

# **South Yorkshire Passenger Transport Pension Fund**

Actuarial Valuation as at 31 March 2013

J A Harrison  
Barnett Waddingham LLP

28 March 2014

## Summary

This report is addressed to the South Yorkshire Integrated Transport Authority ("the Authority") but it is intended that a copy of the report is also made available to the Employer. It summarises the results of an actuarial valuation of the South Yorkshire Passenger Transport Pension Fund ("the Fund") as at 31 March 2013.

Where mentioned in this report "the Employer" refers to First South Yorkshire Limited.

The principal results of the valuation are summarised below:

- On the assumptions used, the Fund's liabilities were £32,875,000 more than the value of the Fund's assets, equivalent to a funding level of 86%.
- Using the same assumptions adopted for the calculation of the liabilities, the Employer's contribution rate required to cover the cost of accruing benefits and expenses is 23.1% of Pensionable Pay from 1 April 2014.

The following decisions have been made since the Valuation Date:

- The Employer has agreed to pay phased deficit reduction contributions over the period to 31 March 2023 to eliminate the deficit revealed at the valuation. The payments are as follows:
  - Lump sum of £1.5 million on 10 April 2015;
  - Lump sum of £2.5 million on 10 April 2016;
  - Lump sum of £3.0 million on 31 March 2017;
  - Lump sum of £3.25 million on 31 March 2018;
  - Lump sums of £3.5 million on each 31 March from 2019 to 2023 inclusive.
- The Employer will also pay 23.1% of Pensionable Pay to fund future accrual in the Fund from 1 April 2014.

This advice is subject to and complies with the Technical Actuarial Standards issued by the Financial Reporting Council (in particular, the pensions TAS and generic TASs relating to reporting, data and modelling).

No liability to any third party is accepted in respect of this report. Figures required for other purposes, such as employer accounting or corporate mergers, acquisitions and other transfers of business assets should be calculated in accordance with the specific requirements for such purposes and it should not be assumed that the figures contained in this report are appropriate. The report may be disclosed to other parties with the consent of the Authority.

The next formal valuation of the Fund should be made as at 31 March 2016.



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**Partner, Barnett Waddingham LLP**  
**28 March 2014**

## 1 Background information

Acting on the instructions of the Authority an actuarial valuation of the South Yorkshire Passenger Transport Pension Fund ("the Fund") has been carried out as at 31 March 2013 ("the Valuation Date").

The valuation has been carried out in accordance with Regulation 36 of The Local Government Pension Scheme (Administration) Regulations 2008 ("the Regulations") as amended.

Regulation 36 states that the actuary must have regard to:

- The existing and prospective liabilities of the Fund;
- The desirability of maintaining as nearly a common a rate of contribution as possible; and
- The current version of the Administering Authority's Funding Strategy Statement.

I can confirm that, in our view, the methods and assumptions adopted meet this requirement.

From 1 April 2014, The Local Government Pension Scheme Regulations 2013 and the Local Government Pension Scheme (Transitional Provisions, Savings and Amendment) Regulations 2014 will come into effect and replace the current regulations.

## Membership data

The Fund's administrators have supplied details of the membership of the Fund at the Valuation Date. A summary of the data is attached as Appendix 1.

I am not aware of any significant changes to the membership since the previous valuation.

I have undertaken various checks on the data supplied and, whilst this should not be considered to be an audit of the data, I am satisfied that it is sufficiently accurate for the purposes of the valuation.

## Benefits

The benefits valued are those set out in the regulations governing the Local Government Pension Scheme. No allowance has been made for any other benefits. A summary of the benefits valued is attached as Appendix 2.

The benefits for service from 1 April 2014 will be based on the Local Government Pension Scheme Regulations 2013. The main changes are to move from a final salary pension scheme based on 60<sup>th</sup>s accrual and a retirement age of 65 to a career average revalued earnings pension scheme based on 49<sup>th</sup>s accrual and a retirement age equal to State Pension Age.

The Local Government Pension Scheme (Transitional Provisions, Savings and Amendment) Regulations 2014 serve the dual purpose of retaining the previous benefit structure for service up to 31 March 2014 and introducing new protections for members close to retirement to ensure that they are not disadvantaged by the benefit changes.

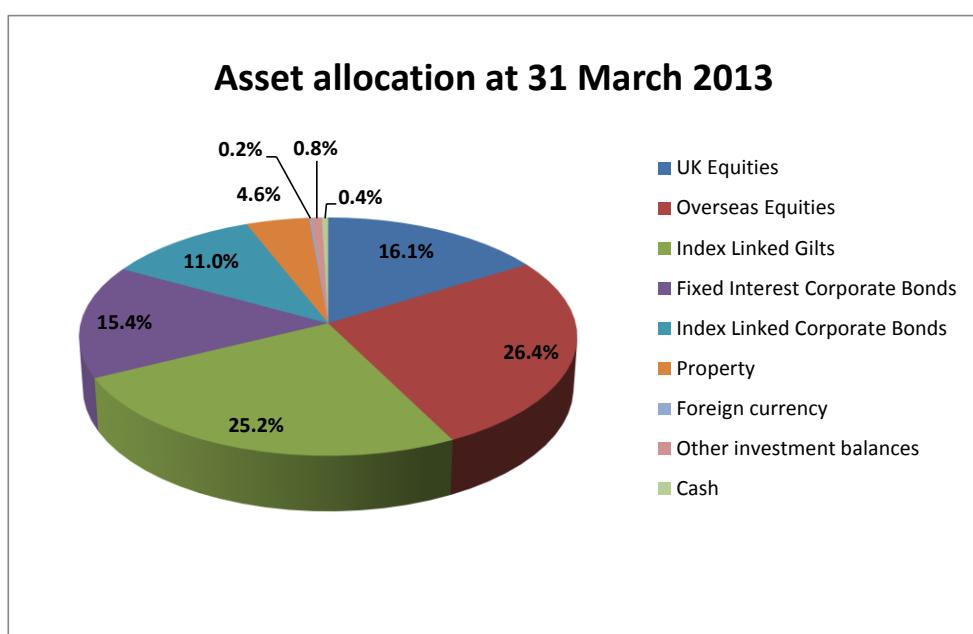
## Scheme assets

Audited accounts for the Fund have been provided by the Fund's administrators for the period from 31 March 2010 to 31 March 2013.

The accounts show that the Fund's total assets have increased from £158,374,000 at the previous valuation to £194,220,000 at the Valuation Date. This amount makes allowance for all debtors, creditors, prepayments, accounts and cash balances and excludes members' Additional Voluntary Contributions ("AVCs") which are invested in separately designated member accounts. For the purposes of this valuation, AVCs have been excluded from both the assets and liabilities of the Fund.

At the Valuation Date, the assets of the Fund were invested in funds operated by South Yorkshire Pensions Authority and Old Mutual Asset Managers.

The asset allocation of the Fund as at 31 March 2013 was as follows:



The current investment strategy is set out in the Fund's Statement of Investment Principles.

## 2 Methodology and assumptions

### Funding objective

The aim of a funded pension scheme is to build up reserves over the course of the members' employments which should be sufficient to meet the cost of providing benefits as they fall due. A scheme's "funding objective" sets out the rate at which these reserves are intended to be built up.

The Authority's funding objective is to achieve and then maintain assets equal to 100% of projected accrued liabilities, assessed on an ongoing basis including allowance for projected final pay as set out in its Funding Strategy Statement.

The Fund's ongoing liabilities are a prudent estimate, made on actuarial principles, of the assets needed at any particular time to make provision for benefits already accrued under the Fund. These include pensions in payment (including those payable to survivors of former members) and benefits accrued by other members which will become payable in the future.

## The purpose of the valuation

The actuarial valuation is intended to satisfy a number of purposes having regard to the Authority's Funding Strategy Statement:

- To compare the value of the assets with the value of the liabilities at the Valuation Date assuming that the Fund will continue. This allows the financial position of the Fund to be assessed in relation to its funding objective;
- To set out a future contribution rate which, in my opinion, should be sufficient to cover the cost of any future benefit accrual, and if there is a shortfall in the Fund at the Valuation Date, target full compliance with the funding objective by the end of the Recovery Period.

The Pensions TAS requires the actuary to report on the value of the liabilities that would arise had the Fund wound up at the valuation date (based on the cost of buying out the accrued benefits with an insurance company). As the LGPS is a statutory scheme, there is no regulatory provision for the Fund to wind up and the Fund members have a statutory right to their accrued benefits. Therefore the concept of solvency on a buy-out basis does not apply to the LGPS.

## Funding method

The actuarial valuation method used for the purposes of this valuation is known as the "Projected Unit Method". This is the same method that was used at the previous valuation.

A value has been placed on the liabilities of the Fund which arise in respect of service accrued before the Valuation Date. This value is calculated by projecting forward the accrued benefits to the expected dates of payment, according to the actuarial assumptions set out in this report. For members still in service this includes an allowance for expected future salary increases until each member's expected date of retirement or earlier exit from the Fund. These projected benefits are then discounted back to the Valuation Date at the valuation rate of interest to allow for the fact that they do not become payable for some time and, during that time, the reserves held will earn interest.

I have taken the assets of the Fund into account at their market value. In doing so, it is important that I use assumptions to value the liabilities that are consistent with market indicators at the Valuation Date. This means that the funding position of the Fund will be sensitive to investment market volatility.

When considering the future service contributions needed to meet the cost of benefits accruing of active members of the Fund, the Projected Unit Method with a three year control period is used. First, the benefits arising in the three years following the Valuation Date are projected forward in the same way as for the past service liabilities using the same assumptions. The value placed on these benefits is compared with the value of the Pensionable Pay expected to be paid over the same period. The ratio gives the relevant standard contribution rate.

If new members join the Fund and so maintain the current age and salary profile, then the Projected Unit Method produces a stable future contribution rate over the long term. If new members do not join in sufficient numbers, the age profile will rise. Pensions normally cost more for older members, so in this case the contribution rate would rise as a percentage of payroll (though the absolute cost will fall as the membership reduces) over the long term because of the closed nature of the Fund. I am satisfied that the method is appropriate for the Fund although it will be reviewed at the next valuation.

## Valuation assumptions

The assumptions for calculating the Fund's ongoing liabilities should be chosen after considering detailed actuarial advice.

The assumptions and the rationale for them were set out in my paper to the Authority dated 31 May 2013 and my subsequent letter dated 3 September 2013. The final assumptions have been adopted following discussion with the Authority and are as set out in Appendix 4. I confirm that I believe that these are appropriate for the purposes of this valuation.

The actuarial method and assumptions do not determine the actual cost of benefits (which cannot be known in advance) – they just set the pace of funding i.e. the rate at which contributions are paid. The actual cost of the benefits will depend upon a number of factors including:

- The membership profile including the number of members, their age and earnings.
- The benefit structure of the Fund.
- Future experience, for example investment returns, salary growth and mortality experience.

However, the pace of funding does have an impact on the level of security of members' benefits, should the Employer fail.

## 3 Results

Using the methodology described above and the assumptions set out in Appendix 4, the results of the valuation are as follows.

Past service liabilities	£000s
Actives	50,700
Deferreds	29,425
Pensioners & dependants	146,970
<b>Total liabilities</b>	<b>227,095</b>
<b>Market value of assets</b>	<b>194,220</b>
<b>Surplus/(Deficit)</b>	<b>(32,875)</b>
<b>Funding level</b>	<b>86%</b>

Future service benefits:	% of Pensionable Pay
Contribution rate for accrual of pension and contingent benefits	27.5
Expenses	2.0
<b>Total contribution rate</b>	<b>29.5</b>
Less average member contribution rate (exclusive of AVCs)	(6.4)
<b>Employer contribution rate</b>	<b>23.1</b>

The administrative and operational expenses of running the Fund are currently met by the Authority, but the Authority is subsequently reimbursed by the Fund. I have therefore made an allowance for expenses of 2.0% of Pensionable Pay within the future service contribution rate. This is an increase of 0.5% pa compared to the allowance included in the last valuation to reflect actual experience.

It should be understood that these results show the expected cost of providing the Scheme benefits using the chosen method and assumptions. The actual cost of providing the benefits will depend on the actual experience. The sensitivity of the results to some key assumptions is included as Appendix 5.

## Contribution requirements

There is a deficit revealed by the valuation of £32,875,000. Additional contributions are required from the Employer in order to fund this deficit.

A recovery plan has been agreed with the Authority to spread the deficit over a period of 10 years from the Valuation Date. Lump sum deficit payments are to be as follows:

Payment date	Contribution
10 April 2015	£1.5m
10 April 2016	£2.5m
31 March 2017	£3.0m
31 March 2018	£3.25m
31 March 2019 to 31 March 2023	£3.5m

Contributions totalling £2.5 million have also been paid between 1 April 2013 and 31 March 2014.

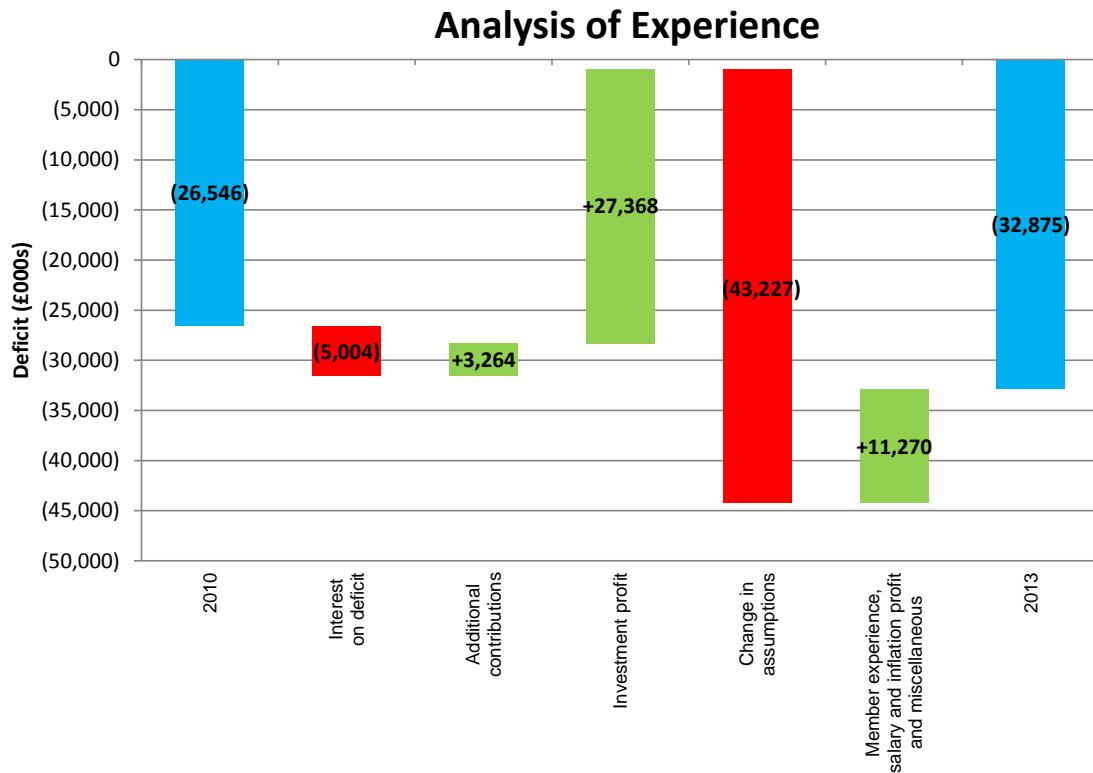
Note that the above contributions are in addition to the Employer's future service contribution rate of 23.1% of Pensionable Pay, which is payable monthly.

The assumptions underlying the recovery plan are the same as those used for calculating the past service liabilities, with the exception that allowance has been made for a proportion of the improvement in the Fund's funding position between 31 March 2013 and 31 July 2013.

The Scheme's funding position will be reviewed as part of the next formal actuarial valuation as at 31 March 2016 and the contribution rates may be amended to reflect any changes in the level of assets and liabilities. Some variation in contribution rates is likely as the market-related nature of valuations means that funding levels and contribution requirements can be volatile over time.

## Reconciliation to previous valuation

The previous valuation was carried out by me as at 31 March 2010. The results are summarised in my report dated 13 January 2011 and show a funding level of 86% corresponding to a deficit of £26,546,000. The key factors that have influenced the funding level of the Fund over the period are as follows:



For example, the change in assumptions from the 2010 valuation has increased the deficit by £43,227,000 whereas the additional contributions paid have reduced the deficit by £3,264,000.

The change in assumptions item can be broken down as follows:

Change of assumptions	£000s
Change in financial conditions	(35,620)
Change due to amendment to financial assumptions (term dependence etc)	(3,380)
Change due to amendment to mortality and demographic assumptions	(4,227)
	(43,227)

At the previous valuation the total contribution rate for accrual of pension was 26.3% per annum of Pensionable Pay. Using consistent method and assumptions and before allowing for the LGPS 2014 changes, the equivalent rate at this valuation is 25.2% per annum of Pensionable Pay – this decrease in the cost of accrual is due to the change in profile of the active membership over the inter-valuation period. The change in assumptions between 2010 and 2013 increases the total contribution rate to 28.3% per annum of Pensionable Pay. Allowing for the 2014 LGPS changes reduces the total contribution rate to 27.5%.

## Projected future results

The progression of the funding level over time is influenced by a large number of factors, including the experience of the Fund's membership, the investment return achieved and the contributions paid.

I estimate that 3 years after the valuation date (i.e. at the next valuation) the funding position on the same assumptions will be approximately 90%. This allows for contributions to be paid as described above and allows for the improvement in the Fund's financial position between 31 March 2013 and 31 July 2013 incorporated into the Fund's recovery plan, but otherwise assumes that investment returns and other experience over the next 3 years is in line with the assumptions described in Appendix 4.

## 4 Risk and uncertainty

There are many factors that affect the financial position of the Fund, in particular:

**Employer covenant risk** – there is a risk to the Fund that the Employer may be unable to pay contributions.

The Fund should monitor the strength of the Employer over time, so that any sudden changes in an Employer's position can be mitigated.

**Investment risk** - allowance is made in the assumptions for the expected long-term performance of asset classes such as equities. There is a risk that these returns will not be achieved in practice which may result in further contributions being required. Further, the value of the Fund's assets may not move in line with the Fund's liabilities – mainly because the Fund invests in volatile assets whose value might fall or rise less than expected.

The sensitivity of the valuation results to changes in the investment return assumptions is shown in Appendix 5. The Fund should regularly review its investment strategy to understand the risks being taken and ensure that those risks are being appropriately managed.

**Inflation** - in projecting the expected future benefit payments, we make assumptions regarding future price inflation. There is a risk that the actual rate of inflation will be higher than assumed which will increase the cost of providing the benefits. This would result in additional contributions being required and a deterioration in the funding position unless investment returns are similarly higher than expected.

The sensitivity of the results to the choice of inflation assumptions is also shown in Appendix 5.

**Mortality** - it is not possible to predict with any certainty how long members of the Fund will live, and if members live longer than expected, additional contributions will be required and the Fund's funding position will deteriorate.

The sensitivity of the results to the choice of mortality assumptions is also shown in Appendix 5. The Fund should review its mortality assumptions at each valuation, taking into account all available evidence, to ensure they remain appropriate for the Fund.

**Member options** - certain benefit options may be exercised by members without the consent of the Fund or the Employer. For example, exchanging pension for cash at retirement or taking a transfer value. The value of the cash benefit is generally expected to be less than the value of the pension exchanged so the funding position would only deteriorate if fewer members than expected took this option. Individual transfer values can be higher or lower than the value of the valuation liabilities, depending on the particular member and market conditions.

**Legislative changes** – there are a number of legislative risks to the Fund and the LGPS in general, including:

- All benefits relating to membership after 31 March 2014 will be linked to the individual's State Pension Age and the Chancellor of the Exchequer's Autumn 2013 Statement outlined plans to increase this for some individuals. This valuation is based on the current legislation so if these plans are enacted, some members will find the value of their future benefits reduced and this would be expected to reduce the cost of benefits.
- Contracting-out of the State Second Pension is due to end in 2016 and it is not yet clear what the effect on the LGPS will be.
- The potential effects of GMP equalisation between males and females, if implemented, are not yet known.
- As part of the changes to the LGPS from 1 April 2014, a cost control mechanism has been implemented so that if the future cost turns out to be higher or lower than expected when the reforms were made, a review of the benefits may be triggered.
- If the LGPS was to be discontinued in its current form it is not known what would happen to members' benefits.
- More generally, as a statutory scheme the benefits provided by the LGPS or the structure of the scheme could be changed by the Government.

## Appendix 1 Membership data

The membership data from the 31 March 2010 valuation is also shown for comparison.

Active Members						
	31 March 2013			31 March 2010		
	Number	Average age (liability weighted)	Pensionable Pay £000s pa	Number	Average age (liability weighted)	Pensionable Pay £000s pa
Males	275	56	6,101	389	55	7,964
Females	17	54	406	22	52	480
	292	56	6,507	411	55	8,444

Deferred Members						
	31 March 2013			31 March 2010		
	Number	Average age (liability weighted)	Pension at Date of Valuation £000s pa	Number	Average age (liability weighted)	Pension at Date of Valuation £000s pa
Males	398	53	1,352	462	53	1,491
Females	63	52	178	64	51	145
	461	53	1,530	526	53	1,636

Pensioner and Dependents						
	31 March 2013			31 March 2010		
	Number	Average age (liability weighted)	Pension at Valuation Date £000s pa	Number	Average age (liability weighted)	Pension at Valuation Date £000s pa
Males	1,151	67	7,131	1,501	65	5,908
Females	242	65	752	202	63	567
	1,393	66	7,883	1,253	65	6,475

## Appendix 2 Summary of LGPS Benefits

The benefit changes from 1 April 2014 involve the formation of a new scheme, referred to below as LGPS 2014. Transitional regulations are applied so that the benefits in the previous LGPS 2008 scheme are maintained.

LGPS Benefits	LGPS 2014	LGPS 2008																																								
<b>Type of Scheme</b>	Career Average Revalued Earnings (CARE)	Final Salary																																								
<b>Pension Benefit Accrual</b>	1/49 <sup>th</sup>	1/60 <sup>th</sup> for service after 1 April 2008. Benefits for service before 31 March 2008 were based on 1/80 <sup>th</sup> accrual and an automatic lump sum of 3/80 <sup>ths</sup> .																																								
<b>Revaluation</b>	Consumer Prices Index (CPI)	Based on Final Salary																																								
<b>Lump Sum</b>	By commutation 12:1 up to a maximum of 25% of lifetime allowance																																									
<b>Pensionable Pay</b>	Pay <b>including</b> non-contractual overtime and additional hours for part time staff	Pay <b>excluding</b> non-contractual overtime and non-pensionable additional hours																																								
<b>Member Contributions</b>	Banded Contributions based on <b>actual</b> pensionable pay	Banded Contributions based on <b>full time equivalent</b> pensionable pay																																								
	<table border="1"> <thead> <tr> <th>Range</th><th>Gross Rate</th><th>Range</th><th>Gross Rate</th></tr> </thead> <tbody> <tr> <td>Up to £13,500</td><td>5.5%</td><td>Up to £13,700</td><td>5.5%</td></tr> <tr> <td>£13,501 to £21,000</td><td>5.8%</td><td>£13,701 to £16,100</td><td>5.8%</td></tr> <tr> <td>£21,001 to £34,000</td><td>6.5%</td><td>£16,101 to £20,800</td><td>5.9%</td></tr> <tr> <td>£34,001 to £43,000</td><td>6.8%</td><td>£20,801 to £34,700</td><td>6.5%</td></tr> <tr> <td>£43,001 to £60,000</td><td>8.5%</td><td>£34,701 to £46,500</td><td>6.8%</td></tr> <tr> <td>£60,001 to £85,000</td><td>9.9%</td><td>£46,501 to £87,100</td><td>7.2%</td></tr> <tr> <td>£85,001 to £100,000</td><td>10.5%</td><td>More than £87,100</td><td>7.5%</td></tr> <tr> <td>£100,001 to £150,000</td><td>11.4%</td><td></td><td></td></tr> <tr> <td>More than £150,000</td><td>12.5%</td><td></td><td></td></tr> </tbody> </table>	Range	Gross Rate	Range	Gross Rate	Up to £13,500	5.5%	Up to £13,700	5.5%	£13,501 to £21,000	5.8%	£13,701 to £16,100	5.8%	£21,001 to £34,000	6.5%	£16,101 to £20,800	5.9%	£34,001 to £43,000	6.8%	£20,801 to £34,700	6.5%	£43,001 to £60,000	8.5%	£34,701 to £46,500	6.8%	£60,001 to £85,000	9.9%	£46,501 to £87,100	7.2%	£85,001 to £100,000	10.5%	More than £87,100	7.5%	£100,001 to £150,000	11.4%			More than £150,000	12.5%			
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<b>Contribution Flexibility</b>	Member can pay 50% contributions for 50% of the pension benefit	Not Available																																								
<b>Normal Pension Age</b>	Linked to individual member's State Pension Age (minimum age 65)	Age 65																																								
<b>Death in Service Lump Sum</b>		3 x <b>Pensionable Pay</b>																																								
<b>Death in Service Survivor Benefits</b>		1/160 <sup>th</sup> accrual based on potential service to <b>Normal Pension Age</b>																																								

### III Health Provision

Tier 1 - Immediate payment with service enhanced to **Normal Pension Age**

Tier 2 - Immediate payment with 25% service enhancement to **Normal Pension Age**

Tier 3 - Temporary payment of pension for up to 3 years

### Post Retirement Revaluation

Pension Increase Orders

### Vesting Period

2 years

3 months

### Early Payment - Reduction to Benefits (Rule of 85)

For members of the LGPS on 30 September 2006, some or all of their benefits paid early could be protected from reduction under what is called the Rule of 85.

The Rule of 85 is satisfied if their age at the date they draw their benefits plus their scheme membership (each in whole years) add up to 85 or more.

If they **could not satisfy the Rule of 85 by the time they are 65**, then all of their benefits are reduced, if they choose to retire before age 65.

If they **will be age 60 or over by 31 March 2016** and choose to retire before age 65, then **provided they satisfy the Rule of 85 when they start to draw their pension**, the benefits they build up to 31 March 2016 will not be reduced.

If they **will be under age 60 by 31 March 2016** and choose to retire before age 65, then **provided they satisfy the Rule of 85 when they start to draw their pension**, the benefits they have built up to 31 March 2008 will not be reduced. Also, if they will be aged 60 between 1 April 2016 and 31 March 2020 and meet the Rule of 85 by 31 March 2020, some or all of the benefits that they have built up between 1 April 2008 and 31 March 2020 will not have a full reduction.

## Appendix 3 Summary of assets and contributions

Summary of income and expenditure (£s)	
<b>Fund value at 31 March 2010</b>	<b>158,405,000<sup>1</sup></b>
Employer contributions to future accrual	4,626,000
Employer deficit contributions	3,500,000
Employee contributions to future accrual	1,416,000
Transfers in	79,000
<b>TOTAL INCOME</b>	<b>9,621,000</b>
Pensions payable	(21,422,000)
Commutation and lump sum retirement benefits	(6,585,000)
Death lump sum payments	(468,000)
Transfer values paid	(154,000)
Administration expenses	(520,000)
<b>TOTAL OUTGO</b>	<b>(29,149,000)</b>
Investment income	13,994,000
Change in market value of investments	42,959,000
Investment expenses	(1,610,000)
<b>Net change in market value of investments</b>	<b>55,343,000</b>
<b>Fund value at 31 March 2013</b>	<b>194,220,000</b>

<sup>1</sup> Based on 2009/2010 restated annual report and accounts

## Appendix 4 Summary of assumptions

The assumptions used for the valuation are as follows.

	2010 valuation	2013 valuation (non-pensioner/pensioner) <sup>2</sup>
<b>Financial assumptions:</b>		
Pre retirement discount rate	6.50% pa	6.60% pa
Post retirement discount rate	5.50% pa	3.60% pa / 2.80% pa
Price inflation - RPI	3.60% pa	3.60% pa/ 3.40% pa
Price inflation - CPI	3.00% pa	2.70% pa/ 2.50% pa
Salary inflation	3.85% pa	3.60% pa
<b>Demographic assumptions:</b>		
Mortality table	120% S1PA	
Ill health mortality table	120% S1PA + 6 years	
Mortality projections	CMI_2009 long term rate of improvement 0.5% pa	CMI_2012 long term rate of improvement 1.0% pa
Age difference between member and dependant		Males 3 years older
Proportion leaving a dependant at retirement or earlier death	90% males 70% females	80% males 70% females
Allowance for early retirements	Members to retire at age 65 or the age they meet the rule of 85 if earlier. Allowance made for tapering	Members to retire at age 65 or the age they meet the rule of 85 plus one year if earlier. Allowance made for tapering
Allowance for withdrawals	See below	
Allowance for cash commutation	70% of members elect to take maximum cash	
Allowance for ill health retirements	See below	

<sup>2</sup> Average term of non-pensioner liabilities is approximately 19 years, average term of pensioner liabilities is approximately 12 years.

## Withdrawals

An allowance is made for a certain proportion of active members to leave service each year before reaching Normal Pension Age in line with the following rates.

Withdrawal statistics				
Age	Male officers	Female officers	Male manuals	Female manuals
20	0.1280	0.1300	0.1020	0.1900
25	0.0880	0.1540	0.1000	0.2020
30	0.0500	0.1380	0.0720	0.1720
35	0.0320	0.0840	0.0520	0.1340
40	0.0240	0.0540	0.0400	0.1000
45	0.0180	0.0380	0.0320	0.0720
50	0.0140	0.0260	0.0240	0.0480
55	0.0100	0.0160	0.0180	0.0280
60	0.0080	0.0080	0.0140	0.0140

## III health retirements

**2010** – 50% of the rates set out below

**2013** – 25% of the rates set out below

III health statistics				
Age	Male officers	Female officers	Male manuals	Female manuals
19	0.0000	0.0000	0.0000	0.0000
24	0.0001	0.0001	0.0007	0.0005
29	0.0003	0.0005	0.0020	0.0010
34	0.0006	0.0011	0.0038	0.0018
39	0.0012	0.0021	0.0061	0.0032
44	0.0028	0.0038	0.0091	0.0060
49	0.0063	0.0079	0.0137	0.0110
54	0.0125	0.0169	0.0230	0.0200
59	0.0217	0.0316	0.0405	0.0340

On ill-health retirement of active members, members are assumed to be eligible for the higher tier of benefit with a 15% probability. No allowance is made for the “third-tier” of benefit.

## Appendix 5 Sensitivity analysis

The funding position is sensitive to the assumptions made regarding future experience. The following table illustrates the impact on the funding position of making different assumptions at the valuation date.

	2013 results	No allowance for asset performance in excess of gilt yields	Increasing inflation assumption by 0.1%	Increase long term rate of mortality improvement to 1.5%
Assets (£000s)	194,220	194,220	194,220	194,220
Liabilities (£000s)	227,095	264,584	229,979	232,386
<b>Surplus/(Deficit) (£000s)</b>	<b>(32,875)</b>	<b>(70,364)</b>	<b>(35,759)</b>	<b>(38,166)</b>
<b>Funding level</b>	<b>86%</b>	<b>73%</b>	<b>84%</b>	<b>84%</b>

The above sensitivities show the effect of an assumption being adjusted whilst all other assumptions remain the same. The differences would not be cumulative if more than once change were made.

## Appendix 6 Rates and Adjustments Certificate

### South Yorkshire Passenger Transport Pension Fund

### Local Government Pension Scheme (Administration) Regulations 2008

### Rates and adjustments certificate in accordance with Regulation 36

In accordance with Regulation 36 of the Local Government Pension Scheme (Administration) Regulations 2008, I hereby certify that in respect of the period from 1 April 2014 to 31 March 2017 in my opinion

- (a) The amount of the Employer's common contribution rate should be 23.1% per annum of Pensionable Pay.
- (b) The individual adjustment should be:
  - i. £1.5 million paid on 10 April 2015
  - ii. £2.5 million paid on 10 April 2016
  - iii. £3.0 million paid on 31 March 2017; plus
  - iv. special contributions in accordance with actuarial advice where an early retirement occurs which is not allowed for in the actuarial assumptions adopted for the valuation.

The rate in (a) should be applied to the total remuneration on which contributions will be payable to the fund by employees of First South Yorkshire Limited who are pensionable employees of the South Yorkshire Passenger Transport Pension fund.

Hence the rate payable by First South Yorkshire Limited should be 23.1% per annum plus the individual adjustment as required.

In respect of the period from 1 April 2014 to 31 March 2017

- (a) It is expected that there will be 10 retirements due to ill health and 176 retirements where the members meet the rule of 85 plus one year or who retire at age 65. No other retirements are anticipated.
- (b) The liabilities in respect of the members in (a) are expected to amount to £31,560,000 as at the valuation date.

Signature



Date: 28 March 2014

Qualification: Fellow of the Institute and Faculty of Actuaries

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