Teesside Pension Fund Valuation Training

10 February 2020

Presentation to Teesside Pension Board

Originally prepared by Becky Durran FIA for 22 January 2020 Teesside Pension Fund Committee meeting

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Agenda

- **What is a valuation?**
- **Setting the assumptions**
- **Funding strategy and uncertainties**
- **Timescales**

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What is a valuation?

What is an actuarial valuation?

Assess financial health

Set Contributions

Assets

Market value from Fund accounts

Liabilities 'past service'

Calculated by the Actuary:

Use Fund specific data

Make assumptions about the future

Surplus/Shortfall

Employer contributions to meet cost of new benefits **"primary rate"**

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Employer contributions to eliminate surplus/ shortfall **"secondary contributions"**

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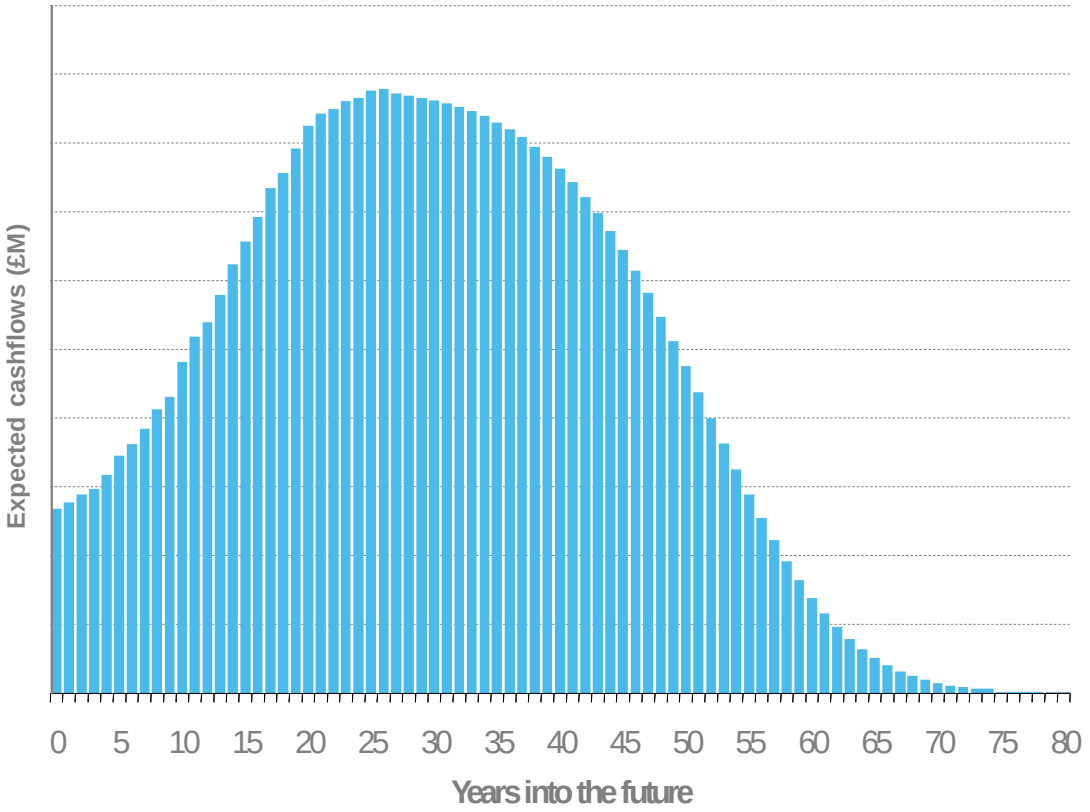
Valuing the liabilities

Member data

Valuation Assump-tions



Sample fund, accrued liabilities only

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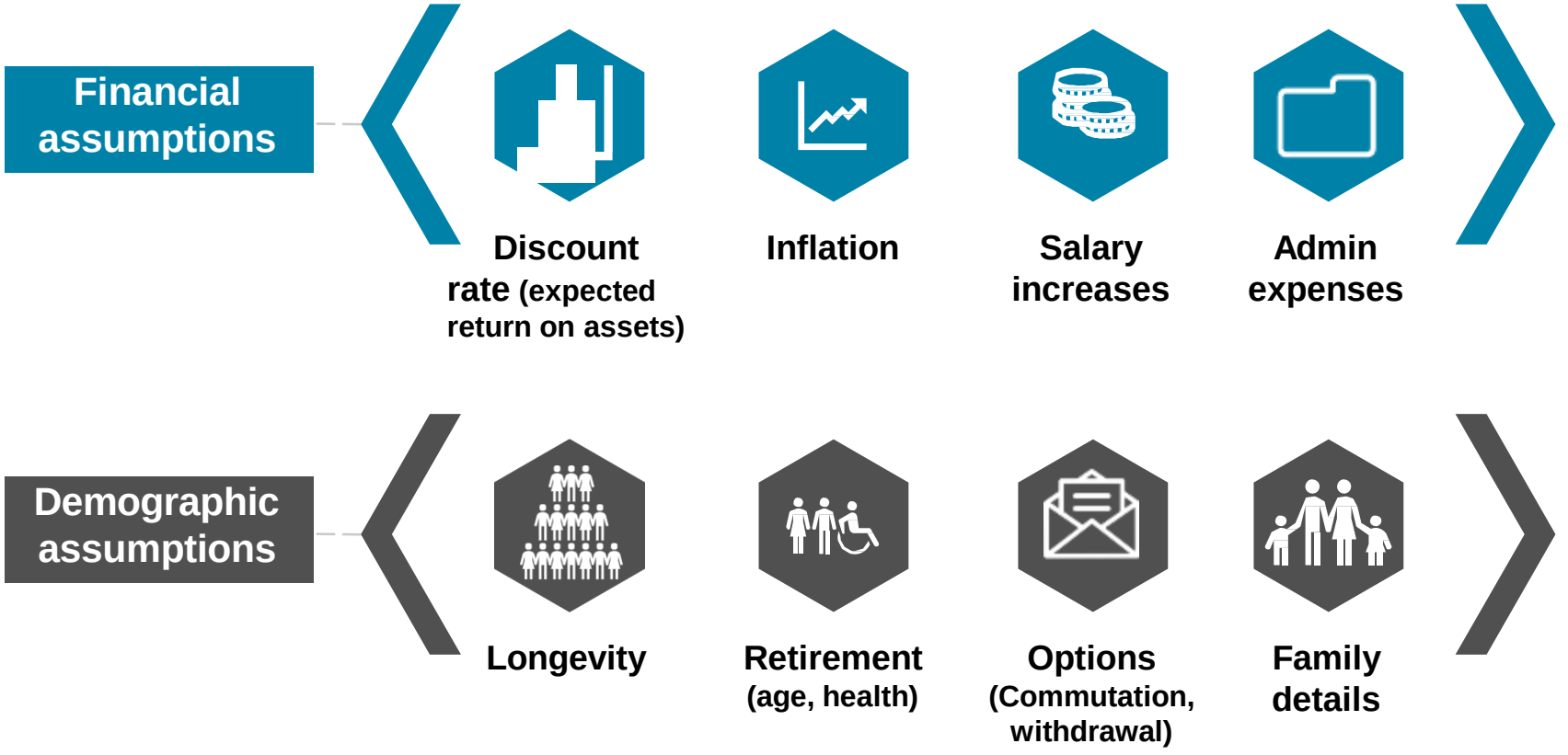
Setting the assumptions

Assumptions



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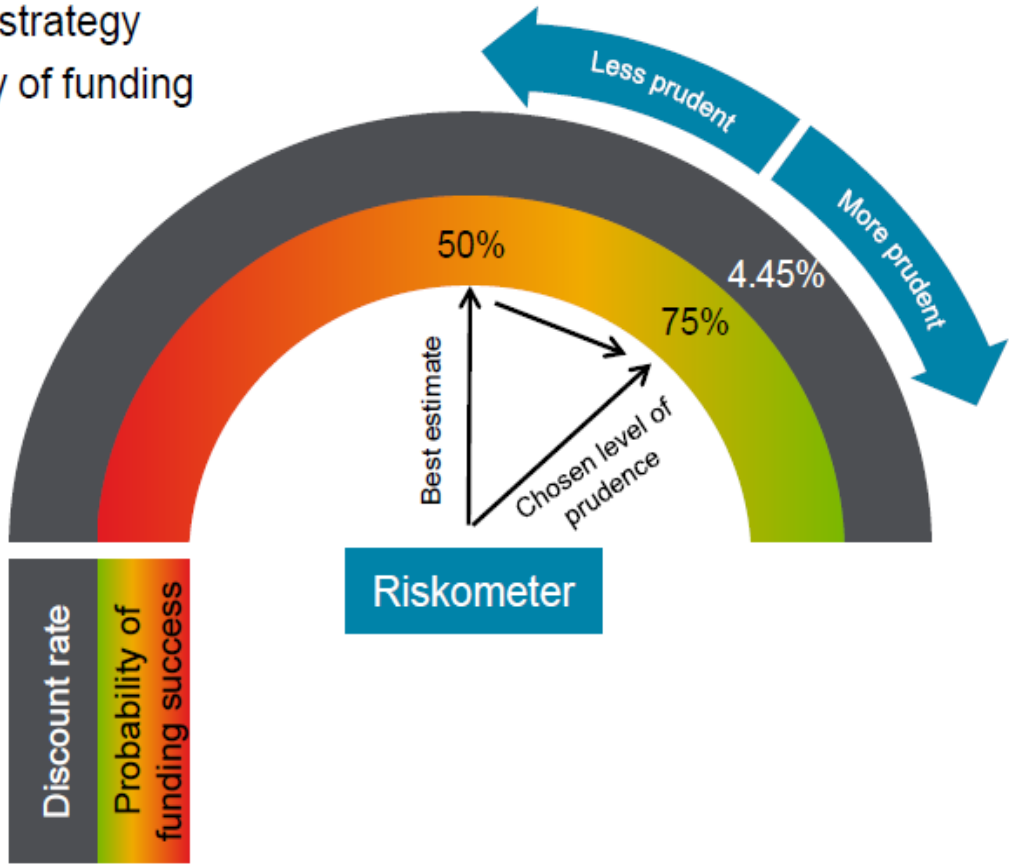
Setting the discount rate – secure long term bodies

- Expected returns based on your investment strategy
- Risk based - level of prudence - "probability of funding success"

Sensitivity to discount rate

Discount rate	Cost now of paying £100 in 20 years' time
4.95%	£38 (10% lower)
4.45%	£42
3.95%	£46 (10% higher)



Supported by Aon's Capital Market Assumptions

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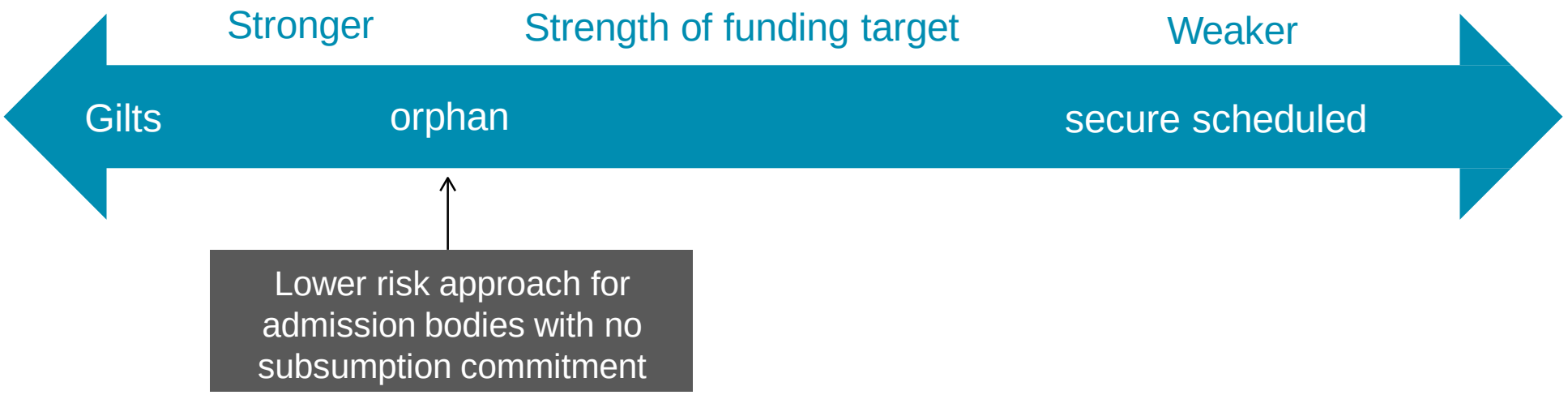
Setting the discount rate – different categories of employer

- Different employers have different characteristics
- Ongoing orphan funding target adopted for admission bodies with no subsumption commitment (to be phased in)



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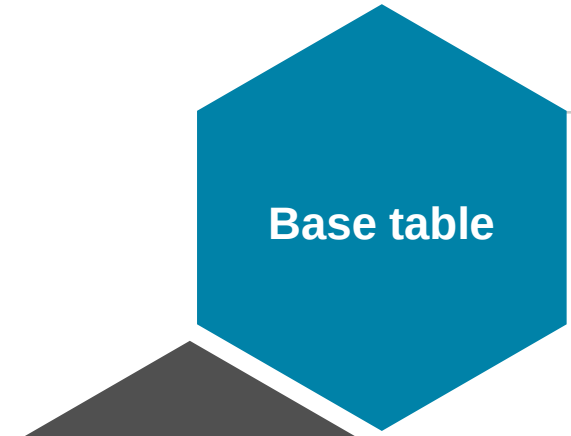
Setting the longevity assumption

There are two parts to the longevity assumption



Current rates of mortality

"Scaling factor" applied to standard mortality tables

How the current mortality will change in future years

CMI publishes standard improvements for the short term. An assumption is also needed for the long term rate of improvement

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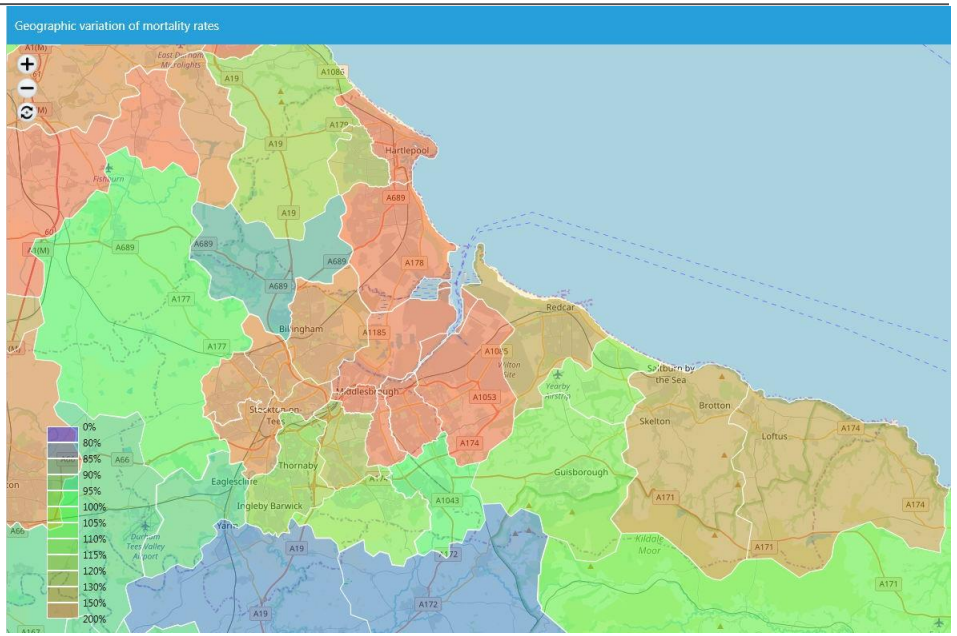
Longevity – base table

Longevity analysis using Demographic Horizons™



Scheme member data *(all members)*

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Demographic Horizons *(2 million data points)*

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Raw Demographic Horizons mortality assumptions *(tailored to Fund population)*

Fund deaths *(experience data)*

→ Weighting *(depending on size of dataset of deaths experience)*

→ Demographic Horizons based mortality assumptions for Fund

Analysis carried out on data to 31 March 2018

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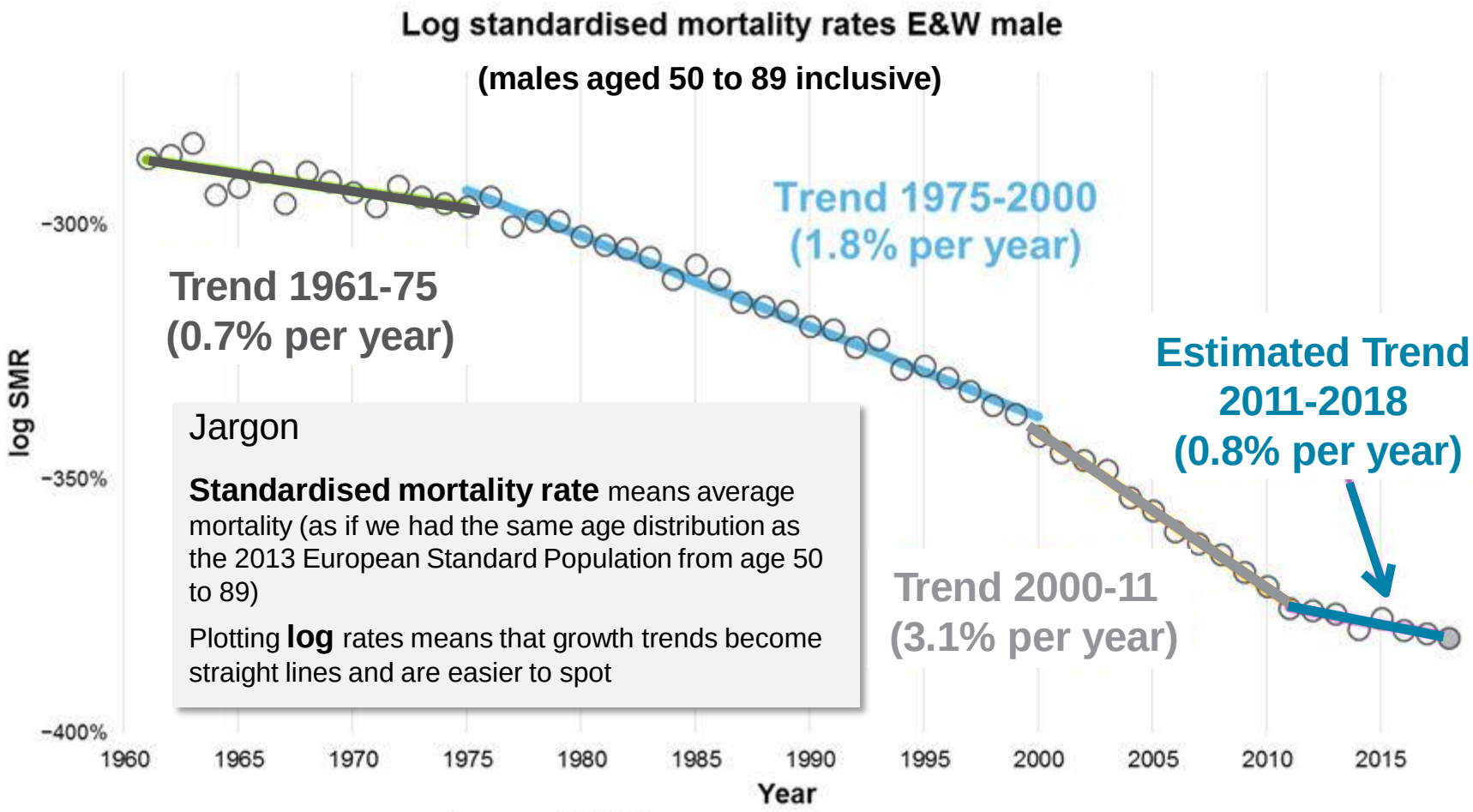
Longevity - historical national male mortality improvements



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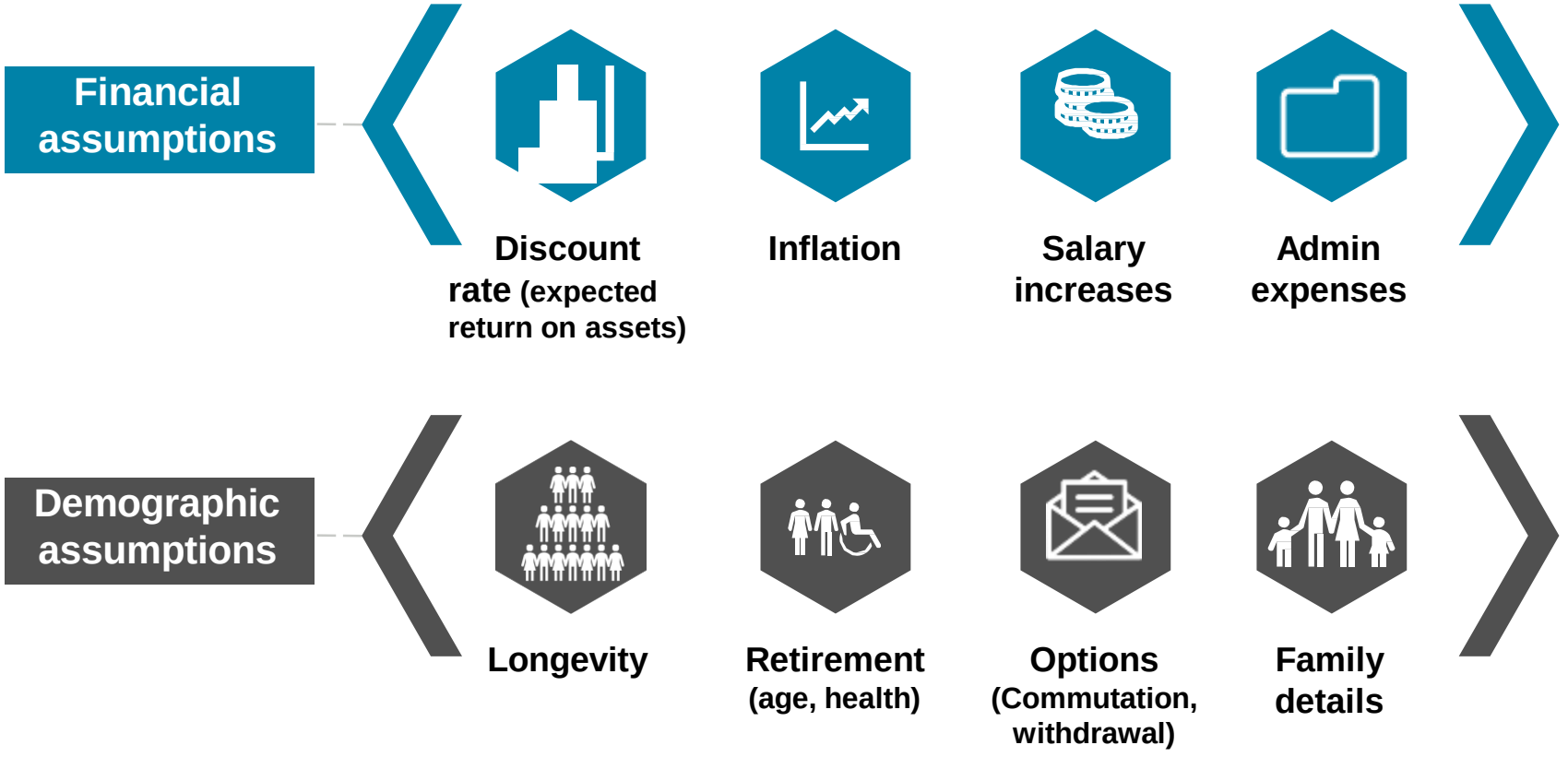
Recap of assumptions



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Funding strategy and uncertainties

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Funding strategy

Funding strategy varies between funds, and between employers within a fund.

Funding target

Long term funding of the liabilities

Recovery/spreading period

May depend on covenant of employer, terms of participation, etc.

Security

Guarantees, bonds

Pooling

Approach to pooling, risks shared

Smoothing mechanisms

For example stepping up of contributions

Documented in Funding Strategy Statement

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Uncertainties at the 2019 valuation – benefit improvements

Cost management

- Package of benefit improvements agreed.
- Average cost to employers 0.9% pay.
- Process paused due to McCloud/Sargeant

McCloud / Sargeant

- McCloud and Sargeant (Judges / Firefighters) cases deemed the transitional protections were age discrimination
- In LGPS, transitional protections are in the form of an underpin
- Government confirmed in July 2019 that they will make changes to all public sector schemes
- Advice from MHCLG / SAB that allowance must be made at the 2019 valuation

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Timescales

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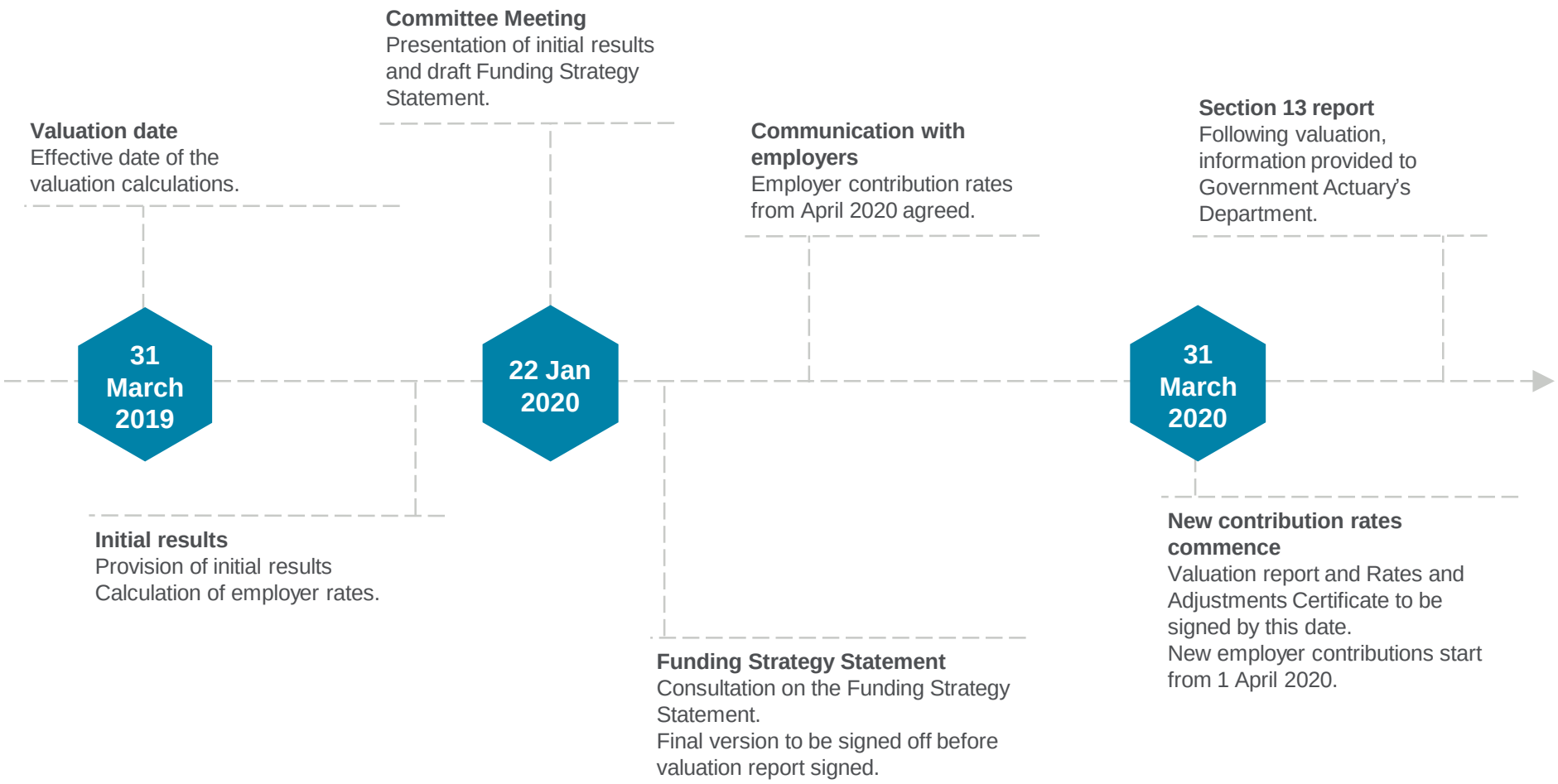
Timeline



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Questions?

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