

ITEM NO: 13

Report To:	Pension Fund Management Panel and Advisory Panel
Date:	3 December 2010
Reporting Officer:	Peter Morris, Executive Director of Pensions
Subject :	ACTUARIAL VALUATION
Report Summary:	<p>The Actuary has been giving periodic updates to the Fund regarding the 2010 actuarial valuation and the issues that will arise there from. The purpose of this report is to provide a further update that will serve as background to the Actuary's presentations to the Panel.</p>
Recommendations:	<ul style="list-style-type: none">(i) To support the Actuary's use of assumptions as set out in Option 2.(ii) That employers continue to be advised of their indicative outcomes.(iii) Where there are very difficult cases, the Executive Director of Pensions take appropriate actuarial, financial and legal advice in implementing the valuation outcome in line with the Funding Strategy Statement.(iv) The Funding Strategy Statement be amended to reflect the proposals in the report re<ul style="list-style-type: none">- deficit recovery;- the valuation method adopted by the Actuary be considered on a case by case basis.
Financial Implications: (Authorised by the Borough Treasurer)	<p>The 2010 actuarial valuation will result in higher employer contributions for most employers. Additional costs of advice, e.g. legal and actuarial are likely to be incurred to assist in discussions with employers.</p>
Legal Implications: (Authorised by the Solicitor to the Fund)	<p>The Regulations require an actuarial valuation to be undertaken as at 31 March 2010. It is important that the necessary legal, financial and actuarial advice is taken in making each individual decision in line with the Funding Strategy Statement.</p>
Risk Management:	<p>The Actuary and the Panel will have complex issues to consider in setting contribution rates for the next 3 years balancing prudence, stability, affordability and stewardship.</p> <p>In determining his valuation, the Actuary needs to take account of the Administering Authority's Funding Strategy Statement. The process needs to be transparent. There are four key risks that need to be managed in this exercise, these are financial, demographic, regulatory and governance.</p>

ACCESS TO INFORMATION:

NON-CONFIDENTIAL

This report does not contain information which warrants its consideration in the absence of the Press or members of the public.

Background Papers:

Initial results from Hymans Robertson.

For further information please contact Peter Morris, Executive Director of Pensions, Greater Manchester Pension Fund, Wellington Road, Ashton-Under-Lyne, Tel 0161 342 3438, email peter.morris@tameside.gov.uk

1. INTRODUCTION

- 1.1 Every three years, the Administering Authority must have an actuarial valuation undertaken. Dates are specified in the Regulations and the Actuary is required to carry out his valuation as at 31 March 2010.
- 1.2 The key questions that the valuation is trying to answer are:
- how much is the employer's contribution
 - when such payments should be made
- 1.3 The Panel and employers have received periodic updates on the likely outcomes of the 2010 actuarial valuation. The Actuary will give a further update at the meeting.
- 1.4 The aims of this report and the Actuary's presentation are:-
- (i) to comment on proposed changes to the assumptions, that in aggregate, have had a potentially beneficial impact on funding levels;
 - (ii) to flag issues that the Actuary and Panel will need to consider as part of the valuation process;

The Actuary will also include indicative results at the local authority level in his presentation.

2. ROLE OF THE ACTUARY AND FUNDING STRATEGY STATEMENT

- 2.1 The Regulations require administering authorities to consult on and publish a Funding Strategy Statement (FSS). This was first published in 2005 and it is good practice to review it every three years as part of the actuarial valuation process. The Ethics and Audit Working Group at its July 2010 meeting gave consideration to minor revisions that incorporated the Actuary's comments, proposed for the FSS. A copy of the draft Funding Strategy Statement can be found on the Fund's website at www.gmpf.org.uk or alternatively a copy can be obtained from Loretta Stowers (0161-342-2952). Further revisions may be necessary following the Panel meeting, prior to the Panel considering formal adoption of the statement at its March meeting.
- 2.2 The purpose of the FSS is:-
- (i) to establish a clear and transparent fund specific strategy which will identify how employers' pension liabilities are best met going forward;
 - (ii) to support the regulatory framework to maintain as nearly constant employer contribution rates as possible;
 - (iii) to take a prudent longer term view of funding those liabilities.
- 2.3 In determining employer contribution rates the Actuary must have regard to:-
- (i) the existing and prospective liabilities of the Fund;
 - (ii) the desirability of maintaining as nearly constant a rate as possible;
 - (iii) the Funding Strategy Statement which drives many of the key assumptions in the valuation.
- 2.4 This continues to be a challenging and difficult task to balance the conflicting aims of affordability of contributions, transparency of processes, stability of employer's contributions and prudence in the funding basis. The different types of employers within the Fund adds to the complexity. In developing the valuation assumptions, the Actuary is aiming to ensure they are realistic and the scope for prudence is reflected in the investment return assumption.

- 2.5 A change proposed to the Funding Strategy Statement following discussion with the Actuary relates to the basis on which the Actuary determines the “Future Service Rate” (FSR). The FSR is the rate required from employers, with the aim of ensuring that there are sufficient assets built up to meet future benefit payments in respect of future service. Historically the FSS has differentiated between employers that admit new members and those that do not.
- The Projected Unit method has been used for those with stable membership.
 - The Attained Age method has been used for those employers that have stopped admitting new members.
- 2.6 The norm is for pension costs to increase as the average age of employees increases, hence the different methods. The attained age method aims to provide stability of cost for an ageing membership that results in a higher initial employer cost than the projected unit method. The scale of current uncertainties, such as the economic and financial environment are likely to result in high volatility of cost. Thus it is proposed that the “Projected Unit Method” can be used for employers that are not currently admitting new members and that those employers that have an ageing membership be made aware of the impact of the change in basis. Such decisions need to be taken on a case by case basis to take account of local circumstances.

3. RECENT DEVELOPMENTS

- 3.1 In the 2010 budget, the Government announced a two year pay freeze for public sector workers (those whom they employ directly), except for those earning less than £21,000 a year who will receive an increase of at least £250 per year in those years. For local authority employees, who are not employed directly by the government, it is expected that Local Government will follow suit.
- 3.2 The Government also announced proposals to adopt the Consumer Price Index (CPI) for the indexation of benefits, tax credits and public service pensions from April 2011.
- 3.3 The Public Service Pensions Commission has produced an interim report, considering the case for short term savings within the Spending Review period. A final report will be produced to help inform the 2011 Budget.
- 3.4 The Chancellor, in his Comprehensive Spending Review speech was supportive of the Commission’s report.
- 3.5 The relevant headlines from the Phase 1 report (and CSR) are:-
- (i) a final salary pension scheme is fundamentally unfair; (hence we should expect a different type of scheme to be recommended in the Commission’s final report) but Lord Hutton comments “In making clear I believe there is a case for further reform I have therefore rejected a race to the bottom as the only answer, and hope that reformed public sector pensions can be seen as once again providing a benchmark for the private sector to aim towards”.
 - (ii) 40% of adult life could be spent in retirement (a long term solution needs to be found to manage the costs of improved longevity).
 - (iii) increasing employee contributions is the only option available for reducing short term costs. The Chancellor has reflected a £1.8bn saving from increased contributions by 2015. Lord Hutton advised of the need for careful consideration of such changes to avoid undue hardship and minimise the risk of any rise in the

number of employees who opt out of scheme membership (this change does not apply to the armed forces).

(iv) accrued rights will be protected, but what this means has not yet been defined. The different approaches to protection can have materially different outcomes.

3.6 The Chancellor announced in his CSR speech that the State Pension Age should rise to 66 in 2020. Consideration will also be given about how best to combat the long term implications of improving longevity and how to phase out the default retirement age from April 2011.

3.7 The Government has announced changes to the basis of Pensions tax relief (a separate item on the agenda).

4. IMPLICATIONS OF LEGISLATIVE OR PROSPECTIVE LEGISLATIVE CHANGES

4.1 At the last meeting the Actuary explained that he would be reflecting the “pay freeze” in his valuation assumptions. However, he highlighted that there was a risk based on long term evidence, that pay restraint in the short term is offset by higher compensating increases in the longer term.

4.2 The Actuary cannot reflect prospective legislation changes in his valuation, but in considering the longer term prospects for pay growth, the economic outlook and prospective changes to scheme design are “background factors”.

4.3 The change in the basis of calculating inflationary increases on pensions and deferred benefits from RPI to CPI is expected to improve funding levels in the long term. The impact is an assumed reduction in inflation of 0.5% per year on a like for like basis.

4.4 No advice has yet been received from CLG on possible changes arising from the Pension Commission’s report. An update will be given at the meeting if CLG have made any announcement.

5. FINANCIAL ASSUMPTIONS AND INDICATIVE FUNDING LEVEL

5.1 The valuation assumptions used in the 2007 valuation and the assumptions that could apply at the 2010 valuation are summarised on the next page in Table 1. The Actuary has considered two sets of financial assumptions for the 2010 valuation, these are:-

- **Option 1**

these are derived on the same basis as those used in the 2007 valuation adjusted to reflect recent inflation changes and the pay freeze for 3 years. The initial results reported to the Panel in September were based on these assumptions, but the Actuary advised that these assumptions had not been finalised.

- **Option 2**

these are the proposed final assumptions for the 2010 valuation and similar financial assumptions are likely to be used by a number of the Actuary’s clients.

Table 1 – Comparison of assumptions used in 2007 v proposed 2010 assumptions

	31 March 2007		31 March 2010 Option 1		31 March 2010 Option 2	
	Nominal	Real (v RPI)	Nominal	Real (v CPI)	Nominal	Real (v CPI)
	%	%	%	%	%	%
Investment Return	6.1	2.9	6.1	2.8	6.3	3.0
Pay - short term	4.7	1.5	1.0		1.0	
- long term	4.7	1.5	5.3	2.0	4.8	1.5
Inflation - RPI	3.2	Nil	3.8			
- CPI			3.3		3.3	

5.2 There are 2 changes proposed to the assumptions considered in the initial results presentation in September.

- (i) increase in asset out-performance assumption v gilts from 1.6% to 1.8%; and
- (ii) reduction in pay assumption by 0.5% p.a. (linking pay to CPI inflation rather than RPI).

5.3 The investment return (discount rate) assumption should reflect the returns that the Fund expects to earn on its investments over the long term. This is done by considering the expected return on the lowest risk investments held (government bonds) and applying a margin to allow for the greater returns that are expected to be generated by the equity type investments held (equities, property etc). This additional margin is the asset outperformance assumption (AOA). The last 10 years have yielded very low investment returns from equities and property and it is possible that such trends can continue.

5.4 In setting the AOA, the Actuary aims to explicitly allow for a degree of prudence. In 2007, he adopted an AOA of 1.6% p.a. This reflected historical evidence and the investment strategy of the Funds. Compared to RPI, the investment return assumed a real return of 2.9%.

5.5 Current UK Government Bond rates and in particular index linked returns are at historically low levels reflecting the demand for this type of investment in uncertain times and the desire of private sector pension funds to reduce their investment risk. Given these circumstances the Actuary agrees adopting an increased AOA assumption of 1.8% is still appropriately prudent. This equates to a real return of 3.0% v CPI and this is less than the long term returns expected by our investment managers based on the Fund's investment strategy.

5.6 The pay assumption for the three years of the valuation reflects the anticipated "pay freeze" of approximately 1% per annum. Thereafter, it is assumed to be 1.5% more than inflation as measured by CPI. The Actuary makes a separate allowance for promotional increases.

The case for linking pay to CPI rather than RPI includes:-

- (i) CPI is the inflation measure that the Bank of England is striving to achieve with its 2% target;
- (ii) there is considerable economic uncertainty in the medium term. Looking beyond the next three years, the pressures on public spending may well continue; and
- (iii) the expectation that a benefit design built around final salary is unlikely in the long term.

6. INITIAL RESULTS OF 2010 VALUATION AT WHOLE FUND LEVEL

6.1 The Actuary has issued a comprehensive report on the "Initial Results" (a copy is available from Loretta Stowers on 0161 342 2952) that examines:-

- (i) the events since 2007, investment returns, membership and changes to the benefit structure;
- (ii) his proposed approach to the 2010 valuation and assumptions, the key change being a strengthening of the longevity assumption as discussed at the last meeting;
- (iii) Whole Fund results for the funding level, the common contributions for the Whole Fund based on his assumptions and the reasons why the funding level has changed;
- (iv) the impact of different assumptions on funding levels and contribution rates;
- (v) a risk assessment, identifying the main risks, their potential scale, the scope to control or mitigate the risks and subsequent monitoring.

6.2 Initial Results

The 2007 result is compared with the 2010 outcome based on the assumptions outlined in Options 1 and 2. The funding position at Table 2 and Table 3 compares employer contribution rates at whole fund basis.

Table 2 – Whole Fund Results

– Funding Position

	2007	2010	
Past Services Liabilities	£M	Option 1 £M	Option 2 £M
Liabilities	4,782	5,012	4,684
Employees	1,081	1,504	1,443
Deferred Pensioners	<u>3,698</u>	<u>4,809</u>	<u>4,708</u>
Pensioners	9,560	11,324	10,835
Assets	<u>9,563</u>	<u>10,449</u>	<u>10,449</u>
Surplus/ (Deficit)	3	(875)	(386)
Funding Level	100%	92.3%	96.4%

Table 3 – Employer Contribution Rate

	2007	2010	
	%	Option 1 %	Option 2 %
Future Service Rate	13.9	15.6	14.0
Deficit Recovery		2.8	1.3
Early Retirement Provision	<u>1.0</u>	<u>1.0</u>	<u>1.0</u>
	<u>14.9</u>	<u>19.4</u>	<u>16.3</u>

6.3 If no allowance was made for asset outperformance, the funding level and employer contribution rate would be:-

	Funding Level	Employer Contribution Rate
Option 1	66%	41.8%
Option 2	67%	39.8%

6.4 The fall in funding level from 2007 to 2010 is caused primarily by investment returns being less than the Actuary assumed and an improvement in the mortality assumptions. Other factors are generally positive.

6.5 Deficit recovery periods for employers are advised to the Actuary through the Funding Strategy Statement. For local authorities, this is 20 years (assuming stabilisation is not required) with shorter periods for less secure employers. The norm has been to recover the deficit as a percentage of pay, but the expected reduction in the workforce of many employers makes this less appropriate. Thus where an employer's workforce is expected to decline, it is proposed that consideration be given to recovering the deficit by way of lump sum payments (in line with the deficit recovery period). Such decisions will need to be taken on a case by case basis taking account of the individual employer circumstances.

6.6 The results are determined by the assumptions on which the valuation is based. In setting the assumptions the Actuary highlights the issues for consideration as follows:-

- (i) the importance of stability and affordability v prudence;
- (ii) the degree of investment risk and its potential long term impact on funding;
- (iii) the interaction of funding and investment strategy, it is possible for the return on assets to be materially different than the change in value of liabilities;
- (iv) the need to provide for improving life expectancy;
- (v) the need to assess future influences and risks, some of these are set out in the FSS together with the measures taken to mitigate them;
- (vi) the Actuary has not taken account of possible changes to scheme rules.

- 6.7 If the Actuary adopts the assumptions on which option 2 is based, the stabilisation mechanism will not be a needed to constrain employer contribution increases to 1% p.a. at this valuation. However, the Actuary recommends retaining this risk based methodology for future valuations. The indicative outcomes for individual local authorities and the bodies with which they are pooled is set out in **Appendix A**.
- 6.8 The outcome for other individual employers can result in very different contribution rates and rate of change. The factors influencing the outcome include:
- Different membership profiles (average age, sex, employee/pensioner mix etc)
 - Different experience (pay increases, mortality, retirement experience, transfers)
 - Previous contributions paid to recover the deficit
 - Security/guarantees
 - Deficit recovery period.

At the 2007 valuation, the funding levels for most employers were in the range of 85% to 110%. A similar range is expected arising from the 2010 valuation with most employers expected to be between 80% and 110% reflecting individual employer experience.

- 6.9 For other employers, such as education institutions, registered social landlords, transport companies, care organisations and small employers, the Panel needs to consider the financial risks and protect the Fund but it will also recognise the affordability challenge for employers. A means of managing the scale of increase is extending the deficit recovery period and the period over which contribution increases are phased in. To facilitate longer periods, the Panel needs to be confident on the creditworthiness of the employer and / or put in place arrangements to improve the “security” from the Fund’s perspective, e.g. by the provision of a bond or the taking of security such as a charge on property. Further dialogue (building on past correspondence and the meeting on 22 April) with employers is essential to manage the process. This will be time consuming and difficult because of the complex issues that will arise. It is likely that a number of employers will cease to be viable and the Government is also abolishing some scheme employers. These type of cases will of course create a different type of problem and the aim is to ensure other employers are protected as far as possible from the consequences of such failures.
- 6.10 Latest indications suggest that the number of employers (or pools of employers) likely to experience increases in excess of 4.5% over the valuation period are likely to be less than 10.
- 6.11 The measures that employers can take to help improve their funding position include pay restraint, controlling early retirements and understanding the impact of transfers.

7. OTHER MATTERS ARISING FROM THE VALUATION

7.1 Life Expectancy

- 7.1.1 The starting point for making adequate provision for the Fund members’ life expectancy is based on what we know today. The Actuary calls this baseline longevity and he has extensive data on which to assess this based on the membership of individual employers.
- 7.1.2 The second stage is what improvement is expected in the future.
- 7.1.3 For 2010, baseline longevity has been assessed based on bespoke experience, this generates some savings at most employers. However, the Actuary is strongly recommending the need to provide for longevity improvement. The aggregate impact is a net cost as illustrated below in Table 4.

Table 4 – Life expectancy assumptions

	Actives and Deferreds		Current Pensioners	
	Male	Female	Male	Female
Assumed life expectancy at 65	20.7	23.6	19.6	22.5
2010 valuation baseline	18.9	21.4	18.1	20.7
2010 valuation improvements	22.5	25	20.1	22.9

Assumed employees that joined pre 01/10/2006 but reach 60 after 2020 will draw their benefits at 65.

7.1.4 Another illustration of longer life expectancy is the value of pensions ceasing during the valuation period. The Actuary expected a reduction of £26.7, the actual reduction was £24.5m, £2.2m less than expected.

7.2 *Ill Health and Early Retirements*

7.2.1 The trend is for fewer ill health retirements. During the last valuation period, approximately 1 in 400 retired on the grounds of ill-health each year. This was half the Actuary's estimate. The average age at retirement has also been increasing but over the last 12 months there has been significant increases in the number of early and voluntary retirements. This trend is expected to continue and the funding of early retirements is likely to be a major challenge for many of the Fund's employers during the next valuation period.

7.2.2 There are two options for paying for early retirement, incorporating a provision into the employer rate (and paying for costs in excess of that provision) or a pay as you go basis. Fund employers have historically favoured a provision in the employer rate (where they have their "own" contribution rate). These two options will be revisited with local authority employers as part of finalising individual employer rates.

7.3 *Increasing Maturity*

7.3.1 At the Whole Fund level the proportion of pensioner and deferred member's liabilities is increasing, as illustrated in Table 5. The Fund is also experiencing increases in the average age of its members as detailed in Table 6.

7.3.2 The effect of this increasing maturity is that deficits and surpluses have a smaller base (the employee payroll) over which to be spread. This trend is likely to continue over time and all other matters being equal would lead to increasing volatility of contribution rate.

7.3.3 At the individual employer level, there are very wide variations in maturity. The growth in maturity at some local authorities will be very significant, e.g. where they have transferred services to new employers e.g. re housing and leisure services, and they have decided not to pool the new employer with the local authority for determining contribution rates.

To contain volatility of contribution rate, alternative investment strategies may be adopted that reduces the "mis match" risk between asset performance and liability changes when they are affordable.

Table 5 – Membership

	2007	2010
Employee	102089	100136
Deferred	65131	80764
Pensioner	74476	81643

Table 6 – The membership is ageing

	Average age		Future Working Life	
	2007	2010	2007	2010
Employee	49.5	50.4	8.7	8.4
Deferred	48.5	49.2		
Pensioner	64.2	65.1		

- 1) Ages are weighted by liabilities
- 2) Future working lifetime – anticipated length of time that the average member will remain as a contributor to the Fund

7.4 *What is happening at other administering authorities?*

There is little evidence currently available of valuation outcomes elsewhere. However, the likelihood is that those funds with above average - high employer contribution rates - will find it easier to maintain stability than those with low employer rates.

7.5 *Other experience issues*

- 7.5.1 Pay rises are less than expected and people did not change jobs as often as the Actuary expected. Looking forward to the next valuation period, it is likely that there will be an increase in the number of early leavers and employees opting out of the Scheme for affordability reasons.

Table 7

	Actual	Expected	Difference
Early leavers	23608	32252	-27%
Salary increase	4.60%	5.20%	-11%

8. INVESTMENT STRATEGY ISSUES

- 8.1 The experience of the last ten years has highlighted for many pension funds the risks they run in having a high equity weighting as a cornerstone of their investment strategy and the potential mis-match between equity returns and growth in liabilities.

- 8.2 Unfortunately, better matching of liabilities (e.g. from investments in bonds and index linked gilts), generally results in higher costs compared to the Actuary's long term assumptions. The value of the asset outperformance assumption in 6.3 reinforces this point.
- 8.3 When relative pricing between bonds, equities and the Actuary's assumed returns becomes more favourable, consideration should be given to a potentially less volatile investment strategy. This is particularly relevant at the individual employer level, especially for those employers who have a significant proportion of pensioner or deferred liabilities. Employers have been offered the scope to use the Designated Fund if they wish to adopt a more cautious investment strategy. The bus companies have previously requested consideration be given to some more innovative solutions for their own specific problems. As maturity increases, employers wanting to adopt a more "defensive" strategy or the Fund looking to impose such a strategy will become more common and probably create a number of challenging issues for the Panel to address.

9. SUMMARY OF GMPF POSITION AND ISSUES TO CONSIDER

- 9.1 The Fund's objective is to have low, stable employer contribution rates whilst maintaining the solvency of the Fund. In the current environment, this will be achieved on a relative basis compared to other LGPS funds.
- 9.2 GMPF will have one of the best reported funding levels and a low level of employer contributions.
- 9.3 The strength of GMPF's funding position is driven by a variety of factors with long-term investment performance being most important, supported by a historically relatively prudent approach which in the long term has proved financially beneficial.
- 9.4 Local authority employers have been advised to budget for an employer increase of 1% per annum from 1st April 2011 with further similar increases in subsequent years.
- 9.5 The Comprehensive Spending Review 2010 will result in an unprecedented scale and pace of change for many employers.
- 9.6 The difficult task for the Actuary and Panel in this challenging environment is to balance the potentially conflicting aims of affordability, stability and prudence, balancing short term and longer term aspirations. In carrying out this task, transparency of process needs to be maintained.
- 9.7 In formulating its funding strategy statement which guides the Actuary in his valuation, the important decisions are:-
- the asset out-performance assumption
 - deficit recovery/surplus spreading periods
 - phasing in of changes to contribution rates

10. SUMMARY AND CONCLUSIONS

- 10.1 Over the last 18 months the funding level and outlook for employer contributions has improved materially. The Actuary will give his latest update at the meeting.
- 10.2 Whilst very few valuations have reached a conclusion, the expectation is that GMPF will maintain its position amongst the best funded local authority schemes and its employers' average employer contribution rate will be amongst the lowest.

- 10.3 The current expectations for material reductions in public expenditure will effect most of the Fund's employers. Significant reductions in the public sector workforce are expected over the next 3 to 5 years. In part, this will be achieved by early retirements. Some employers will cease to be viable and some employers will be abolished. This is a very challenging environment for employers and as previously commented, raises complex matters for the Fund where issues of prudence, stewardship, affordability and stability will need to be considered on a case by case basis.
- 10.4 Discussions have started with employers based on indicative outcomes as determined under Option 2.

11. RECOMMENDATIONS

- 11.1 To support the Actuary's use of assumptions as set out in Option 2.
- 11.2 That employers continue to be advised of their indicative outcomes.
- 11.3 Where there are very difficult cases, the Executive Director of Pensions take appropriate actuarial, financial and legal advice in implementing the valuation outcome in line with the Funding Strategy Statement.
- 11.4 The Funding Strategy Statement be amended to reflect the proposals in the report re
- (i) deficit recovery; and
 - (ii) the valuation method adopted by the Actuary be considered on a case by case basis.