New Mexico Educational Retirement Board

Improving Sustainability

Investments and Pensions Oversight Committee

Representative Tomás Salazar, Chair

George Muñoz, Vice-Chair

July 11, 2018

Jan Goodwin, Executive Director

Mary Lou Cameron, Board Chair

H. Russell Goff, Board Vice Chair

Open Items from Last Meeting

Effect of inflation and possible federal interest rate changes on the funds managed by ERB

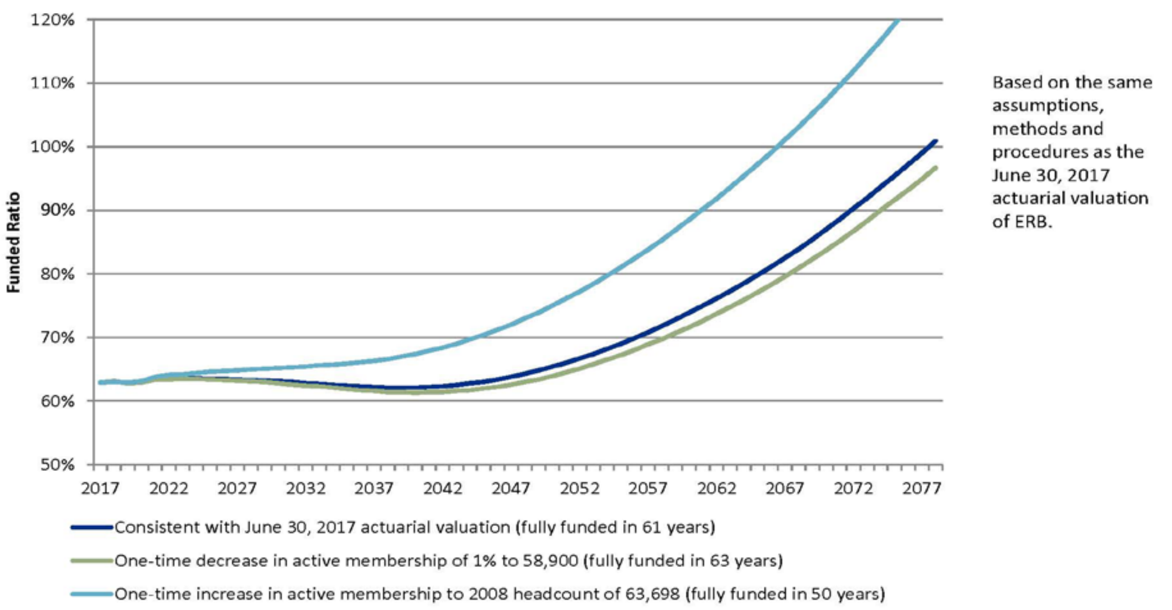
Although inflation has some positive effect on actuarial status, largely due to higher investment earnings, overall higher inflation is a slight negative for our plan

Open Items from Last Meeting, continued

Effect of one percent vacancy rate has a negative impact on ERB -

Lower covered payroll means lower contributions

Projected Funded Ratios
Based on Different Headcount Scenarios



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Open Items from Last Meeting, continued

Percentage of public education employees near retirement

(utilizing FY17 Active members)

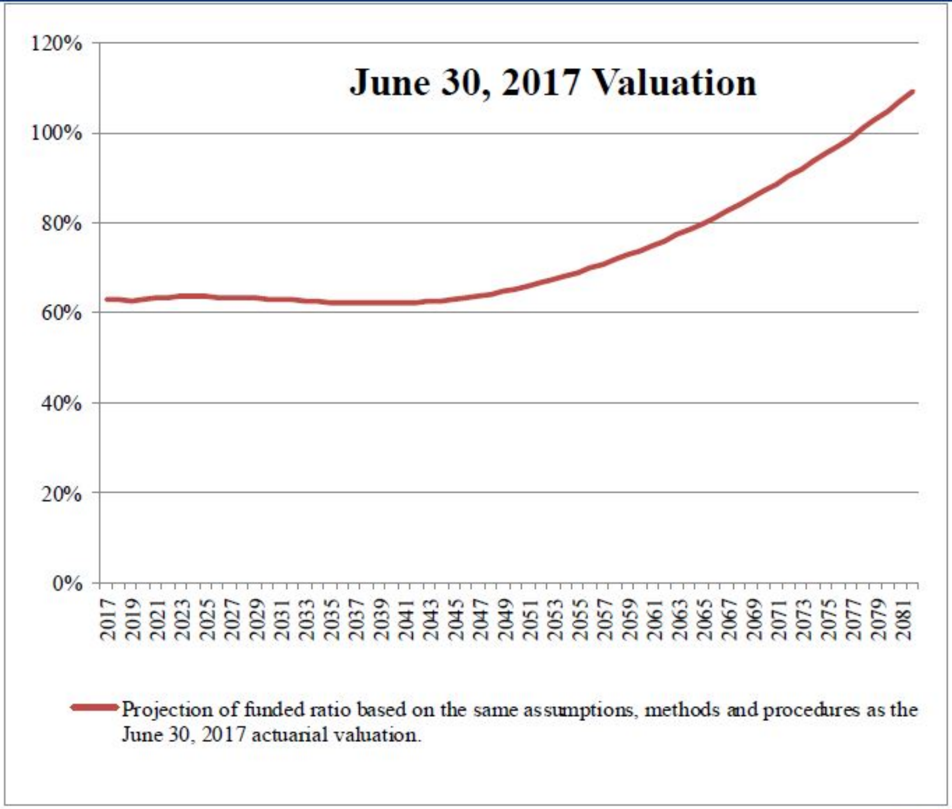
Current - Eligible to retire as of 6/30/17	14.44%
One year out - Eligible to retire as of 6/30/18	16.55%
Three years out - Eligible to retire as of 6/30/20	25.28%
Five years out - Eligible to retire as of 6/30/22	26.80%
Ten years out – Eligible to retire as of 6/30/27	50.11%

What is the difference between Solvency and Sustainability?

Solvency

- Ability to pay obligations as they become due
- ERB is solvent and can pay benefits for all time horizons and is on the path to 100% funding

Projection – Funded Ratio



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What is the difference between Solvency and Sustainability?

Sustainability

•Standard- Contributions + Investment income= Benefits + Expenses

•Actuary- can pay all of the promised benefits without any future modifications to contributions or benefits

•Proposed definition- ability to pay benefits and reach 100% funding within a reasonable length of time

Why is 100% funding desirable for ERB?

1. It’s good public policy!
2. Better able to withstand market downturns
3. Contribution rates can be lower
4. COLA reductions will end
5. GASB 68 reporting to employers will not be necessary

What is the difference between Solvency and Sustainability?

Characteristics of sustainable pension plans (*National Institute on Retirement Security- Lessons from Well-Funded Public Pensions*):

- Pay Annual Required Contribution and maintain stable contribution level over time
- Employees share in the cost of the plan
- Actuarially value benefit improvements and ensure funding source
- Cost of living adjustments are responsible and if automatic, capped at a modest level

Characteristics of sustainable pension plans (*National Institute on Retirement Security- Lessons from Well-Funded Public Pensions*)- continued:

- Anti-spiking measures to ensure actuarial integrity and transparency
- Economic actuarial assumptions can be expected to be achieved over the long term

Conclusion:

ERB needs to improve its sustainability

Gabriel Roeder Smith Sustainability Checklist

Funding Policy	Answer	Rating
Do you have a legally required contribution amount based on accepted actuarial practices?	No	*
What is your current funded ratio?	62.90%	*
Is your funded ratio higher than it was 10 years ago?	No, but largest source is decline from assumption changes	***
Based on current practices and assumptions, is your funded ratio expected to be higher 10 years from now?	Yes	*****
Based on current practices and assumptions, is your unfunded liability expected to be lower 10 years from now?	No, UAAL expected to grow until 2058	*
What is the remaining amortization period for the current UAAL based on the current funding policy?	61 Years	*
What is the sum of your amortization period and asset smoothing period?	66 Years	**
What is the amortization period for new experience losses, plan amendments, and assumption changes?	Same as funding period	**

Gabriel Roeder Smith Sustainability Checklist (con't)

Assumptions and Methods	Answer	Rating
Does the Board regularly review actuarial assumptions?	2 Years	*****
What is the likelihood of meeting or exceeding the assumed rate over the next 20 years based on actuarial analysis?	50%	***
What is the annual percent change in active population last 10 years?	-4%	*
What is the assumed rate of payroll growth for amortization purposes?	2.8% over 30 years according to open group projection	***
Plan Design	**Answer**	**Rating**
Is the Plan open to new entrants?	Yes, including same contribution rate with lower benefits	*****
Are there any benefits that are likely to be paid, but not reflected in the liabilities and contributions? Examples include ad hoc colas that occur regularly but are not advanced recognized, subsidized service purchases, or pay spiking patterns.	No	*****
Are any of the liabilities contingent on future experience? Meaning future liabilities will be lower if actual experience fails to meet the assumptions? Examples include contingent post-retirement beneffit enhancements and cash balance interest credits based on actual market returns.	Yes, reduced COLA until funded ratio improves	*****

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Gabriel Roeder Smith Sustainability Checklist (con't)

Risk Measures	Answer	Rating
What is your short – intermediate term negative cash flow as a % of assets?	-5.5% after about 10 years	***
What is your longer term negative cash flow as a % of assets?	Trends down, better than -4% after 30 years	****
What is your current active to retiree ratio?	1.3	**
What is your longer term active to retiree ratio?	0.9	*
What is your current ratio of retiree liability to total liability?	64.4%	***
What is your longer term ratio of retiree liability to total liability?	73% after 15 years, drifts back down below 67% in 30 years	***
What is your current ratio of benefit payments to payroll?	40%	***
What is your longer term ratio of benefit payments to payroll?	Over 50% after 10 years, drifts back below 40% after 30 years	***
What is your ratio of accrued liability to payroll?	7.3	**
What is your longer term ratio of accrued liability to payroll?	Levels out at 6.0 after 20 years	**

ERB Actuarials at a Glance

Fiscal Year	6/30/14 Valuation	6/30/14 Experience Study	6/30/15 Valuation	6/30/16 Valuation	6/30/16 Experience Study	06/30/2017 Valuation
UAAL	$6.3B	$6.6B	$6.5B	$6.6B	$7.4B	$7.4B
Funded Ratio	63.1%	62.0%	63.7%	64.2%	61.5%	62.9%
Funding Period	26 years	32 years	37 years	46 years	84 years	61 years

Why It's Important to Take Action Now

Moody's credit rating agency downgraded New Mexico's general obligation bonds

New Mexico's GO Ratings Cut on Pension Liabilities by Moody's

2018-06-18 15:14:20.789 GMT

By Polina Noskova

(Bloomberg) -- Moody's downgraded New Mexico general obligation bonds ratings to Aa2 from Aa1, with the outlook revised to stable from negative, primarily citing the state's large pension liabilities

- Action affects about $260m outstanding GO bonds
- New Mexico's pension liabilities include both its direct obligation to the Public Employees' Retirement System and an indirect obligation to the Educational Employees' Retirement System
- The need to assist districts in addressing their EERS pension liabilities represents a significant financial pressure for the state, Moody's writes:

  Pressure is compounded by spending challenges associated with large Medicaid caseload, revenue structure more concentrated and volatile that most similarly-rated states and economy that lagged the nation's.
- Stable outlook reflects positive recent economic trends, strong budget discipline following the decline in oil and gas related revenues in fiscal 2015 and 2016

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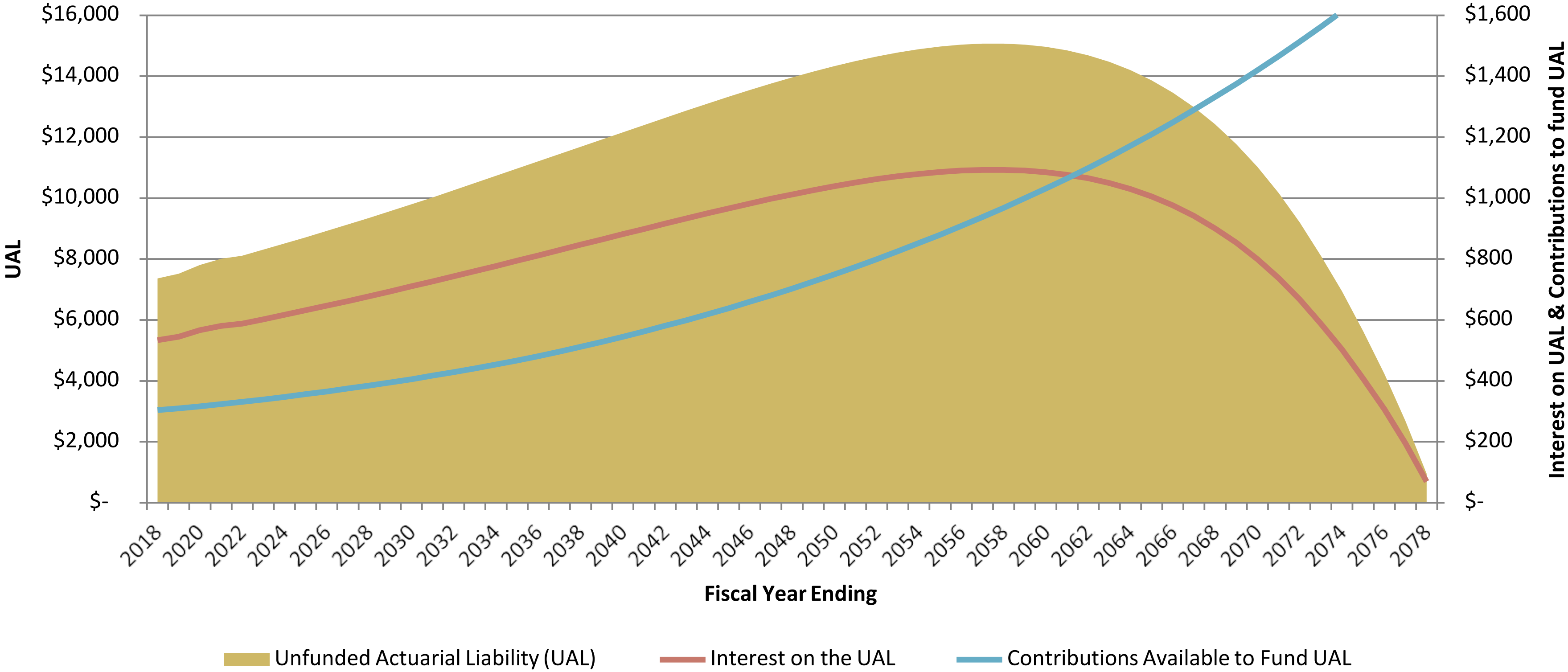
Negative Amortization

Total projected contributions until UAAL eliminated: $110.4 billion
Contributions directed to the interest on the UAAL: $49.8 billion



Cost of Delay

- Expected FY2018 contributions of $298 million allocated to eliminating UAAL
  - Total expected contributions for FY2018 are $668 million
  - However, first $370 million is allocated to normal cost
- UAAL at June 30, 2017 was $7.4 billion
  - At 7.25% per year, interest on UAAL for FY2018 is $533 million
- Excess of interest over UAAL contributions results in negative amortization
- Contributions expected to exceed interest on UAAL in approximately 40 years
  - Contributions increase as payroll increases

Putting Contributions in Perspective

Figure I

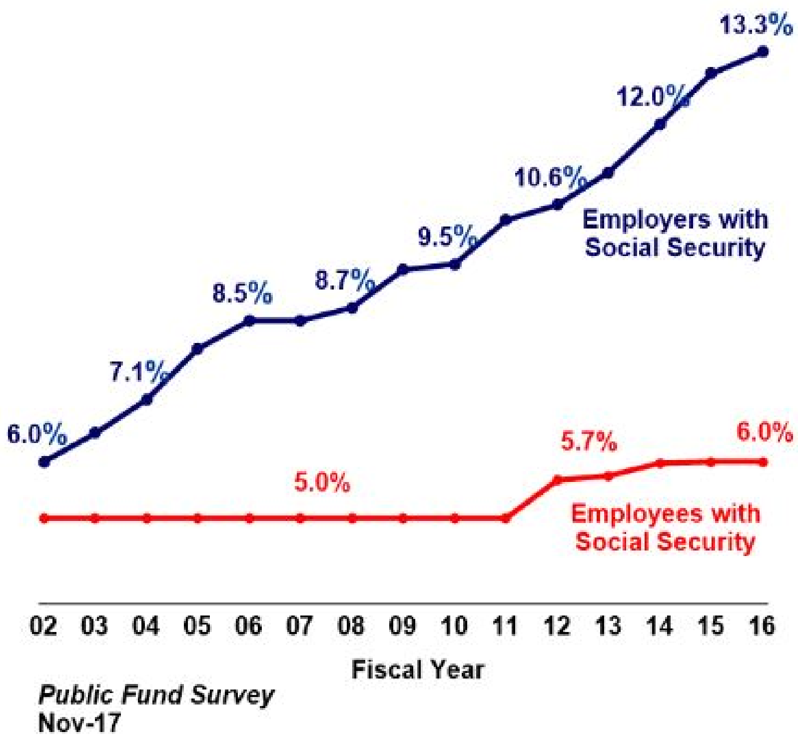
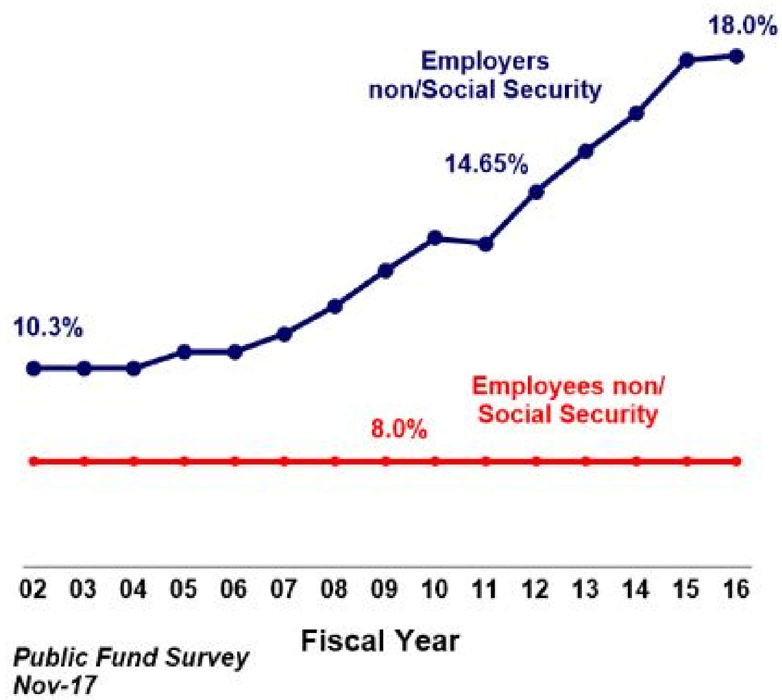
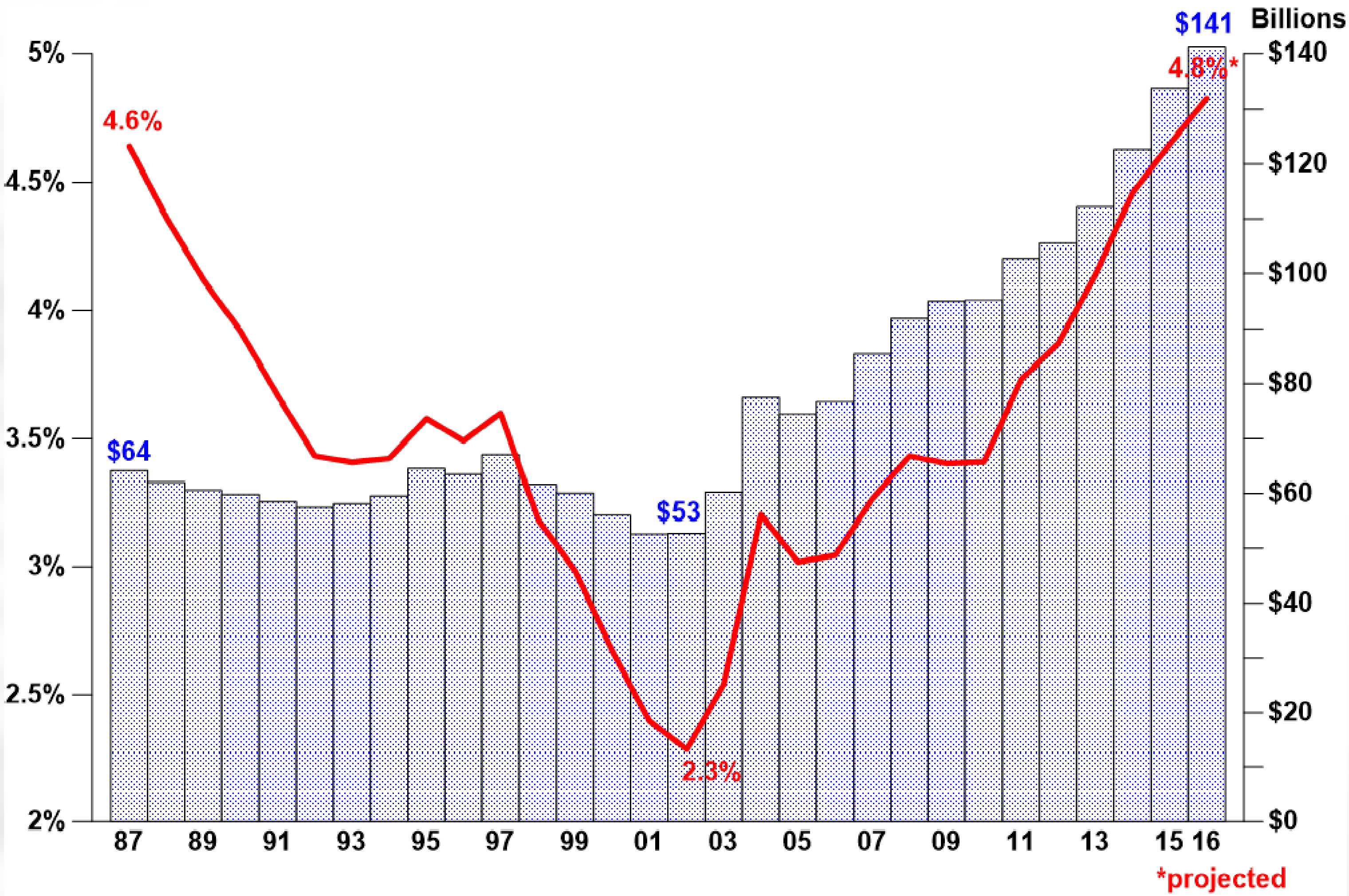


Figure J



Courtesy of NASRA

Putting Contributions in Perspective, continued



"State and Local Government Spending on
Public Employee Retirement Systems," NASRA 2018

History of ERB Contributions

Fiscal Year	Wage category	Date Range	Member Rate	Employer Rate	Total	% of Total Contribution Employee Pays
58-59		7/1/1957 -6/30/1959	3.00%	4.00%	7.00%	42.86%
60-74		7/1/1959 -6/30/1974	4.00%	6.50%	10.50%	38.10%
75-79		7/1/1974 -6/30/1979	5.50%	6.50%	12.00%	45.83%
80-81		7/1/1979 -6/30/1981	6.50%	6.50%	13.00%	50.00%
82-84		7/1/1981 -6/30/1984	6.80%	6.80%	13.60%	50.00%
85-93		7/1/1984 -6/30/1993	7.60%	7.60%	15.20%	50.00%
94-2005		7/1/1993 -6/30/2005	7.60%	8.65%	16.25%	46.77%
2006		7/1/2005 -6/30/2006	7.675%	9.40%	17.075%	44.95%
2007		7/1/2006 -6/30/2007	7.75%	10.15%	17.90%	43.30%
2008		7/1/2007 -6/30/2008	7.825%	10.90%	18.725%	41.79%
2009		7/1/2008 -6/30/2009	7.90%	11.65%	19.55%	40.41%
2010 & 2011	$20k or less	7/1/2009 -6/30/2011	7.90%	12.40%	20.30%	38.92%
2010 & 2011	Over $20K	7/1/2009 -6/30/2011	9.40%	10.90%	20.30%	46.31%
2012	$20k or less	7/1/2011 - 6/30/2012	7.90%	12.40%	20.30%	38.92%
2012	Over $20K	7/1/2011 - 6/30/2012	11.15%	9.15%	20.30%	54.93%
2013	$20k or less	7/1/2012 - 6/30/2013	7.90%	12.40%	20.30%	38.92%
2013	Over $20K	7/1/2012 - 6/30/2013	9.40%	10.90%	20.30%	46.31%
2014	$20k or less	7/1/2013 - 6/30/2014	7.90%	13.15%	21.05%	37.53%
2014	Over $20K	7/1/2013 - 6/30/2014	10.10%	13.90%	24.00%	42.08%
2015	$20k or less	7/1/2014 - future	7.90%	13.90%	21.80%	36.24%
2015	Over $20K	7/1/2014 - future	10.70%	13.90%	24.60%	43.50%

How ERB Board Has Been Proactive about Sustainability

- Prior legislation- 2005, 2009 and 2013
- This year:
  - Met with members across state to discuss status and need for change
  - Soliciting input from stakeholders to develop legislative package
  - Yesterday’s Board retreat on Improving Sustainability
  - Submit legislative package for 2019 session

Framework for Benefit Design

Social Security or not?

Target income replacement

Realistic minimum retirement age

The Pension Benefit

Purpose: income replacement in retirement, not wealth creation

Challenges to ERB's pension benefit sustainability:

- ARC has not been paid in recent decades
- Decreasing actives, increasing retirees
- Increasing life expectancy
- More short career retirees
- Lower expectations for future inflation, earnings and contributions
- Length of time to full funding- 61 years- is too long

Sustainability Improvement Elements

How can ERB improve its pension benefit sustainability?

- Joint effort by members, employers and retirees
- Tiered multiplier to reflect cost of short term retirees
- Change in Return to Work program and RTW Exception rule- if you work in retirement, you pay contributions
- PERA retirees working for ERB employers must pay contributions
- Anti-spiking
- COLA modification/suspension

Possible solutions:

- Short Term
  - Collect delinquent taxes
- Long Term
  - Property taxes
  - Overhaul tax system
  - Pension obligation bonds

ERB Strategic Goals

Goal 1:

Improve and maintain the sound financial condition of the fund

Actions:

- Continue increases in NMERB's funded ratio. The defined benefit plan is a secure element of NMERB members' retirement.
- Board reviews asset allocation at least every two years
- Staff conforms asset structure to Board established allocation
- Staff performs necessary levels of due diligence and monitoring to ensure compliance

ERB Strategic Goals (Continued)

Goal 2:

Continually improve the quality of member and employer service

Actions:

- Solicit member/employer input on ways to improve our service
- Participate in peer communication and observation to identify available processes
- or improvements that could be implemented or adapted for use in NMERB
- Redesign website with focus on improved ease of navigation to topical interest

ERB Strategic Goals (Continued)

Goal 2: (Continued)

Continually improve the quality of member and employer service

Actions:

- Develop targeted presentations for various member service levels to address more individualized time-related needs
- Design and implement employer educational outreach activities and resources

ERB Strategic Goals (Continued)

Goal 3:
Perform agency-wide risk identification and develop associated management efforts to control

Actions:

- Review Board Governance Policy and other related areas for direction
- Develop employee educational awareness campaign of business risk
- Measure asset volatility and report periodically to Board
- Utilize industry best practice method to address volatility risk in asset
- Support and encourage educational opportunities to expand workplace skills and knowledge

ERB Strategic Goals (Continued)

Goal 4:

Build strong, effective relationships with all stakeholders to collaborate on necessary legislative or administrative improvements in plan structure

Actions:

- Hold periodic meetings to share information
- Analyze available data to assess needs or determine trends
- Maintain contact with employers so lead time is maximized in evaluating changes and giving feedback
- Assist members and representative groups in educational efforts on defined benefit plan and its value to our members

ERB Retirement Eligibility: Tier Structure

Tier 1: ERB Membership Prior to July 1, 2010

* “25 and Out” – Earned service credits + allowed service credits = 25 or more years. There is no minimum age required.
* “Rule of 75” – Your age + earned service credits = 75 or more. Under the Rule of 75, allowed service credits are used to calculate retirement benefit but do not count toward eligibility. There are permanent and significant reductions if you are under age 60, and even more if you are under age 55.
* “65 and 5” – If you are at least 65 years old and have at least five years of earned service credit, you are eligible for retirement.

Tier 2: ERB Membership Beginning on or after July 1, 2010, but prior to July 1, 2013

* “30 and Out” – Earned service credits + allowed service credits = 30 or more years. There is no minimum age required.
* “Rule of 80” – Your age + earned service credits = 80 or more. As with the Rule of 75, allowed service credits are used to calculate retirement benefit but do not count toward eligibility. There are permanent and significant reductions if you are under age 65, and even more if you are under age 60.
* “67 and 5” – If you are at least 67 years old and have at least five years of earned service credit, you are eligible for retirement.

Tier 3: ERB Membership Beginning on or after July 1, 2013

* Same retirement eligibilities as immediately above. If member receives pension benefit before age 55 with 30 and Out retirement eligibility, benefit will be actuarially reduced.
* Cost of Living Adjustment (COLA) begins at age 67 or on July 1 of the year following member’s effective retirement date, whichever is later.

ERB Retirement Eligibility – Benefit Structure

ERB Benefit Structure

* Final average salary (FAS) x service credit x .0235 = annual benefit
* Cost Of Living Adjustment (COLA) available on July 1 of the year in which you reach age 65 or on July 1 of the year following member's effective retirement date, whichever is later for Tier 1 and Tier 2 members. For Tier 3 members, COLA begins at age 67 or on July 1 of the year following member's effective retirement date, whichever is later. The amount depends on the annual change in the Consumer Price Index (CPI). The average COLA over time has been 2%. COLA was reduced as part of the 2013 sustainability bill until ERB is 100% funded.
* Five year vesting period
- No minimum retirement age (with exception of reductions in Rule of 75 and Rule of 80)

Examples of retirement percentage rates:

25 years x .0235 = 58.75% 30 years x .0235 = 70.5% 35 years x .0235 = 82.25%

History of ERB Retirement Benefits

YEAR	RETIREMENT ELIGIBILITY	MULTIPLIER	COLA	Life expectancy * at age 65 Males	Life expectancy * at age 65 Females
1962	30 years of service with actuarial reduction if younger than age 60 Age 60 with 15 years of service	1.5% first $4,000 of Final Average Salary (FAS) and 1% thereafter	Ad Hoc	13.2	17.4
1965	30 years of service with actuarial reduction if younger than age 60 Age 60 with 15 years' service Age 65 with 10 years of service	SAME	Ad Hoc	13.2	17.4
1971	35 years of service 30 years of service with actuarial reduction if younger than age 60 Age 60 with 15 years of service Age 65 with 5 years of service	1.50%	Ad Hoc	13.8	18.6
1974	35 years of service Rule of 75 with reduction if younger than age 60 Age 65 with 5 years of service	1.5% for years before July 1, 1957 2% for years after July 1, 1957	Ad Hoc	13.8	18.6
1979	SAME	SAME	Based on change in CPI, capped at 2%. Can decrease - but not below original retirement benefit. Begins after 4 years of retirement.	13.8	18.6
1981	30 years of service Rule of 75 with reduction if younger than age 60 Age 65 with 5 years of service	SAME	SAME	14.6	19.1
1984	25 years of service Rule of 75 with reduction if younger than age 60 Age 65 with 5 years of service	SAME	Based on change in CPI, capped at 4%. On average, 2%. Begins the later of age 65 or one year following retirement.	14.6	19.1

*From 1960 through 1999, the stated life expectancies are based on the life expectancies of Social Security at the time (https://www.ssa.gov/history/lifeexpect.html). Beginning in 2000, life expectancies are based on the actuarial valuation assumption for NMERB.

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History of ERB Retirement Benefits

YEAR	RETIREMENT ELIGIBILITY	MULTIPLIER	COLA	Life expectancy* at age 65	
				Males	Females
1987	SAME	2.15%	SAME	14.6	19.1
1991	SAME	2.35%	SAME	15.3	19.6
2010	SAME	SAME	Elimination of negative COLA	19.6	22.4
2010	Hired prior to 7/1/2010: SAME Hired after 7/1/2010: 30 years of service Rule of 80 with reduction if younger than 65 Age 67 with 5 years of service	SAME	SAME	19.6	22.4
2013	Hired after 7/1/2013: Actuarially reduced benefit if member retires with 30 years of service and is younger than age 55	SAME	Hired after 7/1/2013: COLA begins at later of age 67 or one year following retirement Until ERB is > 90% funded: Retirees with benefits at or below the median AND with 25 or more years' service have a 10% COLA reduction from statutory COLA formula. All other retirees have a 20% COLA reduction. ERB Funding >90% <100% Retirees with benefits at or below the median AND with 25 or more years' service have a 5% COLA reduction from statutory COLA formula. All other retirees have a 10% COLA reduction. ERB Funding=100% COLA reductions cease.	20.2	23.1

*From 1960 through 1999, the stated life expectancies are based on the life expectancies of Social Security at the time (https://www.ssa.gov/history/lifeexpect.html). Beginning in 2000, life expectancies are based on the actuarial valuation assumption for NMERB.

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