

# Cambridgeshire Pension Fund

## Employer Forum

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- 30 November 2016

# What are we going to cover?

Cambridgeshire Fund in the  
LGPS



Valuation overview



Inter-valuation experience



Whole Fund results



Employer funding strategies



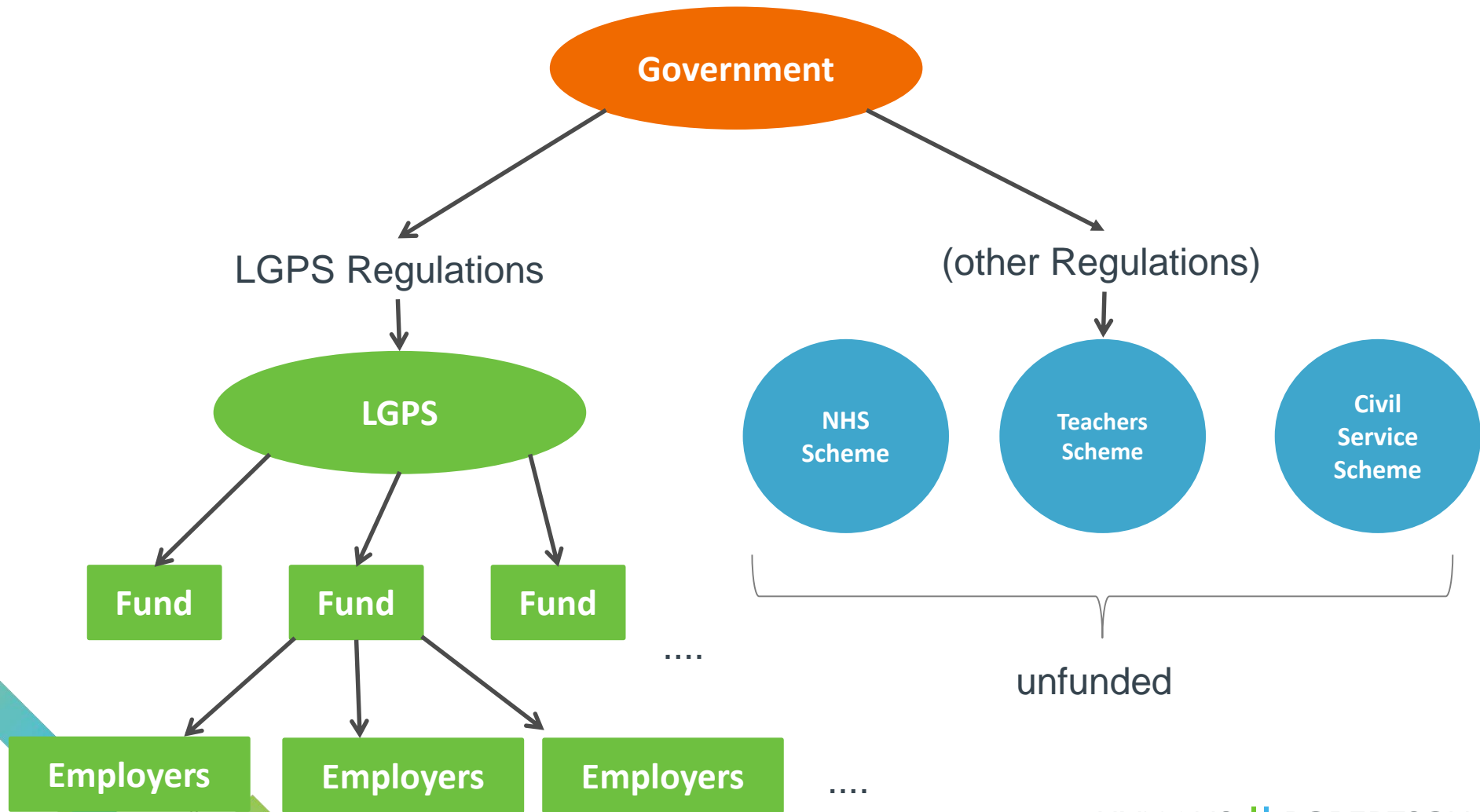
Results Schedules





# The Cambridgeshire Fund in the LGPS

# Public sector pension schemes



# Local Government Pension Scheme



Set by  
Fund Actuary

Contributions

Set by  
Regulations

Contributions

Set by  
Regulations

Benefits

Administering Authority



# The evolving LGPS benefits



	Pre - 2008	2008 - 2014	Post - 2014
<b>Basis</b>	Final Salary	Final Salary	Career Average Revalued Earnings
<b>Accrual</b>	80 <sup>th</sup>	60 <sup>th</sup>	49 <sup>th</sup>
<b>Added cash</b>	3/80 <sup>th</sup>	-	-
<b>Pension age</b>	60 – 65	65	State Pension Age
<b>Pension increases</b>	RPI	RPI (CPI from 2011)	CPI
<b>National cost control?</b>	No	No	Yes

**... and lots of protections too.**



# Cambridgeshire Pension Fund

- More than 77,000 members
- Managing assets of £2,276m\*
- Over 350 employers

\*as at 31 March 2016

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# Valuation overview



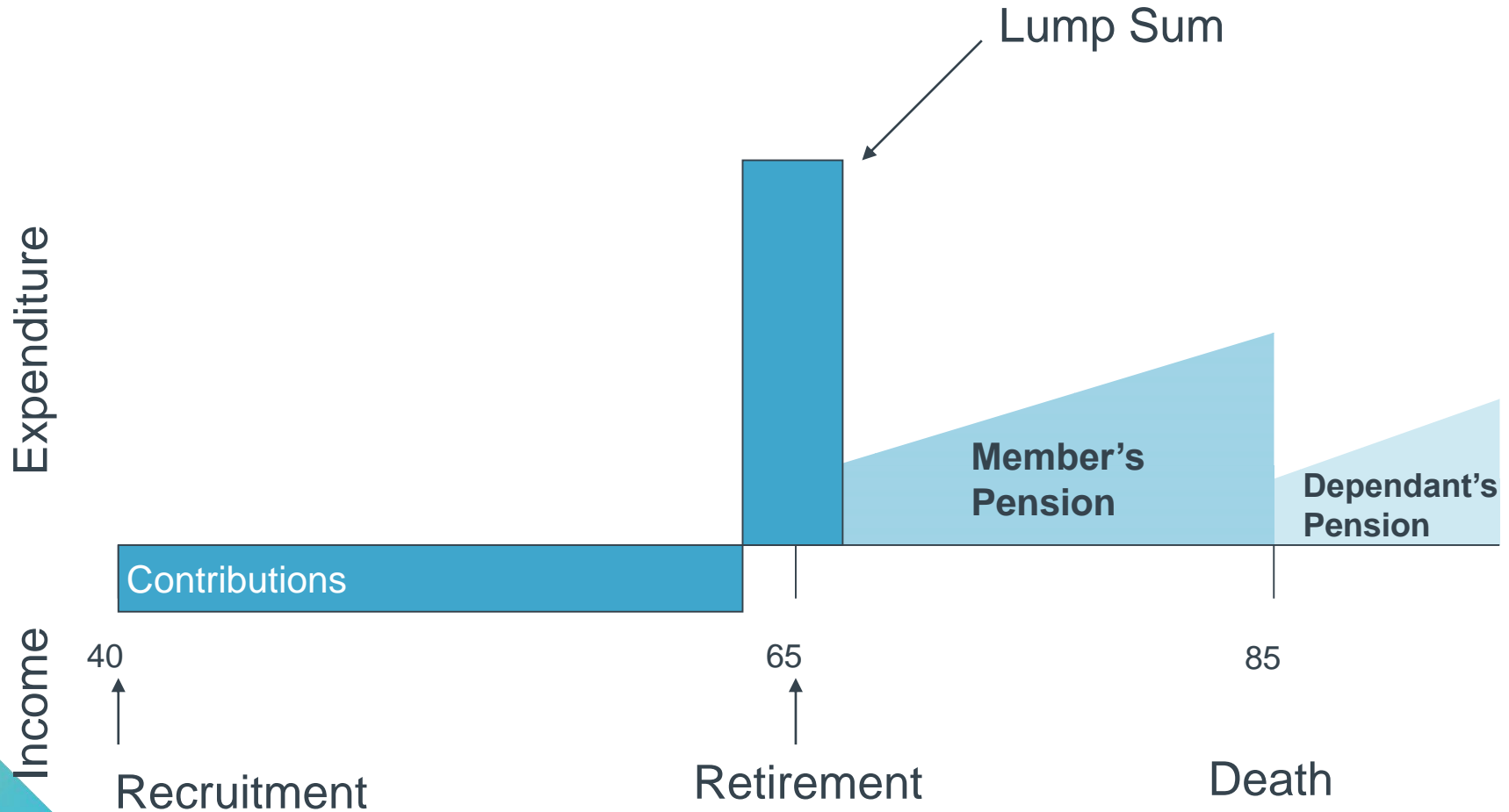
# Why do we do a valuation?



- Compliance with **legislation**
- Set **employer contribution rates**
- Determine money needed to meet accrued liabilities
- Calculate solvency (“**funding level**”)
- Monitor experience vs. assumptions
- Manage risks to Fund and employers

Review the Funding Strategy Statement (FSS)

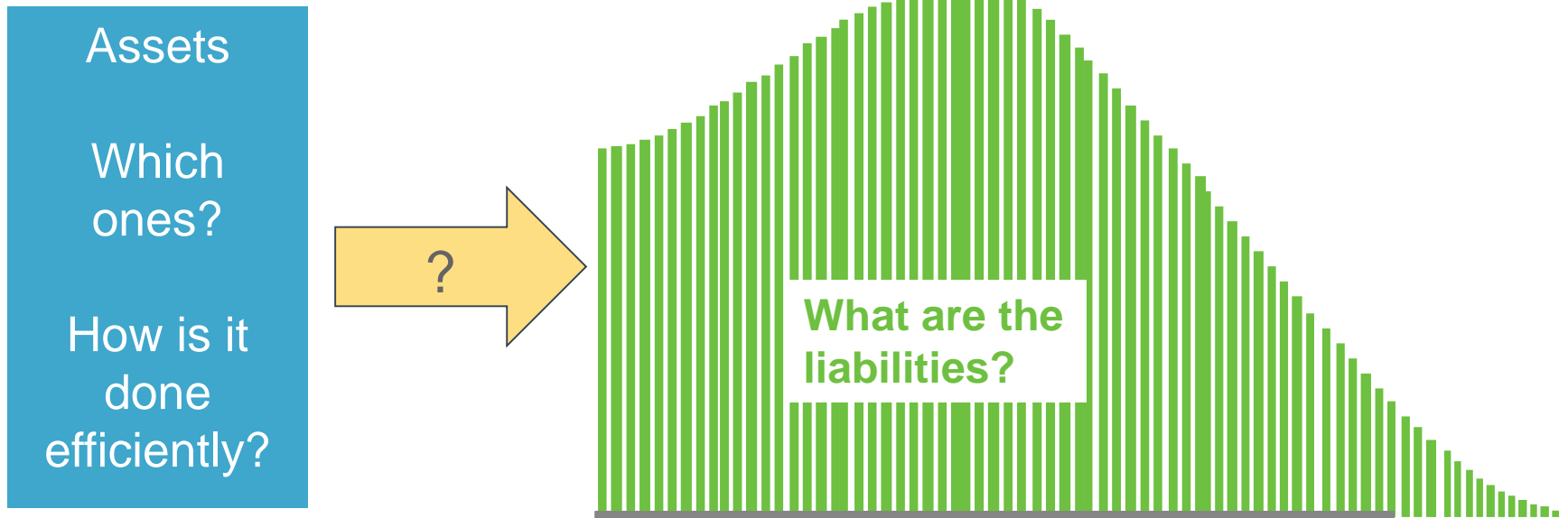
# Promise now, pay later



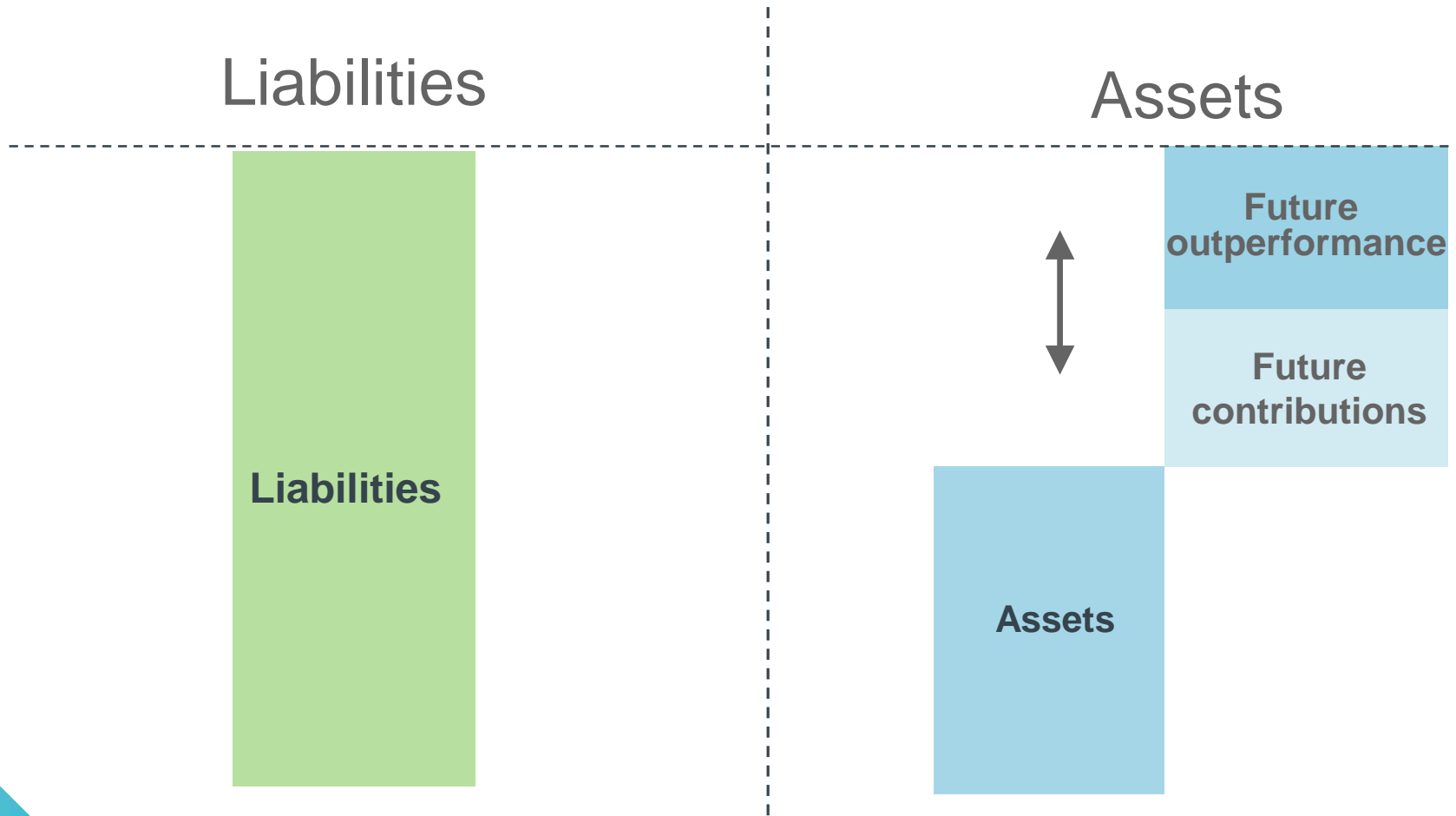
# Valuation - the ultimate objective



- How much money does the Fund need, and how should it be invested, in order to be able to meet the promised benefits?



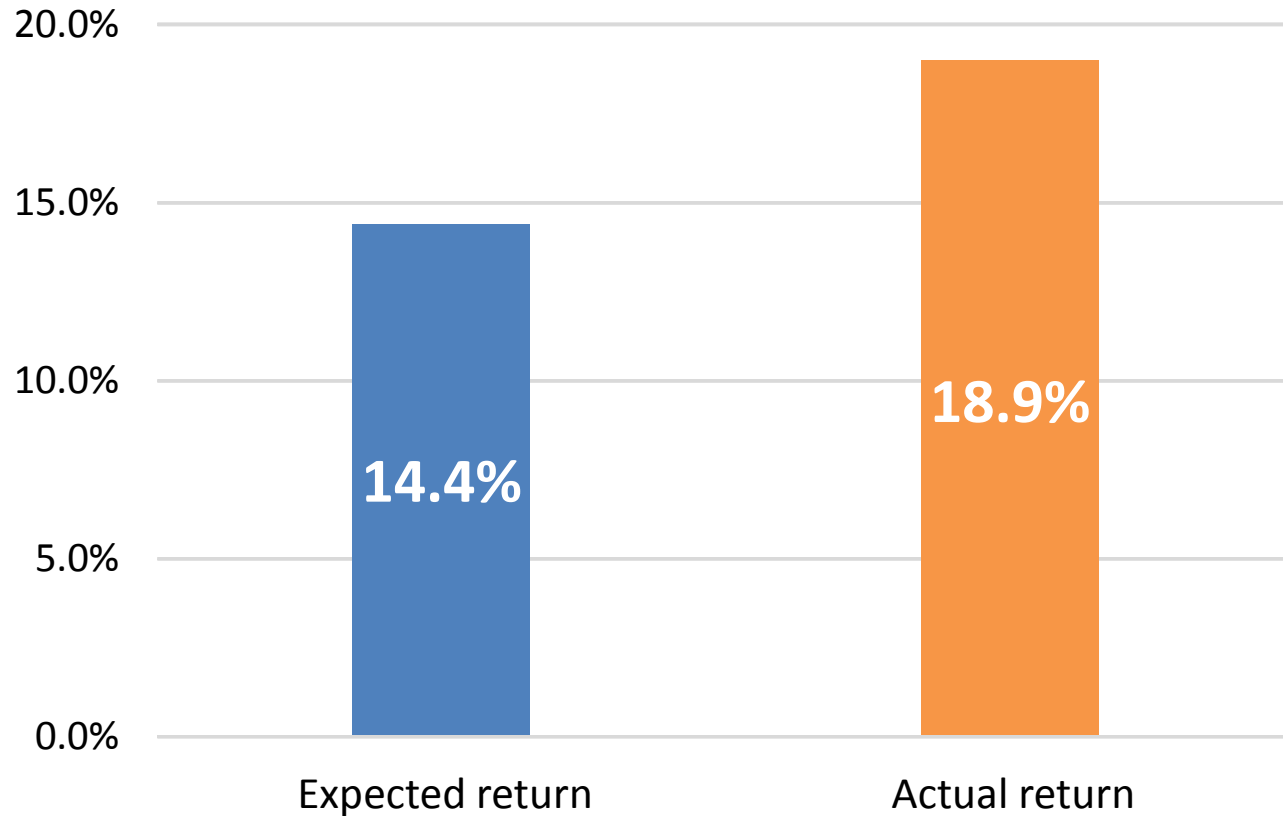
# Meeting the objective





# Inter-valuation experience

# Investment return vs expected

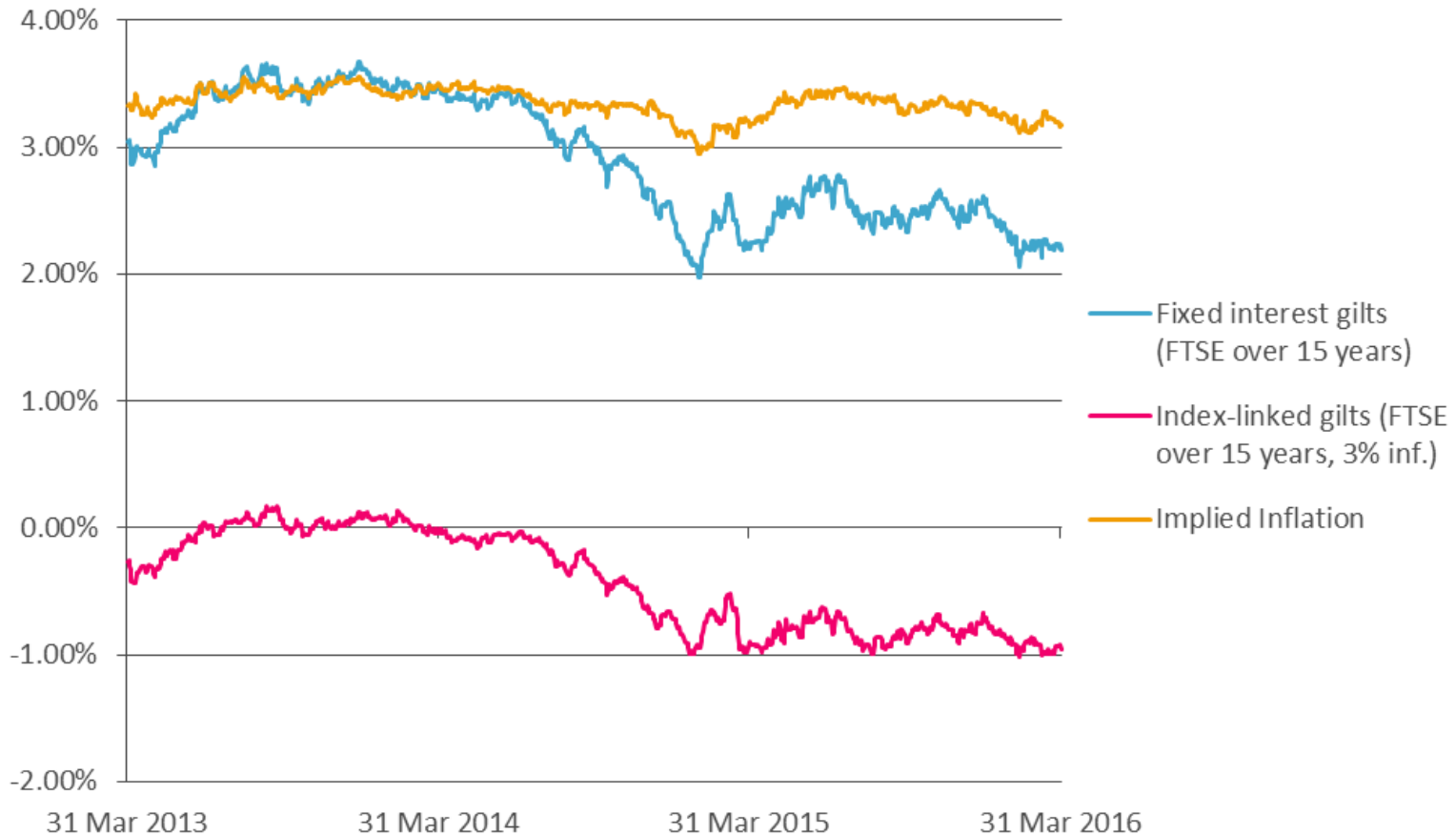


.... asset returns have been stronger than expected

# Experience since 2013 (yields)



UK bond yields since 31 Mar 2013



***Falling bond yields have increased liabilities...***

# Membership experience

- **Pay growth**
  - Lower than expected
  - Does vary across employers
- **Pension increases** (pension increase orders)
  - Expected 2.5% p.a. (7.7%)
  - Actual 2.7%, 1.2%, 0.0% (3.9%)
- **Movements**
  - More early leavers than expected
  - Fewer pensioner deaths than expected
- **50:50 take-up**
  - Lower than expected





# Whole Fund results

# Changes to the 2016 valuation financial assumptions



1. Asset Outperformance Assumption (AOA)
  - Increase to 1.8% p.a. (from 1.6% p.a.)
2. Salary growth assumption
  - Continued public sector pay freeze
  - Run off of pre2014 final salary linked liabilities
  - Reduce post freeze increases to RPI
3. RPI / CPI gap
  - Increase to 1.0% p.a. (from 0.8% p.a.)

# Key assumptions for funding target



	2013 valuation	2016 valuation	Derivation of assumption
Discount rate (assumed future investment return)	4.6%	3.9%	Change in approach: Gilts plus prudent asset out-performance assumption (AOA) At 2013: AOA = 1.6% p.a. At 2016: AOA = 1.8% p.a.
Long term pay growth	4.3%	2.4%	Change in approach: At 2013: RPI + 1.0% At 2016: RPI - 0.7%
Pension increases (CPI)	2.5%	2.1%	Change in approach: At 2013: CPI = RPI - 0.8% At 2016: CPI = RPI - 1.0%
50:50 take up	10%	5%	Lower than anticipated take up
Longevity	ClubVITA with CMI 2010 model for future improvements	ClubVITA with CMI 2013 model for future improvements	2013 not 2015 in order to remove volatility experienced in last two years

# Impact of discount rate



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# Whole fund valuation results



	31 March 2013	31 March 2016
Active	1,042m	953m
Deferred	581m	726m
Pensioner	1,010m	1,222m
<b>Total liabilities</b>	<b>2,633m</b>	<b>2,902m</b>
Assets	1,905m	2,276m
<b>Deficit</b>	<b>(728m)</b>	<b>(626m)</b>
Funding level	72%	78%

*Increase in funding level, and reduction in deficit, at the 2016 valuation*

# Why has the funding position changed?



Analysis		(£m)
<b>Surplus / (deficit) at 31 March 2013</b>		<b>(728)</b>
Interest on surplus / (deficit)	(105)	
Investment returns greater than expected	81	
Contributions greater than cost of accrual	9	
Membership experience over the period	146	
Change in demographic assumptions	(2)	
Change in base mortality assumption	29	
Change in longevity improvements assumption	1	
Change in financial assumptions	(24)	
Impact of LGPS 50/50 take up	(17)	
Other experience items	(16)	
<b>Surplus / (deficit) at 31 March 2016</b>		<b>(625)</b>



# Employer Funding Strategies

# What is the Funding Strategy?



- *The funding strategy is set out in the Funding Strategy Statement (FSS)*
- *“The FSS focuses on how employer liabilities are measured, the pace at which liabilities are funded, and how employers or pools of employers pay for their own liabilities.”*
- *“The FSS is a summary of the Fund’s approach to funding its liabilities, and this includes reference to the Fund’s other policies.”*

***The FSS is the Northamptonshire Pension Fund’s funding blueprint***



# Why is the FSS important to employers?



- The FSS helps employers understand
  - how their contributions are **calculated**;
  - how these are **fair by comparison** to other employers in the Fund; and
  - in what circumstances the employer might need to **pay more**.

# Setting funding targets at 2016



Understand employers



100% funding



Timeframe varies depending on profile and circumstances



Based on Employer's Risk Profile

# Funding Strategy Statement review



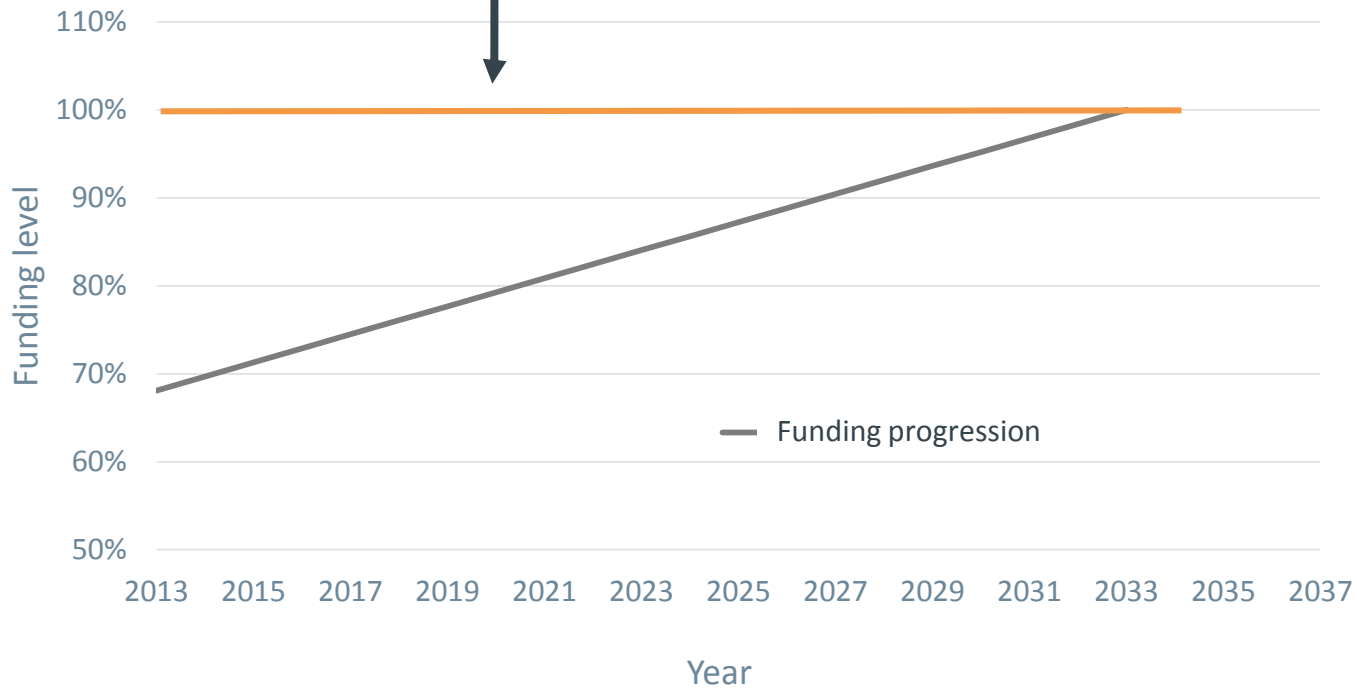
Type of employer	Scheduled Bodies			Community Admission Bodies and Designating Employers		Transferee Admission Bodies
Sub-type	Local Authorities	Colleges, Housing Associations etc	Academies	Open to new entrants	Closed to new entrants	(all)
<b>Funding Target Basis used</b>	Ongoing, assumes long-term Fund participation (see <a href="#">Appendix E</a> )			Ongoing, but may move to "gifts basis" - see <a href="#">Note (a)</a>		Ongoing, assumes fixed contract term in the Fund (see <a href="#">Appendix E</a> )
<b>Maximum time horizon – <a href="#">Note (c)</a></b>	20 years	20 years	20 years	20 years	Shorter of: Future Working Lifetime of employees, and 15 years	Shorter of: Future working lifetime of employees, and outstanding contract term
<b>Probability of achieving target – <a href="#">Note (e)</a></b>	TBC (66%)	TBC (75%)	TBC (66%)	TBC (80%)	TBC (80%)	TBC (70%)
<b>Primary rate approach</b>	(see <a href="#">Appendix D – D.2</a> )					
<b>Secondary rate – <a href="#">Note (d)</a></b>	Monetary Amount	Monetary Amount	Monetary Amount	% of payroll or monetary amount	Monetary amount	% of payroll or monetary amount
<b>Phasing of contribution changes</b>	Eligible for stabilisation arrangement See <a href="#">Note (b)</a>	Eligible for stabilisation arrangement See <a href="#">Note (b)</a>	Eligible for stabilisation arrangement See <a href="#">Note (b)</a>	3 years	3 years	None
<b>Review of rates – <a href="#">Note (f)</a></b>	Administering Authority reserves the right to review contribution rates and amounts, and the level of security provided, at regular intervals between valuations					Particularly reviewed in last 3 years of contract
<b>Treatment of surplus</b>	Covered by stabilisation arrangement	Covered by stabilisation arrangement	Covered by stabilisation arrangement	Preferred approach: contributions kept at Primary rate. Reductions may be permitted by the Admin. Authority		Reduce contributions by spreading the surplus over the remaining contract term
<b>New employer</b>	n/a	n/a	<a href="#">Note (g)</a>	<a href="#">Note (h)</a>		<a href="#">Notes (h) &amp; (i)</a>
<b>Cessation of participation: cessation debt payable</b>	Cessation is assumed not to be possible, as Scheduled Bodies are legally obliged to participate in the LGPS. In the rare event of cessation occurring (machinery of Government changes for example), the cessation debt principles applied would be as per <a href="#">Note (j)</a> .			Can be ceased subject to terms of admission agreement. Cessation debt will be calculated on a basis appropriate to the circumstances of cessation – see <a href="#">Note (j)</a> .		Participation is assumed to expire at the end of the contract. Cessation debt (if any) calculated on ongoing basis. Awarding Authority will be liable for future deficits and contributions arising.

# Historic approach to funding plans



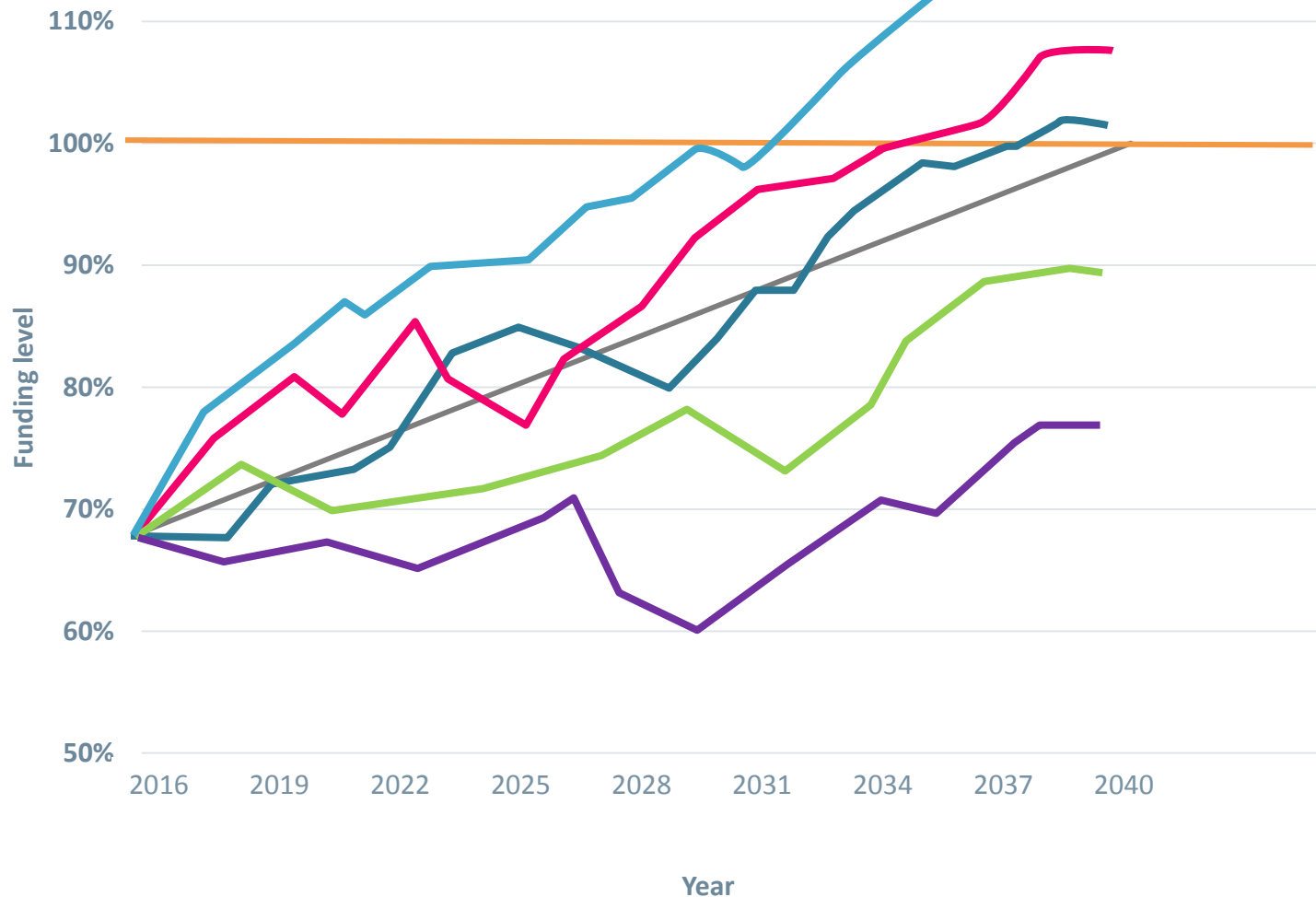
Actuary & Fund agree one set of assumptions

Actuary calculates contribution rates

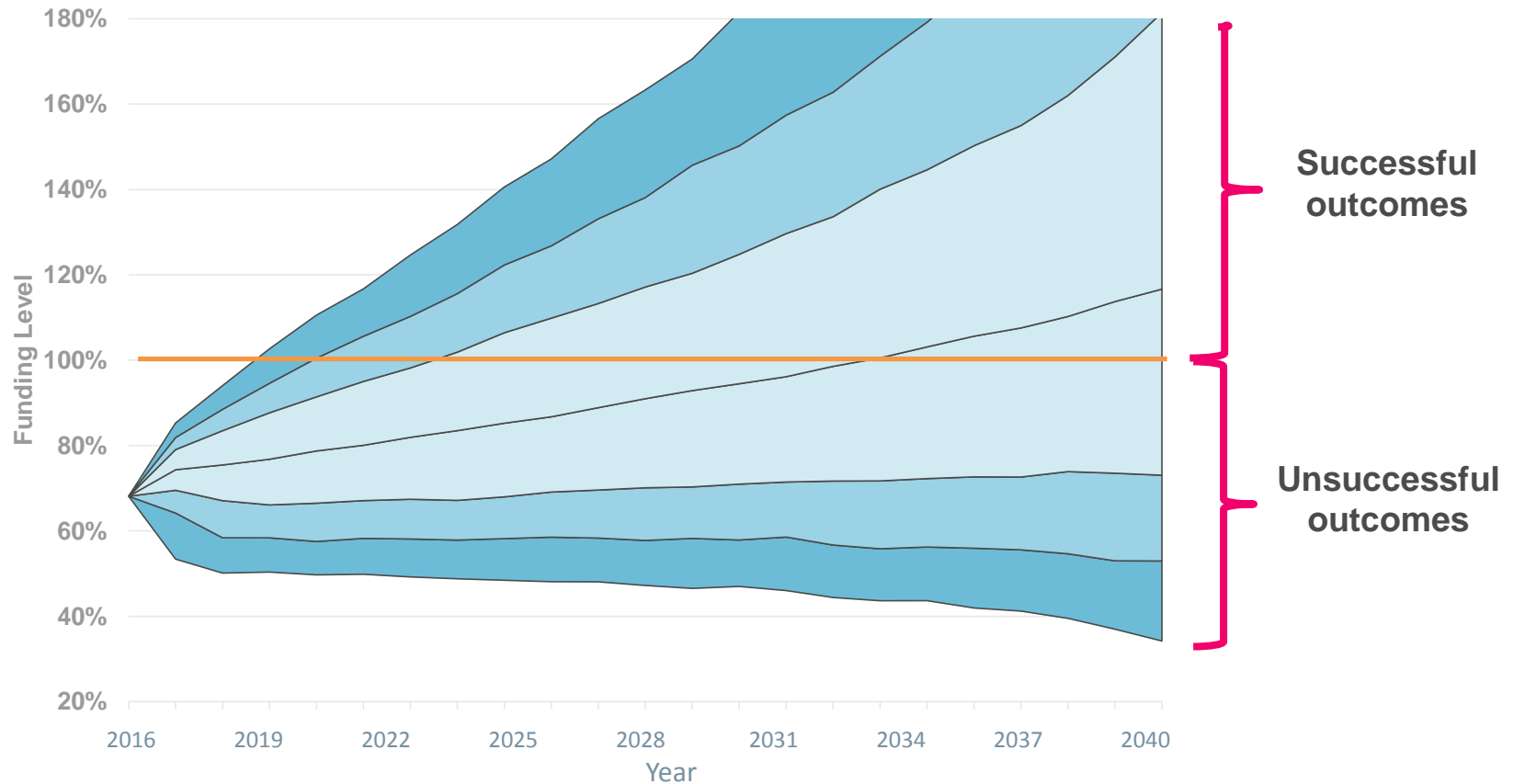


***Based on the assumption that future conditions are certain***

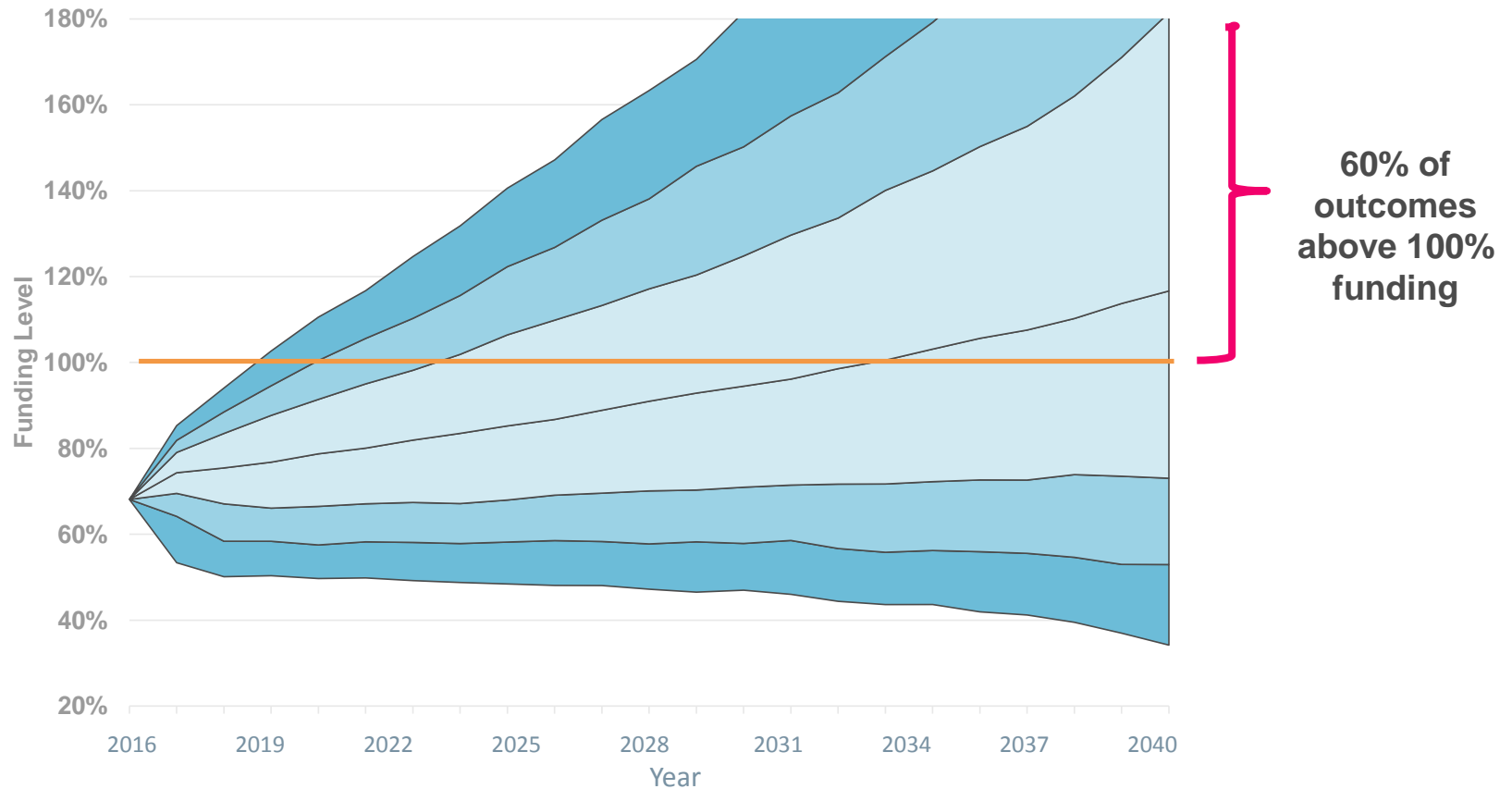
# Risk based approach: recognise uncertainty



# Setting employer contribution rates



# Setting employer contribution rates



# Two elements to contribution rates



Expressed as a % of pay

Cost of  
future  
benefits

“Primary Rate”



Monetary amount in most cases

Adjustment to  
target full  
funding

“Secondary Rate”



# Why pay monetary deficit amounts?



Deficit recovery:  
10% of pay



Payroll of £100,000

Deficit recovery = £10,000

Over 3 years



Payroll of £60,000

Deficit recovery = £6,000

**Deficit does not reduce in line with falling payroll  
Monetary amounts ensure the deficit is still repaid**

# Why doesn't everyone pay the same rate?



Term

No actives

Maturity

Size

Security

Guarantor

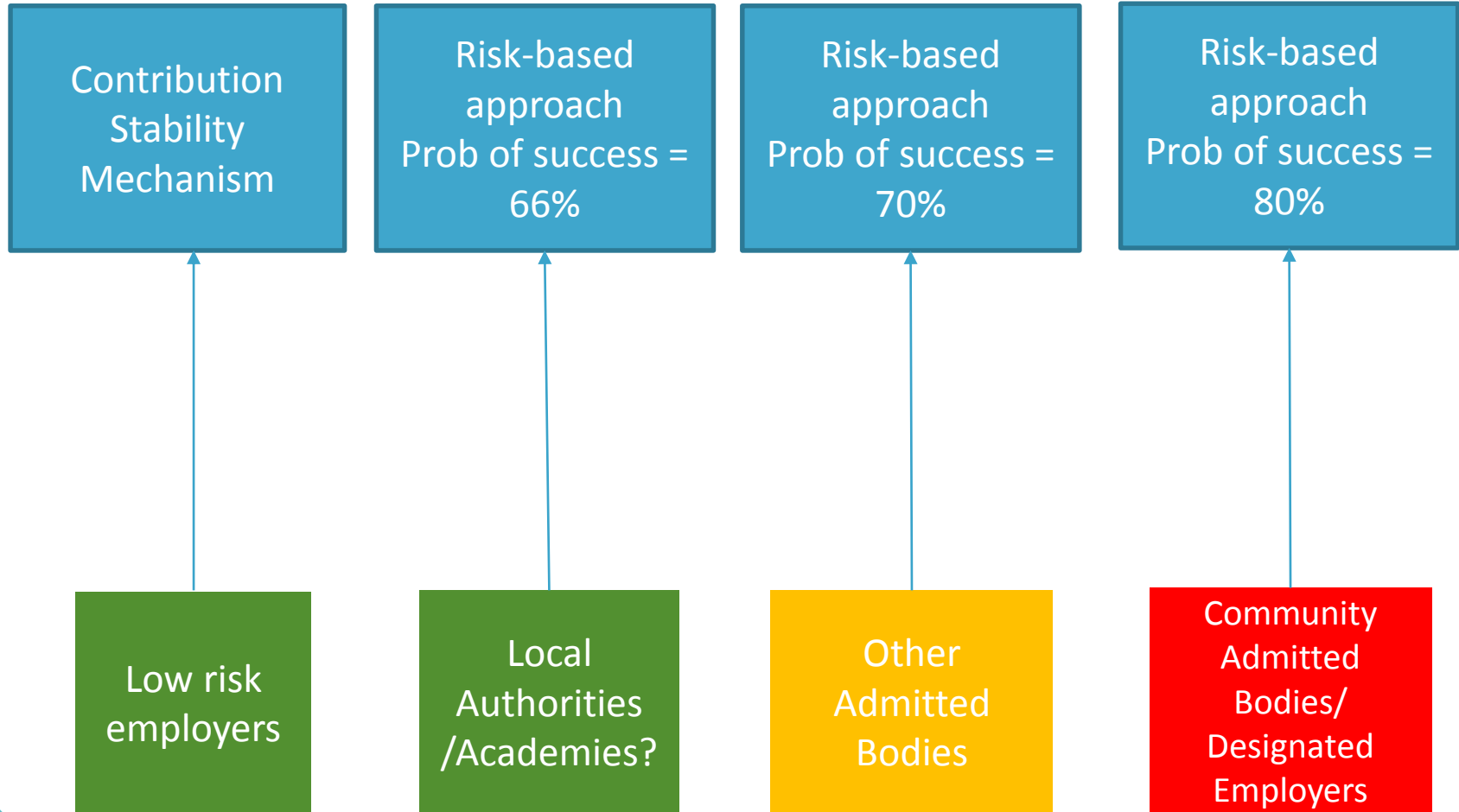
Planning to  
exit

Closed to  
new entrants

Funding level

***Employers are a diverse group with different objectives***

# Risk-based approach for all employers



# What this looks like in practice



Employer	Funding target	Recovery period	Risk category	Likelihood of success
Employer A	Ongoing	17 years	Low	66%
Employer B	Ongoing	17 years	Medium	75%
Employer C	Ongoing	10 years	High	80%
Employer D	Gilts	5 years	High	70% <sup>1</sup>
Employer E	Ongoing	3 years	Low	66%

Notes:

1. Charge on assets, reduction in likelihood of success from 80% to 70% to reflect additional security

- Help all parties understand approach to setting contribution rates (including SAB and DCLG)

**Transparent approach to funding plans**

# Valuation results schedule



Fund	Cambridgeshire Pension Fund
Administering Authority	Cambridgeshire County Council
Employer	
Pool (if applicable)	Individual
Employer code/Pool Name	
Open/Closed	Closed
Employer Type	CAB

## 2016 Valuation Results - Balance Sheet

Funding Position Relative to Employer Funding Target	Ongoing Funding Basis 31 March 2013 (£000)	Ongoing Funding Basis 31 March 2016 (£000)
<b>Past Service Liabilities</b>		
- Active Members (Final salary)	3,000	4,000
- Active Members (CARE)	-	1,000
- Deferred Pensioners	1,500	2,000
- Pensioners	4,500	7,000
<b>Total</b>	<b>9,000</b>	<b>14,000</b>
<b>Asset Share</b>	<b>7,750</b>	<b>12,500</b>
<b>Surplus / (Deficit)</b>	<b>(1,250)</b>	<b>(1,500)</b>
<b>Funding Level</b>	<b>86%</b>	<b>89%</b>

# Valuation results schedule



## 2016 Valuation Results

	% of payroll	£(000) p.a.
Rate paid in 2016/2017	22.4%	-

Contribution Rates	Primary Rate		Secondary Rate	
	Cost of New Benefits Accruing		Deficit (Surplus) Repayment	
	% of payroll	plus	£(000) p.a. *	
2016 Valuation Rate	29.3%	plus	60	
<b>Recommended Contribution Rates</b>				
<b>2017/18</b>	24.7%	plus	20	
<b>2018/19</b>	27.0%	plus	40	
<b>2019/20</b>	29.3%	plus	60	

\*These monetary amounts will increase in line with our salary growth assumption.

The cost of providing LGPS pension benefits is dependent on many uncertain factors including the investment performance of the Fund's assets. To reflect the uncertainty, employer contribution rates have been set by modelling the contributions required to fund the benefits under 5000 different economic scenarios. The likelihood that the 2016 Valuation Contribution Rate above will pay for both benefits accruing and return the employer to a fully funded position over a period of 7 years is 80%.

Further details of how contribution rates have been calculated are included in the Employer Results Report and the Funding Strategy Statement

The Primary Rate includes an allowance of 0.7% for administration expenses.

# Valuation results schedule



## Data

Membership Statistics	Numbers		Actual Pay / Pension (£000)		CARE Pot (£000) <sup>1</sup>
	31 March 2013	31 March 2016	31 March 2013	31 March 2016	31 March 2016
Actives	83	62	2,194	1,852	74
Deferred Pensioners	14	30	55	87	-
Pensioners	22	32	145	200	-

<sup>1</sup> CARE Pot for deferred and pensioner members is included in the pension figures

Membership Statistics	Average Age <sup>2</sup>		Duration
	31 March 2013	31 March 2016	31 March 2016
Actives	52.2	53.5	21.9
Deferred Pensioners	51.0	51.4	23.1
Pensioners	63.6	65.4	12.7

<sup>2</sup> Weighted by liability

## Assumptions

Financial Assumptions	Ongoing	Ongoing
	Funding Basis 31 March 2013	Funding Basis 31 March 2016
Discount Rate		
- Pre Retirement	4.6%	4.0%
- Post Retirement	4.6%	4.0%
Salary Increases	4.3%	2.4%
Pension Increases / CARE revaluation	2.5%	2.1%

Any questions?

