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VALUATION REPORT

West Midlands Integrated Transport Authority Pension Fund

Actuarial valuation as at 31 March 2019

29 June 2020

Graeme Muir FFA
Melanie Durrant FIA CERA | Barnett Waddingham LLP



Introduction

We have been asked by the West Midlands Integrated Transport Authority Pension Fund (the Fund), to carry out an actuarial valuation of the Fund as at 31 March 2019. The Fund is part of the Local Government Pension Scheme (LGPS), a defined benefit statutory scheme administered in accordance with the Local Government Pension Scheme Regulations 2013 (the Regulations) as amended.

The purpose of the valuation is to review the financial position of the Fund and to set appropriate contribution rates for each employer in the Fund for the period from 1 April 2020 to 31 March 2023 as required under Regulation 62 of the Regulations. Contributions are set to cover any shortfall between the assumed cost of providing benefits built up by members at the valuation date and the assets held by the Fund and also to cover the cost of benefits that active members will build up in the future.

This report is provided further to earlier advice dated 11 September 2019 which set out the background to the valuation and explained the underlying methods and initial assumptions derivation. Following consultation and discussions with the Fund in order to reflect covenant advice and an investment strategy review, the final assumptions were agreed and are reflected in this report. Details of the assumptions underlying the valuation are provided in this report and set out in Appendix 2.

This report summarises the results of the valuation and is addressed to the administering authority of the Fund. It is not intended to assist any user

other than the administering authority in making decisions or for any other purpose and neither we nor Barnett Waddingham LLP accept liability to third parties in relation to this advice.

Note that the Fund merged with the West Midlands Pension Fund with effect from 1 April 2019. Prior to the merger, the West Midlands Combined Authority was the administering authority of the Fund however Wolverhampton City Council now assumes this role for the combined Fund. The assets and liabilities associated with the two participating employers in the Fund have since been transferred to two separate Admission Body Funds (ABFs). For the purposes of the 2019 valuation, the associated Funding Strategy Statement for the Fund is included in the form of two appendices to the Funding Strategy Statement of the West Midlands Pension Fund, covering each of the new ABFs.

The administering authority was granted a three month extension to finalising this valuation report in order to agree the Rates and Adjustments certificate with the participating employers.

This advice complies with Technical Actuarial Standards (TASs) issued by the Financial Reporting Council – in particular TAS 100: Principles for Technical Actuarial Work and TAS 300: Pensions.

The Fund Actuary would be pleased to discuss any aspect of this report in more detail.

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Executive summary

Some of the key results contained within this report are set out below:

1.

Funding position

Using the agreed assumptions, the Fund had assets sufficient to cover 84% of the accrued liabilities as at 31 March 2019 which is an increase from 82% at the 2016 valuation.

2.

Contributions

Individual employer contributions are set out in Appendix 4 in the Rates and Adjustments Certificate to cover the period from 1 April 2020 to 31 March 2023.

3.

Method and assumptions

The resulting method and assumptions are set out in Appendix 2 and we believe they are appropriate for the 31 March 2019 valuation. The Fund has changed approach from a smoothed model to an unsmoothed model as explained later in this report.

4.

McCloud/Sargeant

Regulatory uncertainties have put increased pressure on the 2019 valuation results. An allowance for McCloud/Sargeant has been made in the valuation results and more detail is included within this report.

5.

Investment returns

Investment returns have been strong but gains in the funding position have been partially offset by a lower reliance on future investment returns.

Background to valuation approach

The purpose of the 2019 actuarial valuation is to set appropriate contribution rates for each employer in the Fund for the period from 1 April 2020 to 31 March 2023, as required under Regulation 62 of the LGPS Regulations.

The contribution rates consist of two elements, the primary rate and the secondary rate:

- The primary rate for each employer is the employer's future service contribution rate (i.e. the rate required to meet the cost of future accrual of benefits) expressed as a percentage of pay.
- The secondary rate is an adjustment to the primary rate to arrive at the total rate each employer is required to pay (for example, to allow for deficit recovery). In the valuation, we have expressed the secondary rates as monetary amounts.

Regulation 62 specifies four requirements that the actuary "must have regard" to and these are detailed below:

1. The existing and prospective liabilities arising from circumstances common to all those bodies
2. The desirability of maintaining as nearly a constant a primary rate as possible
3. The current version of the administering authority's Funding Strategy Statement

4. The requirement to secure the "solvency" of the pension fund and the "long-term cost efficiency" of the Scheme, so far as relating to the pension fund

Whilst the wording of the second objective refers specifically to the primary rate of contribution, we are also mindful of the fact that it is the stability of the total contribution rate (i.e. primary rate plus secondary rate) that is often more preferable for employers and therefore we have taken this into consideration in setting contributions.

Definitions for "solvency" and "long-term cost efficiency" are included in CIPFA's Funding Strategy Statement guidance. These can be briefly summarised as:

- ensuring that employers are paying in contributions that cover the cost of benefit accrual and target a fully funded position over an appropriate time period using appropriate actuarial assumptions, and
- that employers have the financial capacity to increase contributions (or there is an alternative plan in place) should contributions need to be increased in future.

We have considered these four requirements when providing our advice and choosing the method and assumptions used. A number of reports and discussions have taken place with the administering authority before

agreeing the final assumptions to calculate the results and set contribution rates. In particular:

- The initial results report dated 11 September 2019 which provides information and results as well as more detailed background to the method and derivation of the initial assumptions.
- The Funding Strategy Statement which confirms the approach in setting employer contributions.

Note that not all these documents may be in the public domain.

The final assumptions have been agreed with the administering authority. The Fund's Funding Strategy Statement is consistent with this approach and complies with the updated version of CIPFA's Funding Strategy Statement guidance. The Funding Strategy Statement has been set by the administering authority and reflects an integrated funding approach, taking into account the Employer Risk Management Framework and Investment Strategy Statement. All of these documents are available on the Fund's website.

We confirm that in our opinion the agreed assumptions are appropriate for the purpose of the valuation. Assumptions in full are set out in Appendix 2.

Regulatory uncertainties

There are currently a few important regulatory uncertainties surrounding the 2019 valuation as follows:

- Effect of the McCloud and Sargeant cases and the cost cap on the future and historic LGPS benefits structure
- Change in timing of future actuarial valuations from a triennial cycle
- Guaranteed Minimum Pensions (GMP) equalisation

Although it is unclear what impact these uncertainties will have on the future benefits of individual members, we have considered these issues in the assumptions used to set the contribution rates for employers. Our approach taken to the treatment of McCloud/Sargeant is disclosed in the Funding Strategy Statement. In summary, a liability reserve has been included in the results for West Midlands Travel, equal to the increase in liabilities associated with a reduction in the non buy in discount rate of 0.05% p.a. The value of this reserve as at 31 March 2019 is £2.7m. The purpose of the reserve is to set aside a provision to deal with the potential additional costs of any benefit changes made as a result of the outcome of the McCloud/Sargeant cases, with a view to mitigating possible funding implications and future contribution strain. This allowance may or may not cover the ultimate cost as the remedy is as yet unknown.

We expect the impact of the ruling on the Preston Bus liabilities to be negligible due to the last active member having left service in 2006, many years before the 2015 public service pension reforms, and hence no reserve has been applied to their liabilities.

Membership data

A summary of the membership data used for the valuation is set out in Appendix 1.

The membership data has been checked for reasonableness and we have compared the membership data with information in the Fund accounts. Any missing or inconsistent data has been estimated where necessary. While this should not be seen as a full audit of the data, we are happy that the data is sufficiently accurate for the purposes of the valuation.

Benefits

Full details of the benefits being valued are set out in the Regulations as amended and summarised on the [LGPS website](#) and the Fund's membership booklet. We have made no allowance for discretionary benefits.

Valuation of liabilities

To calculate the value of the liabilities, we estimate the future cashflows which will be made to and from the Fund throughout the future lifetime of existing active members, deferred benefit members, pensioners and their dependants. We then discount these projected cashflows using the discount rate which is essentially a calculation of the amount of money which, if invested now, would be sufficient together with the income and growth in the accumulating assets to make these payments in future, using our assumption about investment returns.

This amount is called the present value (or, more simply, the value) of members' benefits. Separate calculations are made in respect of benefits arising in relation to membership before the valuation date (past service) and for membership after the valuation date (future service).

To produce the future cashflows or liabilities and their present value we need to formulate assumptions about the factors affecting the Fund's future finances such as inflation, salary increases, investment returns, rates of mortality, early retirement and staff turnover etc.

The assumptions used in projecting the future cashflows in respect of both past service and future service are summarised in Appendix 2.

Assets

We have been provided with audited Fund accounts for each of the three years to 31 March 2019.

The asset valuation, incorporating the market value of invested assets and the notional value of the Prudential insurance contract, was £494,798,000 as at 31 March 2019. Please note that this excludes members' additional voluntary contributions (AVCs).

The asset value includes our estimated value of the buy-in relating to members of West Midlands Travel Limited (WMTL). Pensioners and dependants as at 11 August 2011 in respect of WMTL were involved in a buy-in with Prudential Life Insurance Limited in April 2012. The insurer will meet part of the pension payments but the increases continue to be met by the Fund. We have calculated the value of the buy-in to be approximately £227,633,000.

At the 2016 valuation, the base market statistics we used were smoothed around the valuation date so that the market conditions used were the average of the daily observations over the period 1 January 2016 to 30 June

2016. Assets were also smoothed in a consistent way. The smoothing mechanism was used to help with the objective of setting reasonably stable contribution rates.

However, due to movements in the investment strategy of the Fund towards having a higher allocation of Liability Driven Investment (LDI) assets, with potential triggers being put in place to review the strategy going forward, we believe it is appropriate to adjust the existing funding model from a smoothed asset based discount rate approach to an unsmoothed gilts plus approach. A gilts plus approach would be relatively consistent with the move

towards gilt-type investments within an LDI strategy and a change to an unsmoothed funding model would mean that any future changes in investment strategy are immediately recognised in the value of the Fund's assets.

The investment strategy is set out in the Fund's Investment Strategy Statement (ISS) that is publicly available on the Fund's website.

Results

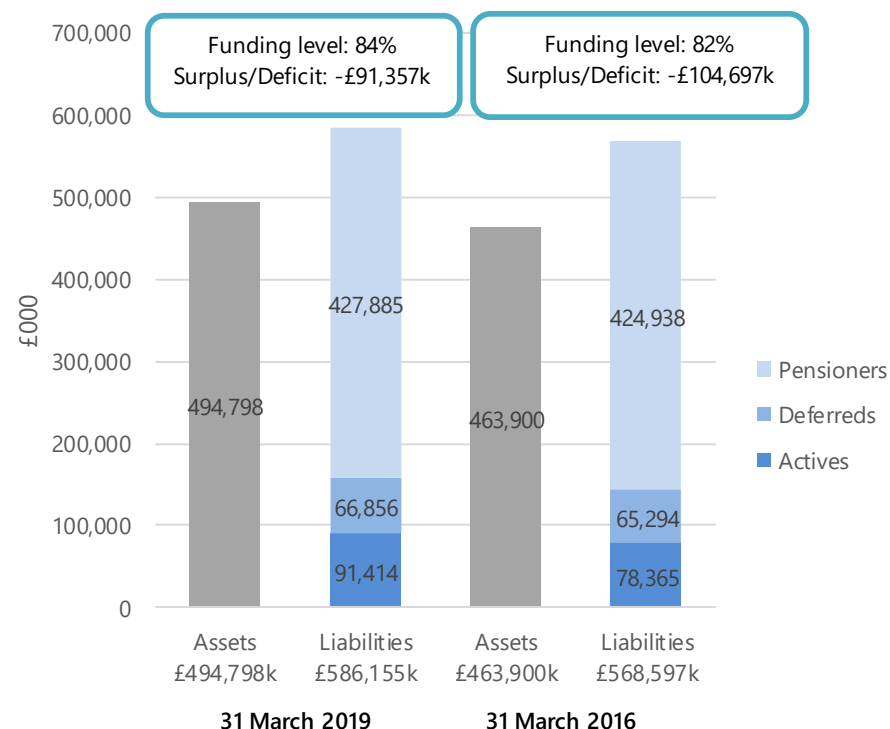
Previous valuation

The previous valuation was carried out as at 31 March 2016 by Barnett Waddingham LLP. The results are summarised in the valuation report dated 31 March 2017 and reported a deficit of £104,697,000.

Funding position

A comparison is made of the value of the existing assets with the value of liabilities. If there is an excess of assets over the liabilities then there is a surplus. If the converse applies there is a deficit.

Using the assumptions summarised in Appendix 2, the results of the valuation in relation to the funding position are set out in the graph below. This shows how well funded the Fund was at the current and previous valuation date.



There was a deficit of £91,357,000 in the Fund at the valuation date, corresponding to a funding level of 84%.

The following table shows the funding position of each of the two participating employers in the Fund.

Past service funding position	West Midlands Travel £000	Preston Bus £000	Fund £000
Asset value	247,828	19,337	267,165
Bulk annuity insurance buy in	227,633	n/a	227,633
Past service liabilities			
Actives	91,414	0	91,414
Deferred pensioners	64,253	2,603	66,856
Pensioners	412,323	15,562	427,885
Total Liabilities	567,990	18,165	586,155
Surplus (Deficit)	-92,529	1,172	-91,357
Funding level	84%	106%	84%

Contribution rates

The total contribution rate payable by employers consists of two elements: the primary rate and the secondary rate.

Primary rate

Using the assumptions summarised in Appendix 2, the resulting average primary rate across the whole Fund is set out in the table below after allowing for member contributions.

Primary rate	Valuation basis 31 March 2019 % of payroll p.a.	Previous valuation 31 March 2016 % of payroll p.a.
Average total future service rate	41.9%	32.0%
Less average member rate	-6.9%	-6.9%
Fund primary rate	35.0%	25.1%

Please note that as Preston Bus has no active members, the primary rate applies to West Midlands Travel only.

Active members pay contributions to the Fund as a condition of membership in line with the rates required under the Regulations.

Please note that expenses are dealt with in the derivation of the discount rate and therefore we make no explicit allowance in the primary rate for expenses.

Secondary rate

The secondary rate is an adjustment to the primary rate to arrive at the total rate each employer is required to pay (for example, to allow for deficit recovery). Where there is a deficit, contributions should be set to restore a fully funded position over an agreed "recovery period".

The primary and secondary rate of the individual employer contributions payable are set out in the Rates and Adjustments Certificate in Appendix 4.

The secondary contributions agreed with individual employers have been set at this valuation in order to restore the Fund to a fully funded position by no more than 14 years with effect from the 2019 valuation.

The agreed contributions for West Midlands Travel as set out in Appendix 4 are contingent on the National Express Group financial guarantee in respect of the West Midlands Travel liabilities which was signed on 17 June 2020. Further information on the contributions has been set out in a Memorandum of Understanding also dated 17 June 2020.

In Appendix 4 we also disclose the sum of the secondary rates for the whole Fund for each of the three years beginning 1 April 2020.

Standardised basis

As part of our calculations we have considered the results on the standardised basis as set by the Scheme Advisory Board (SAB). We are required to provide the Scheme Advisory Board with the results for the Fund for comparison purposes.

The standardised basis is set by the Government Actuary's Department (GAD) with some of the assumptions used being set locally (such as mortality) and some are set at Scheme level (including all the financial assumptions). It is not used to set contributions as it does not reflect the Fund's investment strategy or the administering authority's attitude to risk; contributions are set using the funding basis.

The results on the standardised basis as at 31 March 2019 are set out in the dashboard in Appendix 3. The dashboard has been introduced since the previous valuation to assist readers to compare LGPS valuation reports and the information will be used by GAD in their Section 13 review of the LGPS funds.

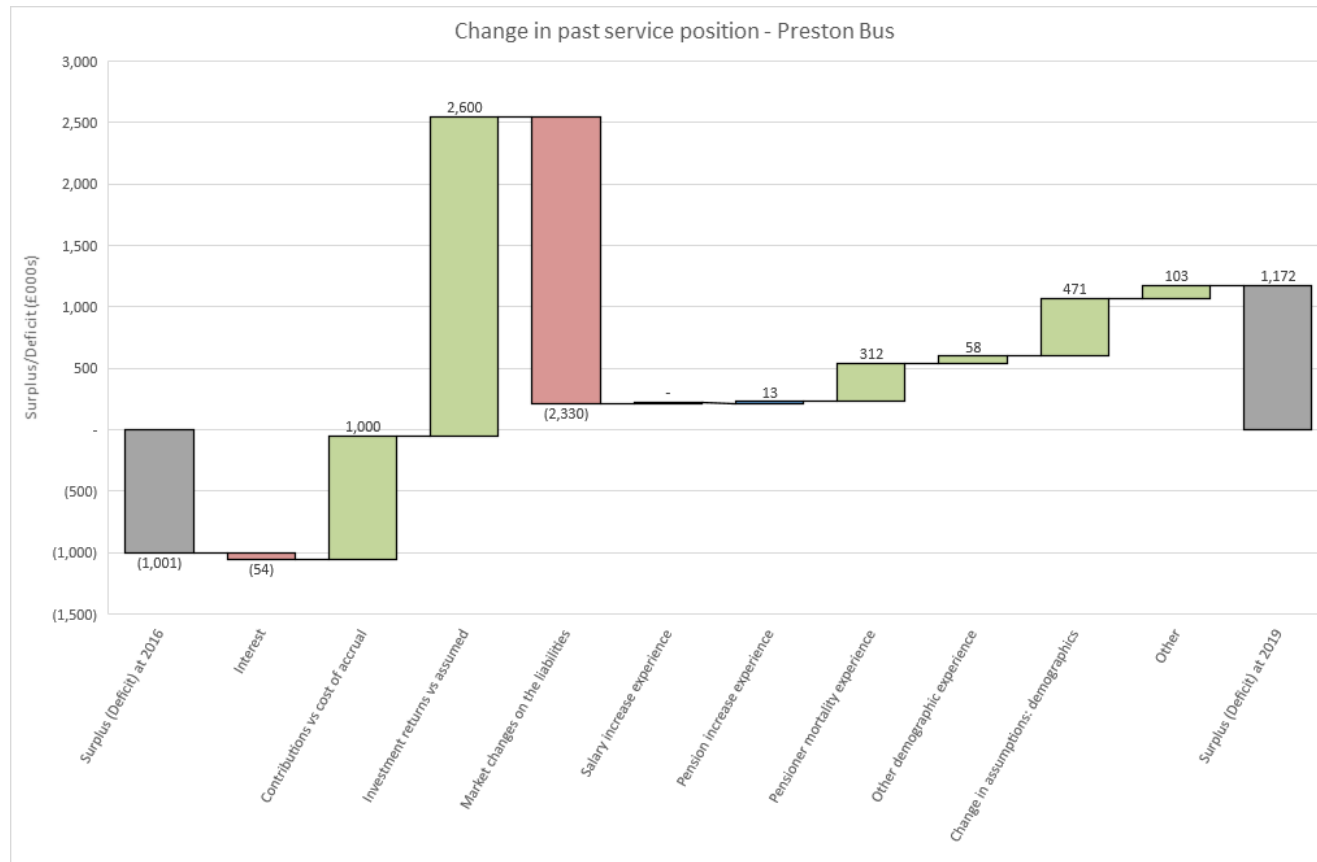
Reconciliation to the previous valuation

Funding position

The key factors that have influenced the funding level of West Midlands Travel over the period are illustrated in the chart below.



The key factors that have influenced the funding level of Preston Bus over the period are illustrated in the chart below.



Experience

The main drivers behind the reduction in the Fund's deficit were:

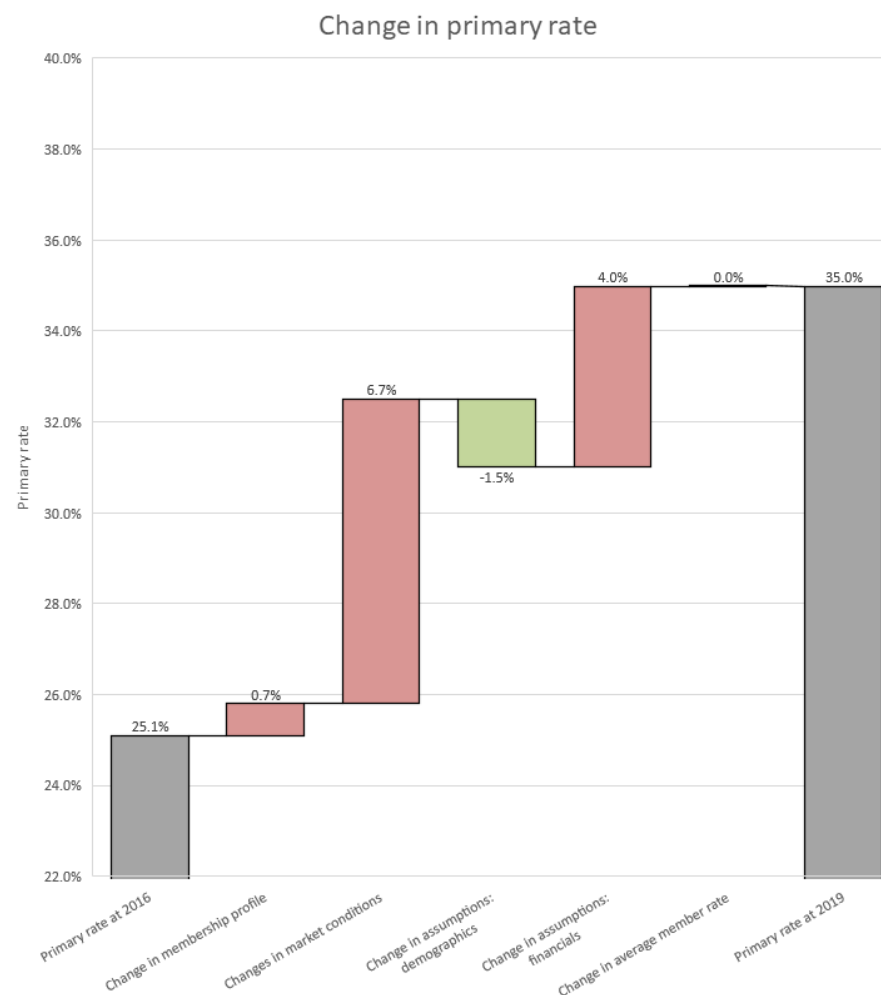
- The payment of contributions by both employers, in particular secondary contributions.
- Investment returns being higher than assumed when compared with the 2016 discount rate assumptions.
- A slow down in the rate of mortality improvements resulting in a fall in future life expectancies. This has been reflected in the revised mortality assumptions used.
- In the case of West Midlands Travel, a change in valuation approach mainly to value only the insured benefits of buy in members on a discount rate equal to gilt yields (rather than all benefits).

The improvement in position has been offset to an extent due to a reduction in the discount rates for both employers. This is predominantly due to:

- A reduction in gilt yields over the period.
- A reduced reliance on future investment returns.

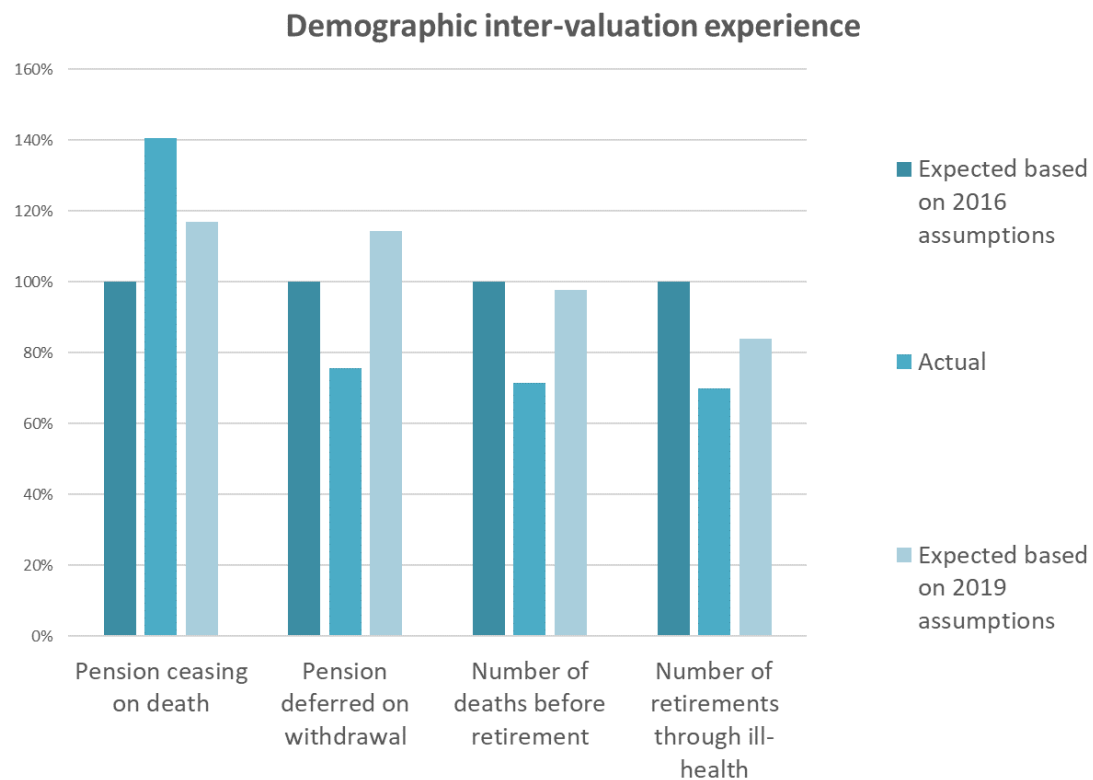
Primary contribution rate

The previous valuation resulted in an average primary rate of 25.1% p.a. of Pensionable Pay (applicable to West Midland Travel Limited only). The reasons for the change in the cost of future benefit accrual are set out in the reconciliation chart below.



Comparing experience with assumptions

A comparison of the actual demographic experience of members of the Fund over the intervalation period, with that assumed by the assumptions adopted at the last valuation in 2016 is shown in the graph below. The graph also shows how the assumptions adopted for this valuation would have compared with those adopted at 2016.



Sensitivities to the liabilities

The results set out in this report are based on a particular set of assumptions. The actual cost of providing the benefits will depend on the actual experience, which could be significantly better or worse than assumed. The sensitivity of the results to some of the key assumptions is set out in the table below.

The figures in the table are shown relative to the deficit of £91,357,000 and funding level of 84% on the agreed funding basis.

Sensitivity analysis - Past service funding position

	Valuation basis	Decrease non buy in discount rate by 0.1% p.a.	Increase CPI inflation by 0.1%	Reduce long-term rate of mortality improvement by 0.25% p.a.
	£000	£000	£000	£000
Asset value	267,165	267,165	267,165	267,165
Bulk annuity insurance buy in	227,633	227,633	227,633	227,633
Total past service liabilities	586,155	591,472	591,923	580,759
Surplus (Deficit)	-91,357	-96,674	-97,125	-85,961
Funding level	84%	84%	84%	85%

Sensitivities to the primary contribution rate

The calculated primary contribution rate required to fund benefits as they are earned from year to year will also be affected by the particular set of assumptions chosen. The sensitivity of the primary rate to changes in some key assumptions is shown below. Please note that the primary rate set out below does not include any adjustment via the secondary rate. The total contribution rate payable by employers will be a combination of the primary rate and a secondary rate adjustment, further details can be found in Appendix 4.

The figures in the table are shown relative to the primary rate of 35.0% of Pensionable Pay on the agreed funding basis.

Sensitivity analysis - Primary rate

	Valuation basis	Decrease non buy in discount rate by 0.1% p.a.	Increase CPI inflation by 0.1%	Reduce long-term rate of mortality improvement by 0.25% p.a.
	% of pay	% of pay	% of pay	% of pay
Total future service rate	41.9%	42.6%	42.5%	41.5%
less employee contribution rate	-6.9%	-6.9%	-6.9%	-6.9%
Total primary rate	35.0%	35.7%	35.6%	34.6%

Final comments

Funding Strategy Statement (FSS)

The assumptions used for the valuation have been documented in a revised FSS. The FSS was set by the Fund's pensions committee based on advice from us as the Fund Actuary and in consultation with stakeholders, including advisers to the Fund.

Risks

There are many factors that affect the Fund's funding position and could lead to the Fund's funding objectives not being met within the timescales expected. Some of the key risks that could have a material impact on the Fund are:

- Employer covenant risk
- Investment risk
- Inflation risk
- Mortality risk
- Member options risk
- Regulatory risk

Sensitivity to some of these risks were set out in the sensitivities section of this report. Please note that this is not an exhaustive list. Further information on these risks and more can be found in our initial results report and are set out in greater detail in the Funding Strategy Statement.

Rates and Adjustments Certificate

The contributions payable in respect of benefit accrual and any deficit contributions under each employer's recovery period have been set out in Appendix 4 in the Rates and Adjustments Certificate in accordance with Regulation 62 of the Regulations and cover the period from 1 April 2020 to 31 March 2023. In this certificate no allowance will be made for additional costs arising which need to be met by additional contributions by the employer such as non-ill health early retirements.

The contributions in the Rates and Adjustments Certificate are set so that each employer's assets (including future contributions) are projected to be sufficient to cover the benefit payments for their members, on the assumptions set out in this report. Where there is currently a deficit for an individual employer, recovery of this deficit is targeted in line with the Fund's FSS. Preston Bus is currently in surplus on the agreed funding basis and so no deficit is required to be recovered whereas the deficit in respect of West Midlands Travel is targeted to be recovered over a recovery period of 14 years with effect from the 2019 valuation, contingent on the sufficiency of the National Express Group guarantee.

This document has been agreed between the administering authority and the Fund Actuary. Contributions have been set which in our opinion meet the regulatory requirements and the funding objectives set out in the Fund's FSS.

This report must be made available to members on request.

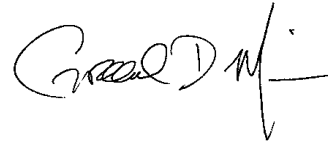
Post valuation events

Since the valuation date there have been some very significant movements in investment markets, largely driven by the COVID-19 crisis.

Due to the timing of these movements in the valuation process, please note that no adjustments have been made to the valuation results or to the employer contributions previously agreed. The results are based on the position as at 31 March 2019 and this information on "post valuation events" is provided for information only.

The impact of COVID-19 will be kept under review by the West Midlands Pension Fund, including monitoring of employer contributions. We will also continue to monitor the funding position of the two new ABFs and raise any issues that we consider need special attention. The impact of the COVID-19 crisis will be fully considered as part of the 2022 valuation when we revisit employer contributions.

The next formal valuation is due to be carried out as at 31 March 2022 at which point the valuation of the Fund will be incorporated into that of the West Midlands Pension Fund, following the merger of the two Funds on 1 April 2019.



Graeme Muir FFA
Partner
Barnett Waddingham LLP



Melanie Durrant FIA CERA
Principal
Barnett Waddingham LLP

Appendices

Appendix 1 Summary of membership data and benefits

Membership data

The membership data has been provided to us by the administering authority. We have relied on information supplied by the administering authority being accurate.

The membership data has been checked for reasonableness and we have compared the membership data with information in the Fund's accounts. The numbers in the tables below relate to the number of records and so will include members in receipt of, or potentially in receipt of, more than one benefit.

Whilst this should not be seen as a full audit of the data, we are happy that the data is sufficiently accurate for the purposes of the valuation.

Membership summary

A summary of the membership data used in the valuation is as follows. The membership data from the previous valuation is also shown for comparison. The 2019 average ages are weighted by liability calculated on the funding basis, while the 2016 average ages are unweighted.

Active members

	31 March 2019			31 March 2016		
	Number	Pensionable pay £000s	Average age	Number	Pensionable pay £000s	Average age
Males	293	9,141	56	412	12,168	56
Females	16	495	53	20	586	53
Total	309	9,637	56	432	12,754	56

For comparison, the unweighted average age of active members at the valuation date is 57.

Deferred members (including undecided)

	31 March 2019			31 March 2016		
	Number	Current Pension £000s	Average age	Number	Current Pension £000s	Average age
Males	505	2,207	56	676	2,977	53
Females	138	331	55	153	368	52
Total	643	2,538	55	829	3,345	53

For comparison, the unweighted average age of deferred members at the valuation date is 54. Note that the deferred membership summary above includes undecided members, which are predominantly frozen refunds.

Pensioner and dependant members

	31 March 2019			31 March 2016		
	Number	Current Pension £000s	Average age	Number	Current Pension £000s	Average age
Males	3,049	21,095	65	3,034	19,964	71
Females	277	913	63	264	721	71
Dependants	664	2,133	65	553	1,628	71
Total	3,990	24,141	65	3,851	22,313	71

For comparison, the unweighted average age of pensioner and dependant members at the valuation date is 73.

Projected retirements

In the table below we have set out the number of members who are assumed to reach retirement age over the period from 1 April 2019 to 31 March 2023 as required under the Regulations.

Members may retire for a number of reasons including reaching normal retirement age, retiring through ill-health or redundancy. The amounts set out in the table below are the new retirement benefit amounts, as at the current valuation date that are assumed to come into payment in each of the intervaluation years.

Projected new benefits

Year to	Number of members	Retirement benefits £ms
31/03/2020	89	2
31/03/2021	81	1
31/03/2022	80	2
31/03/2023	88	2

Allowance for GMP equalisation

On 26 October 2018 the judgement was published for the Lloyds Banking Group Pensions Trustees Ltd vs Lloyds Bank Plc & Ors on how their Guaranteed Minimum Pensions (GMPs) should be equalised. However, HM Treasury (HMT) have confirmed that the GMP judgement "does not impact on the current method used to achieve equalisation and indexation in public service pension schemes", which is set out here:

www.gov.uk/government/consultations/indexation-and-equalisation-of-gmp-in-public-service-pension-schemes/consultation-on-indexation-and-equalisation-of-gmp-in-public-service-pension-schemes

On 22 January 2018, the Government published the outcome to its indexation and equalisation of GMP in public service pension schemes consultation, concluding that the requirement for public service pension schemes to fully protect the GMP element of individuals' public service pension would be extended to those individuals reaching State Pension Age (SPA) before 6 April 2021. HMT published a Ministerial Direction on 4 December 2018 to implement this outcome, with effect from 6 April 2016.

The assumption made at the 2019 valuation is that funds pay limited increases for members that have reached SPA by 6 April 2016, with the Government providing the remainder of the inflationary increase and that funds will be required to pay the full indexation on GMPs for those attaining SPA after 6 April 2016. This effectively assumes that the Government extends their current policy indefinitely and we believe this is a sensible approach to making an interim allowance for GMP equalisation.

Appendix 2 Summary of assumptions

A summary of the assumptions adopted for the valuation at 31 March 2019 is set out below. The assumptions used in the previous valuation are also given below for comparison.

Summary of financial assumptions

Assumptions	Assumptions used for the 2019 valuation	Assumptions used for the 2016 valuation
Financial assumptions		
Market date	31 March 2019	31 March 2016
CPI inflation	2.7% p.a.	2.3% p.a.
Salary increases	2.7% p.a.	2.3% p.a.
Discount rate - West Midlands Travel		
Non buy in liabilities	3.2% p.a.	4.5% p.a.
Buy in liabilities	1.1% p.a. (11 year yield)	1.9% p.a. (13 year yield)
Discount rate - Preston Bus	2.1% p.a.	2.8% p.a.
Pension increases on GMP	Funds will pay limited increases for members that have reached SPA by 6 April 2016, with the Government providing the remainder of the inflationary increases. For members that reach SPA after this date, we have assumed that Funds are required to pay the entire inflationary increases	

Summary of demographic assumptions

Assumptions	Assumptions used for the 2019 valuation	Assumptions used for the 2016 valuation
Demographic assumptions		
Post-retirement mortality	Male / Female	Male / Female
<i>Member base tables</i>	S3PA Heavy	S2PA
<i>Member mortality multiplier</i>	97%	110%
<i>Dependant base tables</i>	S3PA Heavy	S2PA
<i>Dependant mortality multiplier</i>	97%	110%
<i>Projection model</i>	CMI 2018	CMI 2015
<i>Long-term rate of improvement</i>	1.5% p.a.	1.5% p.a.
<i>Smoothing parameter</i>	7.5	n/a
<i>Initial addition to improvements</i>	0.5%	n/a
Retirement assumption	Each member retires at their weighted average "tranche retirement age" plus 3 years for active members of WMTL and plus 2 years for deferred members of WMTL. The future service rate has been calculated using the retirement assumption above plus 1 year rather than 3 years for active members.	
Pre-retirement decrements	GAD 2016 scheme valuation	GAD 2013 scheme valuation
50:50 assumption	Member data	Member data
Commutation	50% of maximum	50% of maximum
% members with qualifying dependant	85%	85%
Age difference	Males are 3 years older	Males are 3 years older

Demographic assumptions – sample rates

The following tables set out some sample rates of the demographic assumptions used in the calculations. These sample rates are based on those set by the Government Actuary's Department (GAD) based on analysis of the Local Government Pension Scheme (LGPS) in England and Wales.

Allowance for ill-health early retirements

A small proportion of members are assumed to retire early due to ill health. In the table below we set out an extract of some sample rates from the GAD tables used:

Age	Males	Females
25	0.01%	0.00%
30	0.01%	0.01%
35	0.02%	0.01%
40	0.04%	0.03%
45	0.09%	0.06%
50	0.18%	0.13%
55	0.36%	0.28%
60	0.74%	0.62%
65	1.51%	1.34%

The proportion of ill-health early retirements falling into each tier category has been assumed to be as follows for both males and females:

Tier 1	Tier 2	Tier 3
75%	15%	10%

Death before retirement

A small number of members are assumed to die before reaching retirement age. In the table below we set out an extract of some sample rates from the GAD tables used:

Age	Males	Females
25	0.02%	0.01%
30	0.03%	0.01%
35	0.05%	0.02%
40	0.06%	0.03%
45	0.09%	0.05%
50	0.13%	0.08%
55	0.21%	0.12%
60	0.32%	0.19%
65	0.50%	0.29%

Allowance for withdrawals

This assumption is regarding active members who leave service to move to deferred member status. Active members are assumed to leave service at the following sample rates:

Age	Males	Females
25	9.21%	10.17%
30	7.25%	8.07%
35	5.70%	6.40%
40	4.48%	5.07%
45	3.53%	4.03%
50	2.78%	3.19%
55	2.18%	2.53%
60	1.72%	2.01%
65	1.35%	1.59%

Appendix 3 Dashboard

Past service funding position - local funding basis

Funding level (assets/liabilities)	84%
Funding level (change since previous valuation)	2%
Asset value used at the valuation	£495,000,000
Value of liabilities	£586,000,000
Surplus (deficit)	-£91,000,000
Discount rate(s)	3.2% p.a. (West Midlands Travel non buy in), 1.1% p.a. (West Midlands Travel buy in), 2.1% p.a. (Preston Bus)
Assumed pension increases (CPI)	2.7% p.a.
Method of derivation of discount rate, plus any changes since previous valuation	Margin above unsmoothed gilt yields. Approach at 2016 valuation was weighted average of expected long term Fund returns based on smoothed market statistics for the non buy in sections of the Fund, adjusted for expenses and prudence.
Assumed life expectancies at age 65:	
Average life expectancy for current pensioners - men currently age 65	20.7
Average life expectancy for current pensioners - women currently age 65	23.8
Average life expectancy for future pensioners - men currently age 45	22.6
Average life expectancy for future pensioners - women currently age 45	25.7

Past service funding position - SAB basis (for comparison purposes only)

Market value of assets	£495,000,000
Value of liabilities	£425,000,000
Funding level on SAB basis (assets/liabilities)	117%
Funding level on SAB basis (change since last valuation)	6%

Contribution rates payable

Primary contribution rate	35.0% of pay
Secondary contribution rate (cash amounts in each year in line with CIPFA guidance)	
Secondary contribution rate 2020/21	£7,106,000
Secondary contribution rate 2021/22	£7,299,000
Secondary contribution rate 2022/23	£7,497,000
Giving total expected contributions, based on expected reduction in payroll due to closed membership	
Total expected contributions 2020/21	£10,256,000
Total expected contributions 2021/22	£10,099,000
Total expected contributions 2022/23	£9,947,000
Average employee contribution rate (% of pay)	6.9% of pay
Employee contribution rate (£ figure based on assumed payroll of £9m)	£621,000
Additional information	
Percentage of liabilities relating to employers with deficit recovery periods longer than 20 years	0%
Percentage of total liabilities that are in respect of Tier 3 employers	100%

Appendix 4 Rates and Adjustments Certificate

Regulatory background

In accordance with Regulation 62 of the Local Government Pension Scheme Regulations we have made an assessment of the contributions that should be paid into the Fund by participating employers for the period 1 April 2020 to 31 March 2023.

The method and assumptions used to calculate the contributions set out in the Rates and Adjustments Certificate are detailed in the Funding Strategy Statement and our report on the actuarial valuation dated June 2020.

The primary rate of contribution as defined by Regulation 62(5) for each employer for the period 1 April 2020 to 31 March 2023 is set out in the table overleaf. The primary rate is the employer's contribution towards the cost of benefits accruing in each of the three years beginning 1 April 2020. In addition each employer pays a secondary contribution as required under Regulation 62(7) that when combined with the primary rate results in the minimum total contributions as set out below. This secondary rate is based on their particular circumstances and so individual adjustments are made for each employer.

Secondary rate summary

The sum of the employers' secondary rates in each of the three years in the period 1 April 2020 to 31 March 2023 is set out in the table below. As there is only one employer with active members and the Fund is closed to new entrants, we have only included this sum as a total monetary amount in each year as expressing this as a percentage of payroll is inappropriate because of the payroll declining.

Secondary Contributions	2020/21	2021/22	2022/23
Total monetary amounts	£7,106,000	£7,299,000	£7,497,000

West Midlands Travel Limited – Schedule to the Rates and Adjustments Certificate

Employer Code	Employer name	Primary rate	Secondary rate (% pay plus monetary adjustment)			Total contributions i.e. primary rate plus secondary rate		
		(% pay)	2020/21	2021/22	2022/23	2020/21	2021/22	2022/23
81	West Midlands Travel Ltd	35.0%	£7,106,000	£7,299,000	£7,497,000	35.0% plus £7,106,000	35.0% plus £7,299,000	35.0% plus £7,497,000

Notes to the contribution schedule

Employers may pay further amounts at any time and future periodic contributions, or the timing of contributions, may be adjusted on a basis agreed by the administering authority and approved by us as the Fund Actuary. The administering authority, with advice from us as the Fund Actuary, may allow some or all of these contributions to be treated as a prepayment and offset against future certified contributions.

The certified contributions include an allowance for expenses and the expected cost of lump sum death benefits but exclude early retirement strain and augmentation costs which are payable by participating employers in addition.

Employer specific notes

The monetary amount for each Scheme year shall be paid in two equal instalments, one in July and the other in January of each Scheme year.

The contributions set at this funding valuation are aligned with those stated for the period 1 April 2020 to 31 March 2023 in section 4.1 of the Memorandum of Understanding (MoU), dated 17 June 2020, as agreed between the employer and the Fund and following actuarial advice from us. The next funding valuation will take into account the projected pattern of contributions for the period from 1 April 2023 onwards, as set out in the MoU, but this will be subject to statutory review at that stage.

Preston Bus Limited – Schedule to the Rates and Adjustments Certificate

Employer Code	Employer name	Primary rate	Secondary rate (% pay plus monetary adjustment)			Total contributions i.e. primary rate plus secondary rate		
		(% pay)	2020/21	2021/22	2022/23	2020/21	2021/22	2022/23
147	Preston Bus Ltd	-	-	-	-	Nil	Nil	Nil

Notes to the contribution schedule

Employers may pay further amounts at any time and future periodic contributions, or the timing of contributions, may be adjusted on a basis agreed by the administering authority and approved by us as the Fund Actuary.