## Legislative Finance Committee

Senator John Arthur Smith, Chair Representative Jimmie C. Hall, Vice Chair Friday, October 28, 2016

## ERB's June 30, 2016 Actuarial Valuation Report

Jan Goodwin, Executive Director

Mary Lou Cameron, Board Chair
H. Russell Goff, Board Vice Chair

# NEW MEXICO EDUCATIONAL RETIREMENT BOARD 

## Actuarial Valuation Report as of June 30, 2016

Presented to Board of Trustees on October 21, 2016
R. Ryan Falls, Senior Consultant

## Actuarial Valuation

- Prepared as of June 30, 2016, 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 $63.7 \%$ to 64.2\%
- Unfunded Actuarial Accrued Liability (UAAL) increased from $\$ 6.5$ billion to $\$ 6.6$ billion
- The normal cost rate increased from $12.98 \%$ of pay to $13.00 \%$ of pay
- The funding period increased from 43.2 years to 45.0 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\%
- Open group projections as future hires replace retirements and terminations


## Recent Events

- The return on the market value of assets was $2.8 \%$
- Rudimentary calculation by GRS that is consistent with our methods
- May differ from more sophisticated returns reported by investment team
- The return on the actuarial (smoothed) value of assets was 6.6\%
- Compare actual returns to assumed 7.75\% return
- $\$ 401$ million in deferred losses not yet recognized
- Created an actuarial loss of $\$ 130$ million
- Experience gains totaled $\$ 193$ million
- Includes $\$ 138$ million gain due to actual COLA less than the 2.0\% assumed
- CPI-U was $0.1 \%$ and most retirees received a COLA of $0.08 \%$


## Membership - Actives

- The number of active members decreased from 60,998 to 60,057, a decrease of $1.5 \%$
- Tier 1 members decreased from 38,967 to 36,048
- Tier 2 members decreased from 9,551 to 8,197
- Tier 3 members increased from 12,480 to 15,812
- Total payroll of active members increased from $\$ 2,610$ million to $\$ 2,612$ million
- Annual increase of $0.1 \%$
- Over the last ten years, total payroll has increased an average of $1.6 \%$ per year


## Membership - Actives

- Average pay for active members increased from \$42,793 to \$43,493
- Annual increase of 1.6\%
- Over the last ten years, average pay has increased an average of 1.9\% per year
- Average age of active members is 46.4
- 46.5 last year
- 45.7 ten years ago
- Average years of service is 9.8
- 9.7 last year
- 9.2 ten years ago


## Membership - Annuitants

- The number of annuitants increased from 44,043 to 45,797 , a $4.0 \%$ 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 $4.8 \%$ per year
- Average annual benefit is $\$ 21,976$
- Reflects cost-of-living increase for July 1, 2016
- Over the last ten years, the average annual benefit has grown an average of $2.2 \%$ per year
- There are 1.3 active members for each annuitant
- Ten years ago the ratio was 2.2


## Active Members and Annuitants


$\rightarrow$ Active Members
--Annuitants

## Assets

- Fair market value increased from \$11,497.7 million to $\$ 11,498.2$ million
- Contributions
- Member contributions = \$297 million, including service purchases
- 10.70\% in FY 2016 and thereafter
- Employer contributions = \$392 million
- 13.90\% in FY 2016 and thereafter
- ARP contribution $=\$ 5$ million ( $3 \%$ of ARP payroll)
- Total contributions of $\$ 694$ million, compared to $\$ 690$ million last year


## Assets

- Most 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 2015 difference, $60 \%$ of FY 2014 difference and $80 \%$ of FY 2013 difference
- Actuarial value is now $\$ 11,900$ million, compared to $\$ 11,472$ million last year


## Assets

- Actuarial return was 6.6\% in FY 2016, compared to $9.7 \%$ in FY 2015
- $20 \%$ of the good returns in FY 2014 and FY 2013, offset by the lower returns in FY 2012, FY 2015 and FY 2016
- Compared to assumed return of $7.75 \%$
- Actuarial value is $103.5 \%$ of fair market value, versus $99.8 \%$ last year
- $\$ 401$ million in deferred losses, not yet recognized


## Assets

- Total distributions-benefit payments, refunds and administrative expenses-totaled $\$ 1,022$ million
- Therefore, net external cash flow was -\$329 million, or $-2.9 \%$ of market value of assets at end of year
- Projected to stay at or below -5\%
- Return of approximately 2.8\% in FY 2016 (net of administrative and investment expenses)
- $6.5 \%$ for last five years
- $5.7 \%$ for last 10 years
- $5.7 \%$ for last 15 years
- $6.8 \%$ for last 20 years


## Contributions vs. Benefits and Refunds



* Includes member contributions, employer contributions, and service purchases
** Includes administrative expenses


## Market and Actuarial Values of Assets



## Funding Valuation Results

- Unfunded actuarial accrued liability (UAAL) increased from $\$ 6,542$ million to $\$ 6,637$ million
- Funded ratio (actuarial assets divided by actuarial accrued liability) increased from 63.7\% to $64.2 \%$
- Ratio using market value decreased from $63.8 \%$ to $62.0 \%$
- 13.90\% employer contribution for FY 2016 comprised of:
- Employer normal cost: 2.30\%
- Amortization payment: 11.60\%


## Funding Valuation Results

- Funding period is 45.0 years
- Funding Policy Contribution is 17.32 \%
- 26-year amortization (30 years from 2012), plus employer normal cost
- Shortfall ( $17.32 \%-13.90 \%$ ) of $3.42 \%$
- These metrics do not incorporate certain improvements going forward
- Lower normal cost for future members
- Future COLAs less than 2\%


## Projection - Funded Ratios



Projection results assuming 7.75\% return market value, $0.00 \%$ annual membership growth, current assumptions and plan provisions, and variable COLAs based on future funded ratios

## Where the Present Value of Future Benefits (\$20,911 Million) Will Go



## How Present Value of Future Benefits (\$20,911 Million) Will Be Funded



## How ERB Uses the Actuarial Valuations

## ERB's Board places significant emphasis on actuarial matters:

- Annual valuation report- statutes require every other year
- Experience study every two years, best practice is every five years
- Actuarial audit every five years, consistent with best practices


## How ERB Uses the Actuarial Valuations, Continued

Actions the ERB Board has taken based on actuarial reports

- 2010 experience study- reduced long-term earnings assumption from 8\% to 7.75\%
- Pursued long-term sustainability legislation- SB 150 in 2013 legislative session
- 2014 experience study- adopted new generational mortality assumptions, eliminated growth in active members for projections (no effect on valuations)


## How ERB Uses the Actuarial Valuations, Continued

## ERB and Board's philosophy:

- Conservative, yet realistic
- Consistent, not reactive


## How ERB Uses the Actuarial Valuations, Continued

Putting actuarial valuations in context:

- Status as of a point in time
- Most important is trend over time


## How ERB Uses the Actuarial Valuations, Continued

## Informs everything we do:

- 7.75\% investment performance target
- No plan changes unless actuarially neutral or beneficial


## ERB Information

## ERB website locations for additional information on various topics:

## Actuarial - http://nmerb.org/Actuarial reports.html

Accounting and finance - http://nmerb.org/Annual reports.html

Investments -
o Performance - http://nmerb.org/Investments.html
o Asset allocation - http://nmerb.org/asset allocation.html
o Investment Policies - http://nmerb.org/investment policies.html

## Questions?



