



The Actuarial Outlook

Recent changes & rate expectations for 2011

Mark Randall
Executive Vice President

October 5, 2009

GRS

Gabriel Roeder Smith & Company
Consultants & Actuaries
www.gabrielroeder.com

Copyright © 2009 GRS – All rights reserved.



Projected Unit Credit Cost Method

- ◆ In 2007, the TMRS Board of Trustees approved the change to the Projected Unit Credit (PUC) actuarial funding method
 - ▶ Change was needed to improve funded ratios long term and to pre-fund annually repeating benefit enhancements:
 - Cost-of-Living Adjustments (COLAs or Annuity Increases)
 - Updated Service Credits (USC)



Assumption Changes

- ◆ This past December, the Board approved the following changes to the actuarial assumption package implemented with the December 31, 2008 actuarial valuation:
 1. Salary scale assumption be applied immediately instead of a one year delay
 2. Explicitly recognize the COLA associated with the annuitization of the Employee Savings Fund (ESF) balances at retirement
 3. Set the Municipality Accumulation Fund (MAF) discount rate at 7.50% to reflect the expectation of a future reserving policy for the TMRS Fund



A review of “Lag” and Phase-In

- ◆ The “Lag” refers to the time delay between the actuarial valuation date and the date the contribution rate becomes effective
- ◆ For TMRS member cities, the “Lag” is one year
 - ▶ Actuarial Valuation as of December 31, 2007 set the rate effective for Calendar Year 2009
- ◆ Similar issue for Phase-In contributions
 - ▶ Less put in today likely means more is needed tomorrow



Board actions taken in June:

1. Amortization policy for closed TMRS plans
2. Amortization policy for future ad hoc benefit enhancements



Summary of Board action taken in June

◆ For Closed Plans:

- ▶ Level dollar amortization – current level % of payroll was not GASB compliant
- ▶ Standard 20 year closed amortization period unless a shorter period is recommended by the Actuary based on cash flow projections and approved by the Board – amortization period to be reviewed annually
- ▶ City may request an extended amortization period up to 30 years subject to Actuary's recommendation based on cash flow projections and approved by the Board – amortization period to be reviewed annually
- ▶ Phase In contribution schedule was eliminated, if applicable
- ▶ New rate effective as of the plan closing date
- ▶ Adoption of benefit enhancements after plan closing subject to more stringent funding requirements and Board approval



Ad hoc Benefit Enhancements

- ◆ Definition: Additional, one time enhancements granted which impact *past accruals only*
 - ▶ COLAs and Updated Service Credits
 - ▶ These benefits were not accrued while services were received, therefore, were not advance funded for

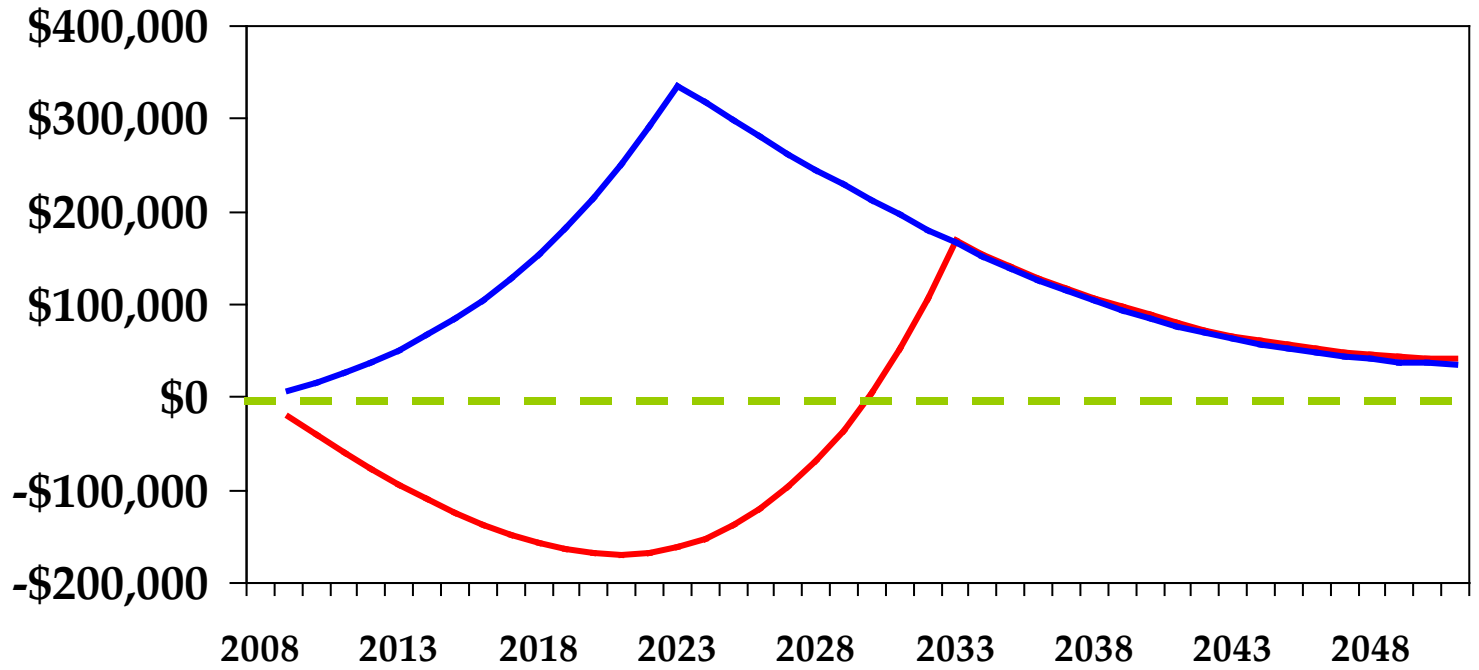


GRS' Recommendation

- ◆ Actuarial Standards of Practice (ASOP) recommend plan amendments be funded so that contributions are scheduled to occur to produce adequate assets to make benefit payments when they become due [ASOP No. 4, 3.13(c.)]
 - ▶ *Interpretation:* Should be financed as a stand-alone financial arrangement
 - ▶ Sufficient level of contributions should be received before the benefits are paid out
 - ▶ This financial model should never be “underwater”
 - ▶ GRS recommended all future ad hoc benefit enhancements be amortized over a 15 year period with a level dollar payment schedule



Stand-alone financial arrangement: Balance (Net Cash In Less Cash Out)



— Increasing Dollar 25 Year Amortization*
— Level Dollar 15 Year Amortization



Board action taken in June

- ◆ Board approved that all future ad hoc benefit enhancements be amortized over a 15 year period with a level dollar payment schedule



Looking Ahead for TMRS cities

- ◆ Ensuring a sustainable benefits program for many years to come
 - ▶ Rate Stabilization
 - ▶ Transparency of Actuarial Assumptions
 - ▶ Developing guidelines for a “Reserve”



2011 City Contribution 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 Unfunded Actuarial Accrued Liability (UAAL), and this loss will be amortized beginning with the December 31, 2009 actuarial valuation and be reflected in the 2011 rates



Example of a sample TMRS city

◆ MAF Asset Balance as of December 31, 2008	\$27,000,000	
◆ Actuarial Assumption	7.50%	
◆ Expected Investment Earnings		\$2,025,000
◆ MAF crediting rate for 2009 for purposes of this example	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%




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 city 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 city 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 city 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%

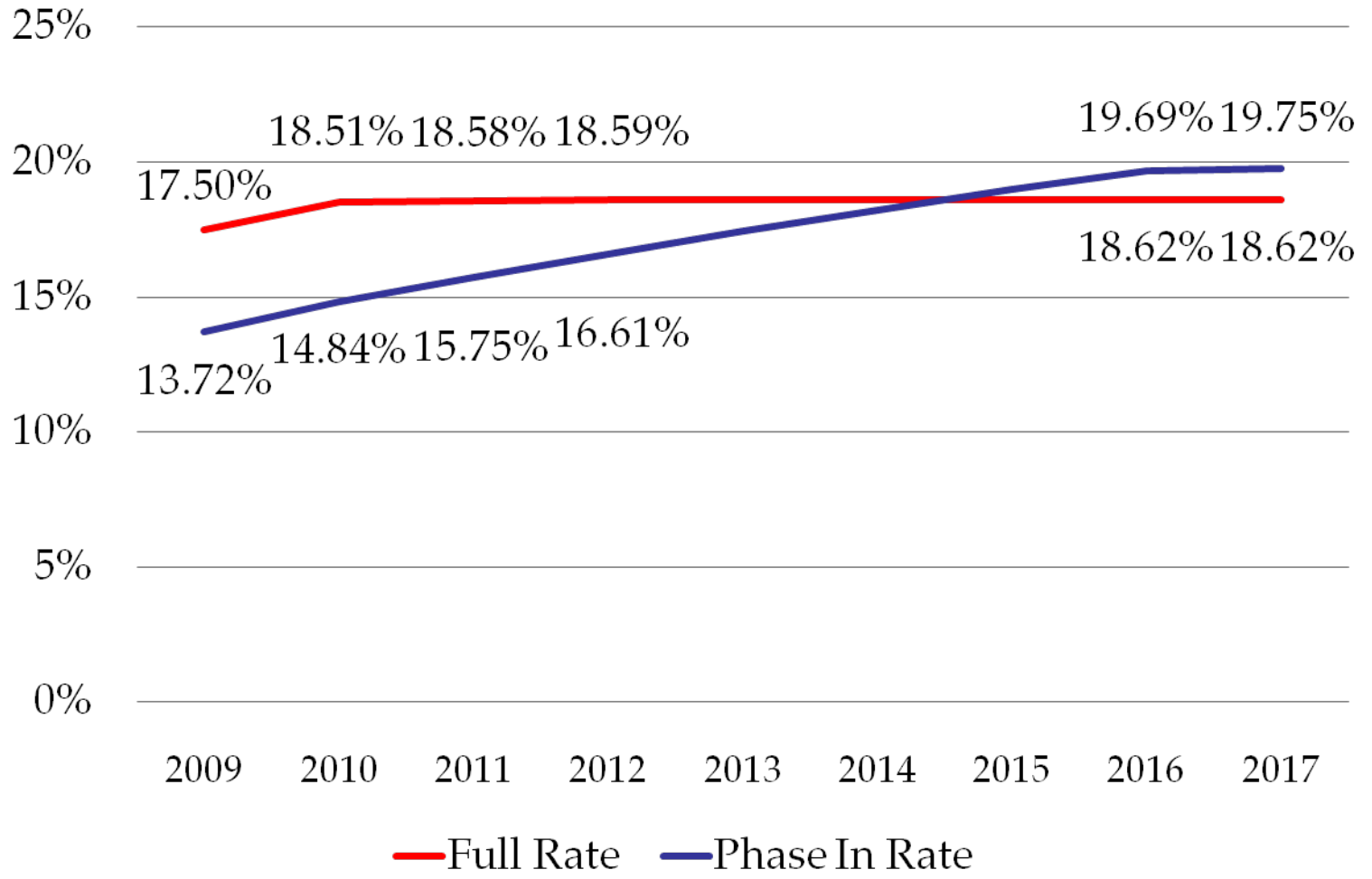


Phase-In Minimums

	<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





The Actuarial Outlook: What's Next?

- ◆ Recommend Guidelines for Building a Reserve in the TMRS Fund
 - ▶ Look at smoothing of future market value returns (Asset Smoothing)
- ◆ TMRS Fund Structure



Circular 230 Notice: Pursuant to regulations issued by the IRS, to the extent this presentation concerns tax matters, it is not intended or written to be used, and cannot be used, for the purpose of (i) avoiding tax-related penalties under the Internal Revenue Code or (ii) marketing or recommending to another party any tax-related matter addressed within. Each taxpayer should seek advice based on the individual's circumstances from an independent tax advisor.

This presentation shall not be construed to provide tax advice, legal advice or investment advice.