



Government
Actuary's
Department

Firefighters' Pension Scheme Advisory Board (England)

Fire Scheme Valuation

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Purpose, background and previous results



2016 Valuation as at 31 March 2016 - Purpose

- > Required by the Public Service Pensions Act 2013
- > Calculate employer contribution rate
 - > from 2019 to 2023
- > Determine whether the cost cap has been breached
- > Similar valuations also being carried out at the same time for other public service pension schemes
 - > eg police, NHS, teachers, etc
 - > HMT have allocated each scheme to a cluster, depending on the size of each scheme
 - > Fire England is in Cluster 3



2016 Valuation as at 31 March 2016 - Purpose

- > The 2016 valuation will make allowance for:
 - > Change to the interest rate (the SCAPE rate)
 - > Changes to other assumptions set by HMT
 - > Impact of recent membership movements
 - > Changes to fire specific assumptions (eg retirement patterns, life expectancies) to update for recent experience in the Fire Scheme, as necessary
- > Currently expected to be published in early 2018



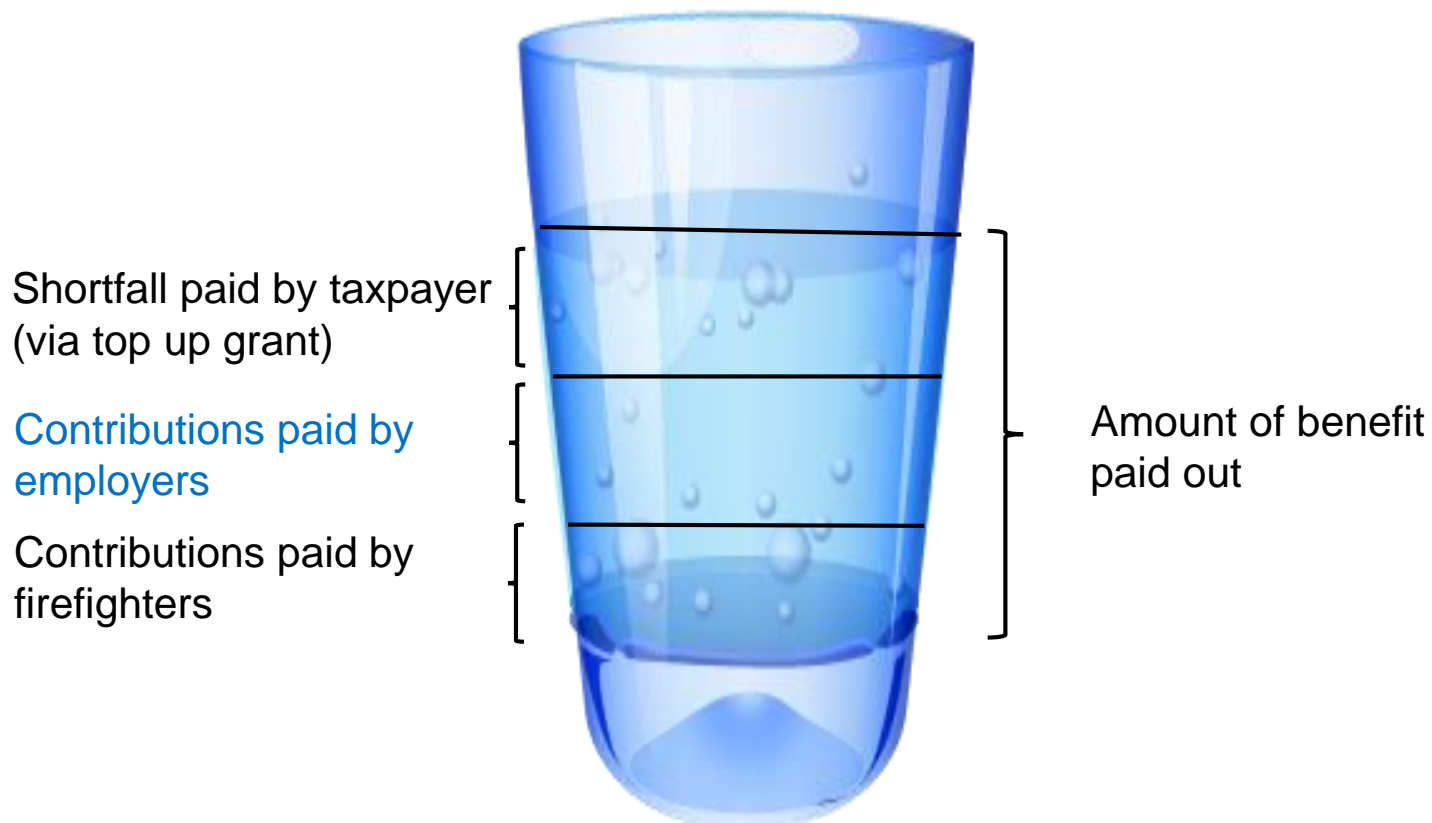
The valuation in three steps

1. Obtain data regarding the scheme
2. Analyse data to develop assumptions about future experience
3. Use data and assumptions to calculate results
 - > Must comply with HMT Valuation Directions regarding approach to calculations



Fire Scheme Valuation

How are fire pensions financed?





Employer contribution rate

Cost of providing benefits being accrued from future service over next 4 years



Saving from notional past service surplus (or add the cost of paying for notional past service deficit)



Member contributions



Allowance for ill health charges paid by employers



Employer contribution rate



Fire Scheme Valuation

Current employer contribution rates (England) Payable 2015 to 2019 (from 2012 valuation)

Rate as % of pensionable pay	1992 Scheme	2006 Scheme	2015 Scheme
Cost of accrual	43.6%	30.7%	27.3%
Past service effects	-5.5%	-5.5%	0.0%
Less member contributions	-14.8%	-10.7%	-12.5%
Less allowance for ill health charges	-1.6%	-2.6%	-0.5%
2015-19 employer contribution rate	21.7%	11.9%	14.3%



Fire Scheme Valuation

Fire Pension Schemes (England)

Some scheme statistics – as of 31 March 2012

Group	Number
Active firefighters	35,149
Deferred pensioners	5,242
Pensioners	38,598
Total membership	78,989

Total pay for active firefighters

£954 million (or £1,109 million FTE)

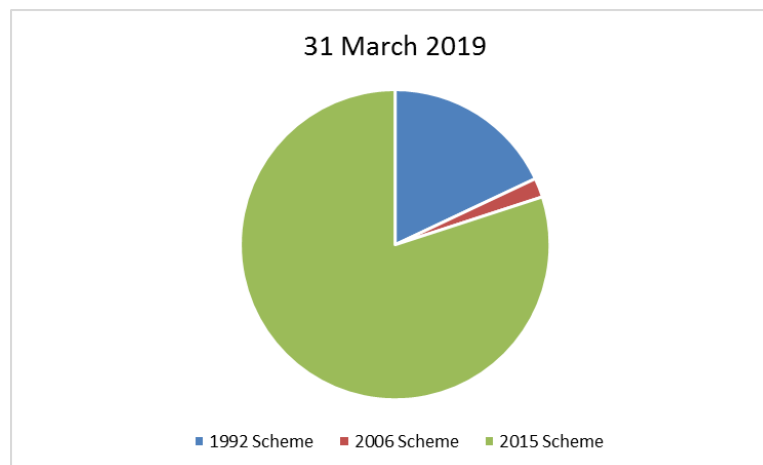
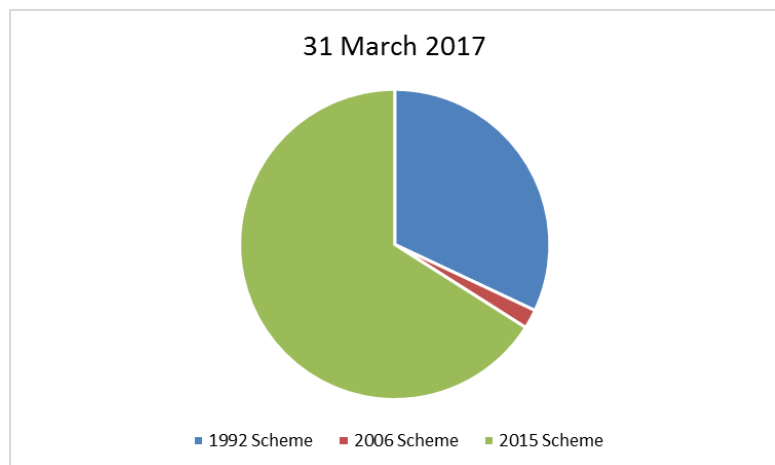
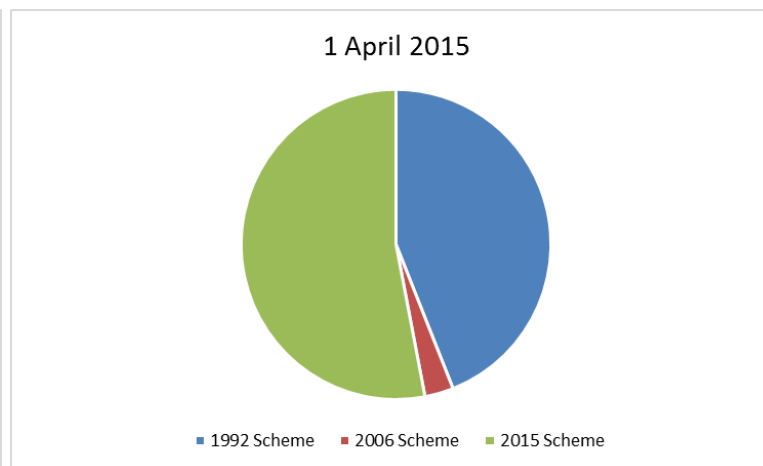
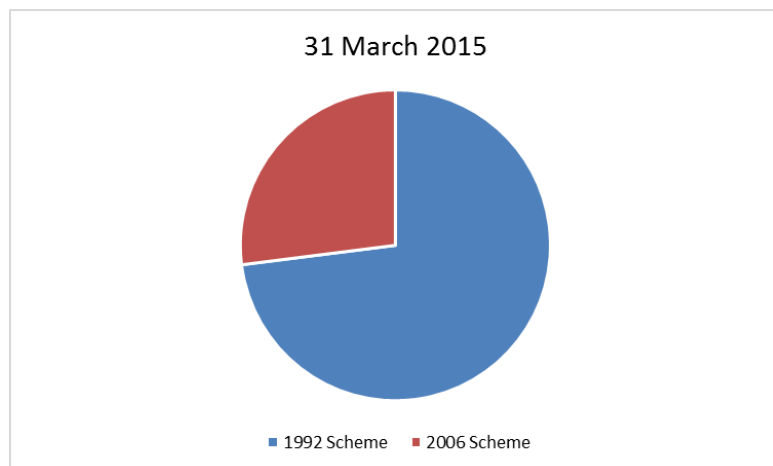
Total pensions in payment

£539 million



Fire Scheme Valuation

Evolving active membership – Projections from 2012 valuation





Current status of the 2016 valuation



2016 Valuation – Current status

- > All data has been received from all FRAs
 - > Both 2015 and 2016 data
- > 2015 data is being used to calculate the starting value of the notional cost cap fund
- > 2016 data is being used to calculate the employer contribution rate from 2019, and to carry out the first comparison of the cost of the scheme against the cost cap
- > Action is now with GAD to:
 - > Check the required items have been provided and look reasonable, such that the data is fit for purpose
 - > Aggregate the data from all FRAs to a single data set
 - > Process the data so in a suitable format for valuation calculations



2016 Valuation – Next steps

- > GAD to complete data processing
- > GAD to analyse the experience since the previous valuation in 2012
 - > Retirements, deaths, etc
- > This analysis makes a comparison of the actual experience with that assumed in the 2012 valuation
- > This might show that some assumptions remain appropriate
 - > but others may need updating.
- > A change in assumptions impacts the assessed cost of the scheme
 - > might be differing impacts on employer contribution rate and cost cap



Fire Scheme Valuation

Valuation Assumptions



Valuation Assumptions

- > The cost of providing pensions is uncertain
- > Therefore, assumptions are made about future experience
 - > eg when members retire, how long they live, pay increases, etc
- > General (all schemes) assumptions are set by HMT and set out in their valuation directions
 - > eg discount rate, CPI increases, pay increases
- > Scheme specific assumptions are set by the Secretary of State
 - > Eg normal health retirements patterns
- > The SoS must consult such persons as considered appropriate and would like to consult the SAB in setting the scheme specific assumptions for the 2016 valuation of the Fire Schemes.



Scheme Specific Assumptions – GAD Advice

- > As scheme actuary, GAD advise the Home Office on appropriate assumptions
- > This advice will be made available to the SAB
- > On receipt of GAD's advice, the Home Office would like the SAB, for each assumption:
 - > to consider whether any other information should be taken into account, and
 - > to give a view on whether they have any reason to believe that the assumption proposed is inappropriate.
- > SAB only expected to comment if they have relevant knowledge or experience
- > SAB may wish to carry out some preparation in advance



Fire Scheme Valuation

Scheme Specific Assumptions – Detail

Assumptions for behaviour before retirement	Assumptions for behaviour at/after retirement
Retirement in normal health	Commutation of pension at retirement
Retirement in ill health	Death after retirement
Voluntary withdrawal from service	Proportion of members for whom a spouse/dependant pension is payable
Death before retirement	Age difference between a member and spouse/dependant
Promotional pay increases	



Fire Scheme Valuation

Past service costs



Fire Scheme Valuation

Past service costs

Since the 2012 valuation, there have been three events that may have an impact on the cost and funding of the Fire Schemes:

Special Retained Option	Milne	Refunds of Contributions
The option for eligible retained members to purchase past service in the modified/special section of the 2006 Scheme.	The additional payments made following the Pensions Ombudsman's determination in the case of Milne.	The refunds of employee contributions being paid to eligible firefighters who made contributions after they had reached their maximum pensionable service in the 1992 Scheme.
Options generally made over 2015/2016.	Payments generally made during 2015/2016.	Refunds generally paid during 2016/2017.



Past Service Costs – Impact

- > Government is currently developing policy for how these past service costs will be treated in the valuation; in particular the impact on the following:
 - > The employer contribution rate (eg should employer contributions increase to meet the additional costs?)
 - > The cost cap arrangement (eg should the cost feed into an increase in the cost of the scheme for assessment against the cost cap?)
- > Home Office will be consulting the SAB for their views as part of this process:
 - > detailed paper at the June 2017 SAB meeting.
- > The SAB will be asked to provide comments after the June 2017 meeting.



Cost cap mechanism



Cost cap mechanism

- > What is it?
 - > A cost control mechanism introduced by HMT
 - > Maintains the cost of the Fire Scheme at a similar level to when the 2015 Scheme was introduced, preventing the taxpayer's share of the cost changing dramatically over time
- > How is it expressed?
 - > A baseline cost was established at the 2012 valuation being **16.8%** of pensionable pay.
 - > Equates to the employer's share of the cost of the 2015 Scheme (ie a total cost of 30.0% of pay minus 13.2% of pay from employees)
- > Calculated in a different way to the employer contribution rate
 - > Assumes all active members are in the 2015 scheme



How does the cost cap mechanism work?

- > Assessed at each valuation (current as at 31 March 2016)
- > Assessment looks at the cost of future benefits, plus changes in the value of (mostly) active benefits already accrued
 - > Changes in the value of deferred and pensioner 2015 Scheme benefits also included, but will not be significant in the early years
- > If this measure is $\pm 2\%$ from target cost, ie:
 - > More than 18.8% of pay, or
 - > Less than 14.8% of pay
- > then, a breach has occurred and corrective action is needed
 - > ie, a change to the design of the 2015 Scheme.



Cost cap breach - process

- > Regulation 150A of the The Firefighters' Pension Scheme (England) Regulations 2014 sets out the process
- > The Secretary of State must consult the SAB on options
 - > for such period the SoS considers appropriate.
 - > with a view to reaching agreement endorsed by all SAB members.
- > If there is no agreement reached:
 - > within 3 months of the date on which the consultation period ends
 - > the SoS to take steps to adjust the accrual rate so that the target cost is achieved.



Potential options for adjustment - Simple

- > Default: Accrual Rate (currently 1/59.7)
 - > Simple to administer
 - > Simple to communicate

- > Change to member contributions
 - > Currently 13.2% of pay on average
 - > Simple to administer
 - > Impacts take home pay



Potential options for adjustment - Complex

- > In-service revaluation rate (currently AWE)
 - > More complex to calculate and communicate
 - > Winners and losers depending on proximity to retirement
 - > Possible complications in administering

- > Other benefits (Dependant's benefits, Early retirement terms)
 - > More complex to calculate
 - > Winners and losers depending on dependant status/future retirement plans
 - > Possible complications in administering



Fire Scheme Valuation

What affects the cost cap mechanism?

Included in cost cap	Excluded from cost cap
All experience in 2015 scheme	Changes to discount/SCAPE rate
Impact of change in age profile	Actuarial methodology

And the following elements of final salary scheme benefits

Actives	Pensioners and deferreds
Experience up to retirement (eg salary increases, withdrawal, ill-health and age retirement)	Post-retirement experience
Changes to pre-retirement assumptions	
Changes to post-retirement assumptions (ie life expectancy) <u>made before retirement</u>	Changes to post-retirement assumptions <u>made after retirement</u>



Cost Cap - Methodology

- > HMT currently considering issues that need attention for 2016 valuations
 - > Includes the treatment of the three past service costs for the Fire Scheme
- > Change in SCAPE rate will not impact cost cap but methodology to be adopted to effect this currently being considered
 - > HMT will set out final methodology in updated HMT Directions
- > Impact of a cost cap breach on 2019-23 employer contribution rate still to be determined by HMT



Fire Scheme Valuation

Timetable



Fire Scheme Valuation

Timetable

Work stage	Action by	Expected timing
SAB training session – the valuation process	GAD	March 2017
SAB training session – setting the assumptions	GAD	June 2017
HO to present paper inviting SAB to provide views on past service costs	HO, GAD	June 2017
SAB to make preparations for their comments on relevant assumptions	SAB	June/July 2017
SAB to provide views on past service costs	SAB	July 2017
Stakeholder engagement on assumptions	GAD, SAB, HMT, HO	August 2017
SAB to provide comments on proposed assumptions to the Home Office	SAB	September 2017
Finalise assumptions	HO	October 2017
Final results*	GAD	March 2018*

Additional SAB meetings may be required over the summer to discuss the valuation assumptions.

* Not accounting for any actions which may be required in the event of a cost cap breach.