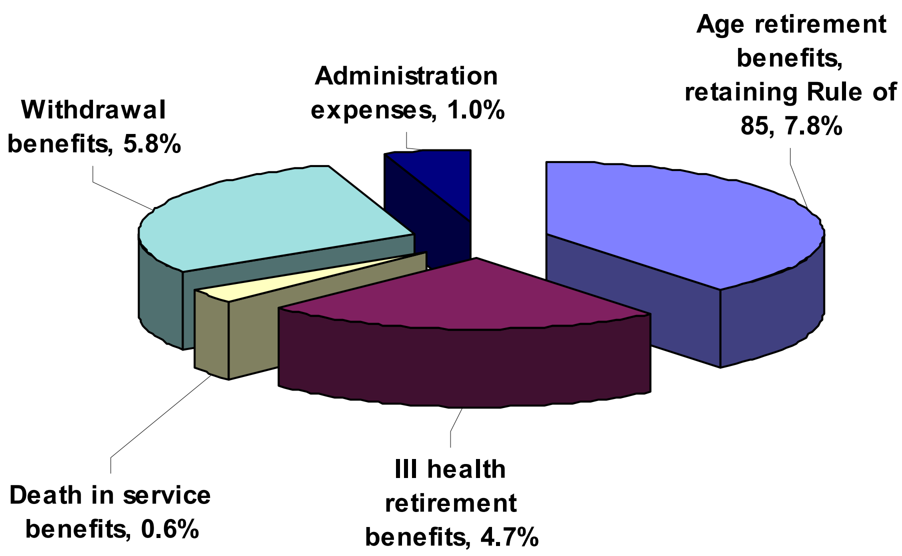
Future service

5.3 We have calculated the combined employers' long-term future service contribution rate to be 14.1% of pensionable pay. This represents the contributions required, in excess of members' contributions, to provide for benefits accruing to existing members over the year following the valuation date. It includes an allowance for expenses and lump sum death in service benefits. It is the rate that would, if our assumptions were borne out, apply to service following the valuation date if there were no past service surplus or shortfall in the Fund.

5.4 This rate has been calculated using the Projected Unit Method.

5.5 A split of the cost of future service benefits, *including members' contributions*, is shown in the chart below.

Breakdown of Cost of Accruing Benefits (% of pay)



5.6 The employers' future service contributions rate of 14.1% of pensionable pay may be compared with the rate revealed by the previous valuation of 12.7% of pensionable pay. The higher rate revealed by this valuation is due to the effect of:

- the changes to the financial assumptions, notably the adoption of higher anticipated future returns from equity investments and the use of the same discount rate for all future accruals ;
- the adoption of revised demographic assumptions;
- change in the membership profile,
- the higher average age of employee members; and
- the increased expense allowance. At this valuation an allowance of 1% of pay has been made – this will be reviewed at the 2007 valuation.

Past Service

The past service funding level of the Fund has declined since the previous valuation. The main reasons for this are:

The losses were:

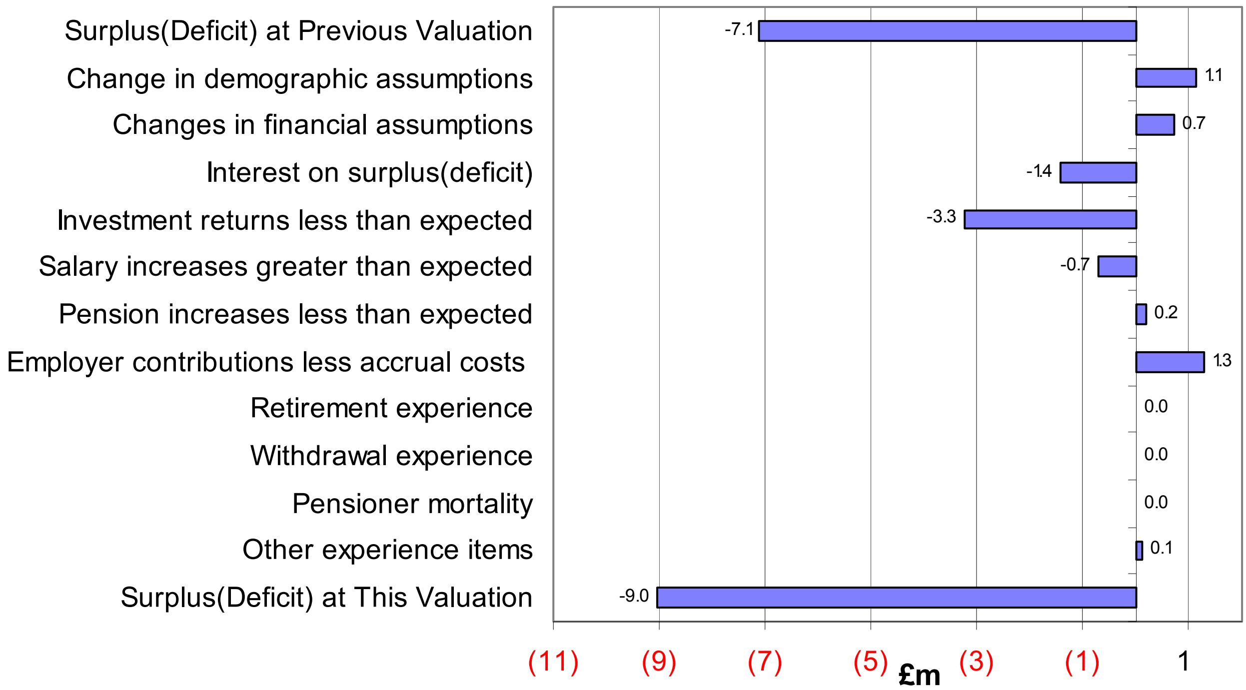
- the poor return on Fund assets over the period since the previous valuation relative to the rate required to keep pace with the liabilities;
- the increases in pensionable pay for employees which were higher than anticipated in the valuation; and
- the interest on the deficit stated within the 2001 triennial valuation.

These losses have been partially offset by:

- the changes to the financial assumptions;
- the substantially higher contributions paid relative to the cost of accruals;
- the increases in pensions in payment which were lower than anticipated in the valuation; and
- the change to the demographic assumptions.

5.7 The net effect of the gains and losses listed in paragraphs 5.7 and 5.8 are summarised in the chart below.

Reconciliation of Opening and Closing Position



5.8 We have calculated the additional contribution rate in respect of the past service deficit to be 9.1% of pensionable pay. This represents the cost of the past service deficit spread over a period of 17 years.

Contributions payable

5.9 The common contribution rate payable is the cost of future benefit accrual, increased by an amount to bring the funding level back to 100% over a period of 17 years. This is intended to be consistent with the Funding Strategy Statement. In order to achieve some stability of contributions, the required contribution increases will be phased in over a period of 4 years.

5.10 The employer common contribution rate based on the funding position as at 31 March 2004 is as follows:

Employer Contribution Rates	% of payroll
Future Service Funding Rate	14.1%
Past Service Adjustment - 17 years spread	9.1%
Total Common Contribution Rate	**23.2%**

Inland Revenue Surplus Test

5.11 In accordance with Paragraph 2(3) of Schedule 22 to the Income and Corporation Taxes Act 1988, we are required to certify to the Inland Revenue whether the Fund has an excessive surplus (over 5%). If this is the case, we would be required to take action to reduce the surplus within 5 years. We can confirm that there is no excessive surplus and our certificate to this effect is included in Appendix F and will be submitted shortly to the Inland Revenue.

5.12 The Government has indicated its intention to remove the requirement for the Inland Revenue Surplus Test with effect from 6 April 2006.

6. Influences on Future Funding

6.1 In the UK, the Funding Strategy Statement provides a framework for the Administering Authority to assess its funding risks. It is likely that such a statement will eventually be required by the Isle of Man regulations. The figures and comments in this section are intended to help put the valuation results shown in Section 5, which are critically dependent on the actuarial assumptions (described in Section 3), into context. Results of future valuations will also depend on the assumptions made at those times. Over time, the funding position and the contributions required will vary depending on actual future experience and whether this matches the assumptions made. This section discusses the potential implications of the actuarial assumptions not being borne out in the future.

6.2 The assumption to which the valuation results are most sensitive is that relating to future investment returns (the discount rate), particularly if the Fund's investment strategy is not a close match for the liabilities. Another key assumption to which the valuation results are particularly sensitive is that relating to future mortality, or longevity. The effects of future unexpected changes in mortality, and of other risks and sensitivities, are discussed later in this section.

Investment strategy

6.3 A defined benefit pension promise, being a promise to pay an income to a member in retirement, is analogous to a bond, which is an obligation to pay an income to the investor (plus repayment of capital).

6.4 Thus for the LGPS the investments that most closely match the liabilities are long-dated index-linked bonds. By "matched" we mean that the financial influences that affect the asset value have a similar effect on the liabilities.

6.5 The Administering Authority has adopted an investment strategy that includes broadly 63% invested in equities and 37% invested in bonds and property.

6.6 The financial assumptions used in the valuation are set by reference to the redemption yield available on bond investments of appropriate term, having regard to the Fund liabilities. In addition, we have made an allowance for the excess return that may be expected to be earned on a diversified portfolio of investments, which includes equities and property. However, no explicit account is taken of the additional risks involved in investing in assets that are not a close match to the ongoing liabilities.

6.7 If the assets of the Fund were invested wholly in high quality bonds selected such that the cashflows closely match the pattern of benefits expected to be paid from the Fund, ("the Minimum Risk" portfolio), then the valuation results would be broadly[4] as follows.

Accrued (Past Service) Liabilities	£m
Value on minimum risk rate of return:	
Employee Members	19.40
Deferred Pensioners	3.12
Pensioners	9.50
Total	**32.02**
Total Value of Assets	15.55
Surplus (Deficit)	**(16.47)**
Funding Level	49%

Employer Contribution Rates	% of payroll
Future Service Funding Rate	21.7%
Past Service Adjustment - 8 years spread	28.4%
Total Common Contribution Rate	**50.1%**

6.8 The main differences between these results and those on the ongoing basis as reported in Section 5 are as follows:

- it is necessary to hold more money in the Fund now to meet the past service benefits as a result of the lower discount rate (which in turn reflects the lower expected investment return on the "Minimum Risk" portfolio);
- an increase in the employers' contribution rate is needed to meet the cost of the accruing benefits as it is assumed that lower returns will be achieved in the future; and
- the past service adjustment has been calculated on a target of 100% funding over the average future working lifetime of active membership..

[4] We discounted the liabilities falling due at all future durations at the minimum risk rate of return of 4.7% a year. In practice, the returns available on different bonds vary with the term of the bond.

6.9 Note that material residual risks would remain even if the investment policy followed the "Minimum Risk" portfolio. For example, it may not be possible to buy bonds of long enough duration, meaning that there would be uncertainty associated with the returns available on future investments. Our valuation above does not include any explicit contingency reserves in respect of these risks.

Appropriateness of investment strategy

6.10 The degree of mismatch between the actual investment strategy, which include significant investments in equities and property, and the minimum risk strategy is significant. As a result the funding level in the Fund will vary considerably if the returns achieved on equities and bonds diverge.

Sensitivity Analysis

6.11 The valuation results are particularly sensitive to the assumed rates of future investment return. If future investment returns are less than expected, for example due to falls in equity markets, the funding level will deteriorate. To illustrate the sensitivity of the funding level to changes in equity and bond markets, we have considered the impact of the following events occurring soon after 31 March 2004:

a) Equity-type investments (UK and international equities fall by 25%, with no change in bond values or yields); or

b) The price of bonds rise such that there is a 1% fall in the nominal annual redemption yields available on fixed interest bonds and a 0.5% fall in the real annual yield available on index-linked bonds, with no change in equity prices or dividend yields.

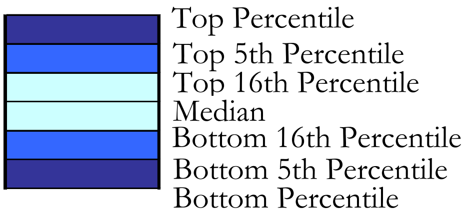
6.12 The table below shows the results that would arise for the whole fund if those events occurred soon after 31 March 2004.

Past Service Funding Levels (FL) (% of Liabilities)	Stable markets change	(a) Equities fall		(b) Bonds rise	
		New FL	Change	New FL	Change
	(i)	(ii)	(iii)=(ii)-(i)	(iv)	(v)=(iv)-(i)
Ongoing valuation (2% ERP)	63%	51%	(12%)	59%	(4%)
Minimum Risk Bond Returns	49%	39%	(10%)	47%	(2%)

6.13 The scenarios illustrated are by no means exhaustive and should not be taken as the limit of how extreme future experience could be. The impact on individual employers could be different to the Fund as a whole, for example less mature employers would be more greatly affected by changes in bond yields than more mature employers.

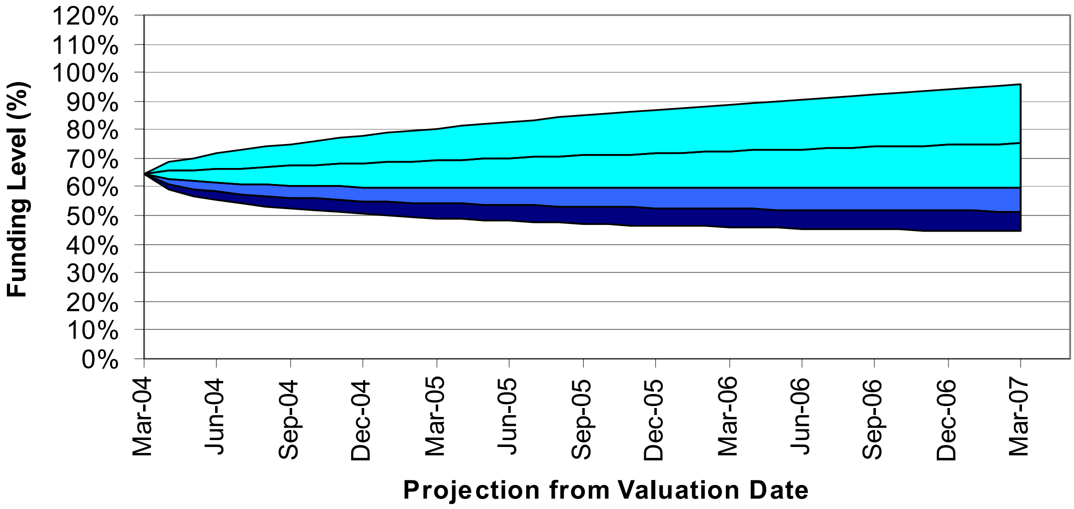
6.14 We have also considered the inter-dependency of equity and bond asset classes within our stochastic asset model to illustrate the spread of potential returns. There are no margins for prudence taken in setting the parameters of the model. The mean additional return from equities relative to bonds is assumed to be 3% a year.

6.15 The charts below use the following colour scheme[5]:



6.16 The first chart illustrates how the funding level for the whole Fund might vary from this valuation date to the next valuation in 2007, allowing for the volatility of different asset classes. No allowance is made for any change in the valuation basis. The turquoise area represents the outcomes that have a roughly 68% chance of occurring, so there is broadly a two in three chance of the funding level being between 60% and 95% at the 2007 valuation. There is a 16% chance of the funding level being less than 60%. The opportunity for investment growth comes with a potentially significant downside risk.

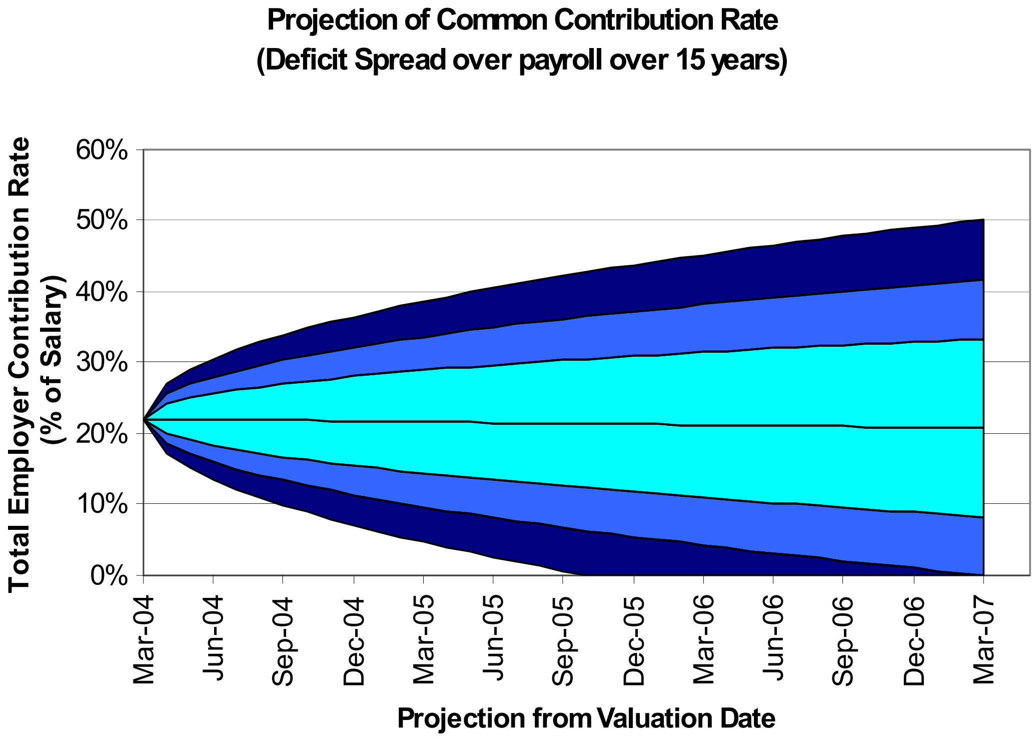
Projection of Scheme Funding Level



[5] Please note that we have not shown the best 16% of the distribution of outcomes. This is because we have also not shown the bottom 1%. In broad terms, we estimate that you would have to give up the top 16% to protect yourself from the bottom 1% if you sought to purchase derivatives.

6.17 The second chart illustrates how the employers' common contribution rate for the whole Fund might vary from this valuation date to the next valuation in 2007, (as a percentage of payroll). The dispersion of results for individual employers could be much greater depending on their maturity position.

6.18 Here the turquoise area again represents the outcomes that have a 68% chance of occurring, so there is a two in three chance of the common contribution rate being between 8% and around 35% of payroll in the 2007 valuation. There is also a non-trivial likelihood (around 16%) of the contribution rate being in excess of 35% of payroll. The reason for the wide spread is the volatility of the predominantly equity investments of the Fund.



Investment Returns Required to Maintain 2004 Deficit

6.19 The allowance for expected equity outperformance used for this valuation is more optimistic than in 2001. This raises the bar for the asset returns required in order to maintain the funding level at its current level. The value placed on liabilities anticipates return on assets of 6.3% a year. However, as the funding level is 63%, the actual return required on the assets held by the Fund to ensure the deficit does not get any larger (in monetary terms) is 9.6% a year assuming no additional contributions are paid to recover the deficit.

6.20 We recommend that the Administering Authority reviews its investment strategy particularly in the light of:

- the funding position revealed by this valuation;
- the reduced prudential margins built into the reserving for liabilities;
- the capacity of employers to be able to absorb further contribution rises if future experience is worse than assumed; and
- any differences in the profile of employers, for example the fact that Best Value Admission Bodies participate on different terms to other employers.

Asset-liability modelling may be helpful in understanding the investment risks.

Other risks and sensitivities

6.21 The valuation results do not include explicit contingency reserves for other unexpected non-investment related financial and demographic effects.

Longevity

6.22 The valuation results are very sensitive to unanticipated changes in future expected mortality of pensioners. The mortality basis adopted has been calibrated against recent mortality experience of pensioners in similar local authority funds.

6.23 Recent medical advances, changes in lifestyles and generally greater awareness of health-related matters have resulted in longevity improving in recent years at a faster pace than most experts had foreseen. It is unknown whether such improvements will continue in the future. Certain factors, such as advancements in genetic medicine, would point towards even greater improvements in longevity in the future; conversely, the increase in childhood obesity may result in a decline in longevity in future generations.

6.24 We have considered the impact of mortality rates continuing to reduce in line with the standard mortality tables developed by the actuarial profession. This would require additional reserves for benefits already accrued and for future accruals of benefits. The table below summarises the estimated additional amounts that would be required on the basis of the mortality tables specified in Appendix E.

Extra Mortality Reserve (for Accrued Liabilities assuming 2%pa ERP)	**£1.00 m**
(i) Extra Employer contributions for past service	
If deficit recovery targeted over:	
Remaining Working Lifetime	2.10% of pay
15 years	1.20% of pay
20 years	1.00% of pay
25 years	0.80% of pay
(ii) Plus Extra Contributions for Future Accruals for Longevity Improvements	**0.90% of pay**
(iii) Less Rule of 85 Saving for Future Service	**(1.60% of pay)**
(iv) Net Adjustment for Future Events [(i)+(ii)-(iii)]:	
If deficit recovery targeted over:	
Remaining Working Lifetime	1.40% of pay
15 years	0.50% of pay
20 years	0.30% of pay
25 years	0.10% of pay

6.25 The reserving in Section 5 makes no allowance for these potential further improvements in longevity. However, no credit is given for the potential abolition of the Rule of 85 for service after April 2005. As a result, the 2007 results may require further increases in employer contributions if, as expected, we make allowance for longer life expectancy in the 2007 valuation.

Changes to Profile of Liabilities

6.26 Future results could also be affected by changes to the profile of the liabilities. For example:

- a rise in average age of employees would lead to the future service rate rising under the Projected Unit Method;
- If deficits are recovered by contributions expressed as a percentage of payroll, a fall in the payroll of an employer would lead to any deficit being recovered more slowly, and therefore a rise in future contributions. (Deficit contributions may be expressed as monetary amounts); and
- The insolvency of an employer whilst the funding of its liabilities is in deficit, or the departure of an employer without making good any funding shortfall, would lead to greater costs for one or more of the other employers.

Variations between Other Assumptions and Experience

6.27 The other main assumptions to which the valuation results are sensitive, together with their associated risks, are described below.

- Pay increases: if increases in pensionable pay are higher than assumed, the funding position will deteriorate;

- Pension increases: if pension increases are higher than assumed, the funding position will deteriorate;

- Withdrawals: if fewer active members withdraw from pensionable service (with refunds of contributions or deferred pensions) than assumed, the funding position will deteriorate;

- Ill-health retirements: if more members retire early on ill-health grounds, and/or retire at a younger age than assumed, the funding position will deteriorate unless the employer makes additional payments.

Ongoing Risk Management

6.28 We would be delighted to work in partnership with the Administering Authority, both in regularly monitoring the funding position of the Fund and in reviewing the appropriateness of the Administering Authority's current risk management programme in today's circumstances.

7. Conclusions and Recommendations

Whole Fund Position

7.1 The valuation reveals that the ongoing funding level of the Fund on 31 March 2004 was 63%. The shortfall of assets compared to the past service liabilities was £9.0m.

7.2 The average cost of accruing benefits payable by the employers, including administration expenses and lump sum death in service benefits, is 14.1% of pensionable pay.

7.3 The shortfall of assets over the past service liabilities requires the employers' contribution rate to be increased by 9.1% of pensionable pay to a rate of 23.2% of pay if recovery of the deficit is targeted over a period of 17 years. This is the Common Contribution Rate.

Employer Contribution Rates

7.4 To formally confirm these contribution rates, a Rates and Adjustment Certificate is included as Appendix G, detailing the minimum contribution rates and amounts for each employer after allowing for any individual adjustments. The Certificate details the contributions due in each of the financial years from 2005/06.

7.5 Further sums should be paid to the Fund by employers to meet the capital costs of any early retirements using the methods and factors issued by us from time to time.

Risk Management

7.6 The valuation results are dependent on the valuation method and the actuarial assumptions (described in section 4). Section 6 discusses the key risks underlying the results and the assumptions to which the results are particularly sensitive and provides some illustration of how the Fund's funding position may change if the assumptions are not borne out in the future.

7.7 The valuation of liabilities anticipates returns of 6.3% p.a. assuming that the liabilities are fully funded. The shortfall of assets means that in order to ensure the deficit does not get any larger (in monetary terms and ignoring the effect of future accruals and contributions), it would be necessary to achieve average annual returns of 9.6% p.a.

7.8 Under the provisions of the Regulations, the next formal valuation of the Fund is due to be carried out as at 31 March 2007. In light of the uncertainty of future financial conditions we recommend that the financial position of the Fund is monitored by means of interim funding reviews in the period up to the next triennial valuation. This will give early warning of changes to funding positions and possible contribution rate changes.

7.9 We recommend that the Administering Authority reviews its investment strategy and ongoing risk management programme.

New Employers Joining the Fund

7.10 Any new employers or admission bodies joining the Fund should be referred to us for individual calculation as to the required level of contribution. They should also agree to pay the capital costs (as a one-off lump sum payment) of any early retirements based on our advice and using methods and factors issued by us from time to time.

Other Matters

7.11 Any employer who ceases to participate in the Fund should be referred to us so a cessation valuation can be performed.

7.12 Any bulk movement of scheme members:

- involving 10 or more scheme members being transferred from or to another LGPS fund, or
- involving 2 or more scheme members being transferred from or to a non-LGPS pension arrangement

should be referred to us to consider the impact on the Fund.

Peter Summers FFA
8 March 2005

Bryan Chalmers FFA

Appendix A - Benefit Structure

Summary of Non Discretionary Benefits Applicable to All Employers

Normal Retirement Age (NRA)	Age 65. However, for members who joined prior to 1 April 1998, NRA is the age between 60 and 65 when the member attains 25 years scheme membership.
Earliest Retirement Age	NRA or, if earlier, the rule of 85 date (when years of age plus years of scheme membership total to 85). Limitations on payment of benefits prior to age 60.
Members' Contributions	Officers - 6% of pensionable pay Manual Workers – 5% of pensionable pay (6% for post 31 March 1998 entrants with no continuing rights).
Pensionable Pay	All salary, wages, fees and other payments in respect of the employment, excluding non-contractual overtime and some other specified amounts. Some scheme members may be covered by special agreements.
Final Pay	The pensionable pay in the year up to the date of leaving the scheme. Alternative methods used in some cases, e.g. where there has been a break in service or a drop in pensionable pay.
Period of Scheme Membership	Total years and days of service during which a member of the Fund. Additional periods may be granted (e.g. transfers from other pension arrangements, augmentation).
Normal Retirement Benefits	Pension - 1/80th of final pay for each year of scheme membership. Lump Sum - 3/80th of final pay for each year of scheme membership.

Early Retirement Benefits	On retirement after age 50 with employer's consent a pension and lump sum based on actual scheme membership completed may be paid, subject to reduction on account of early payment in some circumstances.
Ill-Health Benefits	In the event of premature retirement due to permanent ill-health or incapacity, an immediate pension and lump sum are paid based on actual scheme membership plus an enhancement period of scheme membership. The enhancement period is dependent on scheme membership at date of leaving. No reduction is applied due to early payment.
Pension Increases	All pensions in payment, deferred pensions and dependant's pensions other than benefits arising from the payment of additional voluntary contributions are increased annually. Pensions are increased partially under the Pensions (Increases) Act and particularly in accordance with statutory requirements (depending on the proportions relating to pre 88 GMP, post 88 GMP and excess over GMP).
Death after Retirement	A spouse's pension of one half of the member's pension (generally post 1st April 1972 service for widowers' pension) is payable; plus If the member dies within five years of retiring the balance of five years' pension payments will be paid in the form of a lump sum, plus Children's pensions may also be payable.
Death in Service	A lump sum of two times final pay, plus A spouse's pension of one half of the ill-health retirement pension that would have been paid to the scheme member if he had retired on the day of death, plus Children's pensions may also be payable.

Leaving Service Options	A deferred pension payable from Earliest Retirement Age (minimum of age 60); or A transfer payment to either a new employer's scheme or a suitable insurance policy, equivalent in value to the deferred pension; or If the member has completed less than two years' pensionable service, a return of the member's contributions with interest, less a State Scheme premium deduction and less tax at the rate of 7.5%.

Notes:

All benefits under the Fund are subject to limits laid down from time to time by the Isle of Man Treasury

Certain categories of members of the Fund are entitled to benefits that differ from those summarised above.

Changes to LGPS Benefits Since 2001 in the UK

A1 There have been a number of changes to the LGPS since the previous valuation. However, prior to the valuation date of 31 March 2004, the only change that we feel could have a material effect on the results was the introduction of the discretionary provision to permit elected members in England in the LGPS for future service (with modifications to the benefit structure).

A2 Since the valuation date, there have been further changes in the UK, including:

(a) the reduction of the total periods of membership required for an entitlement to preserved LGPS benefits from two years to three months (rather than a transfer value or a refund of members' contributions);

(b) the requirement for elections to aggregate former scheme membership with current membership to be made within 12 months of becoming an active member (this option was previously open-ended);

(c) the provision to include elected members in England and Wales in the LGPS (with modifications to the scheme structure).

With regard to (a), as we have not anticipated savings from the members who left with less than two years service and elected to take a refund of contributions , there is no effect on the valuation results from this change. Also for (b), we were unable to anticipate the cost of aggregation in the past, so this change has no effect on the valuation.

A3 In addition, the following amendments to the scheme are effective from 1 April 2005 in the UK including:

(a) the abolition of the rule of 85 in respect of service after 1 April 2005 for staff aged under 52; and

(b) the increase of the earliest retirement age from age 50 to age 55 (with the exception of ill-health early retirements).

We have not allowed for the abolition of the Rule of 85 in assessing employer contributions. For (b), we do not anticipate retirement before age 60 and again this has no effect on the valuation.

A4 We have not taken account of any liabilities that may arise from any future requirement to amend the benefits payable from the Fund in respect of sex-equality legislation as it may apply to Guaranteed Minimum Pensions for men and women and the obligation to provide access to the scheme in respect of past service to part-time employees.

Discretionary Benefits

A5 The Regulations in the UK give employers a number of discretionary powers, including:

(a) the awards of periods of augmentation under Regulation 52;

(b) the payment of benefits on employer's consent prior to age 60 under Regulation 31;

(c) the reduction or suspension of scheme member contributions on attaining 40 years' scheme membership under Regulation 15;

(d) not applying the suspension of spouses' pensions on remarriage or cohabitation for members who retired before 1 April 1998.

A6 The effect on benefits or contributions as a result of the use of (a) to (c) above prior to 1 April 2004 has been allowed for in this valuation to the extent that this is reflected in the membership data provided. No allowance has been made for the future use of discretionary powers. Our assumptions do not anticipate any saving from the suspension of spouses' pension; to the extent that this continues, there will be a saving.

Appendix B - Membership Data

B1. A summary of the membership records on which this valuation is based, and on which the previous valuation was based, is as follows:

Employee Members

	Number		Pensionable Pay (£000)				Average Pensionable Pay (£)			
	2004	2001	2004		2001		2004		2001	
			FTE	Actual	FTE	Actual	FTE	Actual	FTE	Actual
Full Time members										
Pre April 1998 Joiners:										
Male Officers	40	57	1,254	1,254	1,490	1,490	31,348	31,348	26,134	26,134
Female Officers	29	34	632	632	615	615	21,785	21,785	18,082	18,082
Male Manuals	97	135	1,696	1,696	1,818	1,818	17,483	17,483	13,464	13,464
Female Manuals	11	14	141	141	166	166	12,820	12,820	11,870	11,870
Post April 1998 Joiners:										
Males	159	86	2,596	2,596	1,304	1,304	16,324	16,324	15,164	15,164
Females	36	16	555	555	268	268	15,419	15,419	16,729	16,729
Full Timers Total	**372**	**342**	**6,873**	**6,873**	**5,660**	**5,660**	**18,476**	**18,476**	**16,550**	**16,550**
Part Time Members										
Pre April 1998 Joiners:										
Male Officers	1	-	86	46	-	-	85,511	46,176	-	-
Female Officers	8	9	171	100	161	84	21,319	12,539	17,934	9,288
Male Manuals	1	1	13	5	17	8	13,197	4,751	16,897	8,220
Female Manuals	7	13	75	40	156	76	10,755	5,666	12,009	5,859
Post April 1998 Joiners:										
Males	4	-	58	29	-	-	14,427	7,188	-	-
Females	19	12	256	105	181	80	13,489	5,507	15,105	6,694
Part Timers Total	**40**	**35**	**659**	**324**	**516**	**248**	**16,464**	**8,108**	**14,734**	**7,095**
Grand Total	**412**	**377**	**7,532**	**7,197**	**6,176**	**5,908**	**18,281**	**17,470**	**16,381**	**15,672**

Pensioners

B2. The table below shows the distribution of pensioners, split by type of pensioner.

	Number		Annual Pension £(000)		Average £	
	2004	2001	2004	2001	2004	2001
Ill Health Retirals						
Male Officers	14	16	167	165	11,901	10,298
Female Officers	5	4	13	5	2,541	1,294
Male Manuals	12	5	28	7	2,347	1,494
Female Manuals	4	3	10	8	2,509	2,758
Normal/Early Retirements						
Male Officers	35	29	324	260	9,269	8,952
Female Officers	11	12	34	39	3,089	3,243
Male Manuals	26	20	33	20	1,282	997
Female Manuals	1	1	0	0	256	241
Dependants						
Widows	42	34	114	94	2,719	2,761
Widowers	-	-	-	-	-	-
Children	2	2	1	1	554	521
Total	**152**	**126**	**725**	**599**	**4,768**	**4,756**

Deferred Pensioners

B3. The table below shows the distribution of deferred pensioners.

	Number		Annual Pensions £(000)		Average £	
	2004	2001	2004	2001	2004	2001
Males	90	62	116	77	1,283	1,239
Females	50	36	70	46	1,405	1,287
Total	**140**	**98**	**186**	**123**	**1,327**	**1,257**

Notes
1 - The numbers relate to the number of records and so will include members in receipt of or potentially in receipt of more than one benefit.
2 - Annual pensions are funded items only include pension increases up to and including the 2004 PI Order.

Appendix C - Accounts and Asset Data

Assets at 31 March 2004

C1. We were supplied with audited accounts for the years ended 31 March 2002, 31 March 2003 and 31 March 2004. The accounts for the year ended 31 March 2004 indicated that the market value for the Fund's assets as at the valuation date amounted to £15,551,000 Members' Additional Voluntary Contributions are excluded from this total and from the value placed on the Fund's liabilities.

C2. A summary of the Fund's assets as at 31 March 2004 is as follows:

Market Value of Assets	as at 31 March 2004	
	£(000)	%
UK Equities	6,348	41%
UK Fixed Interest Gilts	1,892	12%
UK Corporate Bonds	-	0%
UK Index Linked Gilts	1,345	9%
Overseas Equities	3,494	22%
Overseas Bonds	-	0%
Property	1,473	9%
Cash	842	5%
Net Current Assets	154	1%
TOTAL (excluding AVCs)	**15,548**	**100%**

This excludes the assets in respect of money purchase AVCs.

Revenue Accounts for the Intervaluation Period

Revenue Accounts	Year to	31 Mar 04 £ (000)	31 Mar 03 £ (000)	31 Mar 02 £ (000)	TOTAL £ (000)
EXPENDITURE	Retirement Pensions	666	631	580	1,877
	Retirement Lump Sums	79	139	177	395
	Death Benefits	13	44	64	121
	Transfer Values	89	114	60	263
	Refunds/CEPs	7	12	19	38
	Admin Expenses	144	126	75	345
	Investment Expenses	75	64	65	204
	Other Expenditure	-	-	-	-
TOTAL		**1,073**	**1,131**	**1,040**	**3,243**
INCOME	Employee Contributions	430	392	356	1,177
	Employer Contributions	1,523	1,319	1,190	4,032
	Transfer Values	402	431	136	969
	Investment Income	434	350	325	1,109
	Other Income	-	-	-	-
TOTAL		**2,790**	**2,492**	**2,006**	**7,287**
Fund Value					
Assets at Start of Year		11,619	12,646	12,049	12,049
Net Cashflow		1,717	1,361	966	4,045
Change in value		2,215	(2,388)	(369)	(542)
Assets at End of Year		**15,551**	**11,619**	**12,646**	**15,551**
Annual Returns					
Approx Rate of Return		21.0%	-15.9%	-0.9%	0.3%
WM LA Median		23.4%	-19.5%	-0.9%	-0.5%

Fund insurance arrangements

C3. There are no insurance arrangements in place to provide benefits under the Regulations.

Appendix D - Valuation Method

D1. Using our assumptions we estimate the payments that will be made from the Fund throughout the future lifetimes of existing employee members, deferred pensioners, pensioners and their dependants. We then calculate the amount of money that, if invested now, would be sufficient to make these payments in future, assuming that future investment returns are in line the discount rate. This amount is called "the present value" (or, more simply, "the value") of members' benefits. Separate calculations have been made in respect of benefits arising from service before the valuation date ("past service") and from service after the valuation date ("future service").

Past service funding position

D2. A comparison is made of the value of the assets held with the value of benefits for past service (but allowing for future pay and pension increases). If there is an excess then there is a past service surplus. If the converse applies there is a past service shortfall.

Future service contribution rate

D3. We have adopted the projected unit method of valuation. This is summarised below.

Projected Unit Method

D4. The first stage is to calculate the value of benefits (other than the lump sum death-in-service benefits) accruing to existing employee members over the year following the valuation date, by reference to projected pay as at the date of retirement or earlier exit. This value is expressed as a percentage of the members' pensionable salaries over the year following the valuation date and then the equivalent contribution paid by the members is deducted.

D5. The cost of the lump sum death in service benefit is separately assessed as amount that is likely to be paid out in an average year, based on the membership structure at the valuation date. Finally, an addition is made to cover the expenses of administration of the Fund.

D6. The method described above is applied only to the Fund membership at the valuation date, and results in an increasing contribution rate over time if the assumptions adopted are unchanged and the average age of membership increases (for example, if there are no new entrants to the Fund). This is due to the fact that the cost of benefits typically increases with age. The opposite would also be true assuming the age profile of the scheme membership decreased. If the admission of new entrants is such that the membership profile remains broadly unchanged and the assumptions adopted are unchanged, then the contribution rate brought out at future valuations should be reasonably stable.

Overall result

D7. Any past service surplus (or shortfall) that remains can be applied to reduce (or increase) the contribution rate actually payable by the employers over the period following the valuation date.

Appendix E - Valuation Assumptions

Financial assumptions

E1. The key assumptions adopted for this valuation and the previous valuation are summarised in the table below.

Financial Assumptions	Mar 2004 Unsmoothed		Mar 2001 Smoothed	
	% p.a. Nominal	% p.a. Real	% p.a. Nominal	% p.a. Real
Discount Rate	6.3%	3.4%	6.0%	3.2%
Pay Increases	4.4%	1.5%	4.3%	1.5%
Price Inflation/Pension Increases	2.9%	-	2.8%	-

Demographic assumptions

E2. The demographic assumptions represent our estimate of future experience in the Fund. They take account of expected future trends (for instance future improvements in life expectancy) as well past experience in the Fund and other Local Government client funds. Sample rates are shown in the following tables:

Age	Incidence per 1000 active members per annum											
	Male Officers & Post 98 Males			Male Manuals			Female Officers & Post 98 Females			Female Manuals		
	Death	Ill Health Retirement		Death	Ill Health Retirement		Death	Ill Health Retirement		Death	Ill Health Retirement	
		F/T	P/T		F/T	P/T		F/T	P/T		F/T	P/T
20	0.30	-	-	0.30	-	-	0.16	-	-	0.16	-	-
25	0.30	-	-	0.30	3.2	2.6	0.16	0.6	0.5	0.16	2.6	2.1
30	0.36	0.6	0.5	0.36	5.2	4.2	0.24	1.0	0.8	0.24	3.6	2.9
35	0.42	0.8	0.6	0.42	7.8	6.2	0.40	2.0	1.6	0.40	5.2	4.2
40	0.72	1.4	1.1	0.72	10.8	8.6	0.64	2.6	2.1	0.64	7.2	5.8
45	1.20	3.2	2.6	1.20	15.6	12.5	1.04	4.2	3.4	1.04	9.2	7.4
50	1.92	8.8	7.0	1.92	22.8	18.2	1.52	8.2	6.6	1.52	13.6	10.9
55	3.00	18.0	14.4	3.00	36.8	29.4	2.00	21.6	17.3	2.00	25.6	20.5
60	5.40	36.0	28.8	5.40	70.0	56.0	2.56	-	-	2.56	-	-

Age	Incidence per 1000 active members per annum							
	Male Officers & Male Manuals		Post 98 Males		Female Officers & Female Manuals		Post 98 Females	
	Withdrawal		Withdrawal		Withdrawal		Withdrawal	
	F/T	P/T	F/T	P/T	F/T	P/T	F/T	P/T
20	196	245	294	490	186	232	279	464
25	129	162	194	323	125	156	187	312
30	92	115	138	230	105	131	157	262
35	72	90	108	180	90	113	136	226
40	58	72	87	144	75	94	113	188
45	47	59	71	118	62	77	93	155
50	37	46	55	91	47	59	71	118
55	32	40	48	79	36	45	55	91
60	19	24	29	48	17	21	25	42

	Promotional Salary Scales							
	Male Officers & Post 98 Males		Male Manuals		Female Officers & Post 98 Females		Female Manuals	
Age	FT	PT	FT	PT	FT	PT	FT	PT
20	100	100	100	100	100	100	100	100
25	100	100	100	100	100	100	100	100
30	123	113	100	100	115	105	100	100
35	138	123	100	100	126	110	100	100
40	148	128	100	100	136	115	100	100
45	158	128	100	100	136	115	100	100
50	168	128	100	100	136	115	100	100
55	168	128	100	100	136	115	100	100
60	168	128	100	100	136	115	100	100

Other Assumptions		
Age Retirements	It is assumed that active members will retire at age 60 or when they would satisfy the *Rule of 85* if later subject to no later than age 65.	
Pensioner Mortality	Current Pensioners -	Table PXA92 c2004
	Prospective Pensioners -	Table PXA92 c2004
	The following age ratings are applied in each case:	

	Males	Females
Officers (& post-98 joiners)	No age rating	No age rating
Manuals	+3 years	+2 years

	Ill Health Retirement -	as above, except rated up by 5 years (6 years for male officers and male post-98 joiners)
	Widows – one year older than female pensioners	
Proportions Married (including a loading for dependants benefits)	A varying proportion of members will be married and entitled to a spouse's pension. Sample proportions are:	

Age	Males	Females
40	62%	67%
60	80%	75%
80	72%	55%

Wife/Husband Age Difference	Husbands are assumed to be 3 years older than their wives	
Pensioner Mortality for additional reserve for continuing improvements in life expectancy	Current Pensioners -	Table PXA92 c2014
	Prospective Pensioners -	Table PXA92 c2030
	Age ratings as above	
Administration Expenses	1.0% of payroll	

Appendix F - Surplus Certificate

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: Isle of Man Pension Fund

Inland Revenue Reference Number: 49/1897

We hereby certify that:-

(1) in our opinion as at 31 March 2004 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 principles and requirements prescribed by the Pension Scheme Surpluses (Valuation) Regulations 1987.

Signature ....

Date:
Name: Peter Summers FFA Bryan Chalmers
FFA
Qualification: Fellows of the Faculty of Actuaries
Firm: Hymans Robertson
Central Exchange
20 Waterloo Street
Glasgow
G2 6DB

Appendix G - Rates and Adjustments Certificate

In accordance with Regulation 77 of the Local Government Pension Scheme Regulations 1997, as amended, we have made an assessment of the contributions that should be paid to the Fund by the employing authorities as from 1 April 2005 in order to maintain the solvency of the Fund.

The required contribution rates are set out in the attached statement.

Signature	…………………………………………………………..	
Date:		
Name:	Peter Summers FFA	Bryan Chalmers FFA
Qualification:	Fellows of the Faculty of Actuaries	
Firm:	Hymans Robertson Central Exchange 20 Waterloo Street Glasgow G2 6DB	

STATEMENT TO THE RATES AND ADJUSTMENTS CERTIFICATE

The Common Rate of Contribution payable by each employing authority under Regulation 77 for the period 1 April 2005 to 31 March 2008 is 23.2% of pensionable pay.

Individual Adjustments are required under Regulation 77 for the period 1 April 2005 to 31 March 2008 resulting in Minimum Total Contribution Rates expressed as a percentage of pensionable pay are as set out below:-

	Minimum contribution for year commencing			
Employer	**01-Apr-05**	**01-Apr-06**	**01-Apr-07**	**01-Apr-08**
Braddan Church, Vicar and Wardens	21.5%	22.0%	22.5%	23.0%
Braddan Parish Commisioners	21.5%	22.0%	22.5%	23.0%
Bride Parish Commisioners	21.5%	22.0%	22.5%	23.0%
Castletown Commissioners	21.5%	22.0%	22.5%	23.0%
Crossroad Caring for Carers	15.7%	18.1%	20.5%	23.0%
Douglas Borough Council	21.5%	22.0%	22.5%	23.0%
Leonard Cheshire Foundation	15.7%	18.1%	20.5%	23.0%
Malew Parish Commissioners	21.5%	22.0%	22.5%	23.0%
Manx Churches Adoption and Welfare Society	21.5%	22.0%	22.5%	23.0%
Manx Foundation for Physically Disabled	21.5%	22.0%	22.5%	23.0%
Marashen Crescent Housing Committee	21.5%	22.0%	22.5%	23.0%
Michael Commisioners	21.5%	22.0%	22.5%	23.0%
Northern Local Authorities Swimming Pool Board	21.5%	22.0%	22.5%	23.0%
Onchan District Commissioners	21.5%	22.0%	22.5%	23.0%
Peel Town Commissioners	21.5%	22.0%	22.5%	23.0%
Port Erin Commissioners	21.5%	22.0%	22.5%	23.0%
Port St Mary Commisioners	21.5%	22.0%	22.5%	23.0%
Ramsey and Northern District Housing Committee	21.5%	22.0%	22.5%	23.0%
Ramsey Town Commissioners	21.5%	22.0%	22.5%	23.0%
Southern Civic Ameneties Site Board	21.5%	22.0%	22.5%	23.0%
Southern Local Authorities Swimming Pool Board	21.5%	22.0%	22.5%	23.0%
St Peters Church Vicar and Wardens	21.5%	22.0%	22.5%	23.0%
No Contributing Members				
Department of Tourism and Leisure (Villa Marina)				
Manx Blind Welfare				
Peel and Western District Housing Committee				

Notes

Contributions expressed as a percentage should be paid into Isle of Man Pension Fund at a frequency in accordance with the requirements of the Regulations.

Further sums should be paid to the Fund to meet the costs of any early retirements using methods and factors issued by me from time to time.

The certified contribution rates represent the minimum level of contributions to be paid. Employing authorities may pay further amounts at any time and future periodic contributions may be adjusted on a basis approved by ourselves.