

Greater Manchester Pension Fund

Actuarial Valuation as at 31 March 2004

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March 2005

Greater Manchester Pension Fund

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Executive Summary

This report sets out the results of our actuarial valuation of the Greater Manchester Pension Fund as at 31 March 2004 and is addressed to Tameside Metropolitan Borough Council 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 93% (compared to 105% as at 31 March 2001). This corresponds to a past service deficit of £461m.
- Without anticipating an element of future equity out-performance, the corresponding result would be a funding level of 72%.
- The employers' average cost of future service benefits (i.e. ignoring any past service deficit) is 12.4% of pensionable pay with effect from 1 April 2005. This excludes the impact of the abolition of 'the Rule of 85'.
- Assuming that a funding level of 100% is to be targeted over a period of 20 years on the ongoing basis (if our assumptions are borne out in practice) the common employers' contribution rate is 14.5% of pensionable pay, reducing to 12.5% of pay if we take credit for the abolition of the Rule of 85.
- 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.
- Employers may make voluntary additional contributions to recover the shortfall over a shorter period.
- All employers are also required to make additional payments in respect of ill health retirements and other early retirements where the cost exceeds the budgeted cost.

We would be pleased to discuss any aspect of our report with the Administering Authority.

Ronald S Bowie FFA
18 March 2005

Alison Murray FFA



Hymans Robertson

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1. Introduction

- 1.1 We have carried out an actuarial valuation of the Greater Manchester Pension Fund ("the Fund") as at 31 March 2004 and have pleasure in presenting our report to Tameside Metropolitan Borough Council ("the Administering Authority") as the administering authority to the Fund.
- 1.2 The previous valuation was carried out as at 31 March 2001 by Hymans Robertson and the results were set out in their report dated March 2002. They are summarised in the table below. At the last valuation, the funding level was targeted to reduce to 100% over a period of around nine years.

2001 Results Summary	£m
Value of Accrued (Past Service) Liabilities	
Employee Members	2,958
Deferred Pensioners	477
Pensioners	2,520
Total Accrued Liabilities (L)	5,955
Value of Fund Assets (A)	6,261
Surplus/(Deficit)	306
Funding Level [(A)/(L)]	105%
Employer Contributions	% of pay
(a) Future Service Funding Rate	12.8%
(b) Past Service Adjustment	(3.1%)
Total Common Contribution Rate [(a)+(b)]	9.7%

- 1.3 The Fund is part of the Local Government Pension Scheme (LGPS) and is a multi-employer defined benefit pension scheme. It is contracted out of the State Second Pension. 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, so employers' contributions are set to meet the expected cost of the benefits. The employers' contributions are reviewed at a series of three yearly valuation exercises. This valuation is one of the series.

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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 Regulations 1997 ("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 The Administering Authority set the funding objectives in consultation with the employers and is preparing a Funding Strategy Statement (FSS), which is required to be in place by 31 March 2005.
- 1.6 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.
- 1.7 The funding objectives differ from those in place at the previous valuation in that the period over which the target funding level of 100% on an ongoing basis has been extended from the remaining working lifetime of employee members to a period of twenty years for many of the Fund employers.

Regulatory Requirements

- 1.8 This valuation is carried out in accordance with Regulation 77 of 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



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- a rates and adjustments certificate.

1.9 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;
- 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.

1.10 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
- the Administering Authority's funding strategy statement.

1.11 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

1.12 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.

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

1.14 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.

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- 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.
- 1.15 The Government's recent legislation relating to employers' obligations on the voluntary termination of their pension schemes, known as the Debt on Employer regulations¹, 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.
- 1.16 The membership and accounting data has been provided by the Administering Authority and we have relied on the accuracy of the information provided.
- 1.17 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.

¹ The Occupational Pension Schemes (Deficiency on Winding-up etc) Regulations 1996 and the Occupational Pension Schemes (Winding Up, Deficiency on Winding Up and Transfer Values) (Amendment) Regulations 2005.



2. Fund and Benefit Information

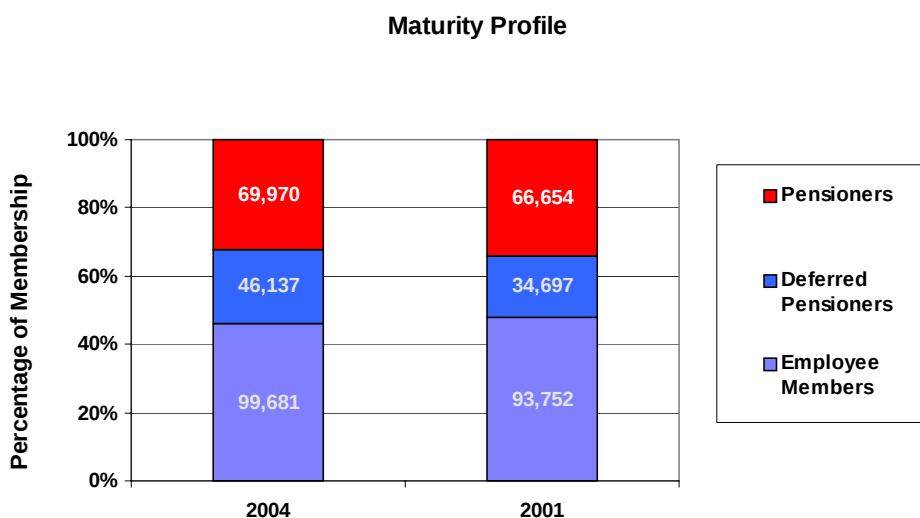
Benefits and member contributions

- 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 Regulations, under the auspices of the Government's Stocktake review of the scheme. The changes are summarised in Appendix A. The changes already made do not materially affect the results of our valuation. However, the changes that take effect from 1 April 2005, notably the abolition of the Rule of 85 for future service, do affect the cost of future service benefits. Please see the discussion on the results in Section 5.
- 2.4 No allowance has been made for the cost of members electing to aggregate any service periods in advance of the 31 March 2005 deadline. If there are material numbers of such elections, this could affect the valuation results. In addition, no allowance has been made for pension benefits being earned by Councillors.
- 2.5 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.
- 2.6 The employers' share of the cost of accruing benefits was assessed to be 12.8% of pay at the 2001 valuation.
- 2.7 The common contribution rate payable by the employers was set at 9.7% of payroll with effect from 1 April 2002. Individual adjustments were calculated and the resulting minimum contributions to be paid were certified in the previous valuation report.
- 2.8 Contributions were paid during the inter-valuation period in accordance with the Rates and Adjustments certificate. These contributions were lower than the cost to the employers of the accruing benefits.

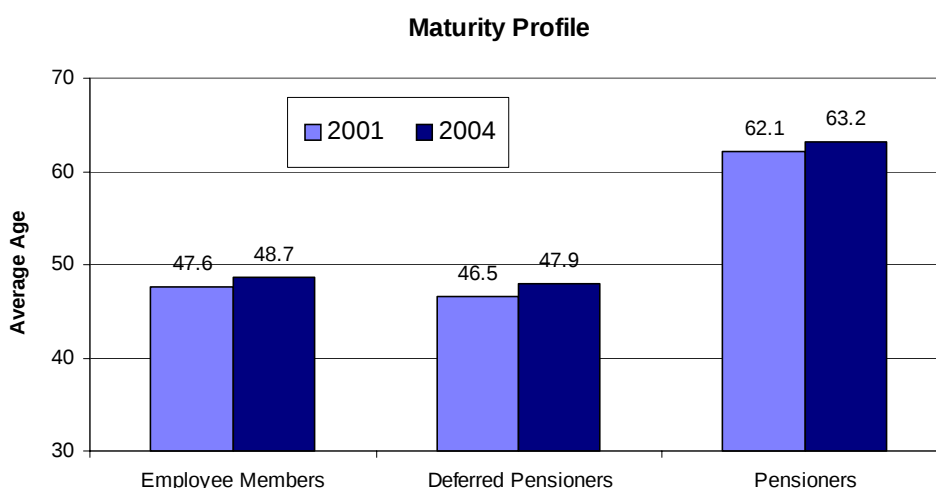
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Fund membership

- 2.9 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.
- 2.10 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.



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



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- 2.12 The chart and table show a modest degree of ageing within the membership of the Fund. Our valuation method for assessing the cost of future service benefits assumes, (amongst other things), a stable average age and an ageing employee membership would lead to an increase in the assessed cost of future service benefits over time.

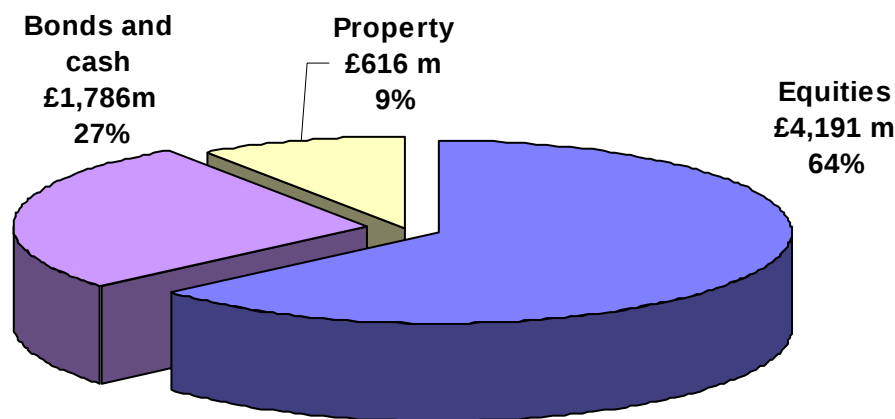
Individual Employer Information

- 2.13 Appendix B also shows the number of members of each of the participating employers as at the valuation date.

Fund assets

- 2.14 The Administering Authority has provided copies of the audited accounts for the Fund for 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. The implied return is calculated from the change in the market value of assets and net annual cashflows to the Fund.
- 2.15 The Fund's assets are invested by the Administering Authority. The market value of assets as at 31 March 2004 was £6,593m². A simplified summary of the asset split is shown below. A more detailed breakdown of the Fund assets is provided in Appendix C.

Whole Fund Asset Distribution as at 31 March 2004



- 2.16 The Fund does not formally segregate assets between participant employers. However, certain employers are allocated specific index-linked gilts within the Designated Fund. These employers also have some of their assets invested in the Main Fund.

² excluding defined contribution AVC funds



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- 2.17 In calculating adjustments to the Common Contribution Rate for individual employers to reflect any 'peculiar' characteristics, we apportion assets to individual employers (or to pools of employers). We use a technique known as analysis of surplus to carry out this apportionment process.

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*.
 - 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 and for employers who continue to admit new members. 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 over that period. That single year is then taken as a proxy for all future years. The method of valuation has not changed since the previous valuation. A description of the valuation method is set out in Appendix D.
- 3.3 For employers who no longer admit new entrants, we have adopted the *attained age method*, means that the contribution rate is derived as the average cost of benefits accruing to employee members over the period until they die, leave the Fund or retire. A description of this method is also set out in Appendix D.

Actuarial Assumptions

- 3.4 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.
- 3.5 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 index³.

³ in line with the Pension (Increases) Act 1971; lower increases can apply to Guaranteed Minimum Pensions.

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- 3.6 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.
- 3.7 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 may be met from investment returns achieved by the Fund's assets that build up from contributions. 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.
- 3.8 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 anticipated future rate of investment return is used to discount future benefits and contributions to obtain their current or present value.
- 3.9 The key assumptions have been discussed with the Administering Authority. A summary of the assumptions used is included in Appendix E.

Financial assumptions

- 3.10 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 value⁴.
- 3.11 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.

⁴ 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 lower long term returns in calculating the past service liabilities to effectively build in a margin for prudence into the reserving for accrued benefits.



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- 3.12 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.

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%	-

The yields as at 31 March 2001 were “smoothed”, i.e. based on an average over the twelve months to the valuation date. In the interests of taking a prudent approach, the assets were taken into account at their market value, although the theoretical smoothed value was 105% of market value.

The discount rate shown in the table relates to all employers for whom all or most of their assets are invested in the Main Fund. For employers whose investment strategy is wholly or mainly in the Designated Fund, the liabilities (past or future as appropriate) have been discounted at the minimum risk rate of return shown in the table above.

Demographic assumptions

- 3.13 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 assumptions derived from the results of “urban” funds within 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.
- 3.14 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 using an anticipated return from the Fund’s equity investments which is below our ‘best estimate’ of future returns from equities.)
- 3.15 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.



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- 3.16 Account has been taken of the effect of the abolition of the Rule of 85 for service after 1 April 2005. We have reported separately on the potential effect of continuing mortality improvements.

Comments on the valuation assumptions

- 3.17 There is a broad spectrum of potentially acceptable valuation assumptions.
- 3.18 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.
- 3.19 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.
- 3.20 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. Thus there should be no expectation of employer contribution reductions if experience is better than assumed between 2004 and 2007.

Assets

- 3.21 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. This is consistent with the approach of valuing the liabilities by reference to spot market conditions on the valuation date.
- 3.22 The approach taken to valuing the Fund's assets has not been changed since the previous valuation, where the value of the assets was equal to their market value.
- 3.23 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.



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4. Experience since 2001

Results of 2001 Valuation

- 4.1 In the previous valuation of the Fund, the assets were valued at £6,261m and the past service liabilities on the ongoing basis amounted to £5,955m. There was then a surplus of £306m and the funding level (ratio of assets to liabilities) was 105%.

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.	Expected % p.a.	Actual % p.a.	Expected % p.a.
Investment Returns	2.1%	6.3%	0.0%	3.4%
Pay Increases	4.7%	4.4%	2.6%	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).

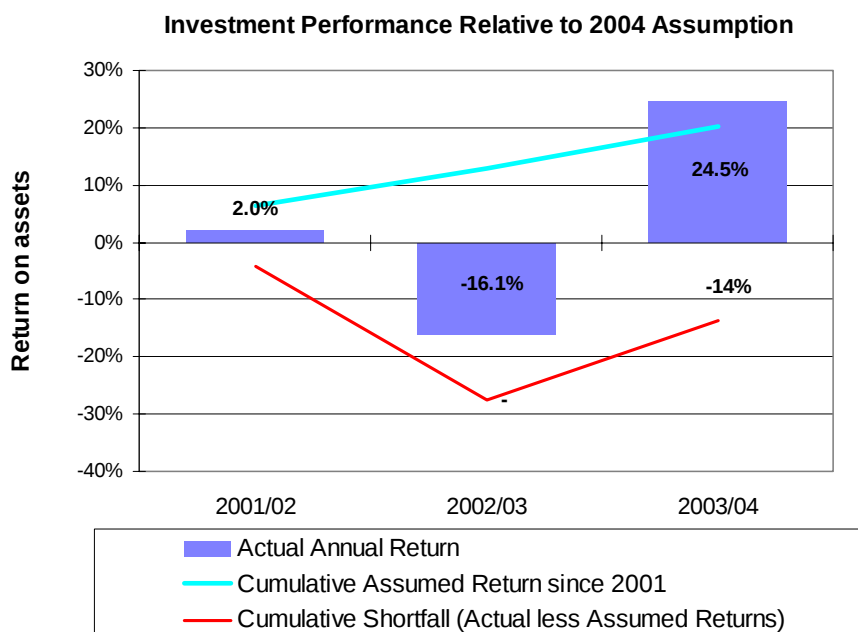
- 4.3 The principal conclusions are:

- Investment under-performance relative to the anticipated returns built into the valuation of the liabilities (both on the 2001 and 2004 bases) dominates;
- Nominal investment returns only averaged 2.1% a year over the three year period to 31 March 2004, and zero percent a year in real terms. This was 4.2% a year less than that assumed at the 2004 valuation, leading to an expected reduction in the funding level on a like for like basis of around 14% for this factor alone. Compared to the median return on Local Authority Funds, however, the Fund's performance was excellent (as illustrated in paragraph 5.9).
- 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).



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- 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 return assumption. By 31 March 2004, the actual returns on assets lagged this valuation assumptions by 14 percentage points.



- 4.5 At the previous valuation the common contribution rate payable by the Employers to the Fund was set at the rate of 9.7% of pensionable pay. This was less 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.

Demographic experience

- 4.7 As indicated in section three above, we have revisited all of the demographic assumptions based on our experience analysis of LGPS funds. In order to test the goodness of fit of these assumptions our analysis of actual versus expected experience is based on the assumptions adopted for this valuation. We have, however, also commented on how experience compares with the assumptions adopted for the 2001 valuation in the paragraphs which follow.
- 4.8 The impact of the variation in experience relative to the demographic assumptions adopted at this valuation as a whole has been a negative factor for the Fund. The main items under this heading were as follows:



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Employee Members

- 4.9 A comparison of the actual and expected membership movements (based on the 2004 assumptions) for employee members is shown below.

	Actual	Expected	% Diff
Early Leavers	23,670	30,859	-23%
Deaths	343	373	-8%
Ill Health Retirements	2,129	2,514	-15%
Early Retirements	2,003	-	

- 4.10 There were significantly fewer early leavers than anticipated, which has a negative 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.
- 4.11 Overall, the 2004 assumptions assume fewer early leavers than were assumed in 2001. Actual experience was still lower than this as shown in the table above, which suggests that further reductions in the assumptions may be required in future valuations.
- 4.12 We have halved our allowance for death before retirement compared to the 2001 assumptions. Thus compared to the 2001 assumptions, actual experience was considerably lighter (fewer deaths) than that assumed.
- 4.13 The allowance for ill-health early retirements is unchanged from 2001 for full-time members, but lower for part-time members. As a result, the expected number of ill-health early retirements using the 2001 basis would be slightly higher than shown above.
- 4.14 No allowance is made within the valuation assumptions for early retirement, other than on ill-health grounds. The incidence of early retirement will affect the funding level to the extent that any strain and augmentation payments made are less than the cost of paying the benefits early and awarding any additional service, assessed on the valuation basis.

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Pensioner Members

- 4.15 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.

2001-2004	Amounts of Pension Ceasing (£000s)		
	Actual	Expected	% Diff
Ill Health Pensioners	5,400	5,647	-4%
Age Pensioners			
Former Officers	6,724	6,347	6%
Former Manuals	4,205	4,021	5%
Dependants	3,656	3,160	16%
Total	19,985	19,175	4%

- 4.16 The corresponding figures based on the 2001 mortality assumptions are given in the table below.

2001-2004	Amounts of Pension Ceasing (£000s)		
	Actual	Expected	% Diff
Ill Health Pensioners	5,400	4,923	10%
Age Pensioners			
Former Officers	6,724	8,635	-22%
Former Manuals	4,205	3,992	5%
Dependants	3,656	3,045	20%
Total	19,985	21,496	-7%



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- 4.17 As the tables show, the actual amounts of pension ceasing during the intervaluation period were higher than our 2004 assumptions for urban funds but there were fewer deaths than expected based on the mortality assumptions used in 2001. Previous analysis for the Fund which was carried out in advance of the valuation has shown life expectancy improving over time. Although there were slightly more deaths than expected based on our 2004 assumptions, if longevity improvements continue, the allowance for mortality at this valuation may not be adequate for the future. 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.
- 4.18 Overall, for the 2004 valuation we have amended our mortality assumptions in line with the results of our demographic experience analysis across our “urban” English and Welsh clients in 2001. This has led to different rates of longer life expectancy for ex-officers and ex-manuals and a revision to the adjustments for ill-health pensioners and spouses. Taken as a whole, the change to the demographic assumptions has increased the value placed on the past service liabilities and increased the assessed cost of future service benefits.

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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 below this target, as shown in the table below.

Accrued (Past Service) Liabilities	£m
Value on minimum risk rate of return:	
Employee Members	4,778
Deferred Pensioners	953
Pensioners	3,391
(a) Total	9,122
Less Credit for Anticipated Future Excess Returns:	
Employee Members	(1,341)
Deferred Pensioners	(265)
Pensioners	(460)
(b) Total Credit for Anticipated Future Returns	(2,066)
Net Value after Credit for Future Excess Returns:	
Employee Members	3,437
Deferred Pensioners	688
Pensioners	2,931
(a)-(b) Total Net Liabilities	7,056
Assets	
Market Value of Assets	6,593
Contributions due for augmentations/redundancies	2
Total Value of Assets	6,595
Surplus (Deficit)	(461)
Funding Level	93%

No credit has been taken for anticipated future excess returns (over and above the minimum risk rate of return), for employers whose assets are held wholly or mainly in the Designated Fund.



Greater Manchester Pension Fund Actuarial Valuation as at 31 March 2004

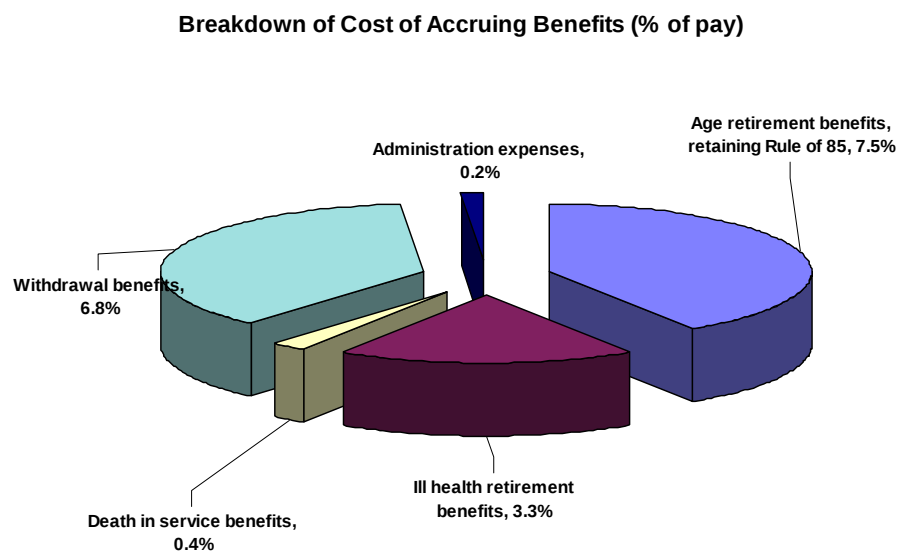
- 5.2 It should be noted that the market value of both assets and liabilities may be volatile. The results of this valuation show only a snapshot of the funding level of the Fund as at 31 March 2004 and this result should be seen in the context of market levels before and since then.

Future service

- 5.3 We have calculated the combined employers' future service contribution rate to be 12.4% 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, lump sum death in service benefits and ill health early retirement benefits. It does not, however, include an allowance for any type of early retirement other than ill health. These costs will be met by employers as and when they arise, although it should be noted that a provision for non ill health early retirements is included in the contribution rates for certain employers.

The future service contribution rate is the rate that would, if our assumptions were borne out, apply to service in the year following the valuation date if there were no past service surplus or shortfall in the Fund.

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



- 5.5 The future service rate has been calculated using the Projected Unit Method. Contributions for employers who no longer admit new entrants are calculated using the Attained Age Method, which would generally produce a higher contribution rate.



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- 5.6 In calculating this rate, no allowance has been made for the abolition of the Rule of 85. If we make allowance for the effect of the abolition of the Rule of 85 for those members who do not qualify for transitional protections, the employers' share of the cost of future service would reduce to 10.4% of pensionable pay. The split of the future service rate also changes, in line with the different pattern of membership movements assumed at higher ages.
- 5.7 After discussion with the Administering Authority we have set the future service rate after taking account of the abolition of the Rule of 85. Thus our valuation results assume that the Regulations which implement the abolition of the Rule of 85 do take effect from 1 April 2005.
- 5.8 The employers' future service contribution rate of 10.4% of pensionable pay may be compared with the rate revealed by the previous valuation of 12.8% of pensionable pay. The lower 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
 - credit given for the abolition of the Rule of 85 for service after April 2005. The reduction in the contribution rate due to the abolition of the Rule of 85 takes into account the protections for members over age 52 as at 1 April 2005.

This is partially offset by the changes to the demographic assumptions.

Past service

- 5.9 The past service funding level of the Fund has declined since the previous valuation. The main reasons for this are:
- 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 changes to the demographic assumptions;
 - the payment of contributions at a rate less than the cost of accruing benefits; and
 - the increases in pensionable pay for employees which were higher than anticipated in the valuation.

These losses have been partially offset by:

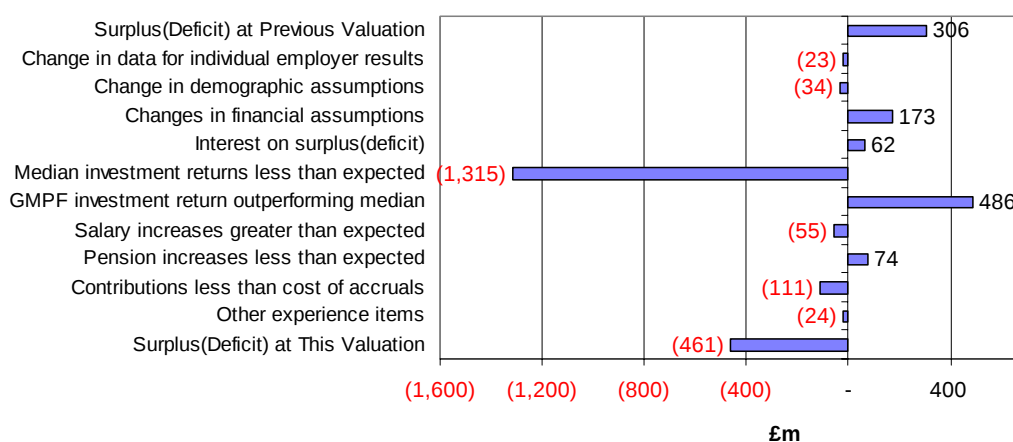
- the increases in pensions in payment which were lower than anticipated in the valuation; and
- the changes to the financial assumptions.



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

Reconciliation of Opening and Closing Position



- 5.11 We have calculated the additional contribution rate in respect of the past service deficit to be 2.1% of pensionable pay. This represents the cost of the past service deficit spread over a period of 20 years.

Contributions payable

- 5.12 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 up to 20 years as set out in the Funding Strategy Statement. In order to achieve some stability of contributions, the required contribution increases will be phased in over a period of up to 4 years.
- 5.13 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	12.4%
Credit for abolition of the Rule of 85	(2.0%)
Past Service Adjustment - 20 year spread	2.1%
Total Common Contribution Rate	12.5%



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Inland Revenue Surplus Test

- 5.14 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.
- 5.15 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 The Funding Strategy Statement provides a framework for the Administering Authority to assess its funding risks. 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.
- 6.2 Whilst the objective of targeting a funding level of 100% over a twenty year period and the decision to allow employers to phase in contribution rates over a four year period help to achieve a degree of stability of employer contributions in the short-term, the deferral of the deficit repayment could lead to less stable (higher) employer contributions in the future.
- 6.3 In addition, the 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.
- 6.4 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

- 6.5 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).
- 6.6 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.
- 6.7 The Administering Authority has adopted an investment strategy that includes broadly 65% invested in equities, 25% invested in bonds and 10% invested in property.
- 6.8 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.

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- 6.9 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 broadly⁵ as follows.

Accrued (Past Service) Liabilities	£m
Value on minimum risk rate of return:	
Employee Members	4,778
Deferred Pensioners	953
Pensioners	3,391
Total	9,122
Total Value of Assets	6,595
Surplus (Deficit)	(2,527)
Funding Level	72%

Employer Contribution Rates	% of payroll
Future Service Funding Rate	20.3%
Credit for abolition of the Rule of 85	(2.0%)
Past Service Adjustment - 20 year spread	9.0%
Total Common Contribution Rate	27.3%

- 6.10 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

⁵ 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.



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- the past service adjustment has been calculated based on a target of 100% funding over the average future working lifetime of the active membership.
- 6.11 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. These residual risks apply to those employers which participate in the Designated Fund, which is invested in index linked gilts and cash.

Appropriateness of investment strategy

- 6.12 The degree of mismatch between the actual investment strategy, which includes 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

- 6.13 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 or falls on long term rates of interest, 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.

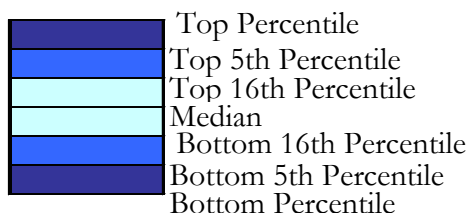


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- 6.14 The table below shows the results that would arise for the whole fund if those events occurred soon after 31 March 2004.

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)	93%	68%	(25%)	74%	(19%)
Minimum Risk Bond Returns	72%	53%	(19%)	64%	(8%)

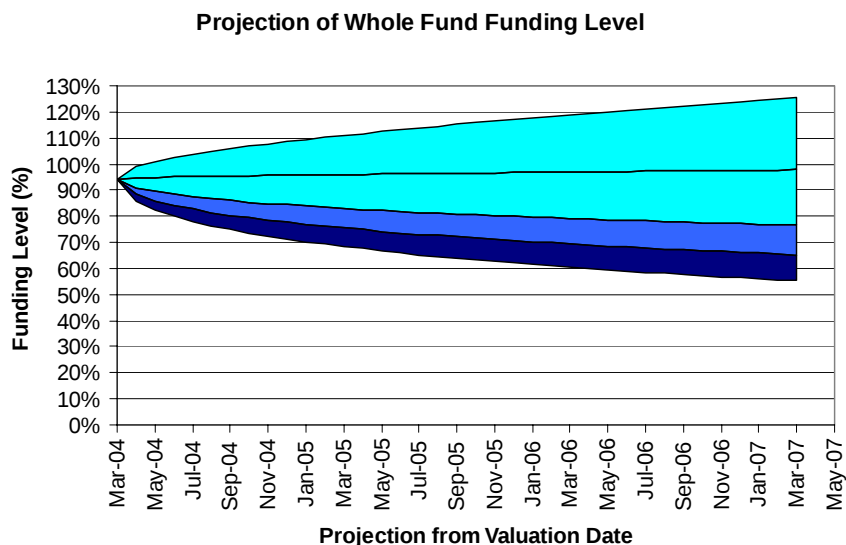
- 6.15 The scenarios illustrated are by no means exhaustive and should not be taken as the limit of how extreme future experience could be. The impact on individual employers could be different to the Fund as a whole, for example less mature employers would be more greatly affected by changes in bond yields than more mature employers.
- 6.16 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.
- 6.17 The charts below use the following colour scheme⁶:



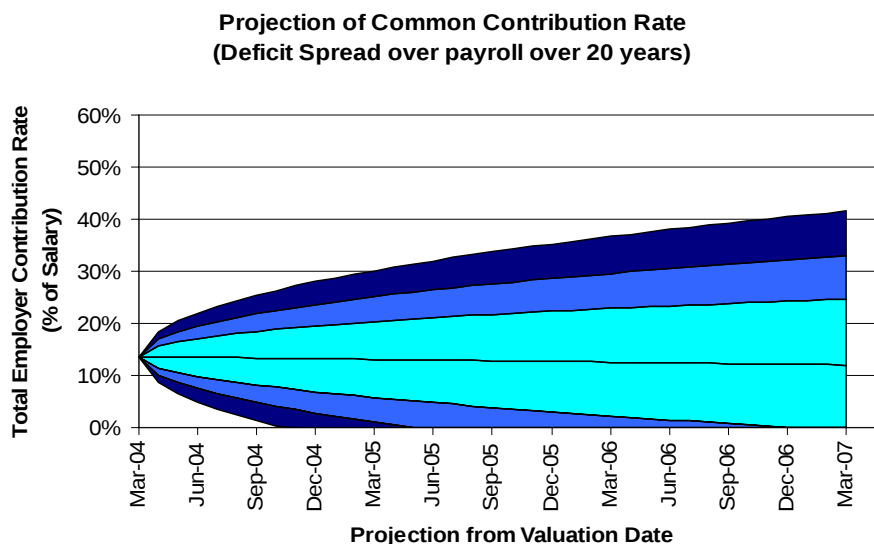
- 6.18 The first chart illustrates how the funding level for the whole Fund might vary from this valuation date to the next valuation in 2007, allowing for the volatility of different asset classes. No allowance is made for any change in the valuation basis. The turquoise area represents the outcomes that have a roughly 68% chance of occurring, so there is broadly a two in three chance of the funding level being between 76% and 125% at the 2007 valuation. There is a 16% chance of the funding level being less than 76%. The opportunity for investment growth comes with a potentially significant downside risk.

⁶ 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

Greater Manchester Pension Fund Actuarial Valuation as at 31 March 2004



- 6.19 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.



- 6.20 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 0% and around 24% of payroll in the 2007 valuation. There is also a non-trivial likelihood (around 16%) of the contribution rate being in excess of 24% of payroll. The reasons for the wide spread include the volatility of the predominantly equity investments of the Fund and the possible future changes in long term interest rates and inflationary expectations.



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Actuarial Valuation as at 31 March 2004

Investment Returns Required to Maintain 2004 Deficit

- 6.21 The allowance for expected equity outperformance used for assessing the value of the past service liabilities at 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. The funding level is 93%, thus a combination of investment returns at 6.3% p.a. and the deficit contributions is intended to remove the deficit over 20 years. If no deficit contributions were paid actual return required on the assets held by the Fund to ensure the deficit does not get any larger (in monetary terms) would be 6.8% a year.
- 6.22 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 sensitivity of the results to interest rate changes following the fall in funding levels and the long deficit recovery period;
 - 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

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

Longevity

- 6.24 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.
- 6.25 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.



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- 6.26 We have considered the impact of mortality rates continuing to reduce in line with the standard mortality tables developed by the actuarial profession. The impact of allowing for longer life expectancy would lead to higher liabilities for benefits already accrued and for future accruals of benefits. The table below summarises the estimated additional employer contributions that would be required on the basis of the mortality tables specified in Appendix E.

Extra Reserve Required for Continuing Mortality Improvements on Accrued Liabilities (on same financial basis as Section 5)	£287m
Effect of Reserve on Employer Contributions after spreading (20 yrs)	1.2% of pay
Increase in Future Service Cost	0.9% of pay
Net Effect on Employer Contributions	2.1% of pay

- 6.27 The reserving in Section 5 makes no allowance for these potential further improvements in longevity. 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

- 6.28 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; 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

- 6.29 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;



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- 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

- 6.30 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.

Post-Valuation Events

- 6.31 Provisional returns on the WM Local Authority Index from 1 April 2004 to 31 December 2004 were 9.4%, some 4.7% ahead of the return built into the liabilities for that period. However, the fall in real index-linked gilt yields between 1 April and 31 December 2004 is likely to have wiped out much of the increase in the funding level due to the better than required investment returns.
- 6.32 Overall, there is not likely to have been much change in the funding level since the valuation date. As a result, we have not included any detailed analysis of the effect of post-valuation events within this report.



7. Conclusions and Recommendations

- 7.1 We have carried out this valuation in accordance with the Administering Authority's proposed Funding Strategy Statement. This statement is currently in draft; however we believe that no further amendments are envisaged which would affect this valuation report.

Whole Fund Position

- 7.2 The valuation reveals that the ongoing funding level of the Fund on 31 March 2004 was 93%. The shortfall of assets compared to the past service liabilities was £461m.
- 7.3 The average cost of accruing benefits payable by the employers, including administration expenses and lump sum death in service benefits, is 12.4% of pensionable pay. The abolition of the Rule of 85 for most employees in respect of service from 1 April 2005 reduces the cost of accruing benefits by 2.0% of pensionable pay. The average cost of accruing benefits (the future service rate) then becomes 10.4% of pensionable pay.
- 7.4 The shortfall of assets over the past service liabilities requires the employers' contribution rate to be increased by 2.1% of pensionable pay, if recovery of the deficit is targeted over a period of 20 years. The Common Contribution Rate is therefore 12.5% of pensionable pay.

Employer Contribution Rates

- 7.5 Individual adjustments to the Common Contribution Rate, specific to each employer, or group of employers, shall be paid by the employers with effect from 1 April 2005.
- 7.6 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 three financial years from 2005/06.
- 7.7 All employers are also required to make additional payments in respect of ill health retirements and other early retirements where the cost exceeds the allowance made in contribution rates.

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Risk Management

- 7.8 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.
- 7.9 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 and for individual employers 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.
- 7.10 We recommend that the Administering Authority reviews its investment strategy and ongoing risk management programme. The Administering Authority has also given its employers the opportunity to consider whether they would like to explore the possibility of a different investment strategy.

New Employers Joining the Fund

- 7.11 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, together with any additional contributions that may be required if their ill-health early retirement experience is worse than assumed.

Other Matters

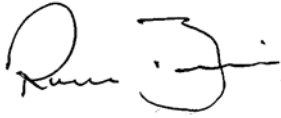
- 7.12 Any employer who ceases to participate in the Fund should be referred to us in accordance with Regulation 78 of the Regulations.
- 7.13 Any bulk movement of scheme members:
- involving 10 or more scheme members being transferred from or to another LGPS fund, or
 - involving 2 or more scheme members being transferred from or to a non-LGPS pension arrangement

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



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7.14 We would be pleased to answer any questions arising from our report.



Ronald S Bowie FFA
18 March 2005



Alison Murray FFA

Greater Manchester Pension Fund

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Appendix A - Benefit Structure

Summary of Non Discretionary Benefits Applicable to All Employers

Normal Retirement Age (NRA)	Age 65 or if earlier and a member immediately before 1 April 1998, age 60 or after age 60 on attaining 25 years of scheme membership.
Earliest Retirement Age	Service before 1 April 2005 - 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. Service after 1 April 2005 – NRA, with limitations on payment of benefits prior to age 65.
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.



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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 partially 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.



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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 three months' pensionable service, a return of the member's contributions with interest, less a State Scheme premium deduction and less tax at the rate of 20%.
State Pension Scheme	The Fund is contracted-out of the State Second Pension (S2P) and the benefits payable to each member are guaranteed to be not less than those required to enable the Fund to be contracted-out.

Notes:

All benefits under the Fund are subject to limits laid down from time to time by the Inland Revenue.

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

Changes to Benefits Since 2001

- 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, 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);



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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 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.

We have 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 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.



Greater Manchester Pension Fund

Actuarial Valuation as at 31 March 2004

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	11,577	13,760	289,302	289,302	297,805	298,624	24,989	24,989	21,643	21,702
Female Officers	16,836	19,943	333,157	333,157	337,495	337,685	19,788	19,788	16,923	16,932
Male Manuals	7,885	10,112	134,215	134,215	158,147	158,412	17,465	17,465	15,640	15,666
Female Manuals	1,526	1,869	21,617	21,617	23,135	23,135	14,166	14,166	12,378	12,378
Post April 1998 Joiners:										
Males	10,173	5,223	190,513	190,513	84,623	84,667	18,727	18,727	16,202	16,210
Females	13,684	6,432	236,400	236,400	97,736	97,736	17,276	17,276	15,195	15,195
Full Timers Total	61,481	57,339	1,205,204	1,205,204	998,941	1,000,258	19,603	19,603	17,422	17,445
Part Time Members										
Pre April 1998 Joiners:										
Male Officers	515	655	10,954	7,154	11,761	7,241	21,270	13,892	17,956	11,055
Female Officers	8,048	9,154	136,031	85,447	134,922	81,139	16,902	10,617	14,739	8,864
Male Manuals	377	629	5,239	3,276	7,604	4,665	13,898	8,689	12,089	7,416
Female Manuals	8,394	12,227	99,278	55,140	129,358	69,533	11,827	6,569	10,580	5,687
Post April 1998 Joiners:										
Males	2,074	1,443	31,099	16,410	18,739	9,962	14,995	7,912	12,986	6,804
Females	18,792	12,305	238,881	120,427	139,451	65,757	12,712	6,408	11,333	5,344
Part Timers Total	38,200	36,413	521,482	287,854	441,833	238,297	13,651	7,535	12,134	6,544
Grand Total	99,681	93,752	1,726,686	1,493,058	1,440,775	1,238,555	17,322	14,978	15,368	13,211

Greater Manchester Pension Fund

Actuarial Valuation as at 31 March 2004

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
III Health Retirals						
Male Officers	3,372	3,222	21,417	19,233	6,351	5,969
Female Officers	5,409	5,048	22,916	19,929	4,237	3,948
Male Manuals	8,029	8,332	30,187	28,650	3,760	3,438
Female Manuals	5,879	5,590	9,693	8,576	1,649	1,534
Normal/Early Retirements						
Male Officers	8,847	8,304	61,743	52,819	6,979	6,361
Female Officers	9,764	8,394	30,256	24,267	3,099	2,891
Male Manuals	8,743	8,947	25,686	23,593	2,938	2,637
Female Manuals	7,891	7,167	8,445	6,874	1,070	959
Dependants						
Widows	10,388	10,354	21,133	19,012	2,034	1,836
Widowers	1,050	696	1,003	566	955	813
Children	598	600	621	536	1,038	894
Total	69,970	66,654	233,101	204,055	3,331	3,061

Deferred Pensioners

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

	Number		Annual Pensions £(000)		Average £	
	2004	2001	2004	2001	2004	2001
Males	17,660	14,934	30,167	23,145	1,708	1,550
Females	28,477	19,763	26,665	17,591	936	890
Total	46,137	34,697	56,832	40,735	1,232	1,174

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.

Greater Manchester Pension Fund

Actuarial Valuation as at 31 March 2004

Membership Split by Employer

Employer Code	Employer	Number of Members		
		Employees	Deferreds	Pensioners
48	Aintree Village Parish Council	-	1	2
262	Alfred McAlpine Construction Limited	38	14	4
203	Altrincham Boys Grammar School	20	8	3
217	Altrincham Grammar School For Girls	14	8	3
43	APSE	20	9	-
179	Aquinas College	54	18	9
111	Ashton On Mersey School Sports College	24	13	9
239	Ashton Pioneer Homes Ltd (New Staff)	1	3	-
238	Ashton Pioneer Homes Ltd (Transferred Staff)	1	6	5
183	Ashton Under Lyne 6th Form College	60	16	9
55	Ass Lancs Schools Exam Board	-	4	17
255	Assessment And Qualifications Alliance	364	24	26
12	Audenshaw High School	17	4	-
160	Bamford Primary School	24	4	1
129	Barrow In Furness BC ¹	-	-	2
197	Better Choices Limited (New Staff)	74	17	2
196	Better Choices Limited (Tfd Staff)	184	29	19
56	Birtenshaw Hall School	11	2	4
57	Blackbrook House School	1	7	17
200	Blackrod Town Council	1	-	-
123	Blessed Thomas Holford Catholic School	20	6	5
236	Bolton & Bury Chamber ¹	-	1	2
289	Bolton At Home Ltd	989	43	19
125	Bolton City Challenge P'ship Ltd ¹	-	-	1
161	Bolton Community College	245	66	85
315	Bolton Community Leisure Limited	109	-	-
5	Bolton Institute of Higher Education	342	144	101
20	Bolton MBC	7,389	3,159	4,715
162	Bolton North 6th Form College ¹	-	4	5
230	Bolton Racial Equality Council	1	-	-
235	Bolton Sixth Form College	33	11	1
163	Bolton South 6th Form College ¹	-	1	4
148	Borough Care Ltd	185	110	92
100	Borough Care Services Ltd	69	41	138
297	Bowlee Park Housing Association	24	-	-
261	Breakthrough UK Limited	1	-	1
127	Burnley BC ¹	-	-	4
164	Bury College	215	83	37
218	Bury College Enterprises Ltd	27	9	1
274	Bury Gateway Club	1	-	-
21	Bury MBC	4,895	1,407	2,807
114	Canon Slade School	67	21	15
97	Catholic Childrens Rescue Society	25	10	9
195	Centra	20	13	8
39	Central Manchester Dev Corpn ¹	-	10	1
180	Cheadle & Marple 6th Form College	231	64	21
87	Chethams School Of Music	11	4	5
128	Chorley BC ¹	-	-	3
80	CIAED ¹	-	3	1



Greater Manchester Pension Fund

Actuarial Valuation as at 31 March 2004

Employer Code	Employer	Number of Members		
		Employees	Deferreds	Pensioners
167	City College Manchester	510	133	55
94	CLES	7	23	3
198	Cloverhall Tenants Assoc Co-Op Ltd	2	-	1
316	Commission for Social Care Inspection	1	1	-
101	Community Charge Tribunal North ¹	-	1	2
102	Community Charge Tribunal South ¹	-	1	-
210	Competition Advice Limited ¹	-	1	-
270	Connexions Cumbria Limited	175	15	3
209	Connexions Lincolnshire And Rutland Limited	218	35	9
226	Council For Voluntary Service Rochdale	11	3	-
110	Crompton Fold School	13	11	1
104	Crossgates School	7	2	-
158	Cumbria Careers Ltd	-	16	8
272	Dance Initiative Greater Manchester	4	-	-
174	De La Salle 6th Form College ¹	-	-	2
71	De La Salle College ¹	-	6	19
61	Deafway (Mary Cross Trust) ¹	-	2	4
259	Deckers Restaurants Limited	1	2	-
244	East Manchester Education Action Forum ¹	20	15	-
307	Eastlands Homes Partnership Ltd (Trfd Staff)	21	-	-
175	Eccles 6th Form College	29	14	6
308	Employment & Regeneration Partnership Ltd	10	1	-
124	Fairfield High School	15	3	4
93	Farnworth & Kearsley CAB ¹	-	-	1
284	First Choice Homes Oldham Limited	714	19	37
142	First Manchester Ltd	815	597	723
120	George Tomlinson Secondary School	35	4	4
3	GM Fire & Civil Defence Authority	444	139	265
4	GM Police Authority	3,682	1,108	1,355
13	GMPTF	426	913	4,846
144	GMSS ¹	-	28	9
36	GMT Employees Social & Athletic Society ¹	-	-	1
35	GMT Social & Athletic Club Atherton ¹	-	-	1
91	Greater Man Econ Dev Corp ¹	-	15	9
14	Greater Manchester Buses Ltd	-	667	1,712
295	Greater Manchester Connexions Partnership Limited	18	-	-
9	Greater Manchester Council ¹	-	407	964
53	Greater Manchester Immig Aid Unit	12	7	2
266	Greater Manchester Magistrates Courts Comm ¹	641	59	46
245	Greater Manchester Public Transport Information	16	4	-
18	Greater Manchester Residuary Body ¹	-	21	51
268	Greater Manchester Waste (Manchester Collections) Limited	122	3	8
2	Greater Manchester Waste Disposal Authority	26	57	173
194	Greater Manchester Waste Ltd	226	26	84
247	Greater Manchester Youth Games	12	2	-
215	Greater Manchester Youth Justice Trust	8	3	-
304	Groundwork Bury	15	-	-
202	Groundwork Manchester, Salford and Trafford Ltd	46	15	-
32	Groundwork Oldham & Rochdale	57	41	5



Greater Manchester Pension Fund

Actuarial Valuation as at 31 March 2004

Employer Code	Employer	Number of Members		
		Employees	Deferreds	Pensioners
267	Groundwork Tameside	15	8	-
291	Group 4 Total Security Limited	26	-	-
206	Grtr M/Cr B/Ness Innov Centre Ltd ¹	-	-	1
41	Grtr Man Probation Service	1,214	438	483
199	Gtr Manchester Open College Network	12	3	-
147	Halle Concert Society ¹	-	-	1
156	Healey Primary School	19	9	1
151	Hollingworth High School	48	6	5
165	Holy Cross College	59	13	6
173	Hopwood Hall College	181	70	45
241	Horwich Town Council	2	1	-
184	Hyde Clarendon College	-	4	2
130	Hyndburn BC ¹	-	-	8
285	Intrain Limited	5	2	-
40	Inward ¹	-	1	1
112	Jeff Joseph Sale Moor Technology College	27	6	5
131	Lancaster City Council ¹	-	-	6
115	Landfill Management Ltd ¹	-	22	6
96	Leigh CAB ¹	1	-	1
237	Leigh Education Action Forum ¹	1	2	1
68	Liverpool Hope University College	301	51	57
168	Loreto 6th Form College	27	15	5
256	Loreto Grammar School	13	5	1
293	Lost Paws Limited ¹	-	1	-
166	M A N C A T	526	181	98
140	Macclesfield BC ¹	-	-	8
305	Manchester & District Housing Association	5	-	-
90	Manchester & Salford FSU	12	20	2
290	Manchester 50 Pool Ltd	117	1	1
281	Manchester Airport Aviation Services Ltd	44	15	10
19	Manchester Airport plc	991	633	1,219
277	Manchester Airport Ventures Limited	40	10	8
89	Manchester CAB	20	27	8
306	Manchester Care Limited [Salford EPH]	60	2	3
69	Manchester Care Ltd	168	113	167
108	Manchester Centre For The Deaf	4	-	-
1	Manchester City Council	15,465	9,351	14,356
10	Manchester Council for Community Relations	-	1	1
7	Manchester Metropolitan University	1,766	813	590
201	Manchester Minibus Agency	7	4	-
227	Manchester North & South Valuation Tribunals ¹	-	2	3
73	Manchester Port Health Authority	3	3	10
214	Marketing Manchester	16	21	-
207	Marple Citizens Advice Bureau ¹	-	-	1
229	Mechanics Centre Ltd	2	1	-
254	Metro Rochdale Employees Credit Union Limited	2	-	-
216	Metrotec (Wigan) Ltd ¹	-	1	-
231	Midas Limited	25	8	-
225	Moss Side & Hulme Economic Agency Ltd ¹	-	2	-



Greater Manchester Pension Fund

Actuarial Valuation as at 31 March 2004

Employer Code	Employer	Number of Members		
		Employees	Deferreds	Pensioners
50	Museum Of Science And Industry	60	56	33
77	Museums, Libraries And Archives North West	13	16	22
257	National Car Parks Manchester Ltd	30	5	1
278	National Care Standards Commission ¹	53	7	3
17	National Museum of Labour History	23	9	2
109	NEAB	-	48	48
249	New Charter Housing Trust Group	716	132	76
296	New Prospect Housing Limited	599	45	27
271	Positive Steps Oldham	136	14	2
220	North & West Greater Manchester Mcc ¹	-	30	35
181	North Area College	28	32	10
263	North Manchester Law Centre	5	2	-
62	North Regional Assoc For The Deaf ¹	-	-	1
187	North Traff College Of Furth Educ	111	51	45
45	North West Arts Board ¹	7	67	5
246	North West Development Agency	1	1	-
63	North West Local Auth Empl Orgn	17	5	5
65	North West Reg Assoc Of Educ Auth ¹	-	3	11
64	North West Regional Exam Board	-	5	12
141	North West Water ¹	-	-	4
58	Nugent House School	2	3	8
42	Nwida ¹	-	1	2
222	Old Trafford Community Development Worker Project ¹	-	3	-
172	Oldham 6th Form College	54	18	2
74	Oldham Blind Workshop ¹	-	11	43
294	Oldham Business Management School	4	-	-
88	Oldham CAB	18	6	-
171	Oldham College	253	77	47
287	Oldham Community Leisure Limited	136	6	1
81	Oldham Family Service Unit ¹	-	1	3
23	Oldham MBC	6,520	3,200	4,362
75	Oldham PCC ¹	-	-	1
78	Order Of St John ¹	-	-	1
99	Parcels Express Ltd ¹	-	3	11
126	Peel Brow Primary School	10	1	1
176	Pendleton 6th Form College	61	11	6
301	Portico Housing Association Limited ¹	1	-	-
193	Positive Futures Limited	82	11	8
134	Preston BC ¹	-	-	4
313	Proco.NW Limited	29	1	-
253	Progress Trust	8	5	-
299	Remploy Limited	9	2	-
133	Ribble Valley BC ¹	-	-	4
105	Ringway Handling Services Ltd	65	58	116
279	Rochdale Boroughwide Housing Limited	551	50	15
86	Rochdale CAB	11	5	1
224	Rochdale Centre Of Diversity	2	2	-
121	Rochdale Development Agency	2	-	-
85	Rochdale Family Service Unit	15	10	4



Greater Manchester Pension Fund

Actuarial Valuation as at 31 March 2004

Employer Code	Employer	Number of Members		
		Employees	Deferreds	Pensioners
252	Rochdale Law Centre	7	-	-
24	Rochdale MBC	6,503	3,042	4,218
135	Rossendale BC ¹	-	-	1
95	Royal Northern College Of Music	100	82	63
46	Saddleworth Parish Council	1	3	2
25	Salford City Council	6,287	3,207	5,164
177	Salford College Of Further Education	192	93	38
311	Salford Community Leisure Limited	161	3	-
122	Salford Foundation Limited	1	-	-
54	Salford University	921	400	552
33	Salford/Trafford Groundwork Trust ¹	-	5	2
67	Sedgely Park College ¹	-	-	2
169	Shena Simon 6th Form College	-	10	10
208	Shopmobility Charitable Trust	2	-	-
260	Shopmobility Manchester	1	-	-
117	Smithy Bridge Primary School	30	7	2
136	South Lakeland BC ¹	-	-	7
251	South Manchester Law Centre	9	3	-
137	South Ribble BC ¹	-	-	9
186	South Traff College Of Furth Educ	184	79	26
157	Sparth Community Centre	4	-	1
59	St Aidan's School	-	-	2
145	St Ambrose Barlow High School	19	-	4
288	St Ambrose College	10	1	-
92	St Ann's Hospice ¹	-	-	1
11	St James School Bolton	24	13	6
149	St John Fisher Primary School	8	1	-
190	St John Rigby College	19	8	5
191	St Kentigern's R.C. Primary School	7	8	3
60	St Thomas More School	-	2	14
143	Stagecoach Manchester	492	639	613
276	Stagecoach Services Limited	8	-	1
204	Stockport Cab	12	4	-
146	Stockport Canal Boat Trust for Disabled People	1	-	-
178	Stockport College Of Further & Hgr Educ	281	124	98
286	Stockport CVS ¹	1	-	-
106	Stockport Enterprises Ltd	-	1	12
26	Stockport MBC	7,195	3,660	3,974
205	Stockport Sharecare	3	1	-
280	Stockport Sports Trust	121	22	1
300	Sustainability North West	1	-	-
98	Swan Street Training Workshop ¹	-	2	3
22	Tameside Care Limited	27	147	208
213	Tameside Citizens Advice Bureau	12	2	1
182	Tameside College	256	105	53
27	Tameside MBC	5,848	2,562	4,247
243	Tameside Sports Trust	155	49	17
282	The Ace Centre-North	14	2	-
326	Cash Box Credit Union Limited	1	-	-



Greater Manchester Pension Fund

Actuarial Valuation as at 31 March 2004

Employer Code	Employer	Number of Members		
		Employees	Deferreds	Pensioners
228	The Emmanuel Community Ltd ¹	-	-	1
265	The Incubation Partnership Limited ¹	-	1	-
275	The Salfordian Trust Company Limited	1	-	-
269	The Standards Board For England	57	4	-
320	The Valuation Tribunal Service	9	-	-
273	The Velodrome Trust	8	1	-
318	The Villages Housing Association Limited	5	-	-
103	Trace Ltd ¹	-	8	3
292	Trafford Children And Young People's Service Limited	38	2	-
302	Trafford Community Leisure Trust	105	9	2
28	Trafford MBC	5,162	2,480	3,376
37	Trafford Park Development Corpn ¹	-	34	11
6	UMIST ¹	639	380	711
107	UNIAC	17	17	1
310	United Learning Trust (Manchester Academy)	12	-	-
8	University College Salford ¹	-	40	49
219	Urmston Grammar School	26	6	4
84	Valuation Panel North ¹	-	1	2
83	Valuation Panel South ¹	-	2	2
118	Wardle High School	62	13	8
119	Wardle St James Primary School	10	3	-
250	Wardleworth Community Centre Association	2	1	-
113	Wellington School	20	13	7
70	West Bank School ¹	-	1	3
116	West Hill High School	20	4	4
138	West Lancashire BC ¹	-	-	3
212	Wigan & Chorley Groundwork Trust Ltd	1	-	-
211	Wigan & District Incorporated Chamber of Commerce ¹	-	-	1
188	Wigan & Leigh College	433	138	110
283	Wigan & Leigh Housing Company Ltd	446	13	19
72	Wigan Blind Workshop ¹	-	1	3
82	Wigan CAB ¹	-	-	1
234	Wigan Chamber Of Comm T & E (Ex-Metrotec) ¹	-	4	1
233	Wigan Chamber Of Comm T & E (Ex-Wnel) ¹	-	1	-
303	Wigan Leisure & Culture Trust	621	12	12
29	Wigan MBC	7,727	2,904	5,508
31	Wigan Metrop Development Co (Inv) Ltd	23	4	5
38	Wigan New Enterprise Ltd ¹	-	1	5
242	Willow Park Housing Trust	171	29	10
189	Winstanley College	55	9	8
30	Witec Ltd ¹	-	6	3
16	Womens Local Authority Network ¹	-	3	-
139	Wyre BC ¹	-	-	2
248	Wythenshawe Education Action Forum ¹	5	-	-
312	Wythenshawe Forum Trust Limited	18	-	-
170	Xaverian 6th Form College	42	8	6
223	Yesoiday Hatorah School	6	1	1
Total		99,681	46,137	69,970

Note: 1) The majority of these employers are excluded from the Rates & Adjustments Certificate from 1 April 2005 as they will have no active members from that date, and no contributions are expected to be due for 2005/06, 2006/07 and 2007/08.



Greater Manchester Pension Fund
Actuarial Valuation as at 31 March 2004

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 £6,592,891. 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	
	£(m)	%
UK Equities	2,764	42%
UK Fixed Interest Gilts	238	4%
UK Corporate Bonds	318	5%
UK Index Linked Gilts	484	7%
Overseas Equities	1,427	22%
Overseas Bonds	338	5%
Property	616	9%
Cash	387	6%
Net Current Assets	21	0%
TOTAL (excluding AVCs)	6,593	100%

This excludes the assets in respect of money purchase AVCs.

Greater Manchester Pension Fund

Actuarial Valuation as at 31 March 2004

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	225,971	217,103	206,826	649,900
	Retirement Lump Sums	33,255	35,976	28,702	97,933
	Death Benefits	4,485	4,579	3,212	12,276
	Transfer Values	27,788	28,141	23,686	79,614
	Refunds/CEPs	1,659	1,369	1,183	4,211
	Admin Expenses	3,298	3,033	3,392	9,723
	Investment Expenses	3,456	5,271	7,520	16,247
	Other Expenditure	-	-	-	-
TOTAL		299,912	295,472	274,520	869,904
INCOME	Employee Contributions	90,680	83,718	77,959	252,357
	Employer Contributions	150,877	136,724	119,274	406,875
	Transfer Values	43,495	42,124	34,782	120,401
	Investment Income	178,872	169,100	184,390	532,363
	Other Income	514	6,411	(1,236)	5,689
TOTAL		464,438	438,077	415,170	1,317,686
Fund Value					
Assets at Start of Year		5,305,430	6,349,498	6,260,642	6,260,642
Net Cashflow		164,526	142,606	140,650	447,781
Change in value		1,122,935	(1,186,674)	(51,794)	(115,532)
Assets at End of Year		6,592,891	5,305,430	6,349,498	6,592,891
Annual Returns					
Approx Rate of Return		24.5%	-16.1%	2.0%	2.1%
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 with 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”).
- D2. This process is carried out separately for each employer. Where differences between participant employers are not considered material, we may agree with the administering Authority to pool together their results.

Past service funding position

- D3. 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

Employers Admitting New Entrants

- D4. For employers who continue to admit new entrants we have adopted the projected unit method of valuation. This is summarised below.

Projected Unit Method

- D5. 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. The value of members’ ordinary contributions over the same period is then deducted and the net cost to the employer is calculated by expressing the value of the benefits accruing as a percentage of the members’ pensionable pay over the year following the valuation date.
- D6. The cost of the lump sum death in service benefit is separately assessed as the 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.

Greater Manchester Pension Fund

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- D7. 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.

Employers not Admitting New Entrants

- D8. For employers who are no longer admitting new entrants we have adopted the *attained age* method of valuation. This is similar to the projected unit method described above, and produces the same past service position. The future service contribution rate calculation under the attained age method is summarised below.

Attained Age Method

- D9. The first stage is to calculate the value of the benefits (other than the lump sum death-in-service benefits) accruing to existing employee members over their anticipated period of future membership, by reference to projected pay as at the date of retirement or earlier exit. The value of members' ordinary contributions over the same period is then deducted and the net cost to the employer is calculated by expressing the value of the benefits accruing as a percentage of the members' pensionable pay over their remaining service lives.
- D10. 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.
- D11. If the actuarial assumptions adopted are unchanged, this funding method will, for pension benefits, give rise to a stable contribution rate in future years in respect of the existing membership. But this will only be so if certain surpluses or deficiencies revealed at subsequent actuarial valuations (i.e. those arising due to the fact that the cost of a year's accrual of pension increases with each year of age) are reflected in the contribution rate payable.

Overall result

- D12. 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.



Greater Manchester Pension Fund Actuarial Valuation as at 31 March 2004

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%	-

A different discount rate, appropriate to the employer's investment strategy has been used to determine the individual adjustment to the common contribution rate for employers which participate in the Designated Fund.

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	-	-



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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

Age	Promotional Salary Scales							
	Male Officers & Post 98 Males		Male Manuals		Female Officers & Post 98 Females		Female Manuals	
	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

Greater Manchester Pension Fund

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Other Assumptions

Age Retirements In respect of service prior to 31 March 2005 and future service for those subject to transitional protections, 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. Otherwise a normal retirement age of 65 is assumed.

Pensioner Mortality Current Pensioners - PXA92 c2004
Prospective Pensioners - PXA92 c2004

The following age ratings are applied in each case:

	<u>Males</u>	<u>Females</u>
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)

Proportions Married (including a loading for dependants benefits) Widows – one year older than female pensioners
A varying proportion of members will be married and entitled to a spouse's pension. Sample proportions are:

<u>Age</u>	<u>Males</u>	<u>Females</u>
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 - PXA92 c2014
Prospective Pensioners - PXA92 c2030
Age ratings as above

Administration Expenses 0.2% of payroll



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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: Greater Manchester Pension Fund

Inland Revenue Reference Number: 49/10370

I hereby certify that:-

- (1) in my 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: 18 March 2005
Name: Ronald S Bowie
Qualification: Fellow of the Faculty of Actuaries
Firm: Hymans Robertson
Central Exchange
20 Waterloo Street
Glasgow
G2 6DB

Greater Manchester Pension Fund
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Appendix G - Rates and Adjustments Certificate

In accordance with Regulation 77 of the Local Government Pension Scheme Regulations 1997, as amended, I 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: 18 March 2005
Name: Ronald S Bowie
Qualification: Fellow of the Faculty of Actuaries
Firm: Hymans Robertson
Central Exchange
20 Waterloo Street
Glasgow
G2 6DB

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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 12.5% 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, as set out below:-

Employer Code	Employer/Pool	Minimum Contributions for the Year ending		
		31 March 2006	31 March 2007	31 March 2008
	Bolton MBC Pool			
20	Bolton MBC	11.4%	12.1%	12.8%
315	Bolton Community Leisure Limited	11.4%	12.1%	12.8%
314	Dawn Construction Limited	11.4%	12.1%	12.8%
114	Canon Slade School	11.4%	12.1%	12.8%
110	Crompton Fold School	11.4%	12.1%	12.8%
120	George Tomlinson Secondary School	11.4%	12.1%	12.8%
11	St James School Bolton	11.4%	12.1%	12.8%
289	Bolton At Home Ltd	11.4%	12.1%	12.8%
	Bury MBC Pool			
21	Bury MBC	11.4%	12.4%	13.4%
274	Bury Gateway Club	11.4%	12.4%	13.4%
304	Groundwork Bury	11.4%	12.4%	13.4%
126	Peel Brow Primary School	11.4%	12.4%	13.4%
223	Yesoday Hatorah School	11.4%	12.4%	13.4%
329	Six Town Housing Limited	11.4%	12.4%	13.4%
	Manchester City Council Pool			
1	Manchester City Council	11.6%	12.6%	12.6%
321	Amey Highways Limited	11.6%	12.6%	12.6%
307	Eastlands Homes Partnership Ltd (Trfd Staff)	11.6%	12.6%	12.6%
291	Group 4 Total Security Limited	11.6%	12.6%	12.6%
290	Manchester 50 Pool Ltd	11.6%	12.6%	12.6%
257	National Car Parks Manchester Ltd	11.6%	12.6%	12.6%
312	Wythenshawe Forum Trust Limited	11.6%	12.6%	12.6%
191	St Kentigern's R.C. Primary School	11.6%	12.6%	12.6%
268	Greater Manchester Waste (Manchester Collections) Limited	11.6%	12.6%	12.6%
	Oldham MBC Pool			
23	Oldham MBC	11.9%	12.5%	13.2%
325	Contour Homes Ltd [Ex-FCHO]	11.9%	12.5%	13.2%
299	Remploy Limited	11.9%	12.5%	13.2%
318	The Villages Housing Association Limited	11.9%	12.5%	13.2%
284	First Choice Homes Oldham Limited	11.9%	12.5%	13.2%
	Rochdale MBC Pool			
24	Rochdale MBC	10.7%	11.6%	12.5%
160	Bamford Primary School	10.7%	11.6%	12.5%
104	Crossgates School	10.7%	11.6%	12.5%
156	Healey Primary School	10.7%	11.6%	12.5%
151	Hollingworth High School	10.7%	11.6%	12.5%
117	Smithy Bridge Primary School	10.7%	11.6%	12.5%
149	St John Fisher Primary School	10.7%	11.6%	12.5%
118	Wardle High School	10.7%	11.6%	12.5%
119	Wardle St James Primary School	10.7%	11.6%	12.5%
279	Rochdale Boroughwide Housing Limited	10.7%	11.6%	12.5%
264	Peopleprint Community Media Workshop	10.7%	11.6%	12.5%



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Employer Code	Employer/Pool	Minimum Contributions for the Year ending		
		31 March 2006	31 March 2007	31 March 2008
	Salford City Council Pool			
25	Salford City Council	10.9%	11.9%	12.8%
323	Jarvis Accommodation Services Limited	10.9%	11.9%	12.8%
306	Manchester Care Limited [Salford EPH]	10.9%	11.9%	12.8%
311	Salford Community Leisure Limited	10.9%	11.9%	12.8%
275	The Salfordian Trust Company Limited	10.9%	11.9%	12.8%
145	St Ambrose Barlow High School	10.9%	11.9%	12.8%
296	New Prospect Housing Limited	10.9%	11.9%	12.8%
	Stockport MBC Pool			
26	Stockport MBC	9.9%	11.0%	12.0%
280	Stockport Sports Trust	9.9%	11.0%	12.0%
	Tameside MBC Pool			
27	Tameside MBC	10.0%	11.1%	12.2%
12	Audenshaw High School	10.0%	11.1%	12.2%
124	Fairfield High School	10.0%	11.1%	12.2%
116	West Hill High School	10.0%	11.1%	12.2%
	Trafford MBC Pool			
28	Trafford MBC ⁵	10.2%	11.2%	12.2%
259	Deckers Restaurants Limited	10.2%	11.2%	12.2%
302	Trafford Community Leisure Trust	10.2%	11.2%	12.2%
203	Altrincham Boys Grammar School	10.2%	11.2%	12.2%
217	Altrincham Grammar School For Girls	10.2%	11.2%	12.2%
111	Ashton On Mersey School Sports College	10.2%	11.2%	12.2%
123	Blessed Thomas Holford Catholic School	10.2%	11.2%	12.2%
112	Jeff Joseph Sale Moor Technology College	10.2%	11.2%	12.2%
256	Loreto Grammar School	10.2%	11.2%	12.2%
288	St Ambrose College	10.2%	11.2%	12.2%
219	Urmston Grammar School	10.2%	11.2%	12.2%
113	Wellington School	10.2%	11.2%	12.2%
292	Trafford Children And Young People's Service Limited	10.2%	11.2%	12.2%
	Wigan MBC Pool			
29	Wigan MBC	12.0%	12.0%	12.9%
285	Intrain Limited	12.0%	12.0%	12.9%
319	NPS North West Limited	12.0%	12.0%	12.9%
313	Proco.NW Limited	12.0%	12.0%	12.9%
303	Wigan Leisure & Culture Trust	12.0%	12.0%	12.9%
283	Wigan & Leigh Housing Company Ltd	12.0%	12.0%	12.9%
Non Local Authority Pools With One Live Employer (highlighted)				
55/64/109/255	Assessment And Qualifications Alliance	15.1%	15.1%	15.1%
238/239	Ashton Pioneer Homes Ltd *	13.7%	13.7%	13.7%
106/148	Borough Care Ltd	13.5%	14.1%	14.6%
167/169	City College Manchester	12.8%	12.8%	12.8%
158/270	Connexions Cumbria Limited	11.9%	11.9%	11.9%
182/184	Tameside College	13.6%	13.6%	13.6%



Greater Manchester Pension Fund

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Employer Code	Employer/Pool	Minimum Contributions for the Year ending		
		31 March 2006	31 March 2007	31 March 2008
Non Local Authority Pools With Connected Employers (highlighted employers are live)				
196/197/308	Better Choices Pool Better Choices Limited (Tfd Staff) Better Choices Limited (New Staff) Employment and Regeneration Partnership Limited	14.2%	14.5%	14.5%
13/14/245	Greater Manchester Passenger Transport Pool GMPTE Greater Manchester Buses Ltd Greater Manchester Public Transport Information	12.0%	12.0%	12.0%
19/105/281/277	Manchester Airport Pool Manchester Airport plc* Ringway Handling Serviced Limited Manchester Airport Aviation Services Limited Manchester Airport Ventures Limited	14.7%	14.7%	14.7%
143/276	Stagecoach Manchester Pool* Stagecoach Manchester Limited Stagecoach Services Limited	10.5%	12.0%	15.0%
54/300	Salford University Pool Salford University Sustainability North West	11.0%	12.0%	13.0%
Small Admitted Bodies Pool				
43	APSE	12.6%	12.6%	12.6%
56	Birtenshaw Hall (Children's Charitable Trust)	12.6%	12.6%	12.6%
57-60	Nugent Care Society	12.6%	12.6%	12.6%
230	Bolton Racial Equality Council	12.6%	12.6%	12.6%
261	Breakthrough UK Limited	12.6%	12.6%	12.6%
218	Bury College Enterprises Ltd	12.6%	12.6%	12.6%
326	Cash Box Credit Union Limited	12.6%	12.6%	12.6%
97	Catholic Childrens Rescue Society	12.6%	12.6%	12.6%
195	Centra	12.6%	12.6%	12.6%
87	Chethams School Of Music	12.6%	12.6%	12.6%
94	CLES	12.6%	12.6%	12.6%
198	Cloverhall Tenants Assoc Co-Op Ltd	12.6%	12.6%	12.6%
226	Council For Voluntary Service Rochdale	12.6%	12.6%	12.6%
272	Dance Initiative Greater Manchester	12.6%	12.6%	12.6%
53	Greater Manchester Immig Aid Unit	12.6%	12.6%	12.6%
247	Greater Manchester Sports Partnership	12.6%	12.6%	12.6%
215	Greater Manchester Youth Justice Trust	12.6%	12.6%	12.6%
202	Groundwork Manchester, Salford and Trafford Ltd	12.6%	12.6%	12.6%
32	Groundwork Oldham & Rochdale	12.6%	12.6%	12.6%
267	Groundwork Tameside	12.6%	12.6%	12.6%
199	Gtr Manchester Open College Network	12.6%	12.6%	12.6%
90	Manchester & Salford FSU	12.6%	12.6%	12.6%
89	Manchester CAB	12.6%	12.6%	12.6%
108	Manchester Centre For The Deaf	12.6%	12.6%	12.6%
10	Manchester Council for Community Relations	12.6%	12.6%	12.6%
201	Manchester Minibus Agency	12.6%	12.6%	12.6%
214	Marketing Manchester	12.6%	12.6%	12.6%
229	Mechanics Centre Ltd	12.6%	12.6%	12.6%



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Employer Code	Employer/Pool	Minimum Contributions for the Year ending		
		31 March 2006	31 March 2007	31 March 2008
254	Metro Rochdale Employees Credit Union Limited	12.6%	12.6%	12.6%
231	Midas Limited	12.6%	12.6%	12.6%
77	Museums, Libraries And Archives North West	12.6%	12.6%	12.6%
17	National Museum of Labour History	12.6%	12.6%	12.6%
263	North Manchester Law Centre	12.6%	12.6%	12.6%
63	North West Local Auth Empl Orgn	12.6%	12.6%	12.6%
88	Oldham CAB	12.6%	12.6%	12.6%
86	Rochdale CAB	12.6%	12.6%	12.6%
224	Rochdale Centre Of Diversity	12.6%	12.6%	12.6%
121	Rochdale Development Agency	12.6%	12.6%	12.6%
85	Rochdale Family Service Unit	12.6%	12.6%	12.6%
252	Rochdale Law Centre	12.6%	12.6%	12.6%
122	Salford Foundation	12.6%	12.6%	12.6%
208	Shopmobility Charitable Trust	12.6%	12.6%	12.6%
260	Shopmobility Manchester	12.6%	12.6%	12.6%
251	South Manchester Law Centre	12.6%	12.6%	12.6%
157	Sparth Community Centre	12.6%	12.6%	12.6%
204	Stockport Cab	12.6%	12.6%	12.6%
146	Stockport Canal Boat Trust for Disabled People	12.6%	12.6%	12.6%
205	Stockport Sharecare	12.6%	12.6%	12.6%
213	Tameside Citizens Advice Bureau	12.6%	12.6%	12.6%
107	UNIAC	12.6%	12.6%	12.6%
250	Wardleworth Community Centre Association	12.6%	12.6%	12.6%
212	Wigan & Chorley Groundwork Trust Ltd	12.6%	12.6%	12.6%
31	Wigan Metrop Development Co (Inv) Ltd	12.6%	12.6%	12.6%
Small Colleges Pool				
179	Aquinas College	11.3%	11.7%	12.1%
183	Ashton Under Lyne 6th Form College	11.3%	11.7%	12.1%
235	Bolton Sixth Form College	11.3%	11.7%	12.1%
175	Eccles 6th Form College	11.3%	11.7%	12.1%
165	Holy Cross College	11.3%	11.7%	12.1%
168	Loreto 6th Form College	11.3%	11.7%	12.1%
181	North Area College	11.3%	11.7%	12.1%
172	Oldham 6th Form College	11.3%	11.7%	12.1%
176	Pendleton 6th Form College	11.3%	11.7%	12.1%
190	St John Rigby College	11.3%	11.7%	12.1%
189	Winstanley College	11.3%	11.7%	12.1%
170	Xaverian 6th Form College	11.3%	11.7%	12.1%
Other Local Authorities Pool				
48	Aintree Village Parish Council	8.8%	9.8%	10.8%
200	Blackrod Town Council	8.8%	9.8%	10.8%
241	Horwich Town Council	8.8%	9.8%	10.8%
73	Manchester Port Health Authority	8.8%	9.8%	10.8%
46	Saddleworth Parish Council	8.8%	9.8%	10.8%
320	The Valuation Tribunal Service	8.8%	9.8%	10.8%



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		Minimum Contributions for the Year ending		
Employer Code	Employer/Pool	31 March 2006	31 March 2007	31 March 2008
Separate Employers				
262	Alfred McAlpine Construction Limited*	15.6%	15.6%	15.6%
100	Borough Care Services Ltd	28.0%	28.0%	28.0%
297	Bowlee Park Housing Association	13.6%	14.4%	15.1%
316	Commission for Social Care Inspection	13.7%	15.4%	17.1%
209	Connexions Lincolnshire And Rutland Limited	13.7%	13.7%	13.7%
309	Eastlands Homes Partnership Ltd (New Staff)	12.8%	12.8%	12.8%
142	First Manchester Ltd *	11.5%	12.5%	15.0%
295	Greater Manchester Connexions Partnership Limited	12.8%	12.8%	12.8%
194	Greater Manchester Waste Ltd*	17.0%	17.0%	17.0%
68	Liverpool Hope University College	15.0%	15.0%	15.0%
305	Manchester & District Housing Association	12.8%	12.8%	12.8%
69	Manchester Care Ltd	15.9%	16.9%	17.9%
50	Museum Of Science And Industry	12.5%	13.1%	13.6%
249	New Charter Housing Trust Group	14.1%	16.4%	18.7%
271	Positive Steps Oldham	12.8%	12.8%	12.8%
287	Oldham Community Leisure Limited	12.0%	12.0%	12.0%
193	Positive Futures Limited	13.3%	14.2%	15.1%
22	Tameside Care Limited*	14.0%	14.0%	14.0%
243	Tameside Sports Trust	10.9%	11.3%	11.7%
282	The Ace Centre-North	12.8%	12.8%	12.8%
328	The University of Manchester*	13.6%	13.6%	13.6%
242	Willow Park Housing Trust	12.3%	13.3%	14.2%
161	Bolton Community College	13.9%	14.6%	15.2%
164	Bury College	13.4%	13.4%	13.4%
180	Cheadle & Marple 6th Form College	13.6%	13.6%	13.6%
173	Hopwood Hall College	13.3%	13.5%	13.7%
166	M A N C A T	13.4%	13.4%	13.4%
187	North Traff College Of Furth Educ	12.1%	12.4%	12.7%
171	Oldham College	13.2%	13.2%	13.2%
177	Salford College Of Further Education	13.6%	13.6%	13.6%
186	South Traff College Of Furth Educ	12.9%	12.9%	12.9%
178	Stockport College Of Further & Hgr Educ	12.8%	13.1%	13.1%
188	Wigan & Leigh College	15.8%	15.8%	15.8%
5	The University of Bolton	14.2%	14.2%	14.2%
7	Manchester Metropolitan University	12.4%	12.8%	13.1%
95	Royal Northern College Of Music	13.0%	13.5%	13.9%
3	Greater Manchester Fire & Civil Defence Authority	16.2%	16.4%	16.6%
4	Greater Manchester Police Authority	14.1%	14.1%	14.1%
2	Greater Manchester Waste Disposal Authority *	10.6%	12.8%	15.0%
41	Grtr Man Probation Service	12.8%	12.8%	12.8%
294	Oldham Business Management School	12.8%	12.8%	12.8%
269	The Standards Board For England	13.0%	13.0%	13.0%
273	The Velodrome Trust	12.8%	12.8%	12.8%
310	United Learning Trust (Manchester Academy)	12.8%	12.8%	12.8%
Other Employers With No Employee Members From 1 April 2005				
220	North & West Greater Manchester MCC	To be agreed ⁴		
266	Greater Manchester Magistrates Courts Comm	To be agreed ⁴		
New Employers				
TBC	Trafford Housing ⁵	11.4%	11.4%	11.4%



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Notes

(1) Further sums should be paid to the Fund by employers to meet the costs of any ill health retirements and other early retirements that exceed the budgeted cost.

(2) Contributions expressed as a percentage should be paid into Greater Manchester Pension Fund at a frequency in accordance with the requirements of the Regulations.

(3) 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.

(4) The employee members of the Magistrates' Courts Committee employers are to be transferred to the Principal Civil Service Pension Scheme with effect from 1 April 2005. It is not yet clear whether the deficit in respect of members whose past service benefits do not transfer, will be met through adjusting the bulk transfer payment or whether Regulations will be made to enable the Department for Constitutional Affairs, as successor employer, to participate in the LGPS. Further contributions may be made as agreed by the Administering Authority and the Actuary.

(5) It has been agreed that Trafford Housing's participation in the Fund should commence at a funding level of 100%. We understand that Trafford Metropolitan Borough Council will make a payment or payments to the Fund towards the assessed deficit (estimated to be approximately £600,000 based on the potentially transferring membership). These payments will be in addition to the contributions shown in the table above.

* Annual lump sum contributions are payable in addition to the percentage of pay rates, in line with figures in the table below.

Employer Code	Employer/Pool	Lump Sum Payment (£'000 pa) for the Year ending		
		31 March 2006	31 March 2007	31 March 2008
19	Manchester Airport plc	1,985.0	2,072.3	2,163.5
143/276	Stagecoach Manchester Pool	168.0	175.4	183.1
194	Greater Manchester Waste Ltd	280.0	292.3	305.2
328	The University of Manchester	189.0	197.3	206.0
239	Ashton Pioneer Homes Ltd	8.0	8.4	8.7
262	Alfred McAlpine Construction Limited	156.0	162.9	170.0
142	First Manchester Ltd	529.0	552.3	576.6
22	Tameside Care Limited	40.0	41.8	43.6
2	Greater Manchester Waste Disposal Authority	87.0	90.8	94.8



Appendix H – Ill-health Early Retirements

Included in the valuation calculations is an assumption in relation to the expected incidence of retirements on the grounds of ill health for employee members for each year in the future. The allowance made varies by age and class and so will be different for each employer or pool of employers depending on the profile of their employee membership.

The following table sets out:

- the expected number per annum based on the employee membership at the valuation date;
- the expected number per annum per 1,000 employee members;
- the expected cost per annum as a monetary amount as at the valuation date; and
- the expected cost per annum expressed as a percentage of pensionable pay.

Greater Manchester Pension Fund

Actuarial Valuation as at 31 March 2004

Employer Code	Employer/Pool	Expected Number p.a.		Expected Cost p.a.	
		total	per 1000	£(000s)	% of payroll
	Bolton MBC Pool	80	9	2,483	1.97%
20	Bolton MBC				1.97%
315	Bolton Community Leisure Limited				1.97%
314	Dawn Construction Limited				1.97%
114	Canon Slade School				1.97%
110	Crompton Fold School				1.97%
120	George Tomlinson Secondary School				1.97%
11	St James School Bolton				1.97%
289	Bolton At Home Ltd				1.97%
	Bury MBC Pool	46	9	1,442	2.16%
21	Bury MBC				2.16%
274	Bury Gateway Club				2.16%
304	Groundwork Bury				2.16%
126	Peel Brow Primary School				2.16%
223	Yesoiday Hatorah School				2.16%
329	Six Town Housing Limited				2.16%
	Manchester City Council Pool	150	9	5,193	2.05%
1	Manchester City Council				2.05%
321	Amey Highways Limited				2.05%
307	Eastlands Homes Partnership Ltd (Trfd Staff)				2.05%
291	Group 4 Total Security Limited				2.05%
290	Manchester 50 Pool Ltd				2.05%
257	National Car Parks Manchester Ltd				2.05%
312	Wythenshawe Forum Trust Limited				2.05%
191	St Kentigern's R.C. Primary School				2.05%
268	Greater Manchester Waste (Manchester Collections) Limited				2.05%
	Oldham MBC Pool	62	9	1,967	2.08%
23	Oldham MBC				2.08%
325	Contour Homes Ltd [Ex-FCHO]				2.08%
299	Remploy Limited				2.08%
318	The Villages Housing Association Limited				2.08%
284	First Choice Homes Oldham Limited				2.08%
	Rochdale MBC Pool	62	9	2,026	2.08%
24	Rochdale MBC				2.08%
160	Bamford Primary School				2.08%
104	Crossgates School				2.08%
156	Healey Primary School				2.08%
151	Hollingworth High School				2.08%
117	Smithy Bridge Primary School				2.08%
149	St John Fisher Primary School				2.08%
118	Wardle High School				2.08%
119	Wardle St James Primary School				2.08%
279	Rochdale Boroughwide Housing Limited				2.08%
264	Peopleprint Community Media Workshop				2.08%
	Salford City Council Pool	62	9	2,074	1.92%
25	Salford City Council				1.92%
323	Jarvis Accommodation Services Limited				1.92%
306	Manchester Care Limited [Salford EPH]				1.92%
311	Salford Community Leisure Limited				1.92%
275	The Salfordian Trust Company Limited				1.92%
145	St Ambrose Barlow High School				1.92%
296	New Prospect Housing Limited				1.92%



Greater Manchester Pension Fund

Actuarial Valuation as at 31 March 2004

Employer Code	Employer/Pool	Expected Number		Expected Cost p.a.	
		per annum	per 1000 p.a	£(000s)	% of payroll
	Stockport MBC Pool	62	8	1,919	2.01%
26	Stockport MBC				2.01%
280	Stockport Sports Trust				2.01%
	Tameside MBC Pool	51	9	1,688	2.06%
27	Tameside MBC				2.06%
12	Audenshaw High School				2.06%
124	Fairfield High School				2.06%
116	West Hill High School				
	Trafford MBC Pool	46	9	1,447	2.10%
28	Trafford MBC				2.10%
259	Deckers Restaurants Limited				2.10%
302	Trafford Community Leisure Trust				2.10%
203	Altrincham Boys Grammar School				2.10%
217	Altrincham Grammar School For Girls				2.10%
111	Ashton On Mersey School Sports College				2.10%
123	Blessed Thomas Holford Catholic School				2.10%
112	Jeff Joseph Sale Moor Technology College				2.10%
256	Loreto Grammar School				2.10%
288	St Ambrose College				2.10%
219	Urmston Grammar School				2.10%
113	Wellington School				2.10%
292	Trafford Children And Young People's Service Limited				2.10%
	Wigan MBC Pool	76	9	2,383	2.11%
29	Wigan MBC				2.11%
285	Intrain Limited				2.11%
319	NPS North West Limited				2.11%
313	Proco.NW Limited				2.11%
303	Wigan Leisure & Culture Trust				2.11%
283	Wigan & Leigh Housing Company Ltd				2.11%
Non Local Authority Pools With One Live Employer					
55/64/109/255	Assessment And Qualifications Alliance Pool	3	8	98	1.28%
238/239	Ashton Pioneer Homes Ltd	0	5	1	3.52%
106/148	Borough Care Ltd	2	9	48	2.25%
167/169	City College Manchester	4	7	118	1.48%
158/270	Connexions Cumbria Limited	1	7	37	1.18%
182/184	Tameside College	2	7	59	1.54%
Non Local Authority Pools With Connected Employers					
196/197/308	Better Choices Pool	2	6	59	1.08%
196	Better Choices Limited (Tfd Staff)				1.08%
197	Better Choices Limited (New Staff)				1.08%
308	Employment and Regeneration Partnership Limited				1.08%
13/14/245	Greater Manchester Passenger Transport Pool	5	11	135	1.40%
13	GMPTE				1.40%
14	Greater Manchester Buses Ltd				1.40%
245	Greater Manchester Public Transport Information				1.40%



Greater Manchester Pension Fund

Actuarial Valuation as at 31 March 2004

Employer Code	Employer/Pool	Expected Number		Expected Cost p.a.	
		per annum	per 1000 p.a	£(000s)	% of payroll
19/105/281/277	Manchester Airport Pool	16	14	519	1.84%
19	Manchester Airport plc				1.84%
105	Ringway Handling Serviced Limited				1.84%
281	Manchester Airport Aviation Services Limited				1.84%
277	Manchester Airport Ventures Limited				1.84%
143/276	Stagecoach Manchester Pool	17	33	452	3.69%
143	Stagecoach Manchester Limited				3.69%
276	Stagecoach Services Limited				3.69%
54/300	Salford University Pool	10	10	263	1.78%
54	Salford University				1.78%
300	Sustainability North West				1.78%
Small Admitted Bodies Pool		4	7	134	1.10%
43	APSE				1.10%
56	Birtenshaw Hall (Children's Charitable Trust)				1.10%
57-60	Nugent Care Society				1.10%
230	Bolton Racial Equality Council				1.10%
261	Breakthrough UK Limited				1.10%
218	Bury College Enterprises Ltd				1.10%
326	Cash Box Credit Union Limited				1.10%
97	Catholic Childrens Rescue Society				1.10%
195	Centra				1.10%
87	Chethams School Of Music				1.10%
94	CLES				1.10%
198	Cloverhall Tenants Assoc Co-Op Ltd				1.10%
226	Council For Voluntary Service Rochdale				1.10%
272	Dance Initiative Greater Manchester				1.10%
53	Greater Manchester Immig Aid Unit				1.10%
247	Greater Manchester Sports Partnership				1.10%
215	Greater Manchester Youth Justice Trust				1.10%
202	Groundwork Manchester, Salford and Trafford Ltd				1.10%
32	Groundwork Oldham & Rochdale				1.10%
267	Groundwork Tameside				1.10%
199	Gtr Manchester Open College Network				1.10%
90	Manchester & Salford FSU				1.10%
89	Manchester CAB				1.10%
108	Manchester Centre For The Deaf				1.10%
10	Manchester Council for Community Relations				1.10%
201	Manchester Minibus Agency				1.10%
214	Marketing Manchester				1.10%
229	Mechanics Centre Ltd				1.10%
254	Metro Rochdale Employees Credit Union Limited				1.10%
231	Midas Limited				1.10%
77	Museums, Libraries And Archives North West				1.10%
17	National Museum of Labour History				1.10%
263	North Manchester Law Centre				1.10%
63	North West Local Auth Empl Orgn				1.10%
88	Oldham CAB				1.10%
86	Rochdale CAB				1.10%
224	Rochdale Centre Of Diversity				1.10%
121	Rochdale Development Agency				1.10%
85	Rochdale Family Service Unit				1.10%
252	Rochdale Law Centre				1.10%
122	Salford Foundation				1.10%



Greater Manchester Pension Fund

Actuarial Valuation as at 31 March 2004

Employer Code Employer/Pool		Expected Number		Expected Cost p.a.	
		per annum	per 1000 p.a	£(000s)	% of payroll
Small Admitted Bodies (Continued)					
157	Sparth Community Centre				1.09%
204	Stockport Cab				1.09%
146	Stockport Canal Boat Trust for Disabled People				1.09%
205	Stockport Sharecare				1.09%
213	Tameside Citizens Advice Bureau				1.09%
107	UNIAC				1.09%
250	Wardleworth Community Centre Association				1.09%
212	Wigan & Chorley Groundwork Trust Ltd				1.09%
31	Wigan Metrop Development Co (Inv) Ltd				1.09%
Small Colleges Pool		4	8	141	1.89%
179	Aquinas College				1.89%
183	Ashton Under Lyne 6th Form College				1.89%
235	Bolton Sixth Form College				1.89%
175	Eccles 6th Form College				1.89%
165	Holy Cross College				1.89%
168	Loreto 6th Form College				1.89%
181	North Area College				1.89%
172	Oldham 6th Form College				1.89%
176	Pendleton 6th Form College				1.89%
190	St John Rigby College				1.89%
189	Winstanley College				1.89%
170	Xaverian 6th Form College				1.89%
Other Local Authorities Pool		0	10	6	1.54%
48	Aintree Village Parish Council				1.54%
200	Blackrod Town Council				1.54%
241	Horwich Town Council				1.54%
73	Manchester Port Health Authority				1.54%
46	Saddleworth Parish Council				1.54%
320	The Valuation Tribunal Service				1.54%
Separate Employers					
262	Alfred McAlpine Construction Limited	1	21	26	3.19%
100	Borough Care Services Ltd	1	11	22	3.17%
297	Bowlee Park Housing Association	0	14	9	1.93%
316	Commission for Social Care Inspection	1	11	19	4.20%
209	Connexions Lincolnshire And Rutland Limited	1	7	53	1.33%
309	Eastlands Homes Partnership Ltd (New Staff)	0	0	-	0.00%
142	First Manchester Ltd	27	33	771	3.75%
295	Greater Manchester Connexions Partnership Limited	0	5	3	0.68%
194	Greater Manchester Waste Ltd	6	26	187	3.43%
68	Liverpool Hope University College	2	8	77	1.48%
305	Manchester & District Housing Association	0	2	1	0.55%
69	Manchester Care Ltd	2	11	63	2.98%
50	Museum Of Science And Industry	0	6	15	1.27%



Greater Manchester Pension Fund

Actuarial Valuation as at 31 March 2004

Employer Code	Employer/Pool	Expected Number		Expected Cost p.a.	
		per annum	per 1000 p.a	£(000s)	% of payroll
249	New Charter Housing Trust Group	9	12	292	2.11%
271	Positive Steps Oldham	1	4	20	0.73%
287	Oldham Community Leisure Limited	1	5	24	1.42%
193	Positive Futures Limited	1	8	23	1.39%
22	Tameside Care Limited	0	9	7	1.85%
243	Tameside Sports Trust	1	6	32	1.81%
282	The Ace Centre-North	0	4	3	0.87%
328	The University of Manchester	7	11	175	1.61%
242	Willow Park Housing Trust	2	12	75	2.12%
161	Bolton Community College	2	9	63	1.72%
164	Bury College	2	8	55	1.71%
180	Cheadle & Marple 6th Form College	2	8	58	2.15%
173	Hopwood Hall College	2	9	47	1.77%
166	M A N C A T	4	7	113	1.26%
187	North Traff College Of Furth Educ	1	7	23	1.43%
171	Oldham College	2	7	51	1.24%
177	Salford College Of Further Education	2	10	58	2.16%
186	South Traff College Of Furth Educ	2	9	57	2.28%
178	Stockport College Of Further & Hgr Educ	3	10	78	1.98%
188	Wigan & Leigh College	4	10	124	1.99%
5	The University of Bolton	3	9	91	1.54%
7	Manchester Metropolitan University	17	10	501	1.75%
95	Royal Northern College Of Music	1	10	25	1.32%
3	Greater Manchester Fire & Civil Defence Authority	5	10	148	2.02%
4	Greater Manchester Police Authority	30	8	871	1.34%
2	Greater Manchester Waste Disposal Authority	0	19	14	2.01%
41	Grtr Man Probation Service	10	8	301	1.27%
294	Oldham Business Management School	0	2	0	0.62%
269	The Standards Board For England	0	5	9	0.42%
273	The Velodrome Trust	0	11	3	1.76%
310	United Learning Trust (Manchester Academy)	0	10	4	2.00%
New Employers					
TBC	Trafford Housing	2	9	65	1.98%