

2013 VALUATION RESULTS AND FUNDING STRATEGY

AVON PENSION FUND

13 December 2013

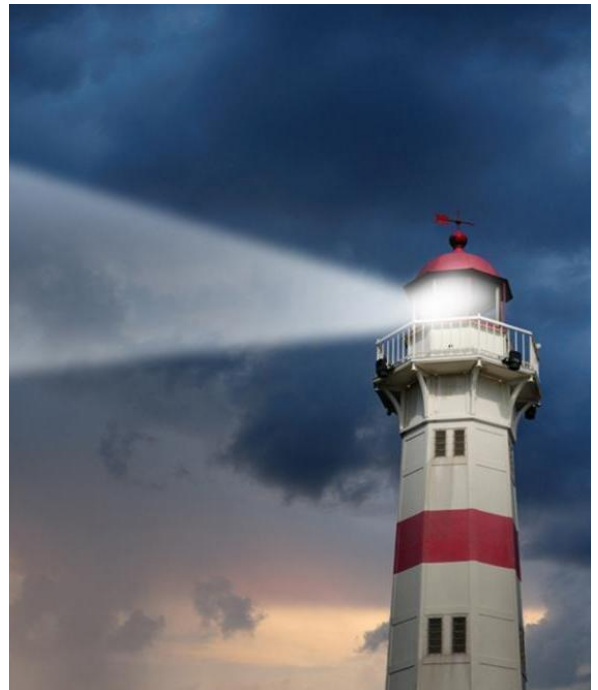
Paul Middleman FIA

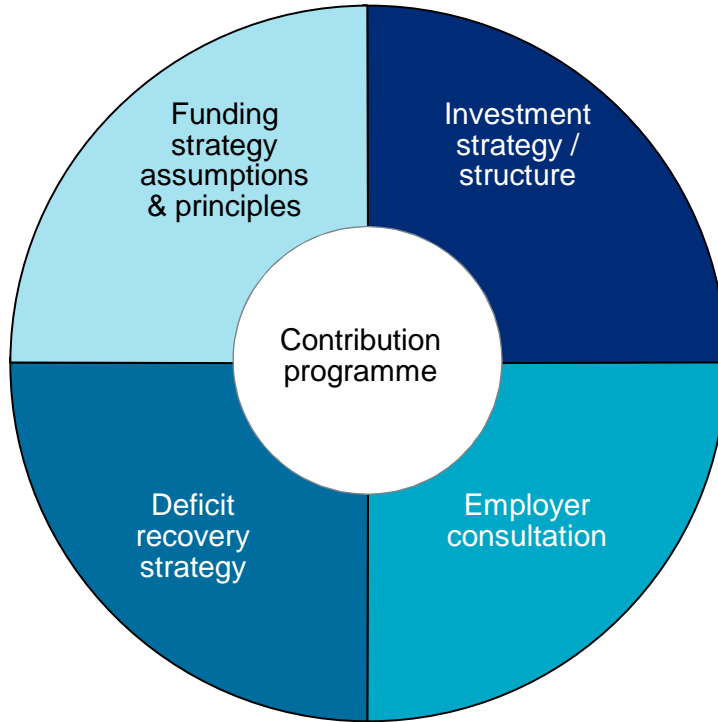
Liverpool - Exchange Station

Agenda

- Valuations and FSS
- 2013 valuation - Whole Fund Results
- Stabilisation of Rates and FSS considerations
- Summary and Next steps

- Appendix A – Whole Fund data
- Appendix B – Demographic Analyses
- Appendix C – Actuarial advice and Important Notices





2013 Valuation - Whole Fund Results

2010 valuation recap

Whole Fund Results

	31 March 2010
Assets	£2,459m
Liabilities	£3,011m
Deficit	£552m
Funding level	82%
Future service contribution rate	11.8% p.a.
Current deficit contributions over 20 years* (indexed at 4.5% p.a.)	£33m** p.a.

*Based on the average 23 year recovery period (from 2010) less 3 years

**Including three years' indexation to 2014/15

MERCER

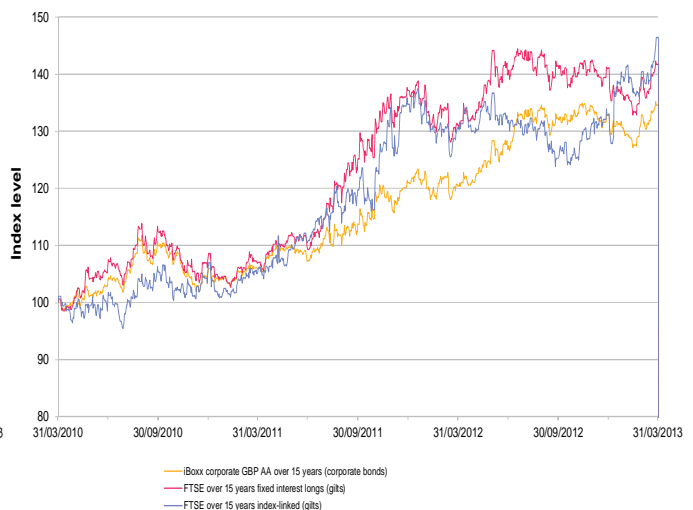
4

Inter-Valuation Financial Markets

Asset and Liability Changes From March 2010

ASSET PERFORMANCE

LIABILITY CHANGES



Over the three-year inter-valuation period, equity and bond returns have been positive, so assets will be higher (APF return c27% over the period). Liability values have increased significantly, driven by falling (nominal and real) bond yields. Since the valuation date yields have risen although returns have been volatile.

MERCER

5

2013 Valuation Financial assumptions

	31 March 2010	31 March 2013
Market data		Initial Proposed
Fixed interest gilt yield	4.5% p.a.	3.2% p.a.
Index-linked gilt yield	0.7% p.a.	-0.4% p.a.
Market-implied RPI price inflation (derived by differencing yields on fixed-interest and index-linked gilts)	3.8% p.a.	3.6% p.a.
Adjustment to derive CPI inflation assumptions	-0.8% p.a.	-1.0% p.a.
Assumptions used for assessment of Liabilities		
Discount rate:	6.1% p.a.	4.8% p.a.*
Inflation: Consumer Prices Index (CPI)	3.0% p.a.	2.6% p.a.
Salary inflation	4.5% p.a.	4.1% p.a.
Pension increases	3.0% p.a.	2.6% p.a.

* Future service assumptions are as for liabilities with the exception of the discount rate, which was a long term rate of 6.75% p.a. at 31 March 2010 and is proposed to be 5.6% p.a. at 31 March 2013.

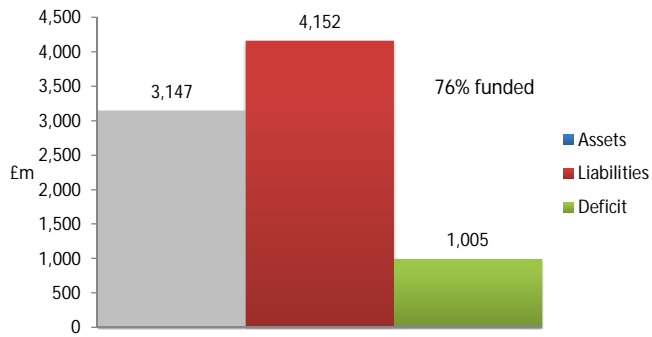
2013 valuation Demographic assumptions

Life Expectancy	<ul style="list-style-type: none"> Analysis has been carried out based on Fund membership. For pre retirement Life Expectancy we are updating based on LG wide experience.
Retirement Age	<ul style="list-style-type: none"> Analysis supports increase in retirement age of 1 year – important for Pre 2008 benefits.
Ill health retirements	<ul style="list-style-type: none"> Analysis suggests change to 2010 assumptions required based on Fund and LG wide experience
Proportions married	<ul style="list-style-type: none"> Analysis supports a small increase in the % of members married at certain ages
Other	<ul style="list-style-type: none"> As per 2010 Valuation

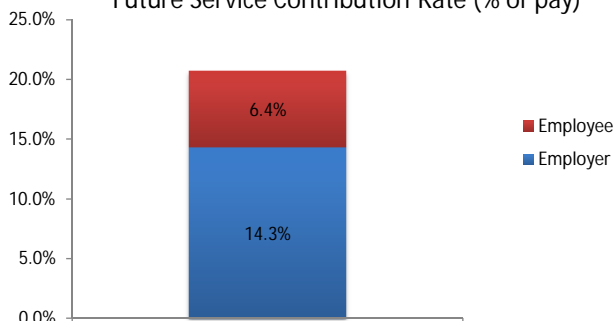
2013 Results

2013 Basis - Whole Fund ("Baseline Position")

Past service position at 31 March 2013



Future Service Contribution Rate (% of pay)



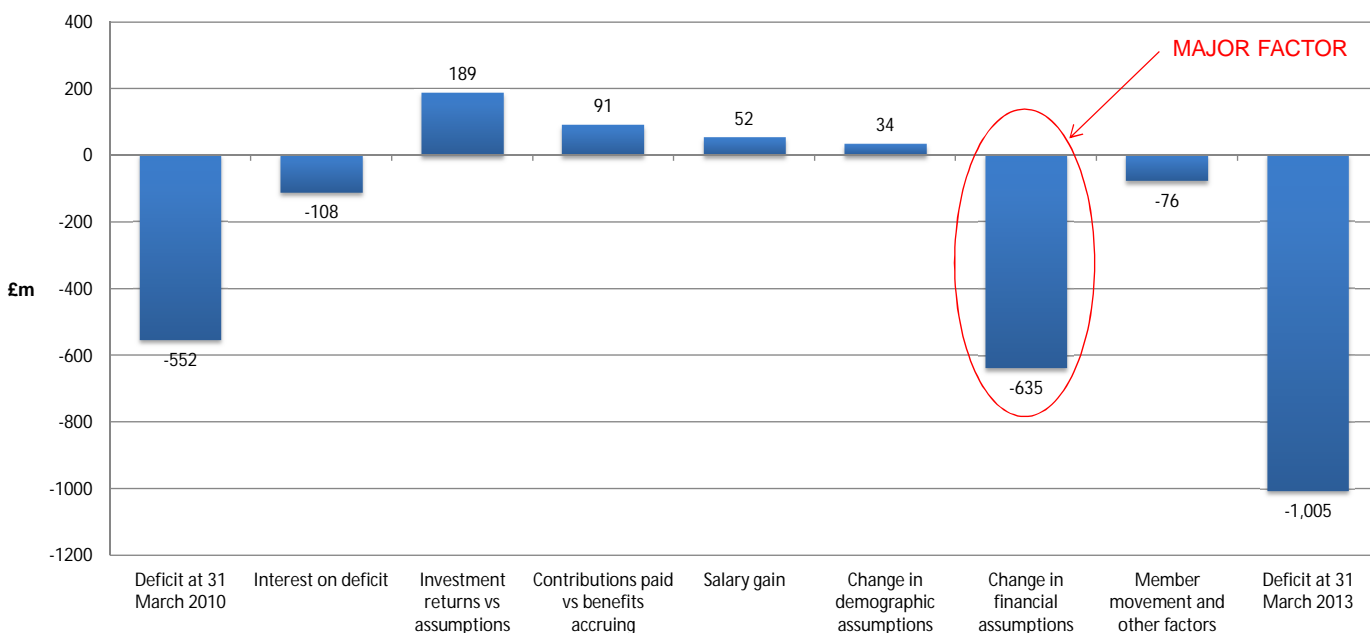
Rates include expenses. Based on post 2014 Scheme and expressed as a % of post 2014 pay based on the draft Regulations and pay provided. The old scheme employee rate would have been 6.3% of pay.

MERCER

Implied deficit contributions (2010 equivalent deficit contributions of £33m p.a.)	
Recovery period (Whole Years)	Required Payment (increasing with assumed pay growth of 4.1% p.a.)
20	2014/15 - £56m
	2015/16 - £58m
	2016/17 - £61m

2013 Results

Analysis of change in 2010 past service position to 2013 baseline position



2013 Results

Analysis of change in future service contribution rate from 2010 to 2013

Change in Future Service Rate Analysis	
Average Employer Rate as at 31 March 2010	11.8% of pay
Change in profile of membership	neutral
Change in demographic assumptions	+ 0.6% of pay
Change in financial assumptions	+ 3.6% of pay
Impact of 2014 LGPS	- 1.7% of pay
Average Employer Rate as at 31 March 2013	14.3% of pay

The impact will differ for each individual employer

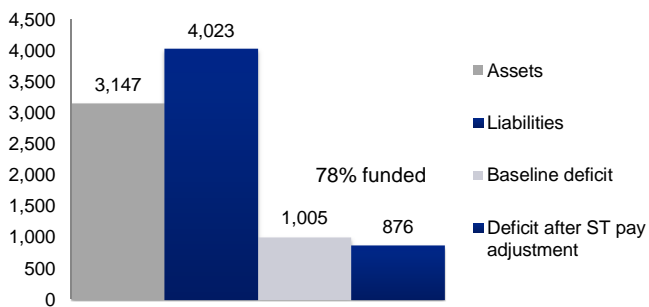
MERCER

10

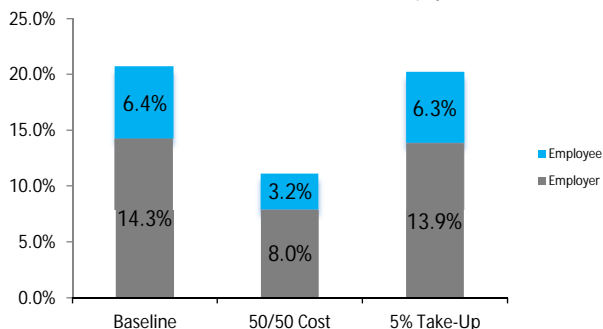
2013 Results

Whole Fund – short term pay growth (1% p.a. for 3 years) and 5% (by payroll) take up of 50/50 option

Past service position at 31 March 2013



Future Service Contribution Rate (% of pay)



Rates include expenses. Based on post 2014 Scheme and expressed as a % of post 2014 pay based on the draft Regulations and pay provided. No change to baseline rates as CARE scheme

MERCER

Implied deficit contributions (2010 equivalent deficit contributions of £33m p.a.)	
Recovery period (Whole Years)	Required Payment (increasing with assumed pay growth of 4.1% p.a.)
20	2014/15 - £49m
	2015/16 - £51m
	2016/17 - £53m

11

Stabilisation of Contribution Rates and FSS Considerations

12

Further considerations

Possible approaches to stabilisation of contributions

SMOOTHING OF FUNDING POSITION

- Extreme smoothing of base funding position does not easily aid objective decision making
- Recognising known post valuation date information is reasonable
- Options include
 - Short term pay growth, significant membership changes etc
 - Market yield changes and future investment expectations possible

STABILISATION OF CONTRIBUTIONS

- Results would be declared as normal but contributions certified could allow for stabilisation mechanisms
- Options include
 - Altering recovery periods
 - Stabilising Future Service Rate – 50:50 take-up?
 - Phasing any increases in contributions
 - Allowing for bond yield changes in deficit recovery plans
- Employers would not be allowed to reduce £ deficit input (indexed) vs. 2010 funding plan in general

*Stochastic
Testing of
funding
outcomes*

Further considerations

Position at 31 August 2013 - 2014/15 contribution outcomes

	31 March 2013	31 August 2013
	Baseline Position (including short term pay growth)	Update position (including short term pay growth)
Funding Level	78%	83%
Illustrative Deficit (£m)	876	650
Average "Smoothed" Future Service Contribution Rate (% Pensionable Earnings) allowing for 5% 50:50 take-up	13.9%	13.9%
Required Deficit Payment (£m p.a. indexed each year)		
Recovery Period (years)		
20	2014/15 - £49m	2014/15 - £34m
	2015/16 - £51m	2015/16 - £35m
	2016/17 - £53m	2016/17 - £37m

Deficit recovery contributions under the current plan would be £33m p.a. (indexed)

Since 31 March 2013, net yields have risen thus reducing liability values. Asset returns have been positive. The overall impact at 31 August was a c5% increase in funding level.

MERCER

14

Funding Strategy Principles

2010 valuation vs 2013 valuation

Maximum recovery period reduced from 30 years at 2010 to 27 years

Minimum deficit contributions to be based on indexed 2010 valuation pattern unless notified otherwise

2013 valuation contributions outcome will take into account post valuation date information for certain employers to aid stability

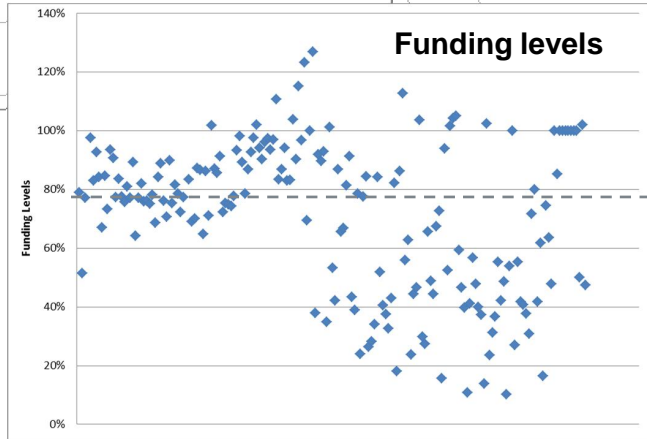
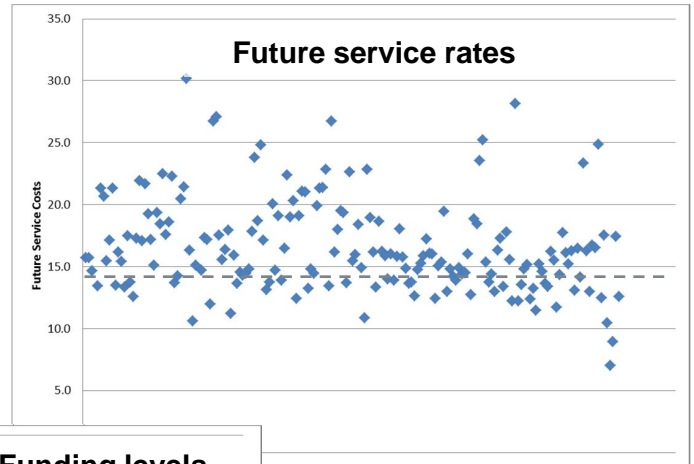
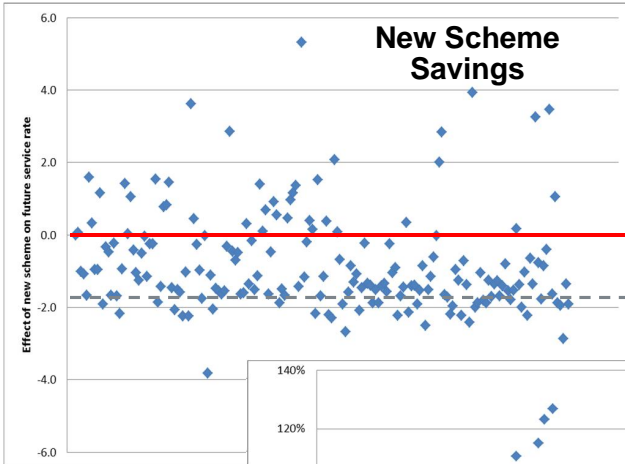
Allowance for LGPS 2014, including impact of 50/50 option for certain employers where turnover can justify it

Where necessary phasing of any increases in contributions will be allowed

MERCER

15

Individual Employers Range of Outcomes



MERCER

16

Individual Employers Range of Outcomes

Funding Levels and Deficit Recovery

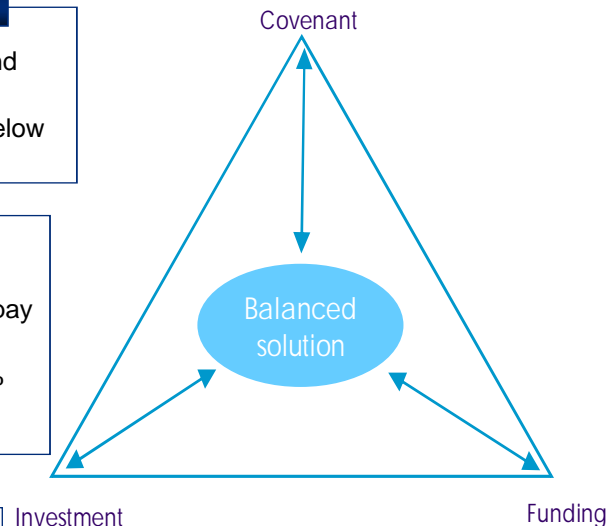
- Range from 10% to 127% depending on start position and history
- Deficit recovery contributions will generally not reduce below 2010 funding plan levels over 2014/17

Future Service Rate requirements

- Not directly linked to market yields except where notified
- Rates range from 7% to 30% of Post 2014 pensionable pay (incl non contractual overtime)
- New Scheme Savings range from 3.8% to a cost of 5.3% depending on profile

Stabilisation of Contributions

- Depends crucially on covenant and time horizon in Fund
- Added security will assist in managing cash requirements vs. affordability
- Certain approaches may not be possible e.g. 50:50 take-up



MERCER

17

Summary and next steps

Summary

- Despite positive investment performance, low bond yields have increased the cost of pension provision and the funding deficit has therefore increased significantly. Outcomes will vary for individual employers.
- Administering Authority and Actuary have considered the assumptions used to value the liabilities and also the flexibilities within the Funding Strategy to set future contributions.

Next steps

- FSS approved in principle by Committee after consultation with Employers:
 - Financial and demographic assumptions, contribution flexibility agreed
 - Confirmation of final rates to employers in progress

Funding plan for each employer needs to be robust, justifiable and recognise the challenges employers face but not at the expense of the long term financial health of the Fund



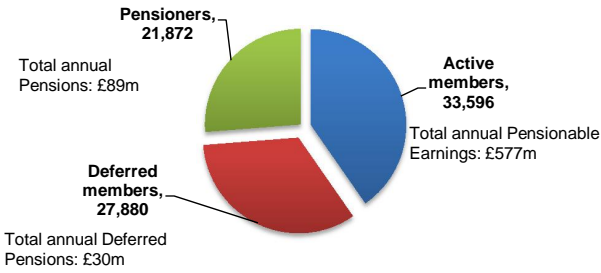
APPENDIX A WHOLE FUND DATA

Avon Pension Fund

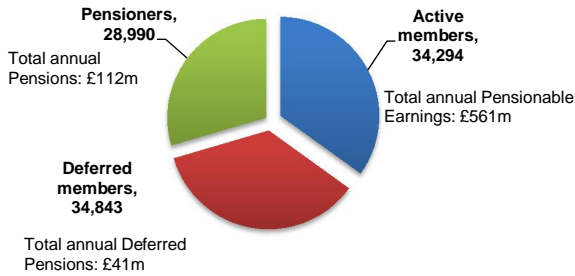
31 March 2013 Actuarial Valuation data summary

Membership development

31 March 2010 total membership



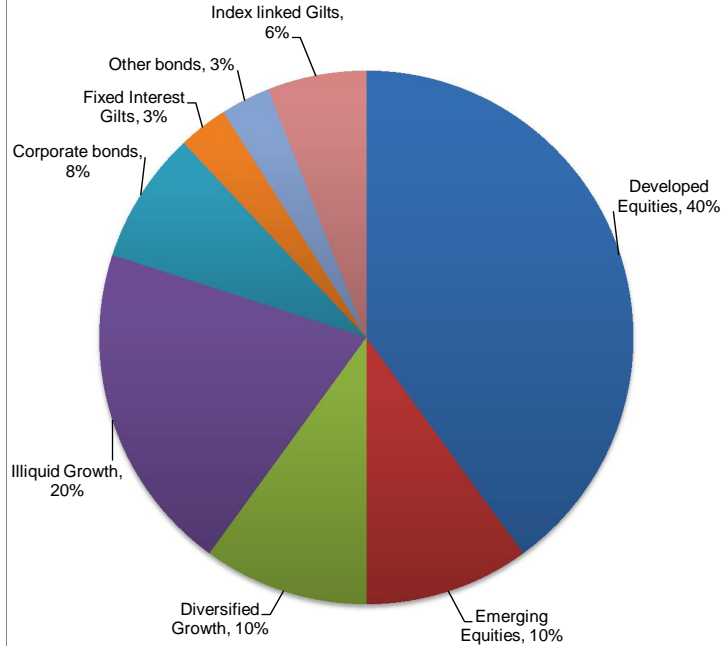
31 March 2013 total membership



Membership data provided by the administering authority (excludes members with leaver options pending). Pension payrolls at 2013 include 2013 increase. **Pay at 2013 does not include non-contractual overtime**

Benchmark at 31 March 2013

Market value of Assets £3,147m



MERCER

APPENDIX B

DEMOGRAPHIC ANALYSES

Summary of analysis recommendations

Post-retirement mortality base table – updated table based on Fund’s profile and experience for both past and future service

Post-retirement mortality future improvements – CMI 2012 model with 1.5% long-term improvements for both past and future service

Death before retirement – adjusted assured lives table based on aggregate LGPS data

Ill health retirement distribution between tiers – maintain 2010 valuation proportions

Ill health retirement rates – based on updated LGPS experience, with a Fund-specific adjustment

Retirement in normal health (pre 1/10/06 joiners) – based on aggregate LGPS experience

Proportions with dependants - revised rates based on 110% of 2010 proportions, with underpin at older ages

MERCER

22

Financial Impact

	Effect on total past service liabilities (% of total past service liabilities)	Effect on future service cost (% of pensionable pay)
Post-retirement mortality	+0.1%	+0.4%
Death before retirement	-0.2%	-0.1%
Ill health retirement	+0.1%	+0.3%
Early retirement in normal health	-1.3%	-0.1%
Proportions with dependants on death	+0.5%	+0.1%

Overall financial effect:

- **0.8% decrease** in the past service liabilities
- **0.6% increase** to future service cost

MERCER

APPENDIX C

ACTUARIAL ADVICE AND IMPORTANT NOTICES

24

Actuarial advice

- This presentation contains actuarial advice to the Administering Authority concerning their potential decisions on calculating the liabilities and preparing the Funding Strategy Statement and Contribution Schedule.
- It is covered by and compliant with the following Technical Actuarial Standards (TAS) issued by the Board for Actuarial Standards: TAS R – Reporting Actuarial Information; TAS D – Data; TAS M – Modelling; and Pensions TAS.
- This presentation forms part of a suite of material that will be used by the Administering Authority in making their decision.
- It forms part of the audit trail for the scheme funding valuation and should be read in conjunction with other valuation material provided.
- The calculations referred to in the report use methods and assumptions appropriate for reviewing the financial position of the Scheme and determining an appropriate contribution rate for the future. Mercer does not accept liability to any third party in respect of this report; nor does Mercer accept liability to the Administering Authority if the information provided in the report is used for any purpose other than that stated (for example for accounting or corporate mergers/acquisitions).



25

Important notices

- This document contains confidential and proprietary information of Mercer and is intended for the exclusive use of the parties to whom it was provided by Mercer. Its content may not be modified, sold or otherwise provided, in whole or in part, to any other person or entity, without Mercer's written permission.
- The findings, ratings and/or opinions expressed in this document are the intellectual property of Mercer Ltd and are subject to change without notice. They are not intended to convey any guarantees as to the future performance of the investment products, asset classes or capital markets discussed. Past performance does not guarantee future results.
- Data contained herein has been obtained from a range of third party sources. While the data is believed to be reliable, Mercer has not sought to verify it. As such, Mercer makes no representations or warranties as to the accuracy of the information presented and takes no responsibility or liability, (including for indirect, consequential or incidental damages,) for any error, omission or inaccuracy in this document.

© 2013 Mercer Ltd. All rights reserved.

MERCER

26

