



# NEW MEXICO EDUCATIONAL RETIREMENT BOARD

## Actuarial Valuation Report as of June 30, 2014

Presented to Board of Trustees on October 31, 2014

R. Ryan Falls, Senior Consultant

Mark Randall, Executive Vice President

**GRS**

Gabriel Roeder Smith & Company  
Consultants & Actuaries  
[www.gabrielroeder.com](http://www.gabrielroeder.com)



# Actuarial Valuation

---

- ◆ Prepared as of June 30, 2014, using member data, financial data, benefit and contribution provisions, actuarial assumptions and methods
- ◆ Purposes:
  - ▶ Measure the actuarial liabilities
  - ▶ Determine adequacy of current statutory contributions
  - ▶ Provide other information for reporting
    - CAFR (Consolidated Annual Financial Report)
  - ▶ Explain changes in actuarial condition of ERB
  - ▶ Track changes over time
  - ▶ Provide early warning on new trends



# Key Results

---

- ◆ The actuarial funded ratio improved from 60.1% to 63.1%
- ◆ Unfunded Actuarial Accrued Liability (UAAL) decreased from \$6.5 billion to \$6.3 billion
- ◆ The normal cost rate decreased from 13.16% of pay to 13.11% of pay, primarily due to the migration to Tier 3 members
- ◆ The funding period decreased from 95.1 years to 42.1 years
- ◆ *These above valuation results are determined as of a single point in time. The calculated funding period does not reflect:*
  - ▶ *Lower normal cost for future members*
  - ▶ *Future COLAs less than 2%*
  - ▶ *Future growth in the active membership (0.50% per year)*



# Recent Events

---

- ◆ The return on the market value of assets was 14.2%
- ◆ The return on the actuarial (smoothed) value of assets was 12.0%
  - ▶ \$631 million in deferred gains not yet recognized in the actuarial value of assets
  - ▶ The 12.0% return on the actuarial value of assets created an actuarial gain of \$409 million
- ◆ Experience gains totaled \$80 million
  - ▶ Partially due to salary increases less than assumed
  - ▶ Also includes \$47 million gain due to actual COLA less than the 2.0% assumed
- ◆ This is the first valuation to include active members in the new Tier 3



# Recent Changes

---

- ◆ SB 115 was signed into law on March 29, 2013
  - ▶ Members hired after June 30, 2013 (Tier 3) have minimum unreduced retirement age of 55 and COLA deferred until age 67
  - ▶ COLAs reduced until ERB attains 100% funded status
- ◆ In accordance with HB 628 (2011 Regular Session) and SB 115 (2013 Regular Session), employer and member contributions are scheduled as follows:

*For employees making more than \$20,000/less than \$20,000 per year*

Fiscal Year End	Employer Contribution Rate	Employee Contribution Rate
2014	13.15%/13.15%	10.10%/7.90%
2015 and thereafter	13.90%/13.90%	10.70%/7.90%



# Demographic Summary



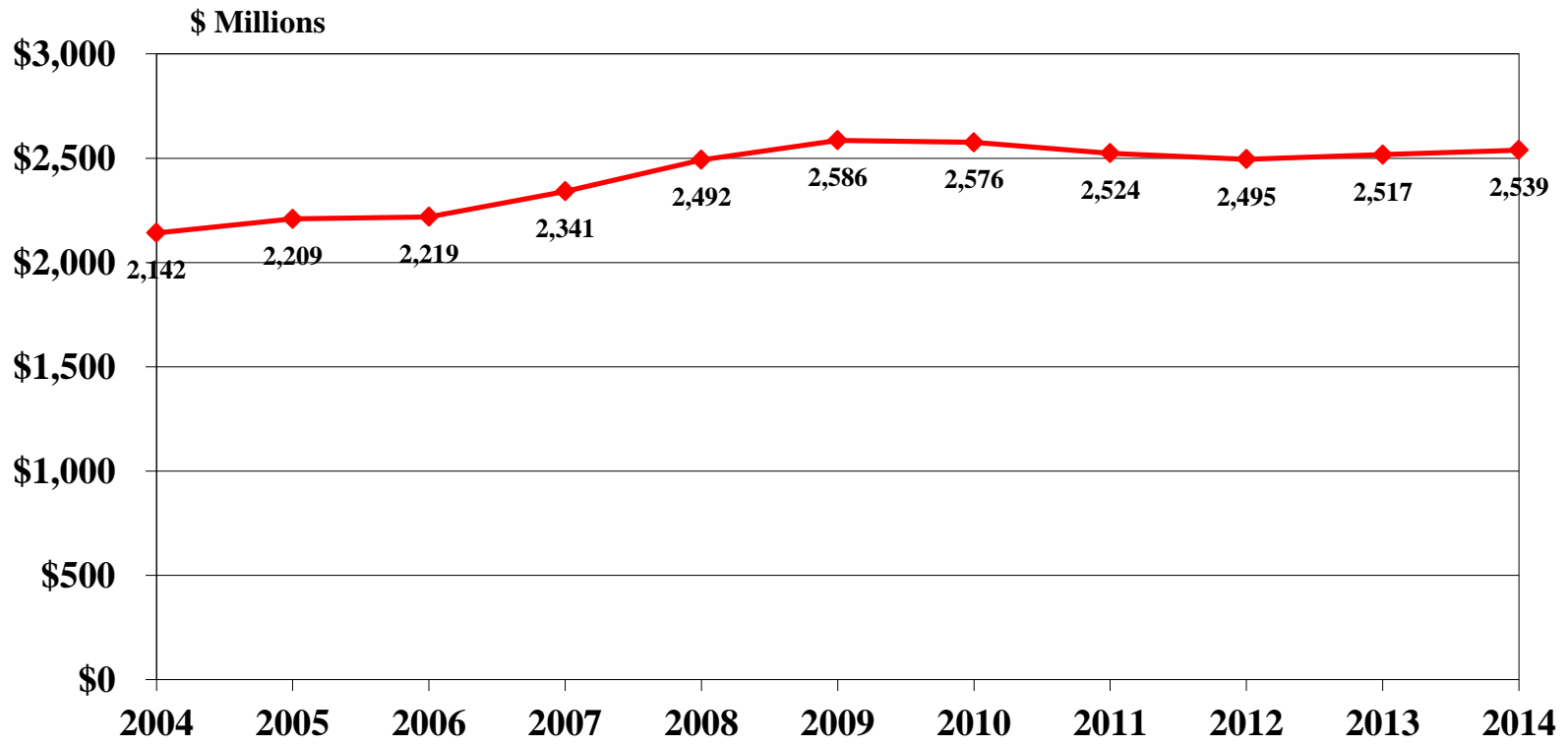
# Membership – Actives

---

- ◆ The number of active members decreased from 61,177 to 61,173, a decrease of 4 members
  - ▶ Tier 1 members decreased from 47,259 to 43,122
  - ▶ Tier 2 members decreased from 13,918 to 11,103
  - ▶ Tier 3 members added this year: 6,948
- ◆ Total payroll of active members increased from \$2,517 million to \$2,539 million
  - ▶ Annual increase of 0.9%
  - ▶ Over the last ten years, total payroll has increased an average of 1.7% per year



# Active Payroll







# Membership – Actives

---

- ◆ Average pay for active members increased from \$41,141 to \$41,503
  - ▶ Annual increase of 0.9%
  - ▶ Over the last ten years, average pay has increased an average of 2.0% per year
- ◆ Average age of active members is 46.6
  - ▶ 47.0 last year
  - ▶ 45.6 ten years ago
- ◆ Average years of service is 9.8
  - ▶ 9.9 last year
  - ▶ 9.4 ten years ago

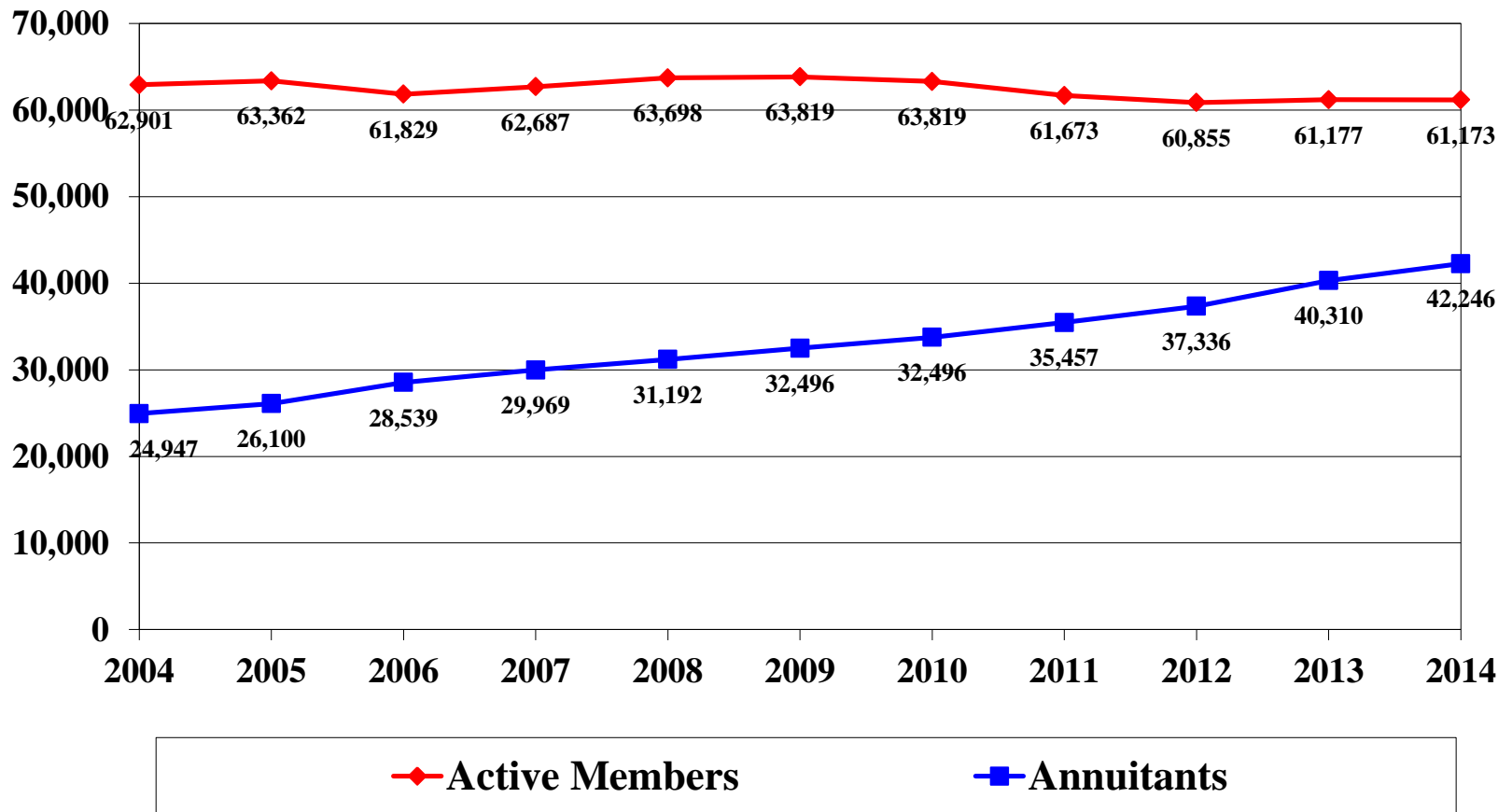


# Membership – Annuitants

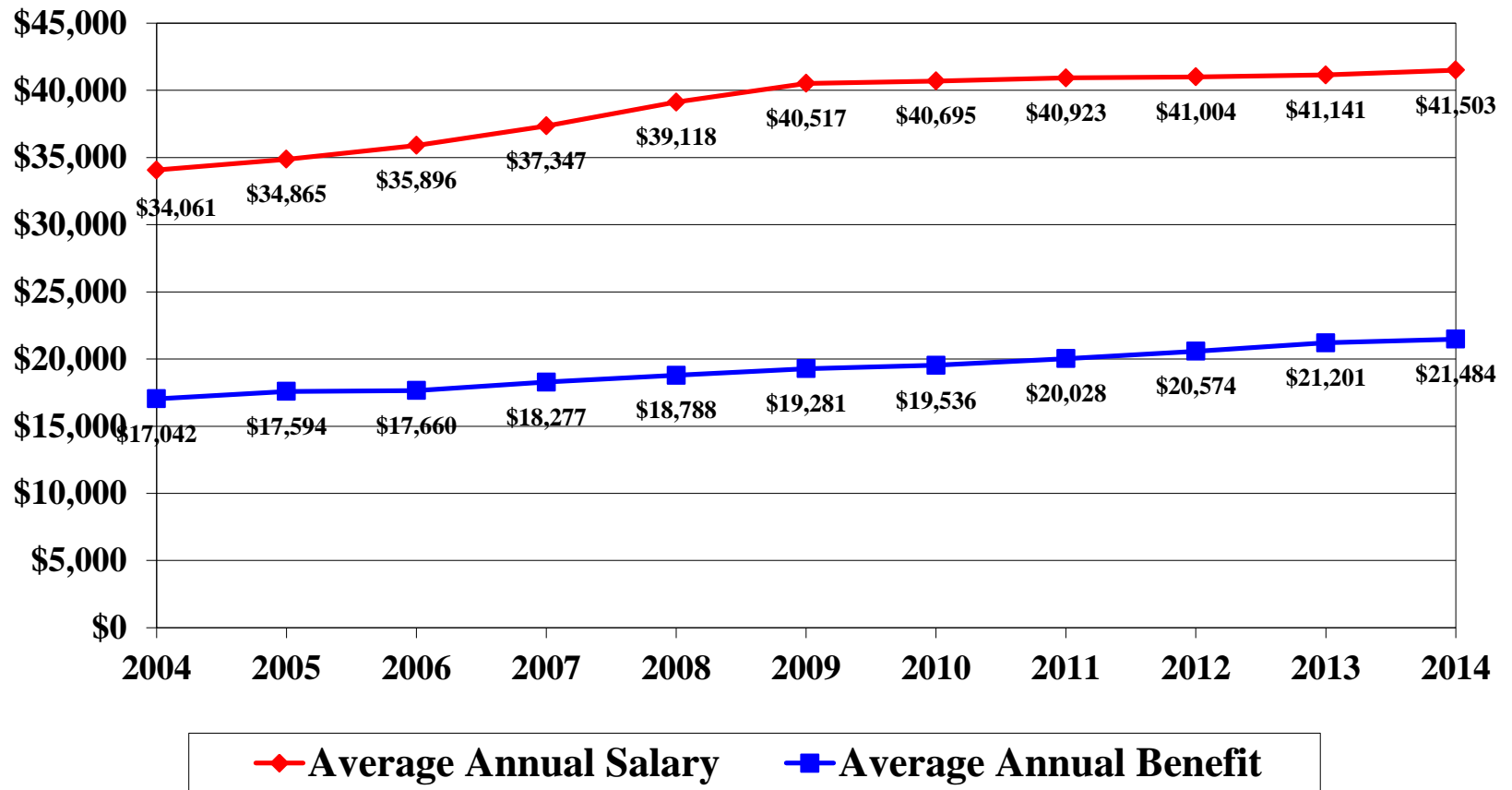
---

- ◆ The number of annuitants increased from 40,310 to 42,246, a 4.8% increase
  - ▶ Annuitants include service retirees, disabled retirees, and beneficiaries receiving benefits
  - ▶ Over the last ten years, the number of annuitants has grown an average of 5.4% per year
- ◆ Average annual benefit is \$21,484
  - ▶ Reflects cost-of-living increase for July 1, 2014
  - ▶ Over the last ten years, the average annual benefit has grown an average of 2.3% per year
- ◆ There are 1.5 active members for each annuitant
  - ▶ Ten years ago the ratio was 2.5

# Active Members and Annuitants



# Average Salary and Average Benefit





# Membership – Inactives

---

- ◆ 9,113 inactive vested members
  - ▶ Generally waiting to commence annuity
- ◆ 27,476 inactive nonvested members
  - ▶ Generally only due refund of contributions



# Assets



# Assets

---

- ◆ Fair market value increased from \$10,192 million to \$11,346 million
- ◆ Contributions
  - ▶ Member contributions = \$272 million, including service purchases
    - 10.10% in FY 2014; 10.70% in FY 2015
  - ▶ Employer contributions = \$357 million
    - 13.15% in FY 2014; 13.90% in FY 2015
  - ▶ ARP contribution = \$5 million (3% of ARP payroll)
- ◆ Total contributions of \$634 million, compared to \$550 million last year



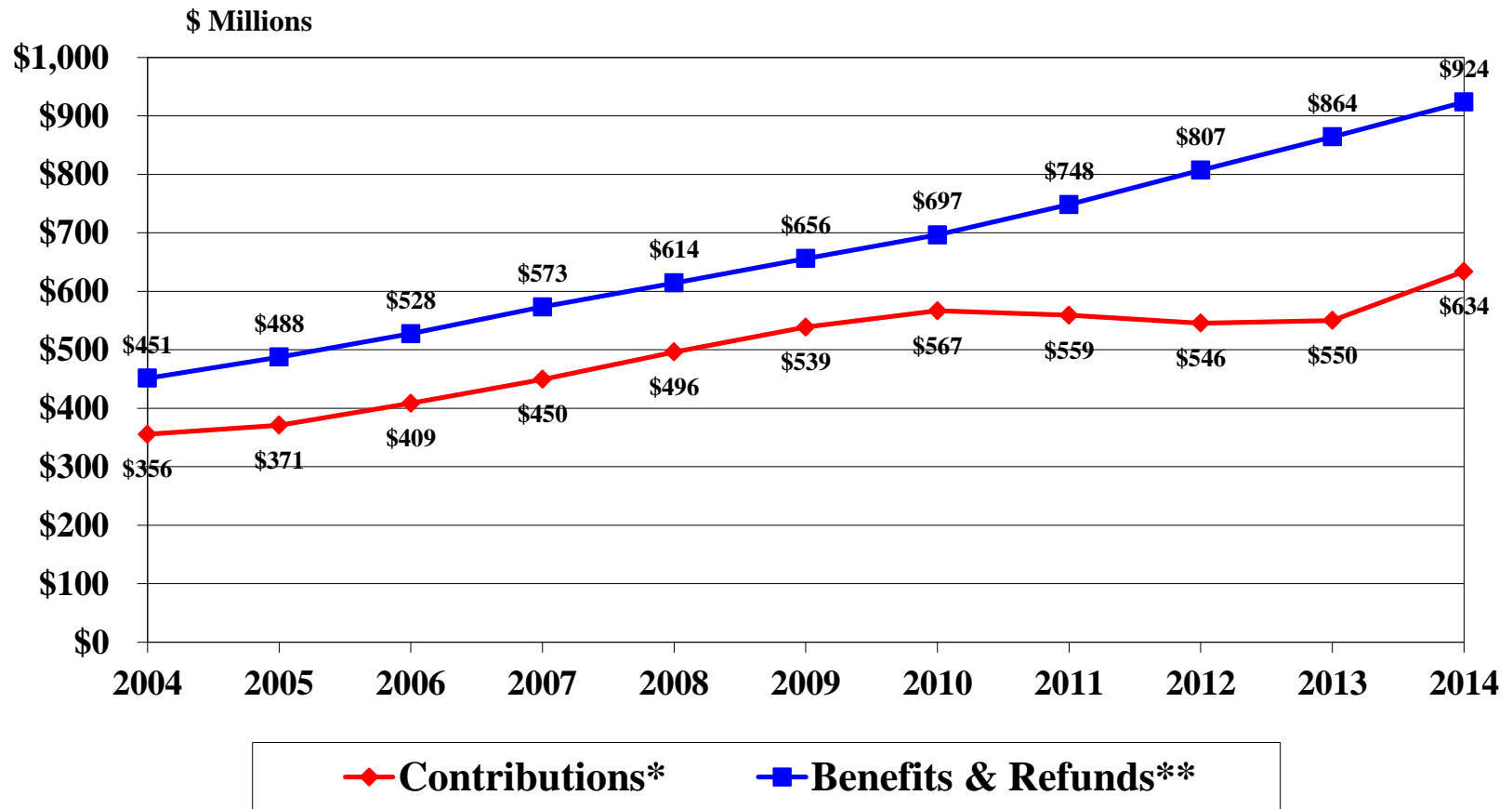
# Assets

---

- ◆ Total distributions—benefit payments, refunds and administrative expenses—totaled \$924 million
- ◆ Therefore, net external cash flow was -\$290 million, or -2.6% of market value of assets at end of year
  - ▶ Projected to stay at or below -4%
- ◆ Return of approximately 14.2% in FY 2014 (net of administrative and investment expenses)
  - ▶ 12.5% for last five years
  - ▶ 7.2% for last 10 years
  - ▶ 5.3% for last 15 years
  - ▶ 7.9% for last 20 years



# Contributions vs. Benefits and Refunds



\* Includes member contributions, employer contributions, and service purchases

\*\* Includes administrative expenses



# Assets

---

- ◆ All actuarial calculations are based on actuarial value of assets, not market value
- ◆ Actuarial value only reflects a portion of the actual market returns over the past five years
  - ▶ 20% of the difference between last year's expected return on market and the actual return
  - ▶ 40% of FY 2013 difference, 60% of FY 2012 difference and 80% of FY 2011 difference
- ◆ Actuarial value is now \$10,715 million, compared to \$9,829 million last year

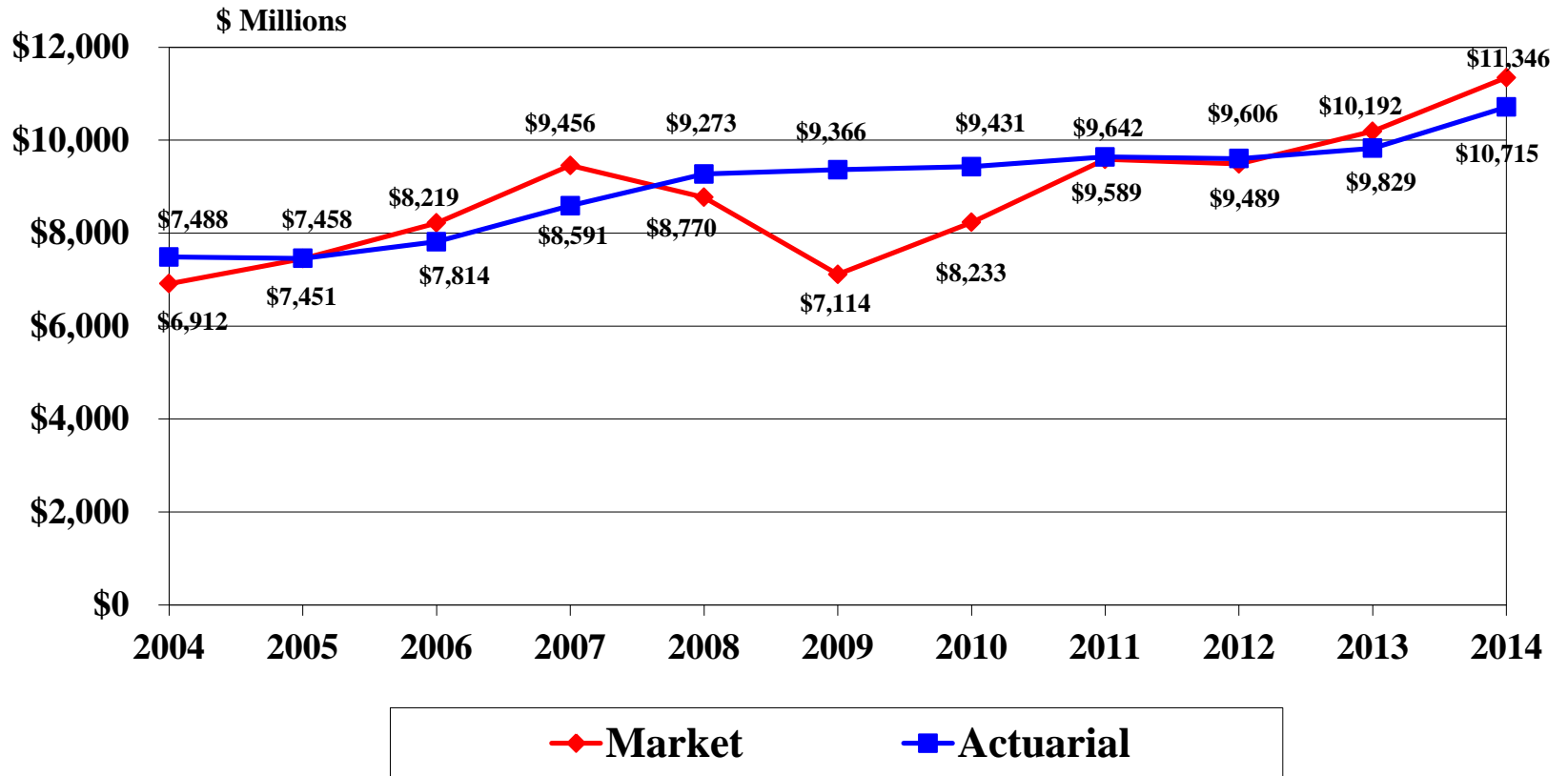


# Assets

---

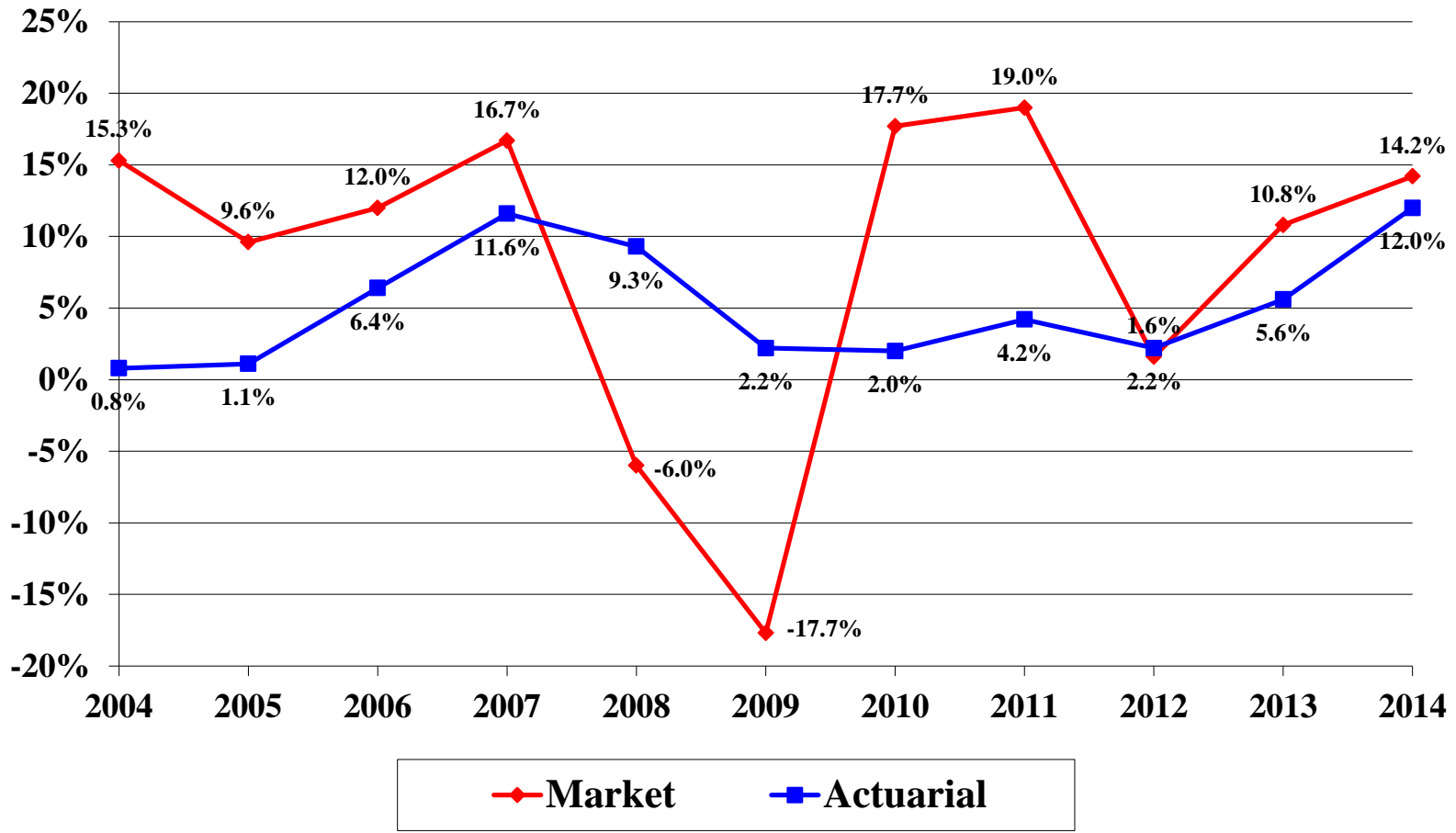
- ◆ Actuarial return was 12.0% in FY 2014, compared to 5.6% in FY 2013
  - ▶ 20% of the good returns in FY 2014, FY 2013, FY 2011, and FY 2010 offset by the lower returns in FY 2012
- ◆ Actuarial value is 94% of fair market value, versus 96% last year
- ◆ \$631 million in deferred gains, not yet recognized

# Market and Actuarial Values of Assets





# Estimated Yields Based on Actuarial and Market Value of Assets





# Funding Valuation Results



# Funding Valuation Results

---

- ◆ Unfunded actuarial accrued liability (UAAL) decreased from \$6,534 million to \$6,256 million
- ◆ Funded ratio (actuarial assets divided by actuarial accrued liability) increased from 60.1% to 63.1%
  - ▶ Ratio using market value increased from 62.3% to 66.9%
- ◆ 13.90% employer contribution for FY 2015 comprised of:
  - ▶ Employer normal cost: 2.41%
  - ▶ Amortization payment: 11.49%



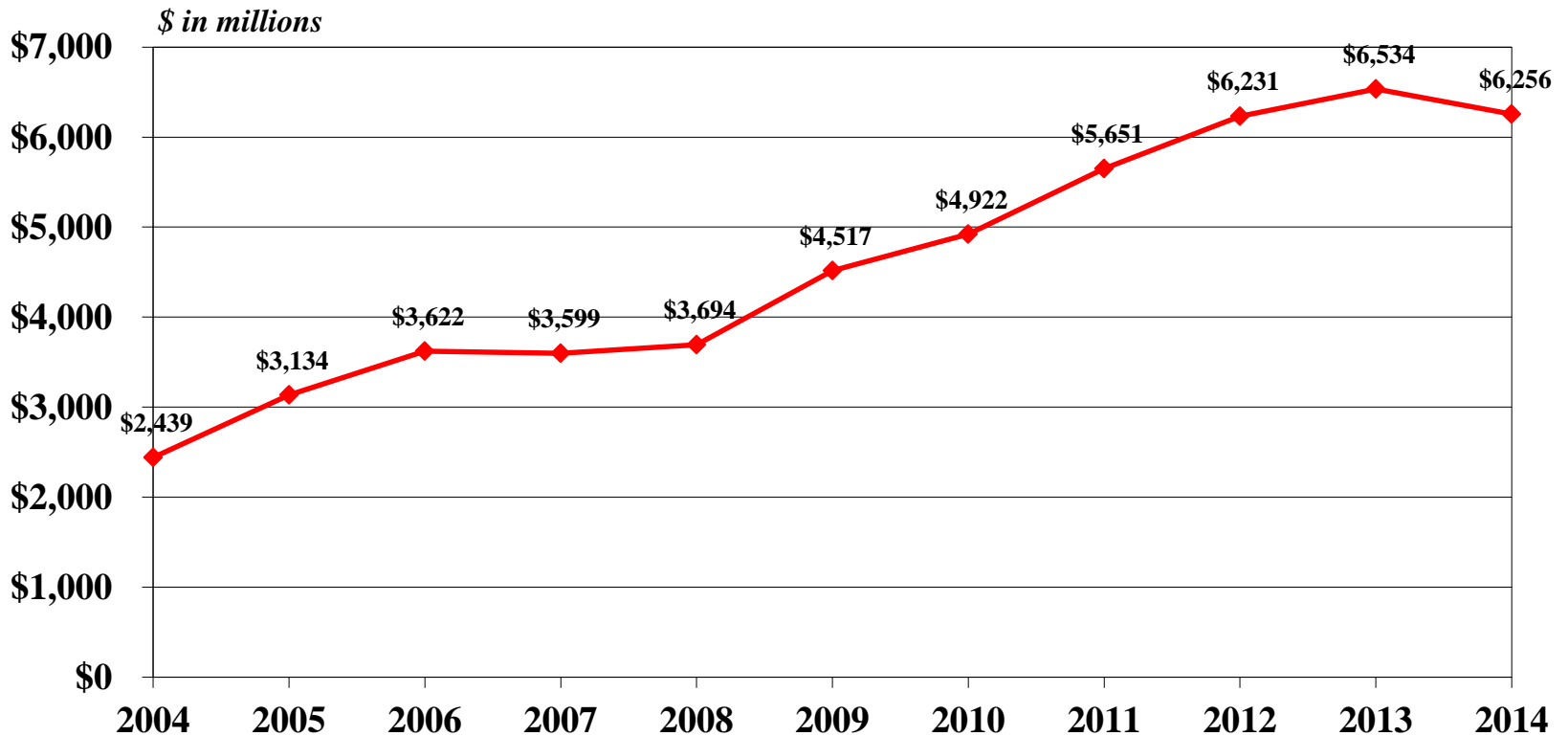
# Change in UAAL for the Year (\$ in millions)

---

	<u>2013/14</u>	<u>2012/13</u>
1. UAAL at beginning of year	\$6,533.7	\$6,230.7
2. Interest on UAAL	506.4	482.9
3. Amortization contributions	(294.8)	(192.1)
4. Liability experience	(33.2)	(107.0)
5. Investment experience	(408.6)	207.4
6. Actual COLA more/(less) than expected	(47.2)	(20.8)
7. Change of actuarial assumptions	0.0	(81.5)
8. Benefit changes	<u>0.0</u>	<u>14.1</u>
9. UAAL at end of year	\$6,256.3	\$6,533.7

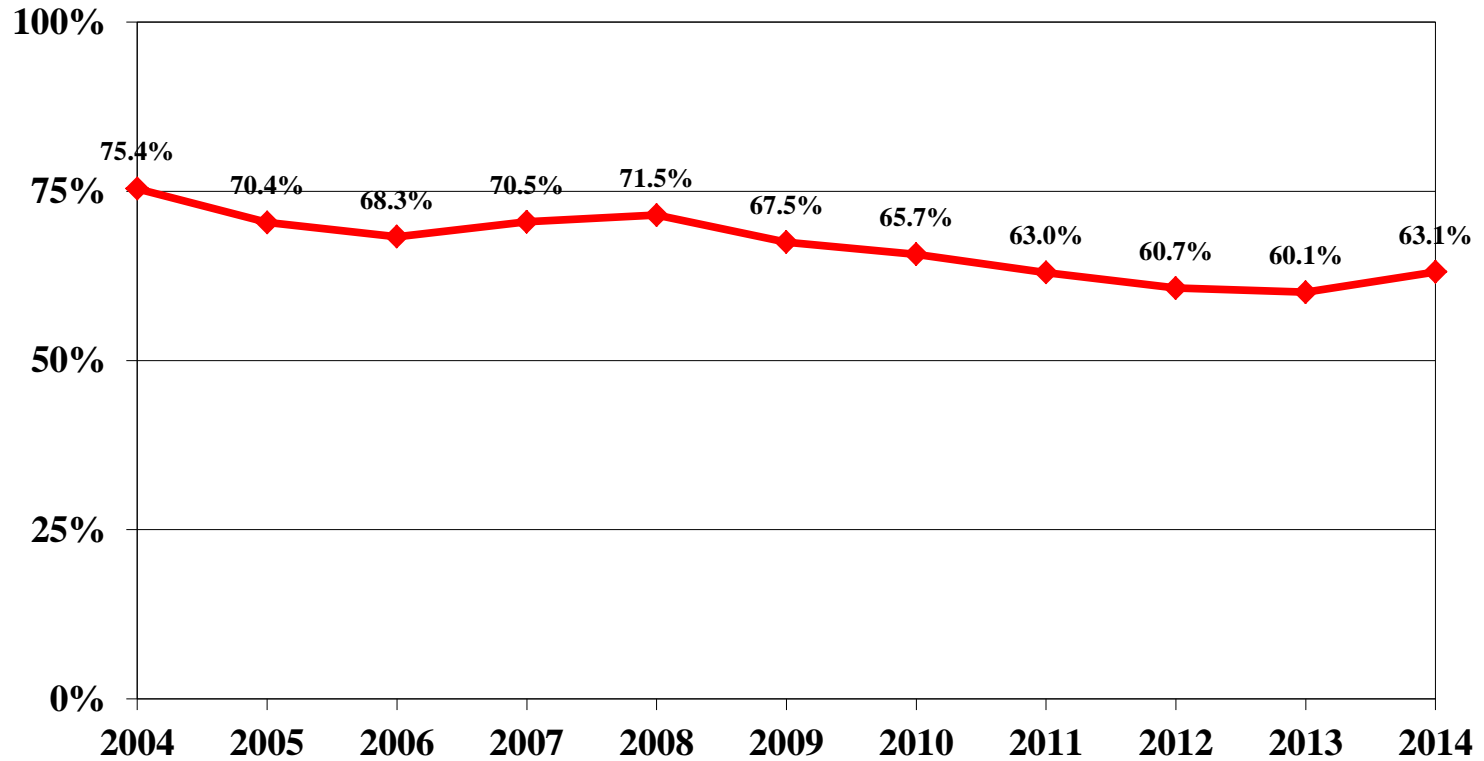


# Unfunded Actuarial Accrued Liability





# Funded Ratio



- Based on actuarial value of assets
- Assumption changes in 2005, 2011 and 2013



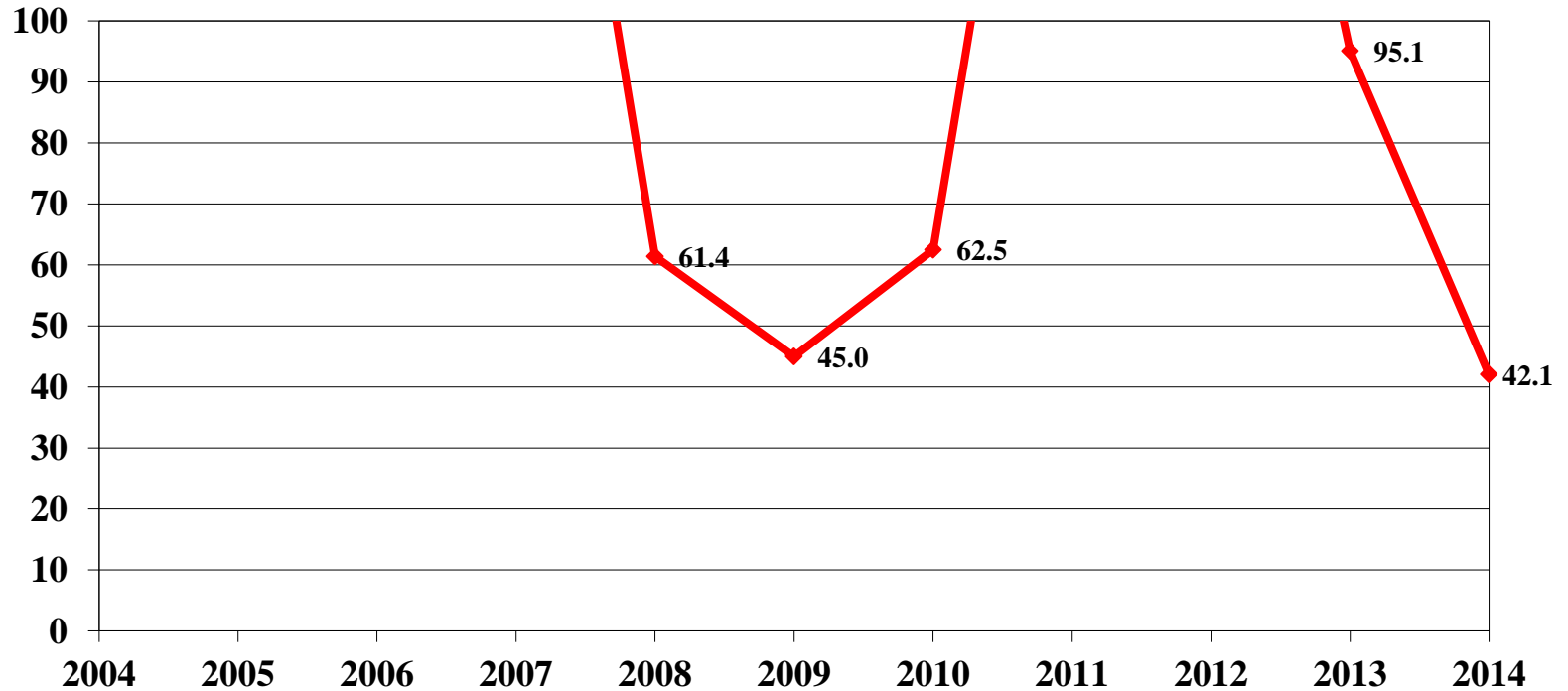
# Funding Valuation Results

---

- ◆ Funding period is 42.1 years
- ◆ Funding Policy Contribution is 16.32%
  - ▶ 28-year amortization (30 years from 06/30/2012), plus employer normal cost
  - ▶ Shortfall (16.32% - 13.90%) of 2.42%
- ◆ These metrics do not incorporate certain improvements going forward
  - ▶ Lower normal cost for future members
  - ▶ Future COLAs less than 2%



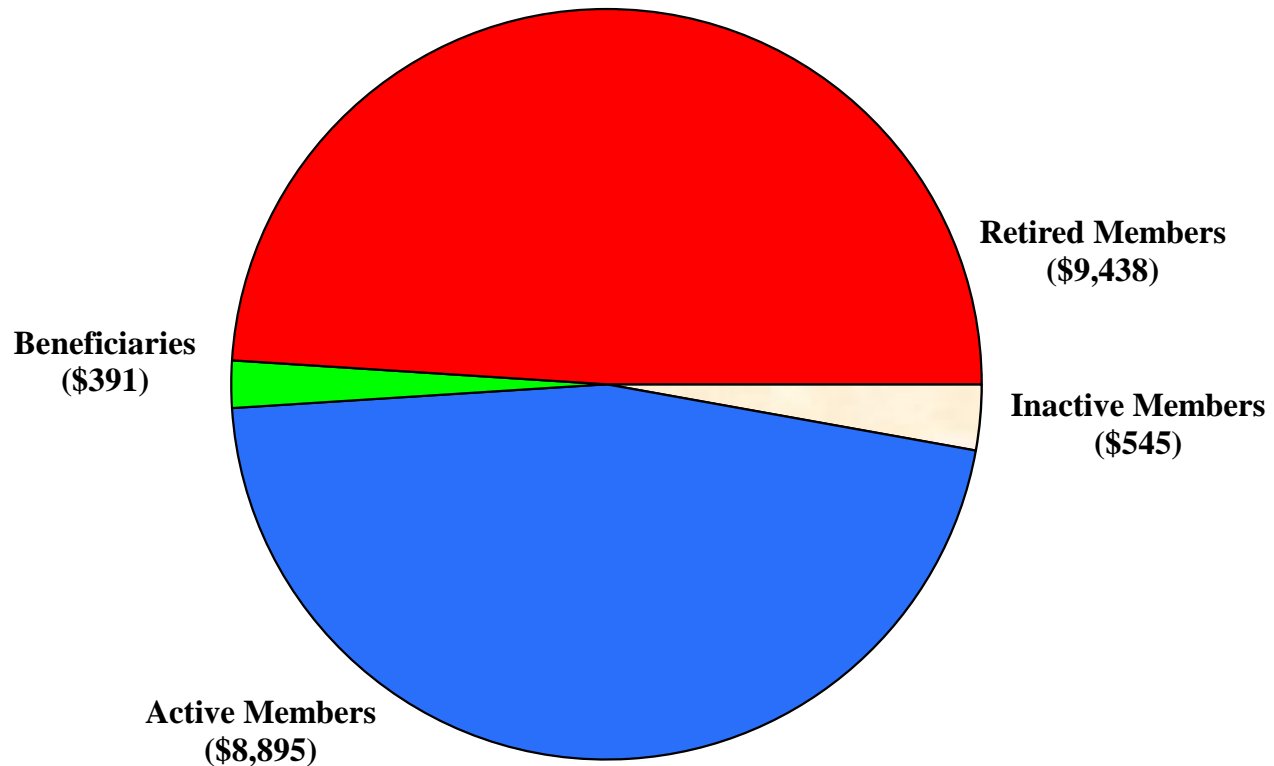
# Funding Period (Years)



*Note -- Funding periods for 2004 through 2007, 2011 and 2012 are infinite*

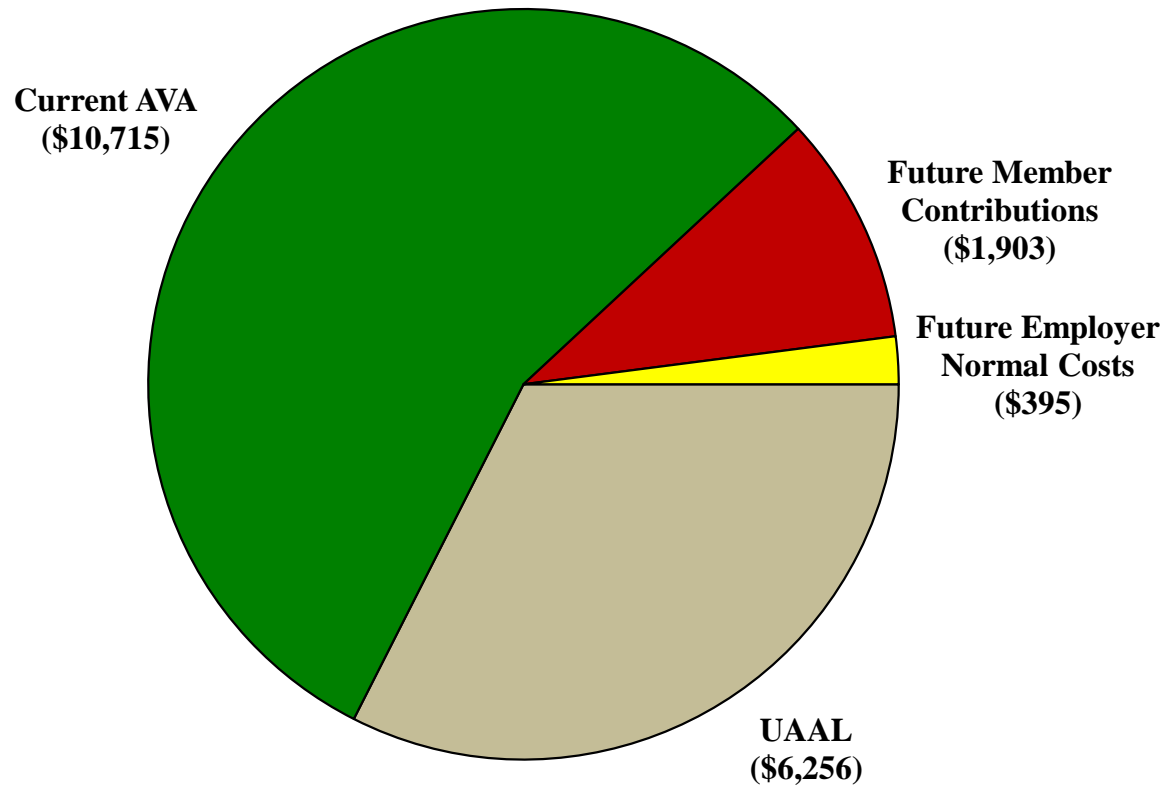


# Where the Present Value of Future Benefits (\$19,269 million) will go





# How Present Value of Future Benefits (\$19,269 Million) will be provided





# Accounting Valuation Results



# Accounting Valuation Results

---

- ◆ ERB elected to adopt GASB 67 for plan year ending June 30, 2013
- ◆ New measures reported in ERB's CAFR
  - ▶ Total Pension Liability (equivalent to AAL)
  - ▶ Plan Fiduciary Net Position (equivalent to MVA)
  - ▶ Net Pension Liability (equivalent to UAAL)
- ◆ GASB 68 reporting will be required for employer fiscal years ending June 30, 2015





# Determining the Discount Rate

---

- ◆ Discount rate used in determining the Total Pension Liability (TPL) is a blend of two rates
  - ▶ Long-term expected rate of return on pension plan investments (7.75% for ERB)
    - Can be used to discount plan obligations as long as there are projected assets sufficient to pay projected plan benefits
  - ▶ Yield or index rate for a 20-year, tax-exempt general obligation municipal bond (4.29% as of June 30, 2014)
    - Used to discount plan obligations after the projected assets have been extinguished



# Accounting Valuation Results

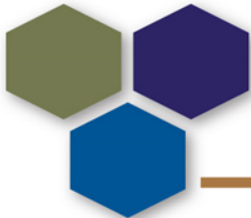
---

- ◆ Based on GASB procedures, projected plan assets will not be extinguished
- ◆ TPL as of June 30, 2014 will be determined based on the full investment return assumption of 7.75%
- ◆ TPL as of June 30, 2014 is based on “roll forward” of prior actuarial valuation, so there will be slight disconnect between TPL and AAL

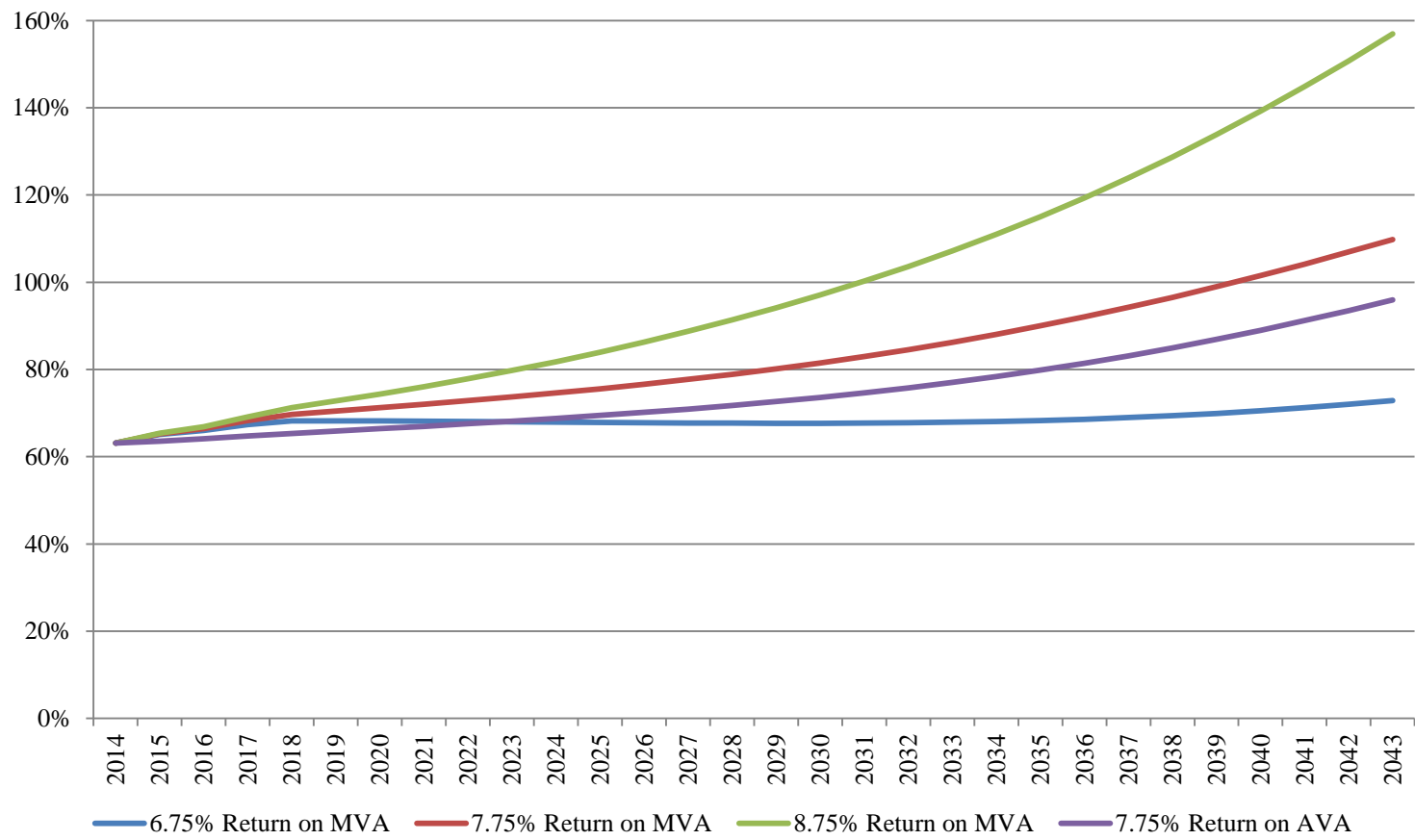
	June 30, 2014 (in millions)	June 30, 2013 (in millions)
Total Pension Liability	\$17,052	\$16,469
Plan Fiduciary Net Position	<u>11,346</u>	<u>10,192</u>
Net Pension Liability	5,706	6,277



# Looking Forward



# Projection – Funded Ratios



*Projection results assuming 7.75% return market value, 0.50% annual membership growth, current assumptions and plan provisions, and variable COLAs based on future funded ratios*



# Current Topics

---

- ◆ Experience study commencing after this valuation
- ◆ Potential for new actuarial standards
  - ▶ Applicable only to public pension plans
- ◆ GASB
  - ▶ Will hear more as employers prepare to comply with new standards next fiscal year