



Joint Meeting Rate Expectations for 2011

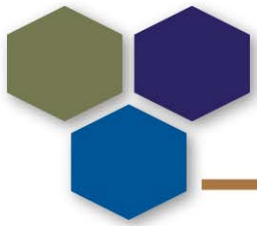
Mark Randall
and
Joseph Newton

August 21, 2009

GRS

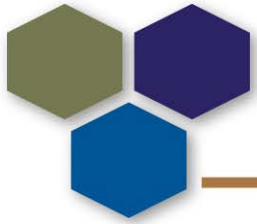
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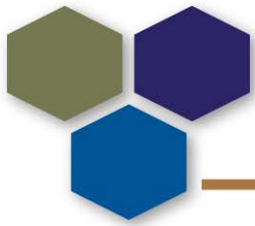
2011 Rates

- ◆ We expect to have no assumption or method changes from the 2010 to the 2011 rates
- ◆ Cities who pay their full rate in 2009 should have stable contribution rates, depending on actual experience
- ◆ Cities who pay Phase-In rate in 2009 will have upward pressure on their contribution rates
- ◆ MAF crediting rate will likely be largest factor in any change
 - ▶ Target is 7.50%



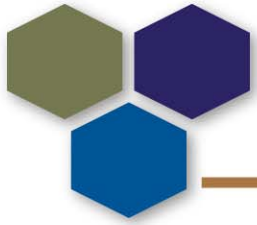
MAF Credit for 2009

- ◆ The actuarial assumption for the expected long term Municipality Accumulation Fund (MAF) crediting rate is 7.50% for 2009
- ◆ The actual crediting rate will be approved by the Board of Trustees early in 2010
- ◆ Credits below the 7.50% target will create a loss on the UAAL, and this loss will be amortized beginning with the December 31, 2009 actuarial valuation and be reflected in the 2011 rates



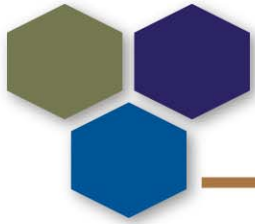
Real Example – a TMRS City

◆ MAF Asset Balance as of December 31, 2008	\$27,000,000	
◆ Actuarial Assumption	7.50%	
◆ Expected Investment Earnings		\$2,025,000
◆ Actual MAF crediting rate for 2008	5.00%	
◆ Actual Investment Earnings		<u>\$1,350,000</u>
◆ Actuarial Loss on Assets, adds directly to the UAAL		\$675,000
◆ Approximate increase in the rate determined by the December 31, 2009 valuation created by the asset loss – as a percentage of payroll		0.21%
- May be dampened by smoothing		



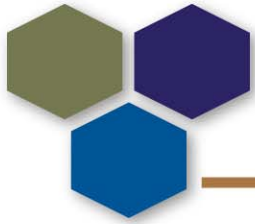
TMRS City Rate Groups

- ◆ **Group 1:** 1 to 1 Employer Match, No repeating COLA
- ◆ **Group 2:** 1.5 to 1 Employer Match, No repeating COLA
- ◆ **Group 3:** 2 to 1 Employer Match, No repeating COLA
- ◆ **Group 4:** 1 to 1 Employer Match, Repeating COLA
- ◆ **Group 5:** 1.5 to 1 Employer Match, Repeating COLA
- ◆ **Group 6:** 2 to 1 Employer Match, Repeating COLA



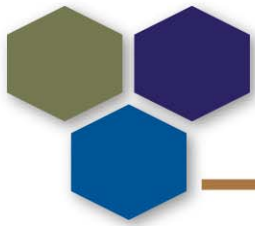
Projected Reconciliation of Contribution Rates (Assumes contributions = Full Rate)

		<u>Group 1</u>	<u>Group 2</u>	<u>Group 3</u>
1.	Full Rate from December 31, 2008 Valuation	4.50%	4.45%	12.50%
2. a.	Contribution "Lag"	(0.01%)	(0.01%)	0.02%
b.	MAF Crediting Rate (7.50%)	0.00%	0.00%	0.00%
c.	Assumption Changes	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>
d.	Anticipated Changes (2a + 2b + 2c)	(0.01%)	(0.01%)	0.02%
3. a.	Overall Payroll Growth	0.00%	0.00%	0.00%
b.	Liability Growth	0.00%	0.00%	0.00%
c.	Change in Current Service	<u>(0.00%)</u>	<u>(0.00%)</u>	<u>(0.00%)</u>
d.	Unanticipated Changes (3a + 3b + 3c)	(0.00%)	(0.00%)	(0.00%)
4.	Full Rate from December 31, 2009 Valuation (1 + 2d+ 3d)	4.49%	4.44%	12.52%



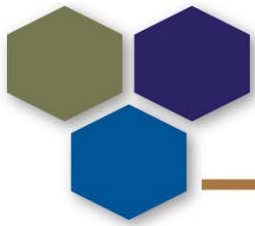
Projected Reconciliation of Contribution Rates (Assumes contributions = Full Rate)

		<u>Group 4</u>	<u>Group 5</u>	<u>Group 6</u>
1.	Full Rate from December 31, 2008 Valuation	6.20%	12.09%	18.51%
2. a.	Contribution "Lag"	0.03%	0.03%	0.07%
b.	MAF Crediting Rate (7.50%)	0.00%	0.00%	0.00%
c.	Assumption Changes	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>
d.	Anticipated Changes (2a + 2b + 2c)	0.03%	0.03%	0.07%
3. a.	Overall Payroll Growth	0.00%	0.00%	0.00%
b.	Liability Growth	0.00%	0.00%	0.00%
c.	Change in Current Service	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>
d.	Unanticipated Changes (3a + 3b + 3c)	0.00%	0.00%	0.00%
4.	Full Rate from December 31, 2009 Valuation (1 + 2d + 3d)	6.23%	12.12%	18.58%



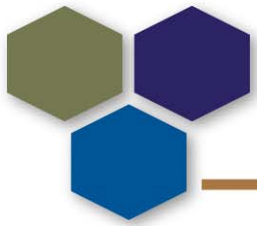
Projected Reconciliation of Contribution Rates (Assumes contributions = Phase In Rate)

	<u>Group 4</u>	<u>Group 5</u>	<u>Group 6</u>
1. Full Rate from December 31, 2008 Valuation	6.20%	12.09%	18.51%
2. a. Contribution "Lag"	0.12%	0.19%	0.30%
b. MAF Crediting Rate (7.50%)	0.00%	0.00%	0.00%
c. Assumption Changes	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>
d. Anticipated Changes (2a + 2b + 2c)	0.12%	0.19%	0.30%
3. a. Overall Payroll Growth	0.00%	0.00%	0.00%
b. Liability Growth	0.00%	0.00%	0.00%
c. Change in Current Service	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>
d. Unanticipated Changes (3a + 3b + 3c)	0.00%	0.00%	0.00%
4. Full Rate from December 31, 2009 Valuation (1 + 2d + 3d)	6.32%	12.28%	18.81%

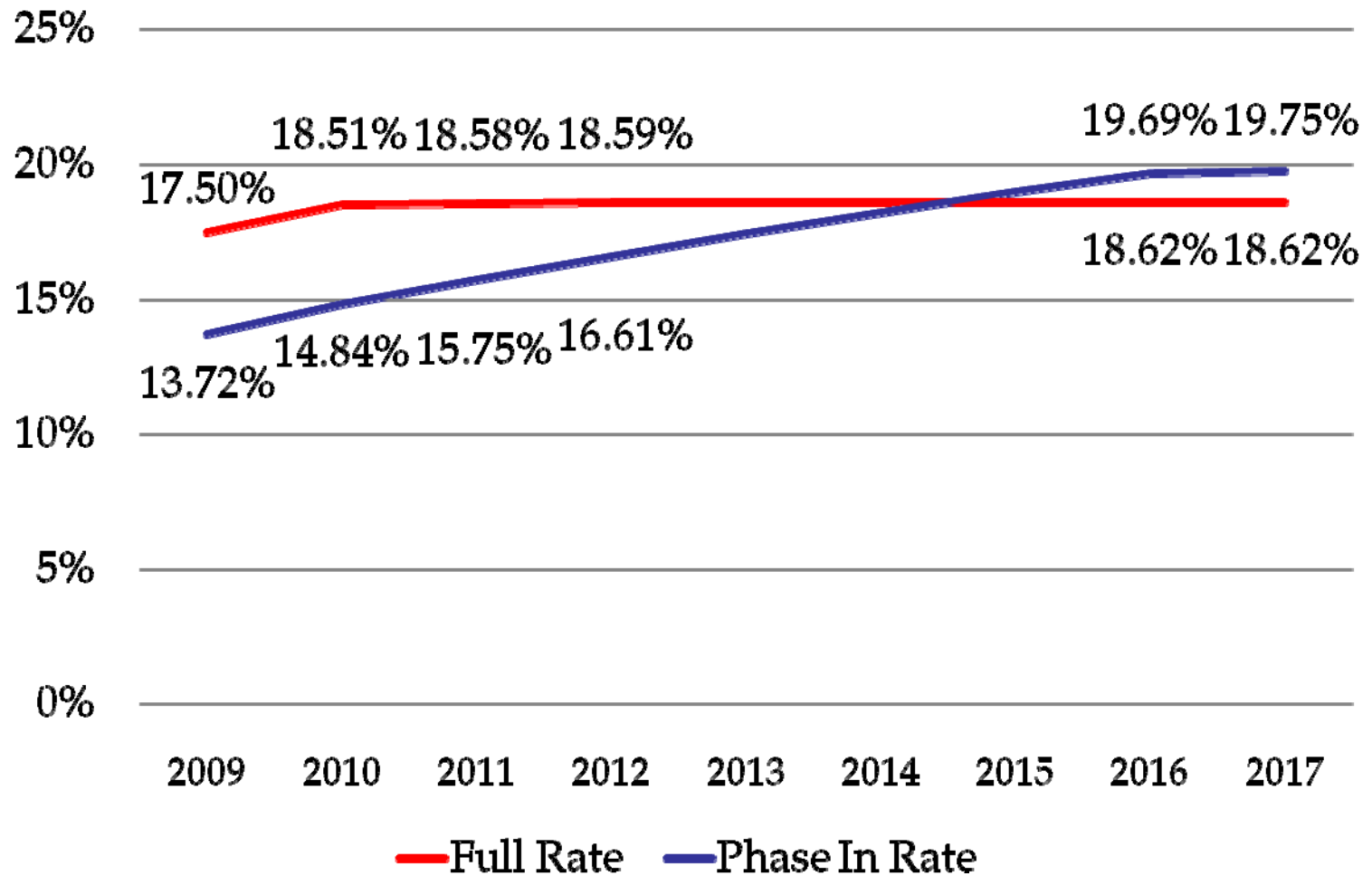


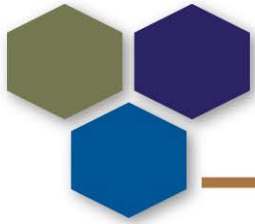
Phase-In Minimums

	<u>Group 4</u>	<u>Group 5</u>	<u>Group 6</u>
1. a. Full Rate from December 31, 2008 Valuation	6.20%	12.09%	18.51%
b. Phase In	<u>(1.60%)</u>	<u>(2.64%)</u>	<u>(3.67%)</u>
c. Minimum Required for 2010	4.60%	9.45%	14.84%
2. a. Full Rate from December 31, 2009 Valuation	6.32%	12.28%	18.81%
b. Phase In	<u>(1.34%)</u>	<u>(2.20%)</u>	<u>(3.06%)</u>
c. Minimum Required for 2011	4.98%	10.08%	15.75%
3. Increase in Minimum Required	0.38%	0.63%	0.91%



Group 6 Projections: Full Rate versus Phase-In

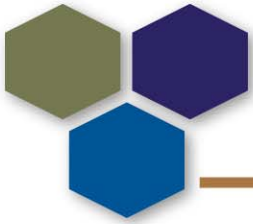




Projected Reconciliation of Contribution Rates

Assumes contributions = Phase-In Rate
0% MAF Crediting in 2009 (3.1% Total Fund Return)

	<u>Group 1</u>	<u>Group 3</u>	<u>Group 6</u>
1. Full Rate from December 31, 2008 Valuation	4.50%	12.50%	18.51%
2. a. Contribution "Lag"	0.00%	0.02%	0.30%
b. MAF Crediting Rate (0.00%)	0.22%	0.67%	0.55%
c. Assumption Changes	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>
d. Anticipated Changes (2a + 2b + 2c)	0.22%	0.69%	0.85%
3. a. Overall Payroll Growth	0.00%	0.00%	0.00%
b. Liability Growth	0.00%	0.00%	0.00%
c. Change in Current Service	<u>(0.00%)</u>	<u>(0.00%)</u>	<u>0.00%</u>
d. Unanticipated Changes (3a + 3b + 3c)	(0.00%)	(0.00%)	0.00%
4. Full Rate from December 31, 2009 Valuation (1 + 2d+ 3d)	4.72%	13.19%	19.36%



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