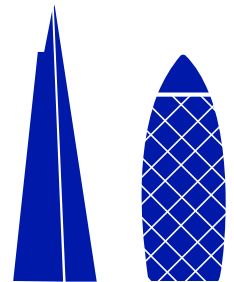




8 OCTOBER 2021

Annual Members' Meeting 2021

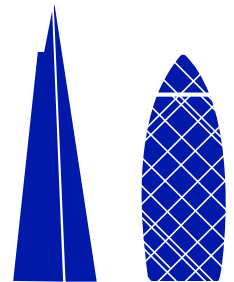


EVERY JOURNEY MATTERS

Welcome and Introduction

Maria Antoniou

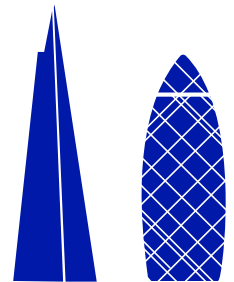
Chair of Trustees



EVERY JOURNEY MATTERS

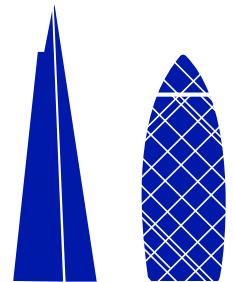
Agenda

Time	Topic	Owner
11.00	Welcome and Introduction	Maria Antoniou (Chair of Trustees)
11.10	Review of the Year	Stephen Field (Fund Secretary)
11.25	Actuarial Update	Gareth Oxtoby (Willis Towers Watson)
11.45	Investment Update	Ed Wilson (Willis Towers Watson)
12.05	Legal Developments	Pauline Sibbit (Sackers & Partners)
12.25	Questions & Answers	Maria Antoniou (Chair of Trustees)
12.45	Close	All



Review of the Year

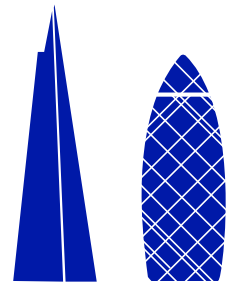
Stephen Field Fund Secretary



EVERY JOURNEY MATTERS

Key Activities Last 12 Months

- Significant increase in work volumes
 - 25% increase in work volumes
 - 22% increase in deaths
- An increase in online activity
 - Over 20% of members now registered
 - 25% increase in quotations run, over 50,000 quotes in the year to 31 March 2021
- Bulk microfiche conversion to support remote working



Key Activities Last 12 Months (continued)

- Fund is targeting Net Zero carbon emissions by 2045 at the latest , with an intermediate target of 55% by 2030 from the baseline established in 2016.
- 30% reduction in Carbon Emission Intensity (tons / \$m sales) of the Fund's portfolio since its peak in Q4 2016.
- Fund's exposure to Oil & Gas via its equity holdings (passive and active) continues to shrink both on an absolute and relative to its benchmark:
 - December 2016 3.3% of overall Fund value
 - March 2019 1.8% of overall Fund value
 - March 2020 0.9% of overall Fund value
 - June 2021 0.16% of overall Fund value
- Exposure in all assets classes (Equity and Bond) to Oil & Gas (Drilling, Exploration and Production) is 0.2% - £26 million as at June 2021. vs. 0.5% in the Fund BM. This is over 60% under-weight.
- Active participant of Climate Action 100+ and Carbon Disclosure Project's Non-Disclosure and Science-Based Targets campaigns.
- The Fund's partnership with Sustainalytics resulted in engagements with 37 investee companies and 6 cases were successfully resolved.
- Launched a new thematic engagement on Climate Change – Sustainable Forests and Finance.
- Glass Lewis voted 7,635 resolutions on behalf of the Fund and voted 'for' 56% of environmental and social shareholder proposals.
- The Fund allocation to "ESG tilted" investments at 9.8% was well ahead of the 5% target. This has been raised to 15% (to be met by 2025).

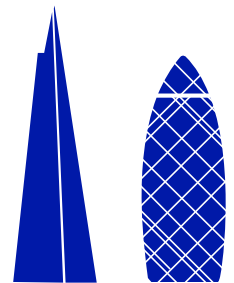


Governance

- Trustee's conduct business through the main Board meetings and 6 sub committee meetings
- Over the year to 31 March 2021, 32 meetings in total were held

Trustees Changes

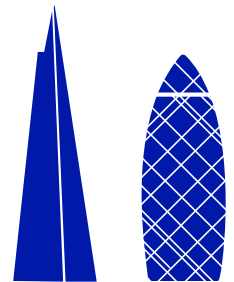
- **To 31 March 2021**
 - No new Trustees appointed/ departed during the year
- **From 31 March 2021**
 - Mercillina Adesida and Tom Cunningham joined
 - Mike Binnington and Michael Hurwitz left
 - There have also been changes made to the Sub Committee composition by the TfL nominated Trustees



Value of the Fund

- At 31 March 2021 the value of the Fund stood at £13.1bn versus £10.6bn at previous year end
- The change in value over the year:

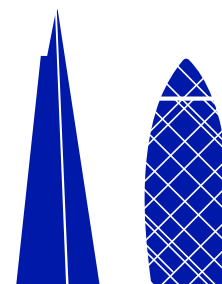
Income	£472m
Plus return on Investment net of expenses	£95m
Plus increase in value of Investments	£2,377m
	<u>£2,944m</u>
Less expenditure	<u>(£424m)</u>
Change in value	£2,520m



Money into the Fund

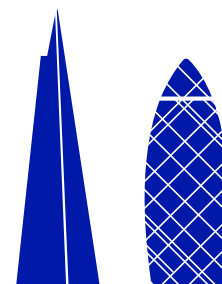
Topic	2020/21 £m	2019/20 £m
Employers' contributions	401.5	287.5
Members' contributions	70.1	67.1
Transfers in from other schemes	0.4	2.8
Total Income	472.0	357.4

Topic	20/21 £m	2019/20 £m
Investment income net of expenses	95.6	123.8
Total Income	95.6	123.8



Money out of the Fund

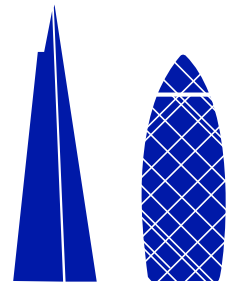
Topic	2020/21 £m	2019/20 £m
Benefits payable	394.7	387.3
Payments to & on account of leavers	4.9	4.2
Other payments	5.2	4.5
Administrative expenses	4.1	4.2
Pension levies	15.4	13.7
Total	424.3	413.9



Investment Portfolios

Value of the Fund:

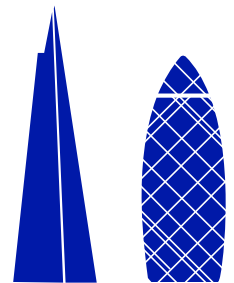
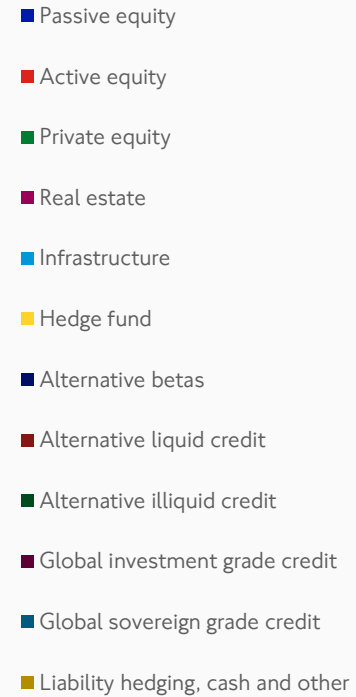
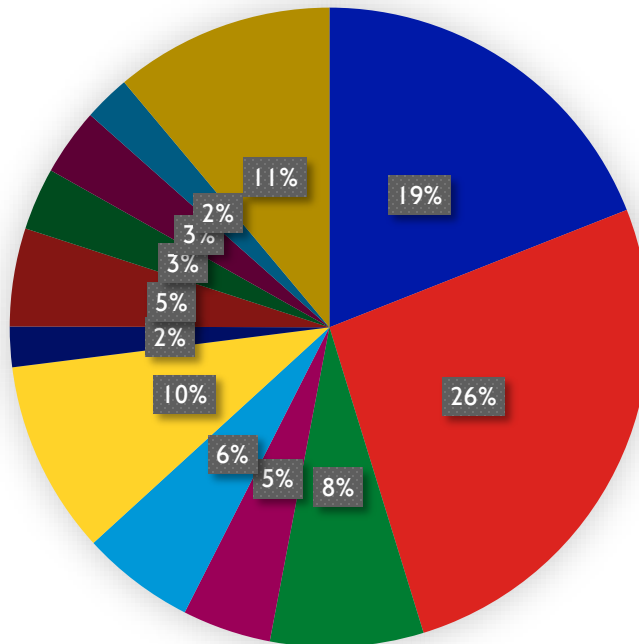
- £13.1bn (31 March 2021)
- £10.6bn (31 March 2020)
- £11.0bn (31 March 2019)
- £10.3bn (31 March 2018)
- £9.8bn (31 March 2017)
- £8.2bn (31 March 2016)



Investment Diversity

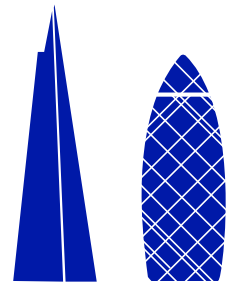
- The Fund continues to diversify to enhance returns while maintaining the risk it takes.

Fund Asset Allocation - June 2021



Investment Costs

Topic	2020/21 £m	2019/20 £m	2018/19 £m
Direct investment management expenses (shown in accounts)	21.6	19.6	17.6
Indirect investment management expenses (shown in change in market value)	39.1	37.0	32.7
Total investment management expenses	60.7	56.6	50.3
Direct investment transaction costs	1.8	1.8	2.0
Total investment management expenses and transaction costs	62.5	58.4	52.3
Investment costs as a percentage of total assets	0.48%	0.55%	0.48%



2022 Pension Increase

- Under the Rules of the Fund the April pension increase is calculated by reference to the change in the Retail Prices Index (RPI) over the period September to September.

The increase for 2021 was

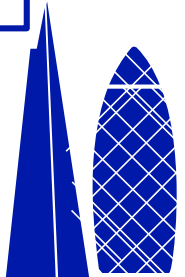


1.1%

The increase for 2022 will be

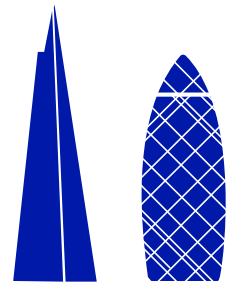


To be announced 20 October



Post 31 March Update

- Triennial Valuation
 - Provision of data
 - Consideration of appropriate assumptions
- Revamp of annual benefit statements
 - Inclusion of checklist
 - Inclusion of Regulators Scam information
- Guaranteed Minimum Pension reconciliation
- Launch of Expression of Wish form online through our Pension Web Portal
- TfL's Pensions Review



TfL Pension Fund

Annual Members' Meeting

Scheme Actuary presentation

8 October 2021



Scheme Actuary review of 2021

- **Preparing for the 2021 actuarial valuation**
- **Regulatory developments**
- **Analysing the Fund's recent mortality experience**
- **Key considerations**

Preparing for the 2021 actuarial valuation of the Fund

- The Trustee is required to carry out an actuarial valuation of the Fund every three years
- Main purpose
 - a) To check whether the money already in the Fund is sufficient to pay the benefits which members have earned so far as they fall due
 - b) To calculate the amount of money required to be paid by TfL to finance further benefit accrual by current employees and new joiners
- Outcomes of the previous (2018) valuation of the Public Sector Section of the Fund
 - a) The Fund's assets of £10.3bn were slightly less than the amount estimated to be required to pay future benefits (the 'Technical Provisions') of £10.9bn. The Trustee agreed a plan with TfL targeting 100% funding by 2026
 - b) TfL would pay 26.9% of pensionable pay to finance future pension accrual (members continue to pay 5%)
- The next valuation of the Fund has an effective date of 31 March 2021
 - We have started work on the calculations, but are not yet in a position to report on the results

Preparing for the 2021 actuarial valuation of the Fund

Where do we start?

- An actuarial valuation makes lots of assumptions about the future, in order to assess whether there is enough money in the Fund now to pay members' benefits 50+ years into the future
- Current funding regulations tell us to start by assuming the assumptions we made last time still hold, unless there is a good reason to change them
- So for example
 - Previous valuations assumed that the Fund stays open (ie continues to admit new entrants), and that the current asset allocation will remain appropriate in future
 - Previous valuations assumed that TfL will continue to be able to provide financial support to the Fund over the long term, and that TfL would have sufficient financial flexibility to pay more into the Fund if future outcomes were worse than anticipated
 - And we made lots of detailed assumptions about future returns on Fund assets, future life expectancy etc
- Estimated funding level at 30 June 2021 on 2018-consistent assumptions c**100%**

A key question for the Trustee is – do these 2018 assumptions still hold good? Or would a prudent approach to funding require changes for 2021?

Regulatory developments which may affect the 2021 valuation

New regulations?

- 2020 – the Pensions Regulator consulted on a revised code of practice to apply to the funding of pension schemes such as the TfL Pension Fund
- Potential outcome: a more demanding funding regime, largely driven by issues for closed schemes (the majority) rather than open schemes like the Fund

In practice, there has been negligible visible regulatory progress in this regard

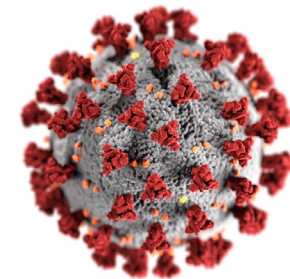
So what regulatory developments have there been?

- Pension Schemes Act 2021
 - New requirements regarding ‘funding and investment strategy’
- Pensions Regulator’s 2021 annual funding statement
 - Focus on the long term – risk management
 - Some sponsors more affected by COVID-19 than others
 - Focus on affordability
 - New funding code in force ‘late 2022 at the earliest’

ELIZABETH II



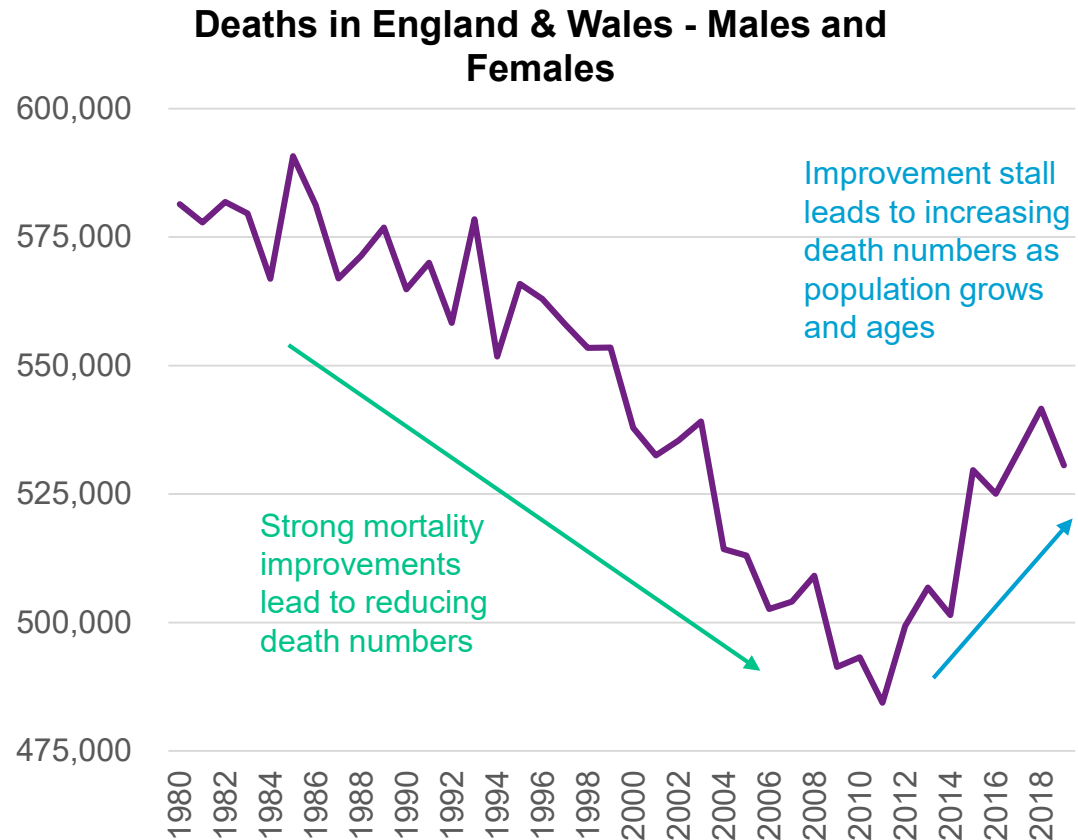
Pension Schemes Act 2021



Understanding UK mortality

Annual death numbers pre-COVID

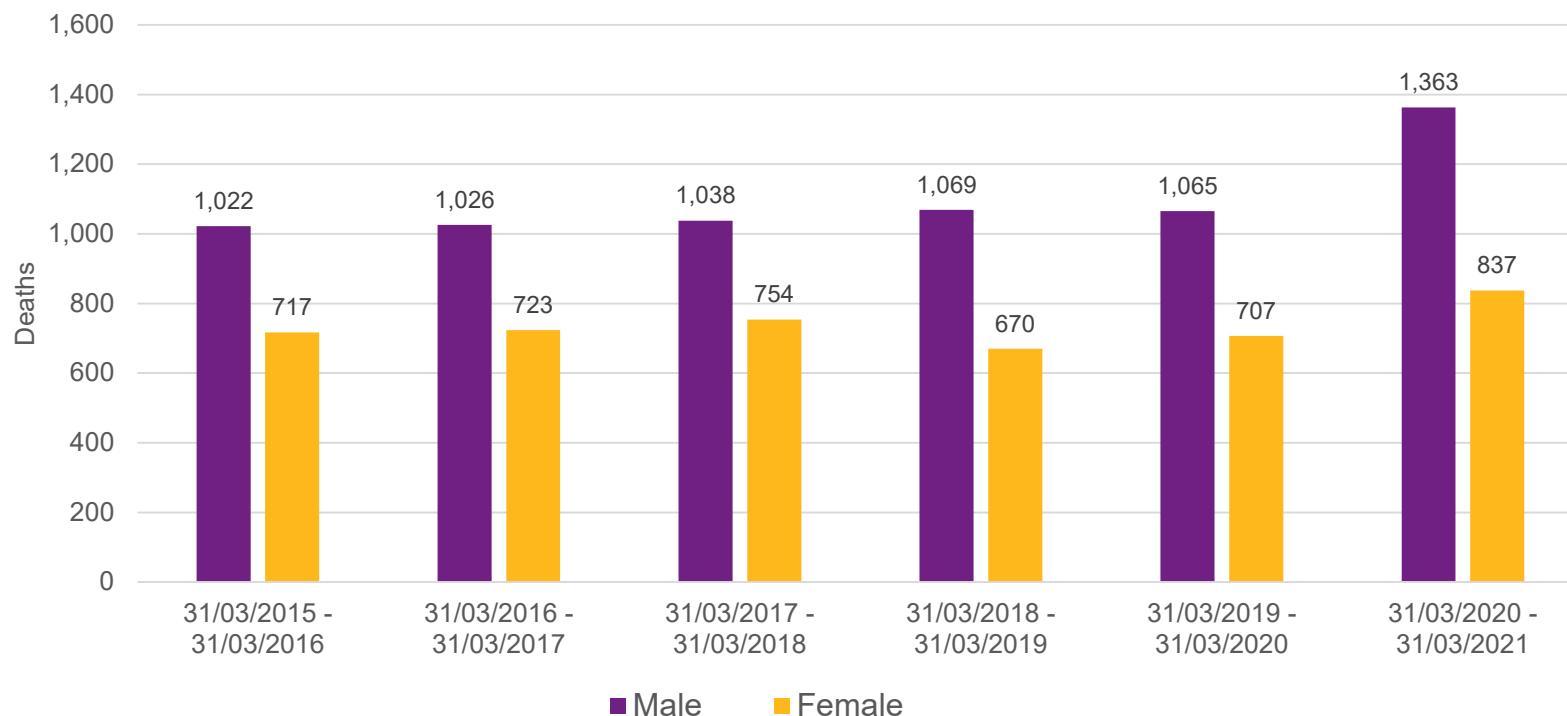
- Each year, around 500,000-550,000 people die in England and Wales and over 600,000 in the UK as a whole.
- This is much lower than the numbers experienced in the latter half of the 20th Century due to improvements in mortality rates and life expectancy over time.
- Annual death numbers have increased since 2011 in line with a growing and ageing population.
- Mortality *rates* have not worsened but improvements are at a much slower rate.



Source: Office for National Statistics

The Fund's own recent experience

Death counts by scheme year – pensioners and dependants

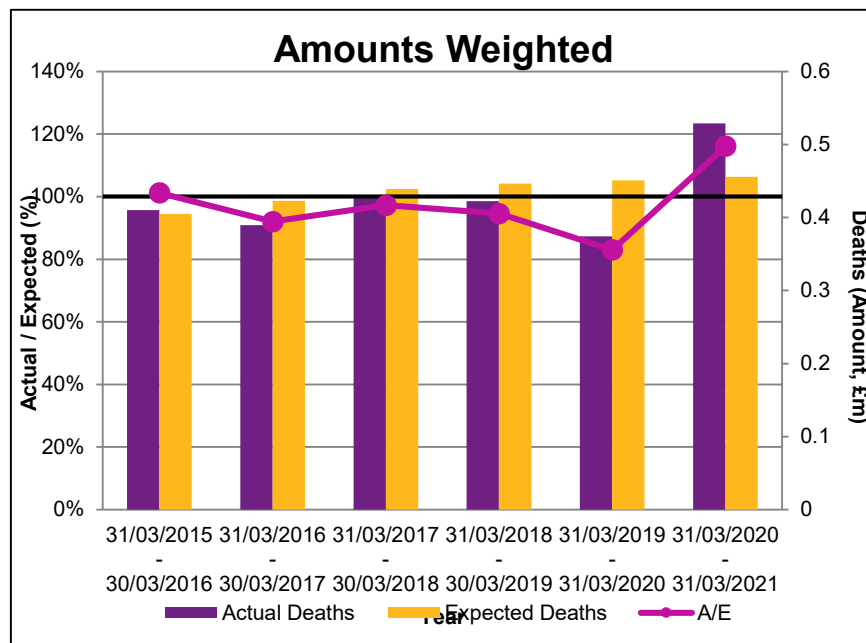


	Deaths over entire period
Males	6,583
Females	4,408
Total	10,991



How does this compare with what we expected?

Female normal health pensioners



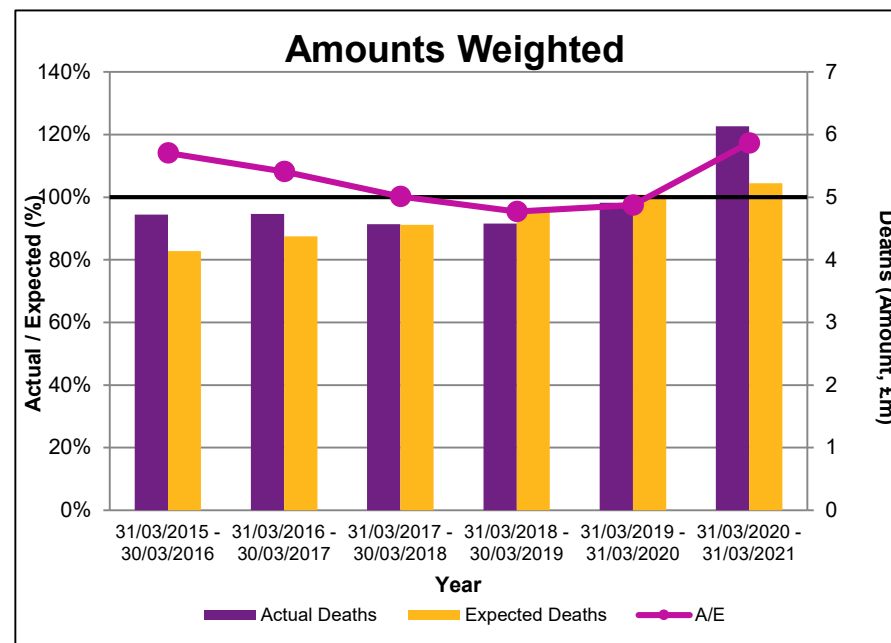
Overall: 97% of expected deaths

Over the six years to 31 March 2021, there were **fewer** female deaths than expected based on our 2018 funding assumption.



(Excluding 31 March 2020 to 31 March 2021 experience, this would be **93%**)

Male normal health pensioners



Overall: 105% of expected deaths

Over the six years to 31 March 2021, there were **more** male deaths than expected based on our 2018 funding assumption.



(Excluding 31 March 2020 to 31 March 2021 experience, this would be **103%**)

Impact of COVID on future improvements in life expectancy

- Pension scheme trustees and sponsors may be surprised to find that liabilities may have reduced by only a little despite more members dying in 2020 and 2021 than anticipated
- What ***might*** be more significant is the long-term impact on the population's well-being and health, and how this affects pension scheme members' longevity improvements
- Arguments for and against a change to the level of mortality improvements in future include:

Possible adverse mortality impact	Possible positive mortality impact
Long term COVID-19 health issues – 'Long COVID'	Healthier habits and lifestyles
Effect of the pandemic on treatment of other health conditions: <ul style="list-style-type: none"> • 'missing' cancer diagnoses • Hundreds of thousands of people have waited more than a year for NHS treatment 	Increased hygiene and infectious disease awareness could materially reduce impact of annual flu – the 2020/21 annual flu cycle has been negligible
Long-term repercussions for the UK's financial health - possible consequences for population well-being and NHS funding	Reduced air pollution and stress through a reduction in commuting

Difficult at this stage to determine impact with certainty. But funding needs to be prudent

Summary: key Trustee considerations for 2021 actuarial valuation

- **Covenant:** ability of TfL to continue to provide financial support to the Fund over the long term
- **Investment:** future investment strategy, and expected returns on those assets
- **Actuarial:** assumptions regarding life expectancy and other matters affecting Fund members
- **Regulatory:** views of the Pensions Regulator?

Limitations

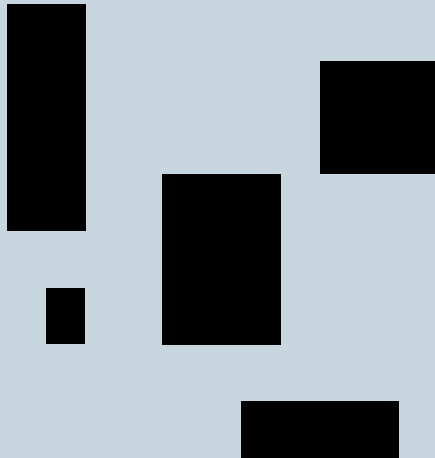
- Willis Towers Watson has prepared this presentation for the Trustee of the TfL Pension Fund as an update from the Actuary to be presented at the Annual Members' Meeting on 8 October 2021.
- It was not prepared for any other use or for use by any other party and may well not address their needs, concerns, or objectives. It is not intended to form a basis for any decisions to do or omit to do anything.
- This presentation is provided to the Trustee solely for its use, for the specific purpose indicated. This presentation is based on information available to Willis Towers Watson at the date of the presentation and takes no account of subsequent developments after that date. It may not be modified or provided to any other party without Willis Towers Watson's prior written permission. It may also not be disclosed to any other party without Willis Towers Watson's prior written permission except as may be required by law. In the absence of our express written permission to the contrary, Willis Towers Watson accepts no responsibility for any consequences arising from any third party relying on this presentation or the opinions we have expressed. This presentation is not intended by Willis Towers Watson to form a basis for any decision by a third party to do or omit to do anything.
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TfL Pension Fund

Annual Members' Meeting – Investment Update

Ed Wilson

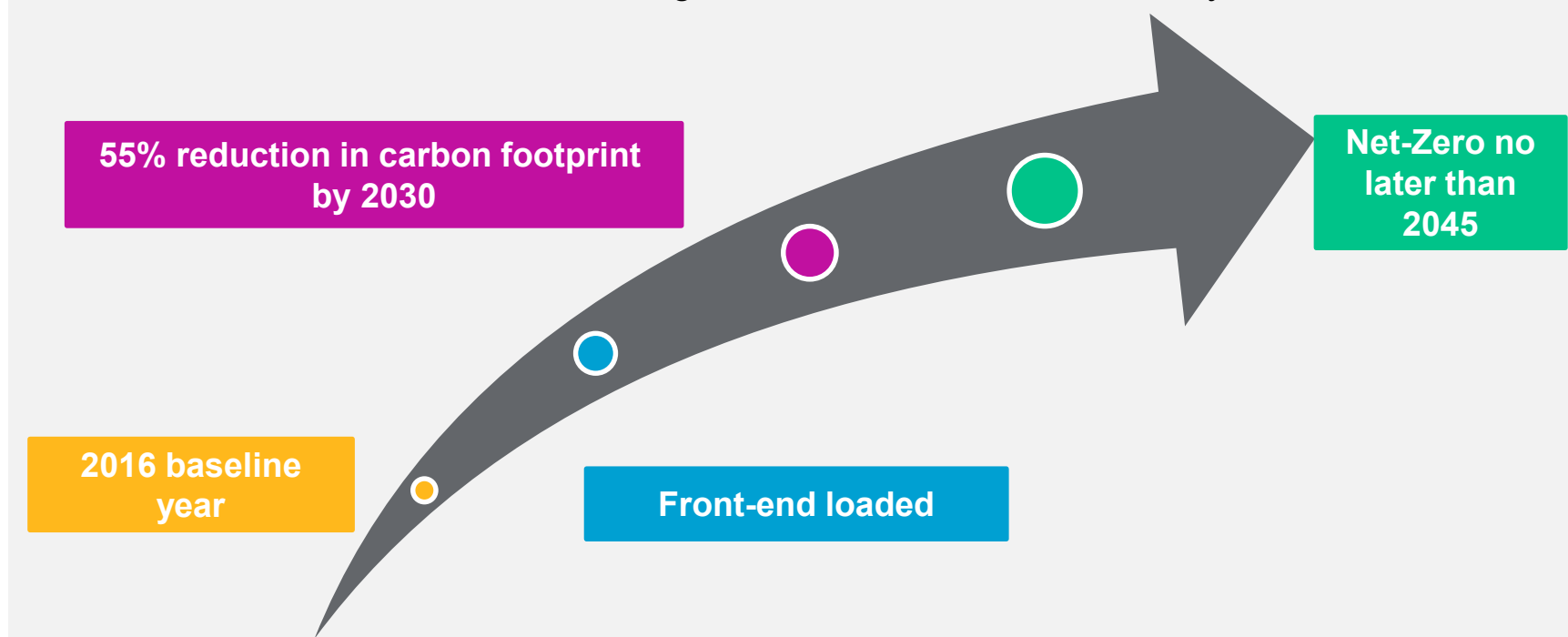
8 October 2021



Environmental developments

“Climate change is a significant long-term financial risk which has potential to impact all holdings in the portfolio over time if not properly managed”

Over 2021 the Fund agreed a Carbon Neutral Journey Plan:



The Fund's carbon footprint has already fallen 30% since the 2016 baseline year

What is the Fund doing?

Action plan



ESG-tilted investment target
increased from 5% to 15%



Engaging on climate issues through
industry groups e.g.:

Climate Action 100+
Carbon Disclosure Project
Sustainalytics



Exclude companies revenues from
that generate >30% of **thermal**
coal



Stress testing the Fund's
portfolio to understand the
potential impact of climate
risks



Environmental impact investing
e.g. renewable investments, energy
from waste, controlled food
agriculture funds.



Improving transparency through
better reporting e.g.:

Annual sustainability report
TCFD report
Implementation statement

**The Fund's carbon exposure will additionally fall as companies around the world
reduce their carbon footprint – due, in part, to investor engagement**

New Sustainalytics engagement themes

Climate Change: Sustainable Forests and Finance

What

Three-year engagement covering forest-related carbon emissions and preservation of forest biodiversity

Who

Targeting ~20 companies involved in the degradation of forests, their customers, and their financiers

How

- Addressing industry financing
- Increased transparency and disclosure
- Developing long-term science based targets
- Mapping physical risk throughout supply chains

The Fund has worked with Sustainalytics the programme's inception in July 2021 and was involved in shaping its key goals and selecting target companies

Social Developments

Sustainalytics: Global Standards Engagement

Improves company behaviour in relation to international guidelines and conventions



Labour rights



Human rights



Environment



Business ethics

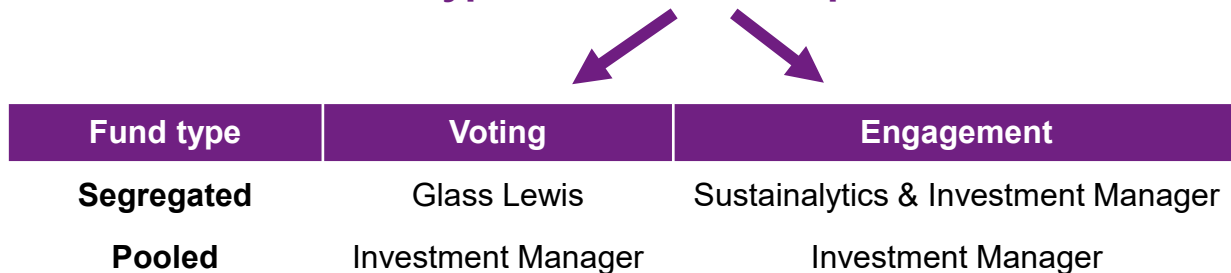
Amazon case study

- Media attention around worker health and safety concerns:
 - 400 incidents reported over 2015 – 2018 in the UK
 - Fined by US government
 - Lack of disclosure on safety procedures
- In 2020 following shareholder opposition and engagement, appointed a Head of ESG Engagement

Governance

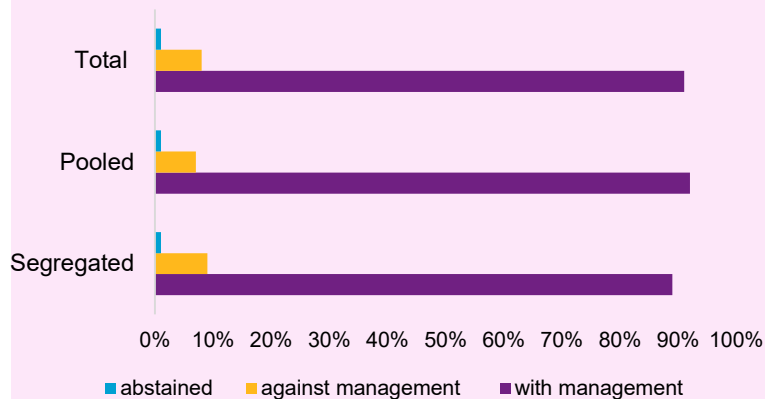
How is the Fund a good steward of assets?

There are two main types of stewardship undertaken on the Fund's assets:



10,500+ votes over the year:

Voting record



900+ company engagements over the year:

Example engagements include:



Amazon: Labour practices

Facebook: Child protection

Exxon Mobil: Climate change

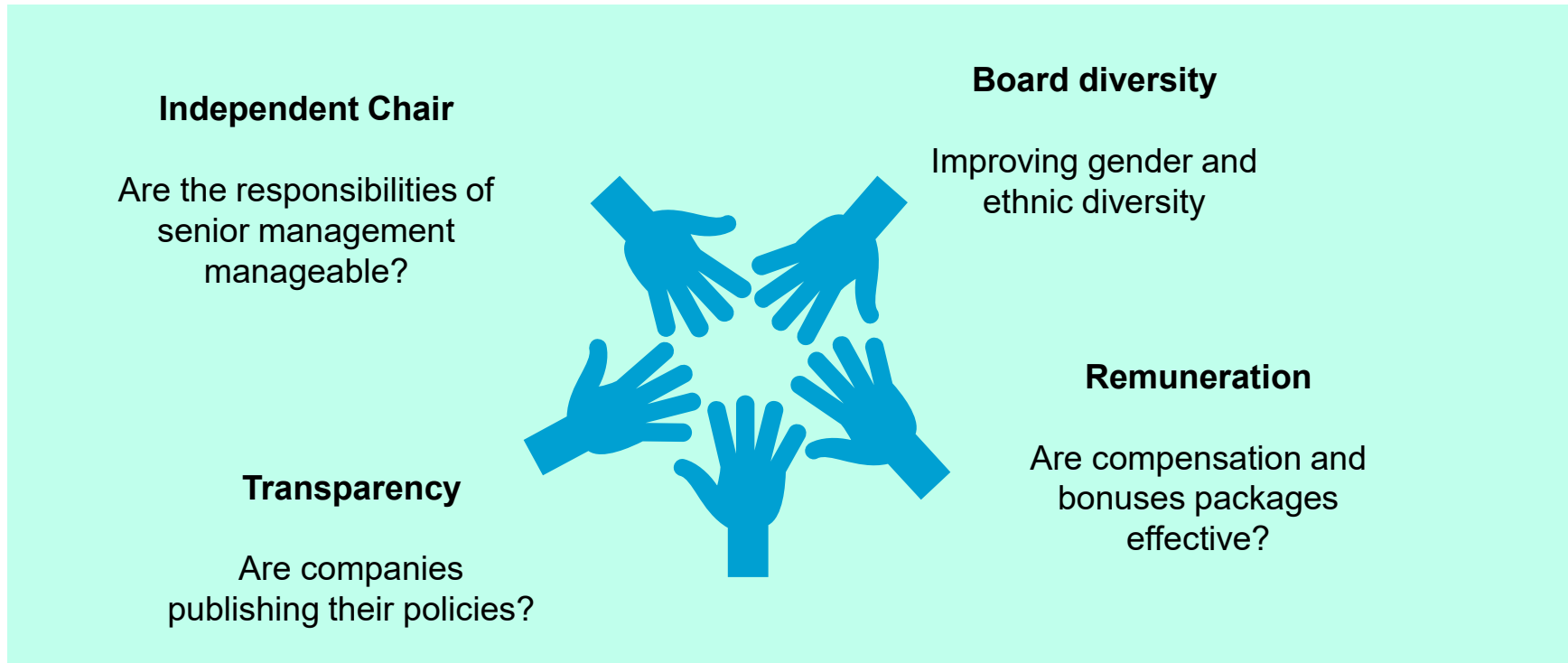
Estee Lauder: Remuneration

Hyundai Motor: Anti corruption

Governance

How does the Fund use stewardship to improve investee companies?

Strong governance at company level benefits long-term investment returns ...



Sustainalytics & the Fund's Investment Managers engage with companies on these governance issues and more...

Manager changes

The Trustee continues to manage the Fund's investment managers actively



Equilibrium Controlled Environment Foods Fund II
(Secure Income)

Bridgewater All Weather China
(Hedge fund)

Brevan Howard co-investment
(Hedge Fund)

Bridgewater Pure Alpha + Gold
(Hedge fund)

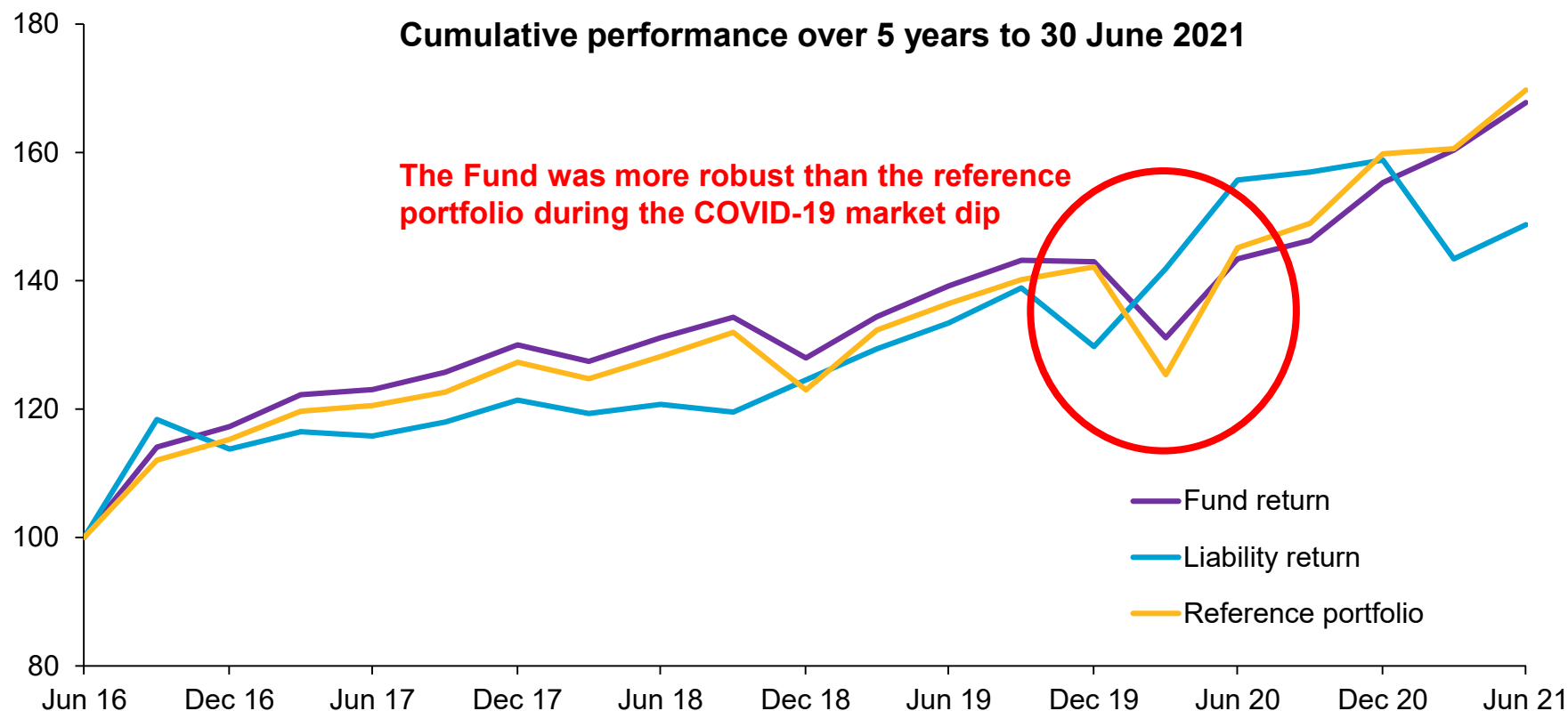


Burgundy
(Active equity)

The Fund continues to look for new opportunities to increase its allocation to a broader range of assets to diversify investment risk more widely

Relative performance

- The Fund's strategy has marginally underperformed the reference portfolio over a five year period.
- Performance has been positive over the past 12 months



Source: JP Morgan, Willis Towers Watson, FTSE International Limited, ICE Benchmark Administration Limited

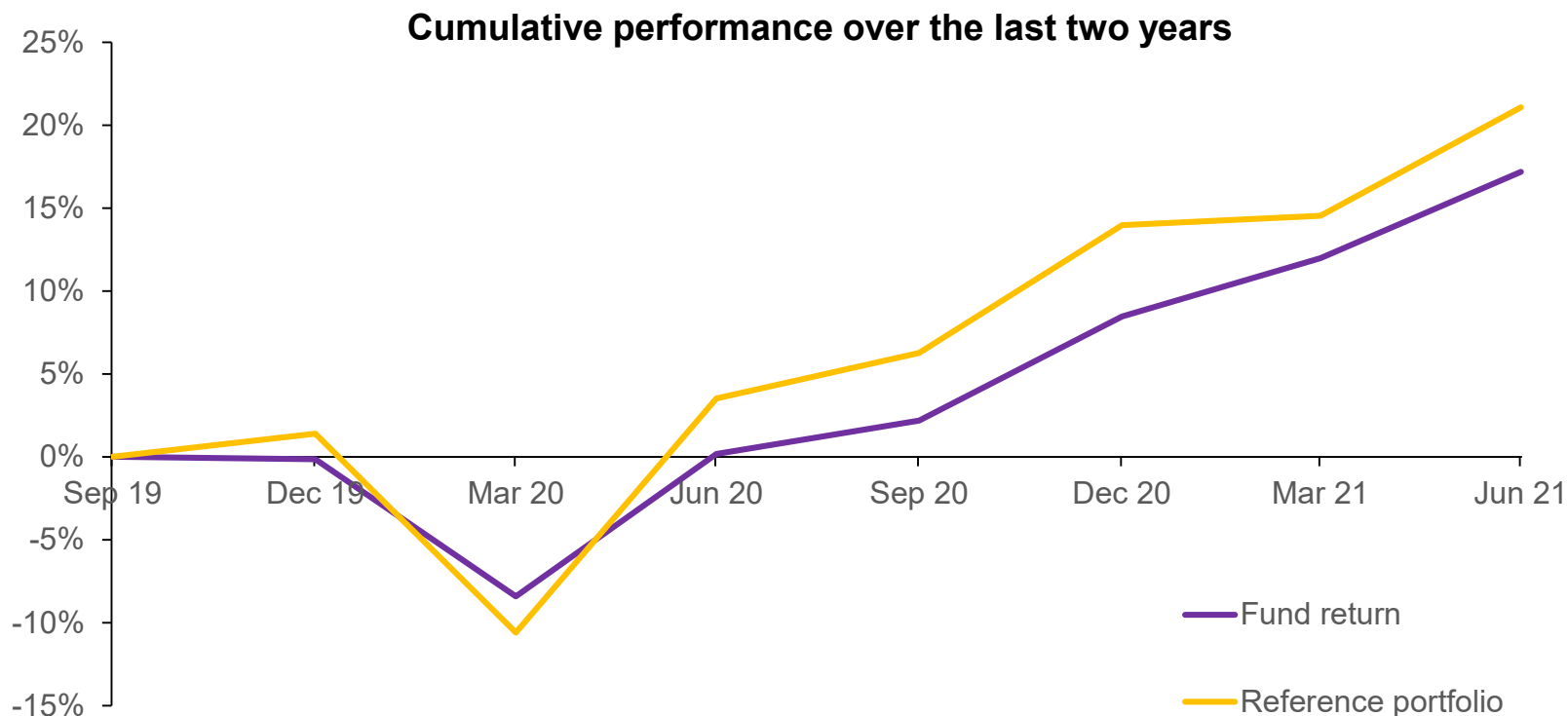
For the period till 31 March 2019, the reference portfolio benchmark consists of 15% FTSE Over 5 Year Index-Linked Gilts, 61.25% FTSE All-World equities (50% hedged) and 23.75% 3 month GBP LIBOR.

The reference portfolio benchmark consists of 30% FTSE All World Index / 30% FTSE All World Index – GBP Hedged, 20% Barcap Global Ag Corp 1% Constrained Hedged, 20% FTSE Over 15 Year Index Linked Gilt Index onwards. The new reference portfolio was first reported against in Q1 2020.

Liability return is based on the "Pensions Funding Agreement" basis using cashflows based on 2018 membership data.

Performance over the COVID-19 Pandemic

- Performance of the Fund has been less volatile than the reference portfolio since the COVID-19 outbreak in early 2020



Source: JP Morgan, Willis Towers Watson, FTSE International Limited, ICE Benchmark Administration Limited

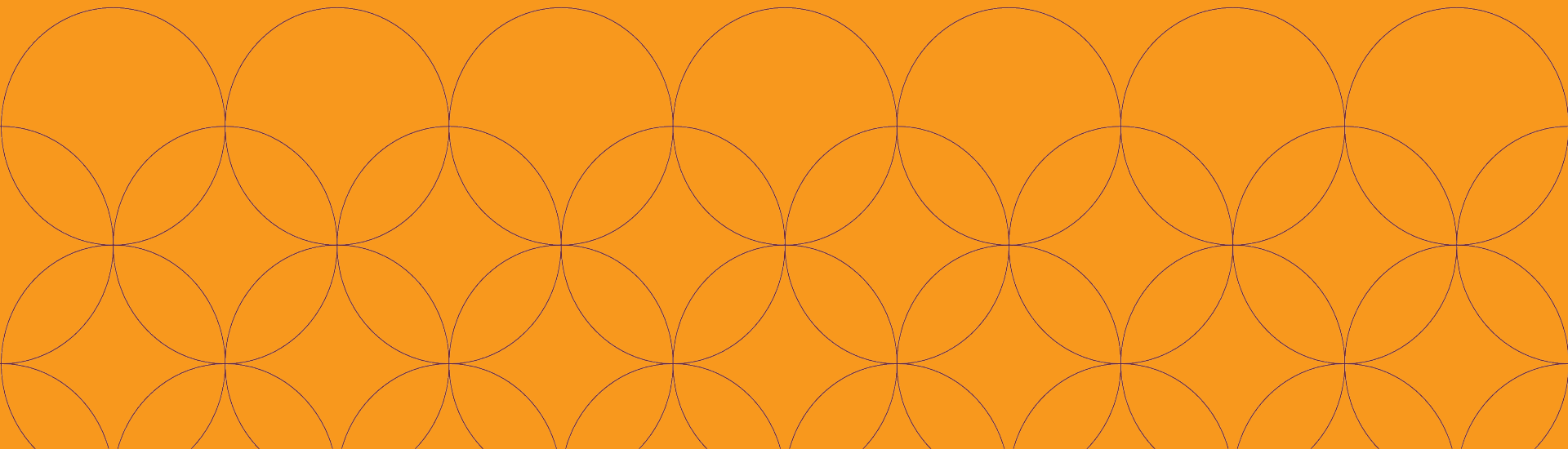
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TfL Pension Fund

Annual Members' Meeting – 8 October 2021

Pauline Sibbit

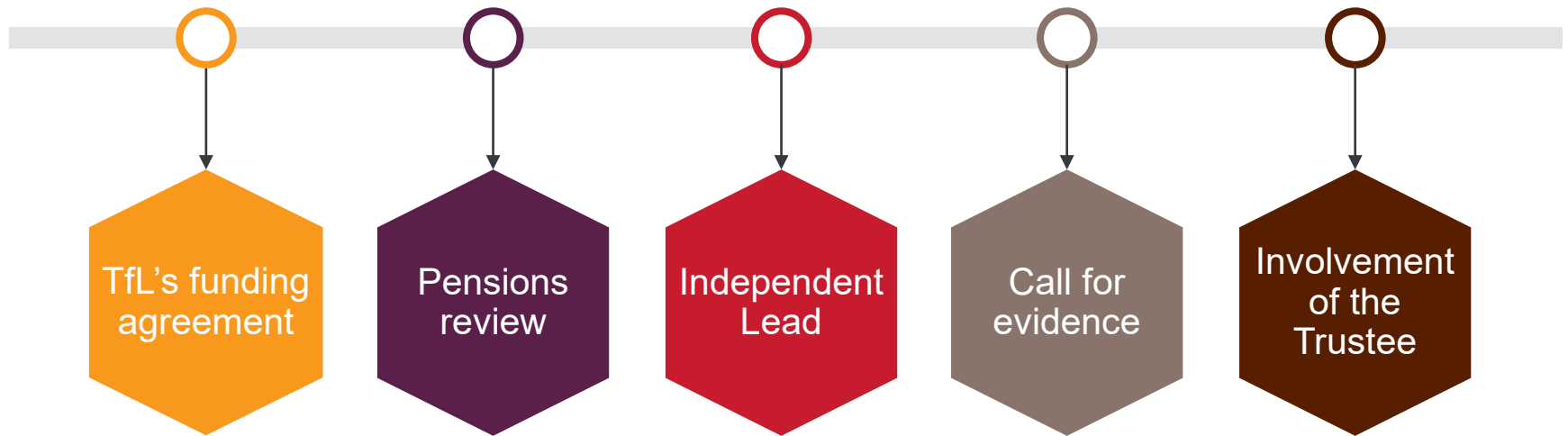


TfL: Pensions
Review

Transfer scams


New information
for members

Change to
“normal
minimum
pension age”



New powers for the Pensions Regulator

Sackers



Why?

New criminal
sanctions

New civil
penalties –
fines up to
£1 million

New
information
powers

New interview
powers

Transfer scams

Sackers



Relevant to
“deferred
members”

Scams not
going away

New powers
for trustees
to hold up
transfers

Due diligence

Keep an eye
out!

New disclosures

Sackers



Change to normal minimum pension age

Sackers

Age at which
under tax laws
can take
benefits

NB different age
if retiring on ill
health grounds

Will rise to 57 in
2028

But protections
for those with
rights to take at
earlier age –
relevant to TfL
members

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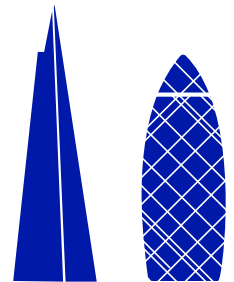
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Q&A



Thank You

See you in October next year
(details to be confirmed)

