

Retirement Program Review

Milliman Presentation for City of Shreveport

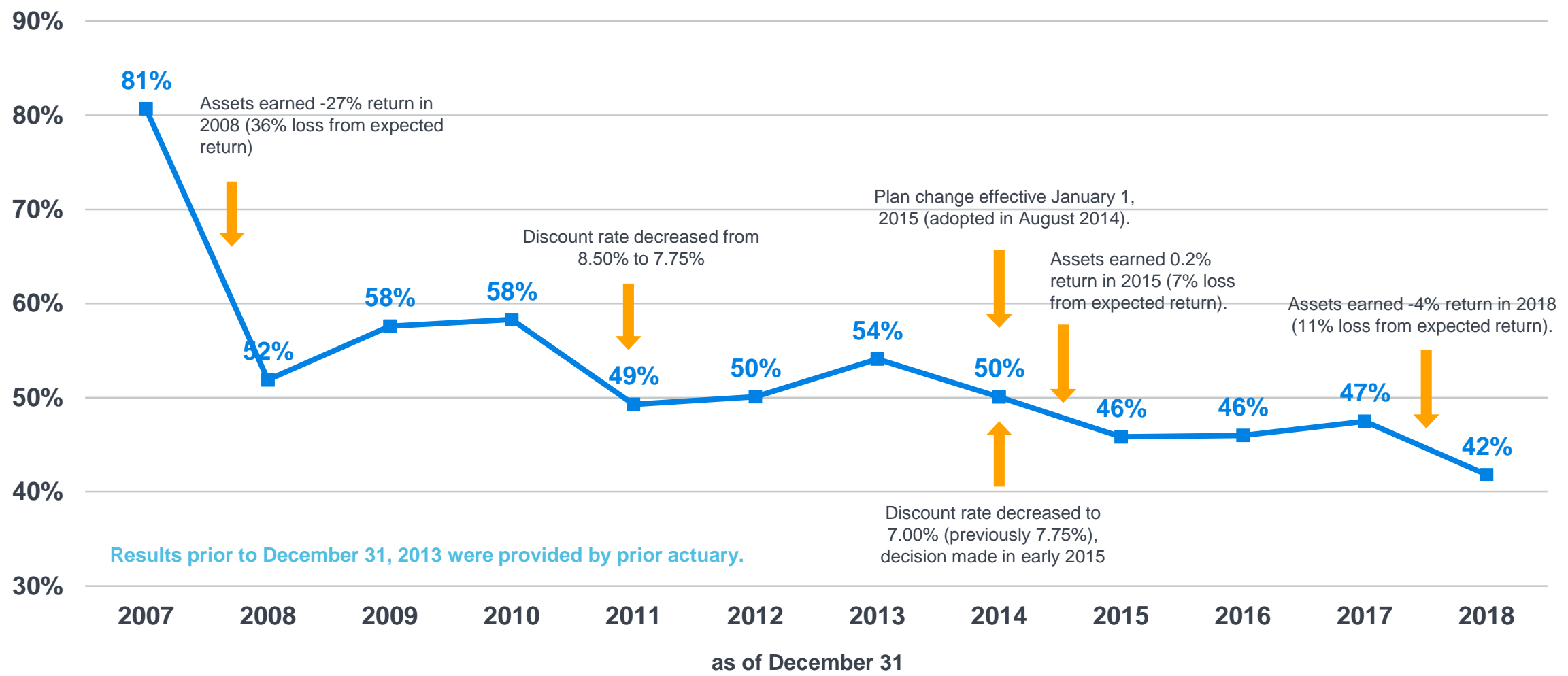
27 AUGUST 2019



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Historical Funded Percentage



Plan Changes

Effective January 1, 2015, the following changes were made to the Employees' Retirement System.

Benefits

- Multiplier for ALL employees is reduced from 3.33% to 2.75% for all future service (after January 1, 2015).
- Employees hired after January 1, 2015 require vesting period of 15 years (previously 10 years).
- Employees hired after January 1, 2015 can retire at 60/30, 63/25, 65/20, 67/15 or age+svc =90 (previously could retire as early as 45/10).

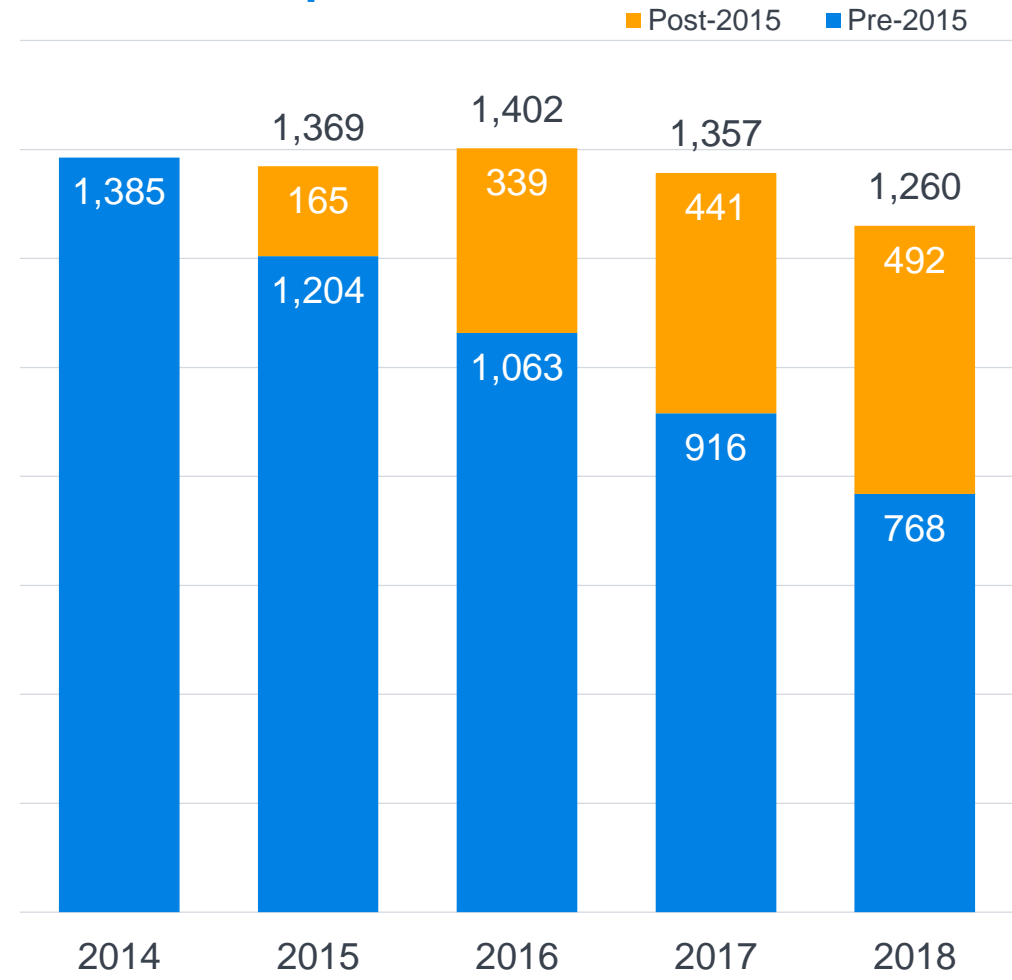
Funding

- Employee contributions will increase from 9% to 10%; and increase 1% each year until it reaches 12%.
- City contributions will be 16.5% (2015), 20% (2016), 25% (2017), and 29% (2018+).

- Changes to benefits do not have an immediate impact on liabilities since they impact only future service and new employees hired after January 1, 2015.
- City elected in 2016 to revise contributions to 22% (2017), 24% (2018), 26% (2019), 28% (2020) and 30% (2021+).

Census as of December 31

Active Participants

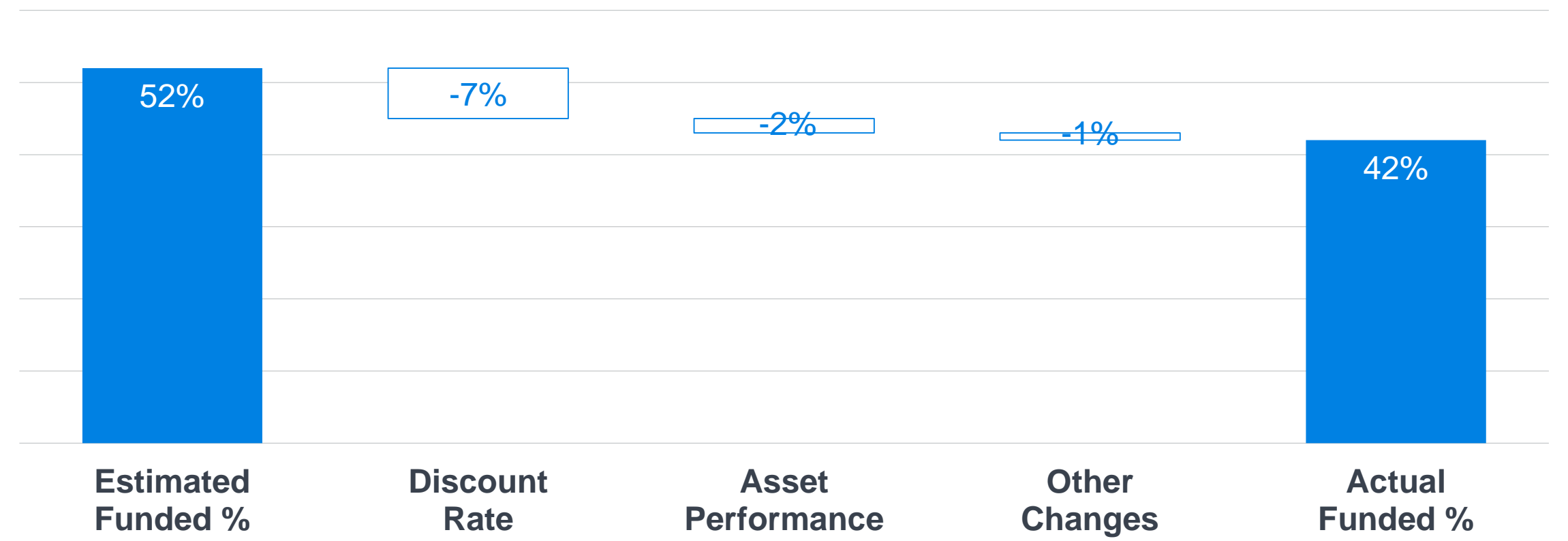


Retired Participants



Reconciliation of 2014 Estimates

Projections provided June 19, 2014 estimated a funded percentage of 52% as of December 31, 2018 (Scenario B3). Below is a reconciliation of the estimated and actual funded percentage as of December 31, 2018.

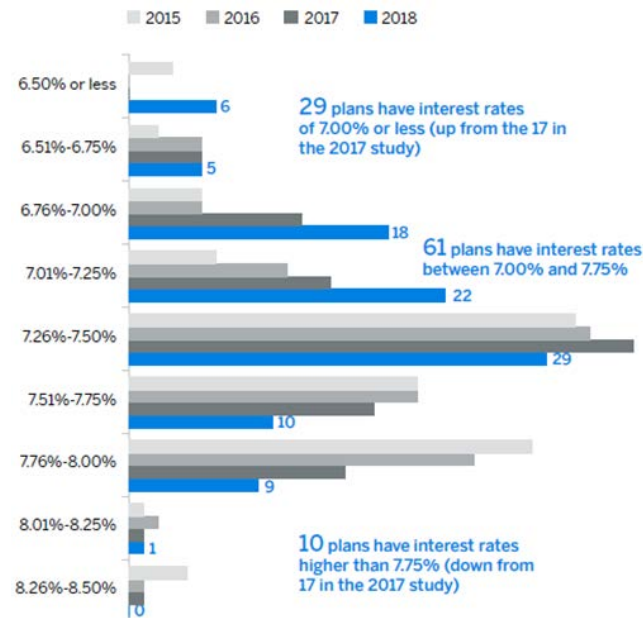


Notes on Reconciliation of 2014 Estimates

Discount Rate

Per GASB, the appropriate rate for discounting future benefit payments to their present value (discount rate) should be based on the long-term expected return of plan assets.

Based on Milliman's expected return model, 7.75% was not a reasonable rate in today's investment environment. Milliman recommended decreasing the rate to at least 7%, and City of Shreveport, with input from their investment consultant, instructed Milliman to begin using 7% beginning in 2015.

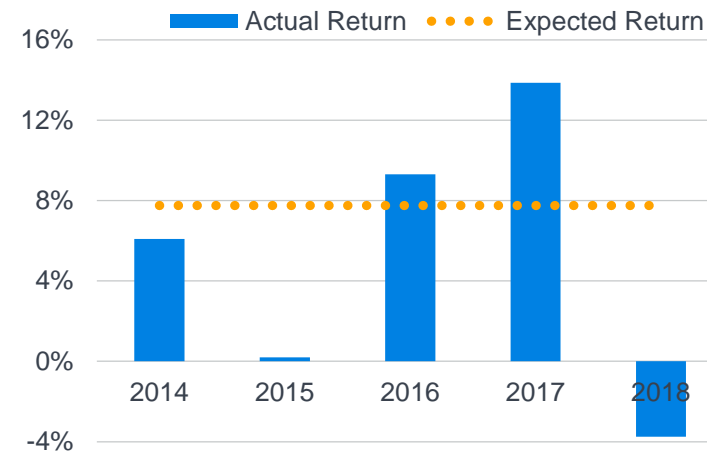


Milliman 2018 Public Pension Funding Study

Asset Performance

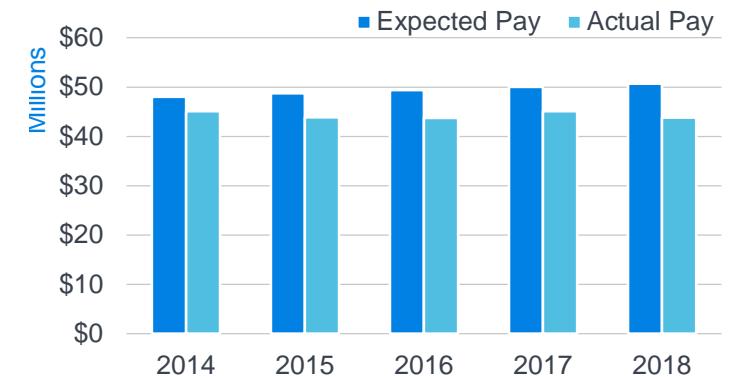
Asset performance from 2014 projections was based on 7.75% long-term expected return on plan assets. Actual asset performance for 2014 – 2018 is below.

The weighted average return over this five year period is 4.95%, underperforming in comparison to the assumed 7.75% return used in the projections for this period.



Other Changes

- City of Shreveport chose to update contributions from 25% (2017) and 29% (2018+) to 22% (2017) and increasing 2% annually until reaching 30% in 2021.
- Projections from 2014 were based on immediate increase in employee contributions to 12%. Final increase was a graded schedule with employee contributions increasing 1% annually until reaching 12% in 2017.
- Projections from 2014 assumed annual salary increases based on actuarial assumptions from 2014 report. Since EE and ER contributions are based on % of pay, total contributions fell short of expectation.

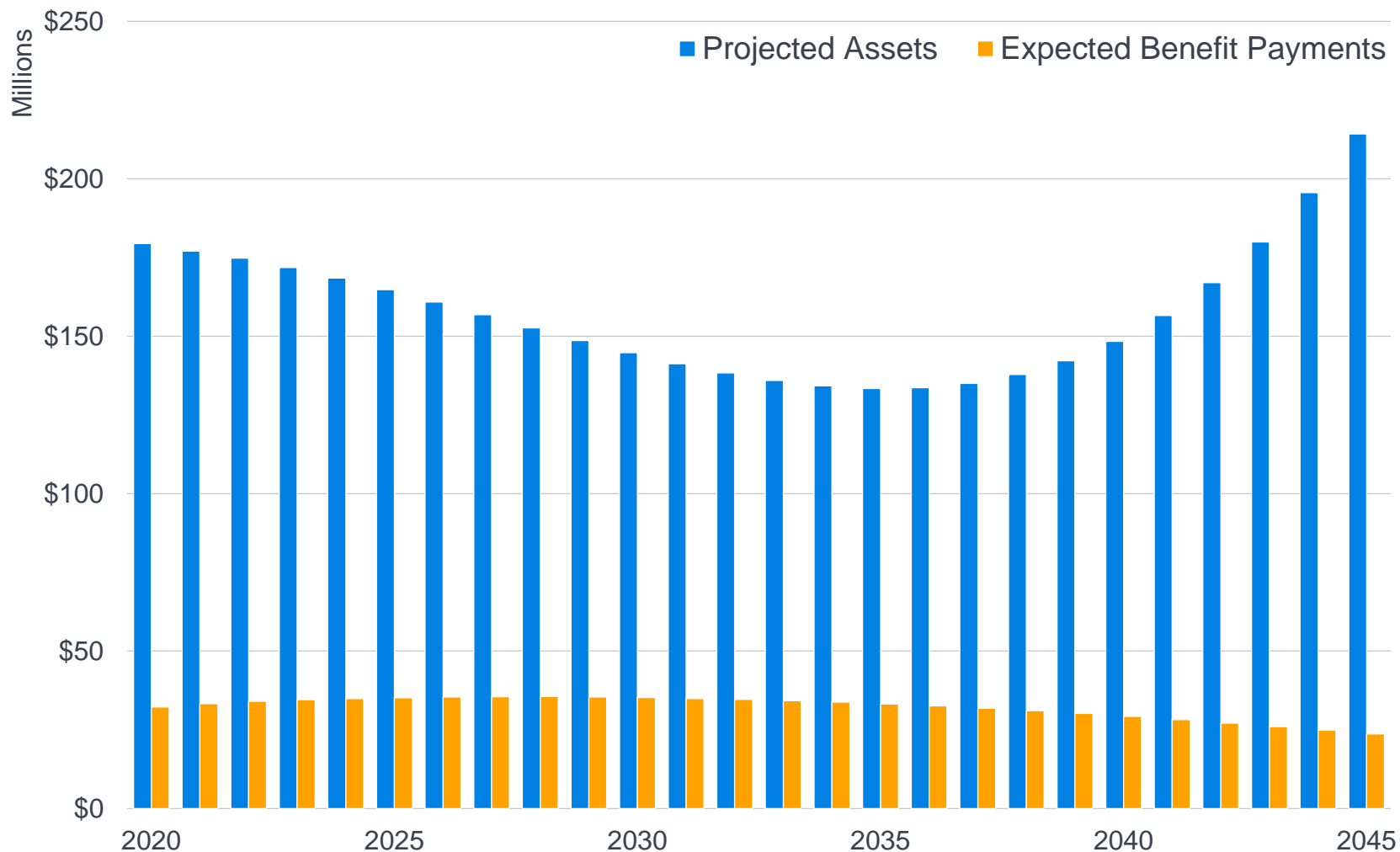


Position as of December 31, 2018

	LIABILITY	ASSETS	UNFUNDED	FUNDED%
As of December 31, 2017	\$413,525,193	\$196,386,797	\$217,138,396	47.5%
Service cost	7,301,607		7,301,607	
Interest on liability	28,333,337		28,333,337	
Actuarial (gains) or losses	(2,693,219)		(2,693,219)	
Benefit payments	(30,199,330)	(30,199,330)	0	
City contributions		10,510,340	(10,510,340)	
Member contributions		6,027,012	(6,027,012)	
Net investment income *		(7,080,949)	7,080,949	
Expenses		(1,568,752)	1,568,752	
As of December 31, 2018	\$416,267,588	\$174,075,118	\$242,192,470	41.8%

* Expected net investment income in 2018, based on 7% investment return, was \$13.2 million. As a result, the expected minus actual investment return resulted in a \$20.3 million dollar loss.

Projected Assets



- Based on current assets (June 30, 2019) and assumptions, **the ERS Plan is not expected to become insolvent.**
- Unless otherwise noted, these estimates are based on the same data, methods, and assumptions as disclosed in December 31, 2018 report under GASB 67 and 68.

Potential Variables

Liquidity	Maturity	Demographic	Investment	Interest Rate	Covered Employment
<ul style="list-style-type: none"> ▪ Potential that assets must be liquidated at a loss in order to pay for plan benefits. ▪ This risk is heightened for plans with negative cash flows (contributions do not exceed annual benefit payments plus expenses). 	<ul style="list-style-type: none"> ▪ This is the potential for total plan liabilities to become more heavily weighted toward inactive liabilities over time. ▪ The impact of any gains or losses on assets or liabilities becomes larger. ▪ Currently, assets are 3.9 times payroll indicating a one-year asset loss of 10% would be equal to 39% of payroll. 	<ul style="list-style-type: none"> ▪ The potential that mortality or other demographic experience will be different than expected. ▪ If actual demographic experience or future demographic assumptions are different from what is assumed to occur in this analysis, future pension liabilities, contributions, and funded status may differ significantly from those presented in this analysis. 	<ul style="list-style-type: none"> ▪ The potential that investment returns will be different than expected. ▪ To the extent that actual investment returns differ from the assumed investment return, the Plan's future assets and funded status may differ significantly from those presented in this valuation. 	<ul style="list-style-type: none"> ▪ The potential that interest rates will be different than expected. ▪ The approximate duration of this Plan is 10 years. As such, if the interest rate changes by 1%, the estimated change in pension liability is 10%. 	<ul style="list-style-type: none"> ▪ Potential future covered employment is lower than expected due to increasing employee contributions. ▪ Decline in active participation will demand higher investment returns or ER contributions to make up the employee contribution shortfall.

Public Pension Mortality Tables

The Society of Actuaries (SOA) released public plan mortality tables to give pension actuaries and plan sponsors current information to assist in setting mortality assumptions. This is the first time the SOA has studied public retirement plan mortality separately from the private sector.

The final dataset upon which this study has been based includes approximately 46 million life-years of exposure and 580 thousand deaths from public pension systems across the United States. Data was received from a total of 35 different public pension systems that collectively submitted information for 78 plans, and the vast majority of the collected data was included in the study.

The following gender-specific tables were developed on both an amount-weighted and headcount weighted basis:

- Employee Tables (teachers, public safety, and general)
- Retiree Tables
- Disabled Retiree Tables
- Contingent Survivor Tables

The liability impact of implementing the new public mortality tables will vary based on job category, member's ages, and other demographics. We expect to be working with the City prior to next year's CAFR on the implementation of the new mortality tables and the appropriate mortality improvement scale for the fiscal year ending December 31, 2019 valuation.

Statements of Reliance and Limitations

This presentation is intended as a high level discussion of current issues in employee benefits. It should be considered a supplement to our latest actuarial valuation, the GASB 67 and 68 Disclosure for fiscal year January 1, 2018 to December 31, 2018. Unless otherwise stated, any calculations herein are based on the same data, methods, and assumptions as disclosed in report.

This information has been prepared for the internal use of and is only to be relied upon by City of Shreveport. No portion of this presentation may be disclosed to any other party without Milliman's prior written consent. The presentation itself is incomplete without attendance at the meeting in which the contents were delivered and discussed. Milliman does not intend to benefit any third party recipient of its work product.

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Thank you