



# ANNUAL VALUATION SUMMARY as of January 1, 2017

**Board of Trustees Meeting**

July 13, 2017

**Dallas Police and Fire Pension System**

 Segal Consulting

# Agenda

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1. Introduction
2. Portrait of a Pension Valuation
3. Summary of January 1, 2017 Actuarial Valuation Results
4. Summary of Data
5. Historical Results
6. Solvency Projection
7. GASB Accounting Disclosures
8. Supplemental Plan Results

# Introduction

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- This is Segal Consulting's second valuation for the Dallas Police and Fire Pension System
- Based on feedback from the Texas Pension Review Board after publication of the January 1, 2016 valuation, the actuarially determined contribution has been calculated based on 30-year amortization of the unfunded actuarial accrued liability
- This year's report for the Combined Pension Plan shows both the total actuarially determined contribution rate as well as the City's actuarially determined employer contribution
- Actuarially determined contributions are shown both as a dollar amount and percentage of computation pay

# Introduction

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- Valuation results include the impact of plan changes in HB3158 signed into law by the Governor on May 31, 2017 and effective September 1, 2017
- Assumption changes related to the plan changes effective September 1, 2017 are included in the valuation
- Results for 2017 are shown both with and without inclusion of the upcoming plan changes

# Summary of 2017 Actuarial Valuation Results

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- The total (City and member) actuarially determined contribution for the Combined Pension Plan declined from \$288.6 million to \$203.5 million; the City's portion declined from \$261.9 million to \$168.9 million
- As a percentage of computation pay, the total contribution rate declined from 79.03% to 56.95%; the City's actuarially determined contribution rate dropped from 71.70% to 47.25%
- The actuarial value of assets declined from \$2.7 billion last year to \$2.2 billion this year
- Total benefit payments, including refunds, increased from \$285 million to \$825 million; total DROP account balances declined from \$1.50 billion to \$1.05 billion
- The funded ratio on an actuarial value basis increased from 45.07% in 2016 to 49.41% in 2017



# Summary of 2017 Actuarial Valuation Results

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- A reconciliation of the City's actuarially determined employer contribution (ADEC), on a 30-year amortization basis, is shown below:
  - January 1, 2016 ADEC **\$261,589,079**, or **71.70%** of computation pay
  - January 1, 2017 ADEC, prior to any assumption or plan changes **\$272,943,384**, or **77.75%** of computation pay
  - January 1, 2017 ADEC, after assumption changes not related to plan changes **\$249,844,232**, or **69.90%** of computation pay
  - January 1, 2017 ADEC, after plan changes **\$168,865,484**, or **47.25%** of computation pay
- The ADEC decreased by \$92,723,595 from January 1, 2016 to January 1, 2017; \$80,978,748 of this amount is due to the plan changes and plan-related assumption changes



# Summary of 2017 Actuarial Valuation Results

COMBINED PENSION PLAN	As of 1/1/2017, after Plan Changes	As of 1/1/2017, prior to Plan Changes	As of 1/1/2016
Total Normal Cost, including administrative expenses	\$68,422,682	\$81,425,009	\$89,266,980
Expected Member Contributions	<u>-33,475,626</u>	<u>-26,087,945</u>	<u>-25,853,423</u>
Employer Normal Cost	\$34,947,056	\$55,337,064	\$63,413,557
Total Normal Cost as a % of Pay	19.14%	22.78%	24.44%
Actuarial Accrued Liability	\$4,367,180,454	\$5,364,055,235	\$5,947,173,998
Actuarial Value of Assets	<u>-2,157,799,730</u>	<u>-2,157,799,730</u>	<u>-2,680,124,303</u>
Unfunded Liability	\$2,209,380,724	\$3,206,255,505	\$3,267,049,695
Funded Ratio	49.41%	40.23%	45.07%
Computation Payroll	\$357,414,472	\$357,414,472	\$365,210,426
<b>Actuarially Determined Employer Contribution, in dollars</b>	<b>\$168,865,484</b>	<b>\$249,844,232</b>	<b>\$261,859,079</b>
<b>Actuarially Determined Employer Contribution, in percentage of computation pay</b>	<b>47.25%</b>	<b>69.90%</b>	<b>71.70%</b>
<b>100% Funded Status based on City's Hiring Plan Payroll, Projected by January 1</b>	<b>2061</b>	<b>N/A</b>	<b>N/A</b>

# Summary of Data

COMBINED PENSION PLAN	Years Ended December 31,		
	2016	2015	Change
<b>Active Members</b>			
Number	5,104	5,415	-311 members
Average Age	41.4	41.4	No change
Average Service	14.3	14.3	No change
Average Computation Pay	\$70,026	\$67,444	3.8%
Number in DROP	1,102	1,338	-236 members
Total DROP Accounts	\$356.1M	\$474.3M	-\$118.2M
<b>Retirees and Beneficiaries</b>			
Number <sup>1</sup>	4,456	4,230	+226 members
Average Monthly Payment <sup>2</sup>	\$3,995	\$3,826	+4.4%
Total DROP Accounts	\$697.1M	\$1,030.5M	-\$333.4M
<b>Terminated Vested Members</b>			
Number	215	200	+15 members

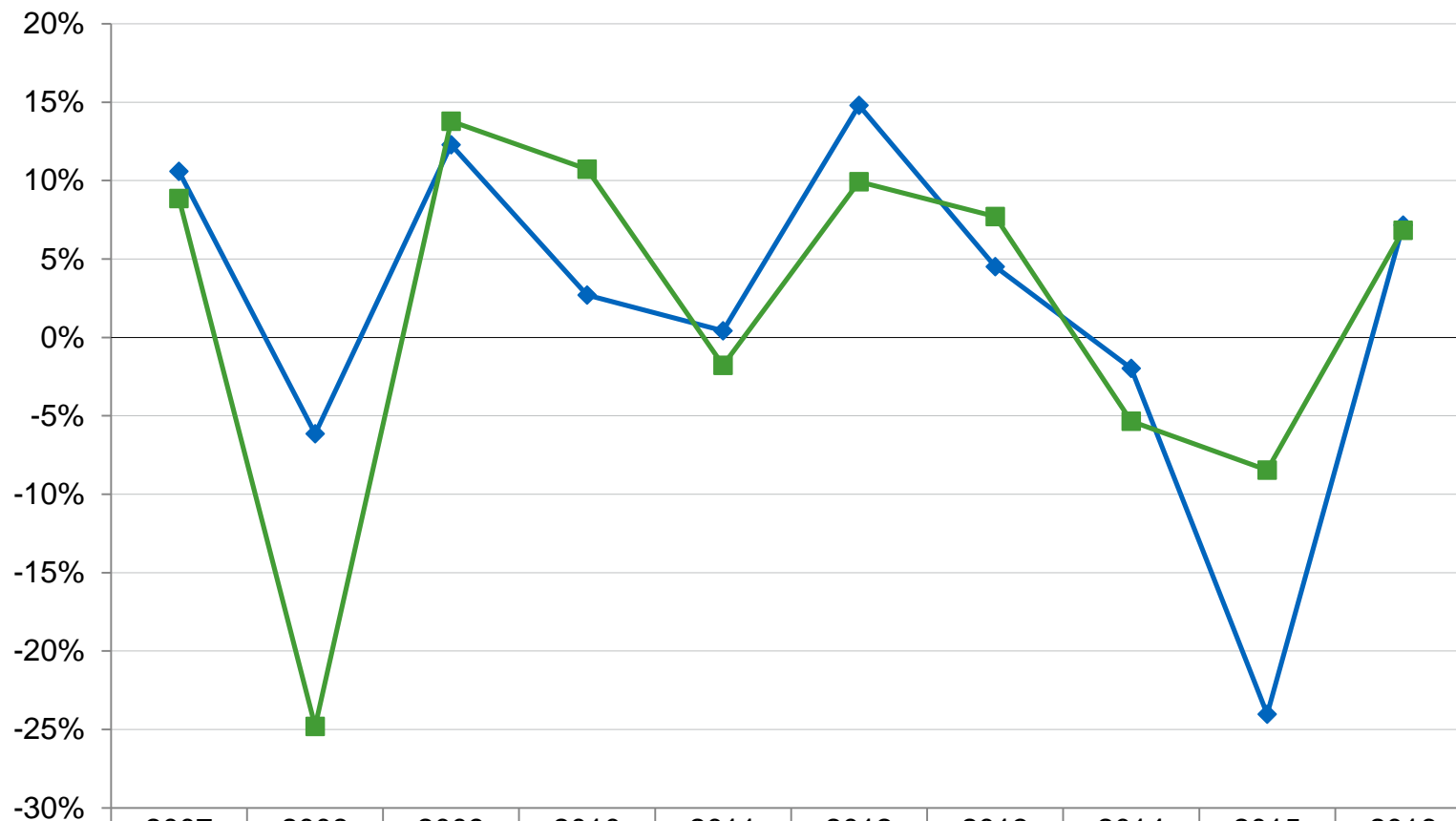
<sup>1</sup>Includes beneficiaries with DROP accounts only

<sup>2</sup>Excludes benefit supplement



# Historical Results

## ASSET RETURNS

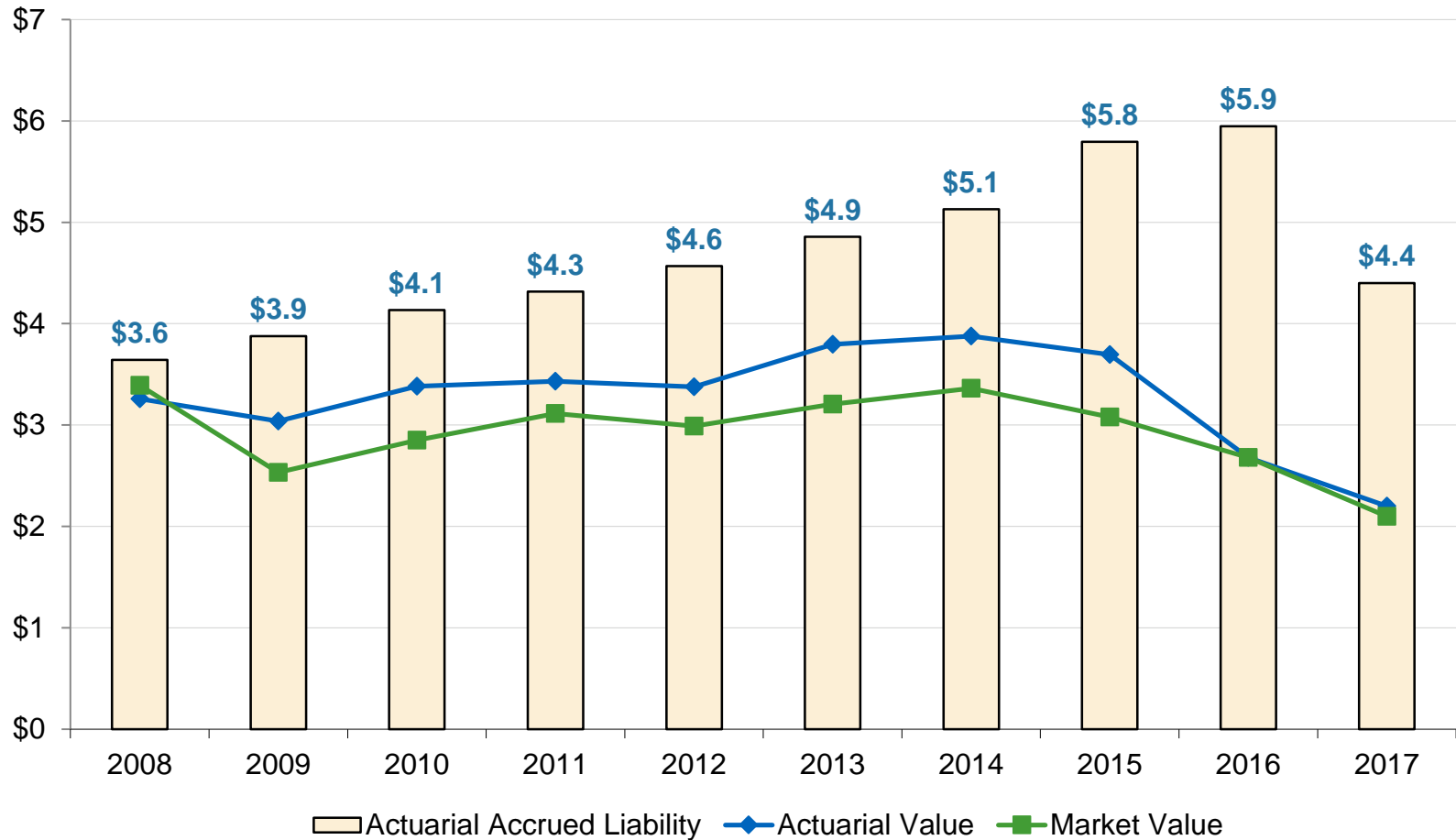


	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
◆ Actuarial Value	10.58%	-6.14%	12.29%	2.69%	0.43%	14.79%	4.52%	-1.98%	-24.03%	7.16%
■ Market Value	8.85%	-24.80%	13.78%	10.72%	-1.78%	9.92%	7.70%	-5.35%	-8.47%	6.82%

Note: The actuarial returns for 2012 and 2015 include the effects of changes in asset method.

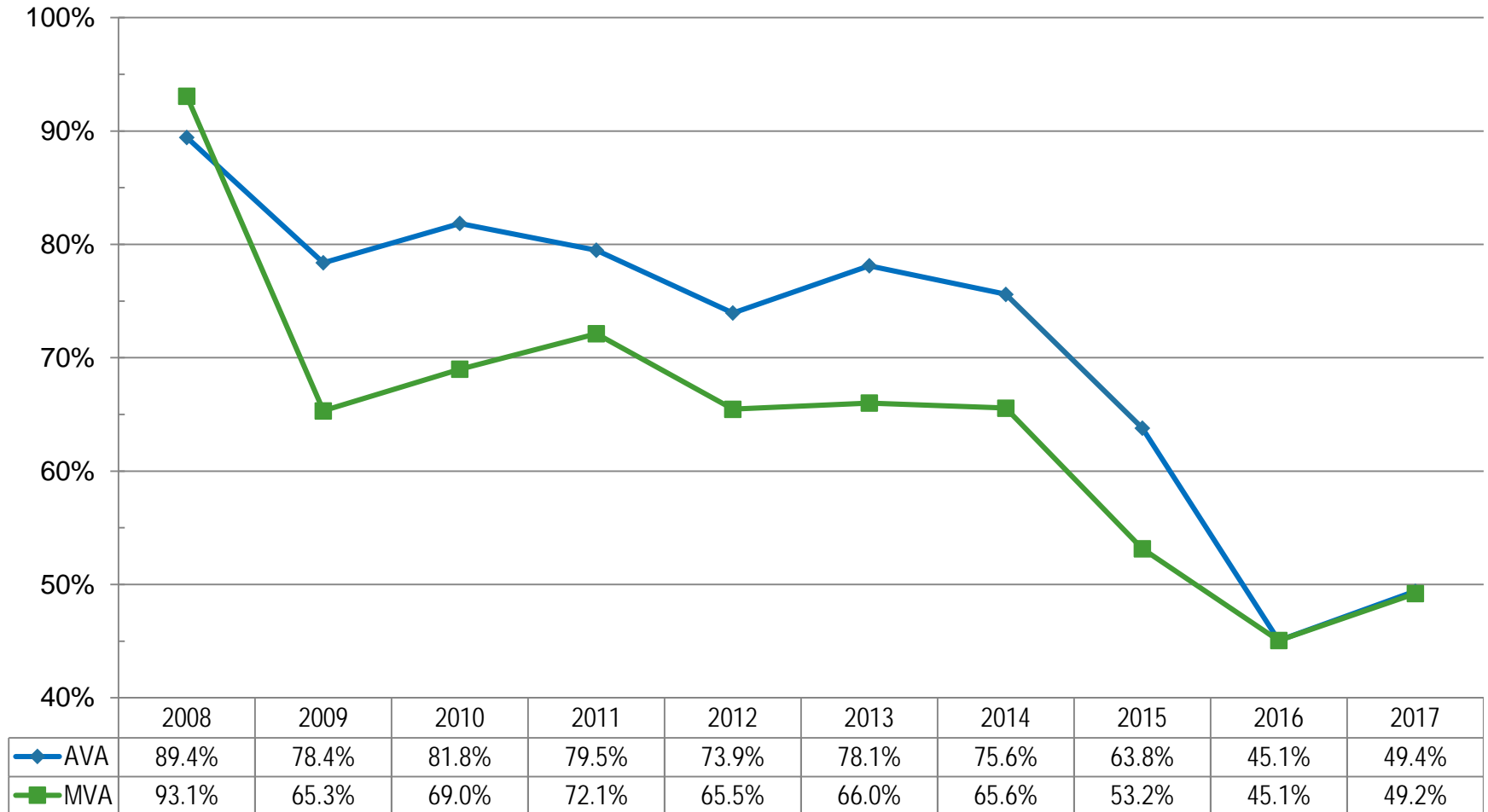
# Historical Results

ASSET AND ACTUARIAL ACCRUED LIABILITY VALUES AS OF JANUARY 1 (\$ billions)



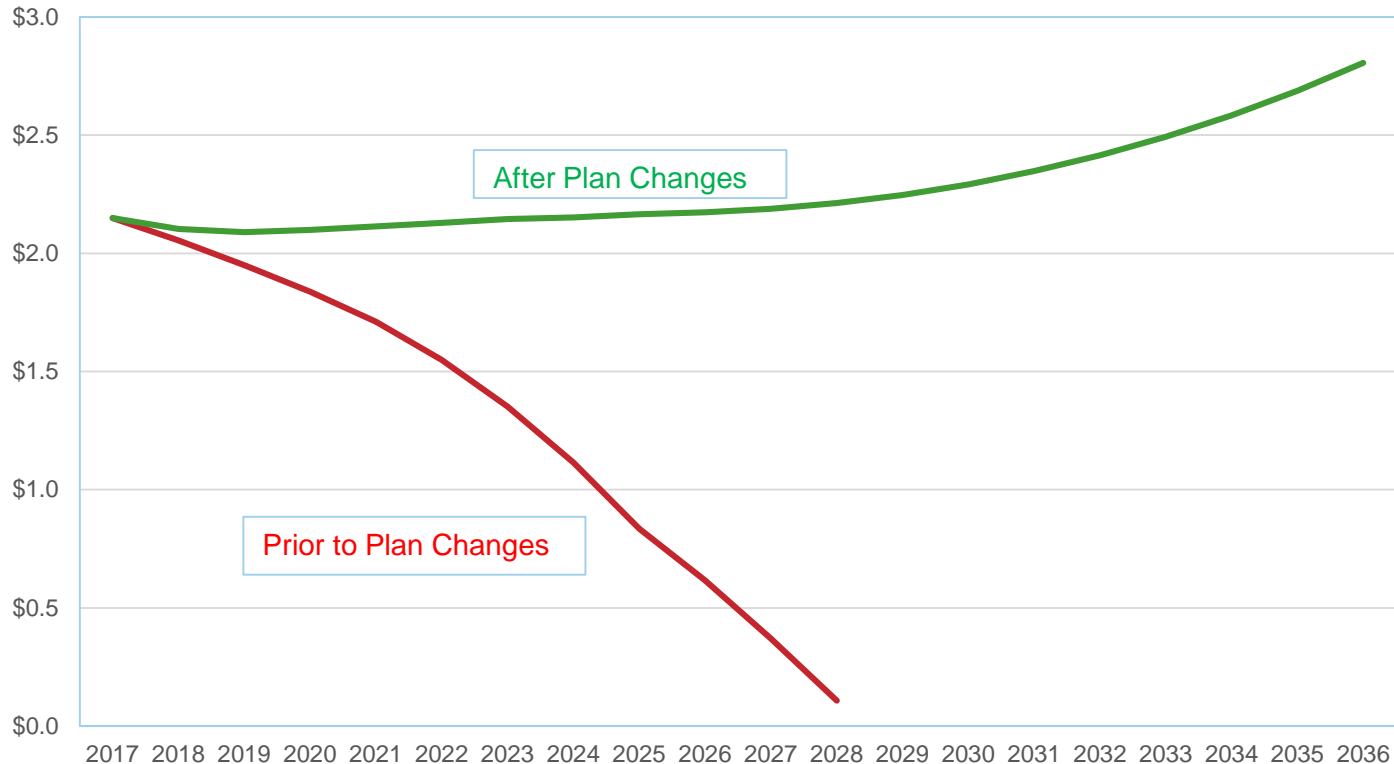
# Historical Results

FUNDED PERCENTAGE AS OF JANUARY 1



# Solvency Projection

## MARKET VALUE OF ASSETS (Billions)



The projection above anticipates that all actuarial assumptions are met in the future and all contributions are made as expected. Projections are based on the City's Hiring Plan payroll projections through 2037 for the "After Plan Changes" projection.

Based on the City's Hiring Plan payroll projections, 100% funding is projected by January 1, 2061. If payroll is 10% less than projected each year through 2037, 100% funding is projected by January 1, 2089.

# GASB 67 Accounting Disclosures – Net Pension Liability

- The Pension System is required to provide disclosures under GASB Statement 67. The components of the net pension liability are as follows:

<b>COMBINED PENSION PLAN</b>	<b>Year Ended December 31, 2016</b>	<b>Year Ended December 31, 2015</b>
Total Pension Liability	\$8.45 billion	\$9.54 billion
Plan Fiduciary Net Position	\$2.15 billion	\$2.68 billion
City's Net Pension Liability	\$6.30 billion	\$6.86 billion
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	25.45%	28.10%

- Total Pension Liability as of December 31, 2016 does not include plan changes effective September 1, 2017 per GASB 67; those plan changes will be included in the December 31, 2017 Total Pension Liability
- In the event that a pension plan has a projected insolvency date, GASB requires that the unfunded benefits be discounted using a 20-year, tax-exempt general obligation bonds rate rather than the Plan's funding rate
- Since current contribution levels are not projected to keep the System solvent, the GASB liabilities are determined using a blended discount rate of 4.12% (3.95% for the 2015 calculation)

# Supplemental Plan Results

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- The City of Dallas contributes to the Supplemental Plan each year based on the normal cost (net of member contributions) and a ten-year amortization of the unfunded actuarial accrued liability
- The same assumption changes implemented for the Combined Pension Plan apply to the Supplemental Plan, with the exception of administrative expenses
- The total recommended contribution for the Supplemental Plan decreased from \$3.10 million in 2015 to \$2.13 million in 2016; the City's portion decreased from \$3.06 million to \$2.09 million
- Supplemental Plan net assets decreased from \$19.5 million to \$17.7 million
- The funded ratio increased from 45.8% to 52.9%
- The number of active members in the Supplemental Plan increased from 45 to 47 and the number of annuitants increased from 124 to 128
- The GASB net pension liability (NPL) for this plan is determined using a blended discount rate of 7.10%, down from 7.19%; the NPL has declined from \$23.9 million to \$23.0 million since last year

# The Small Print

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- This presentation is intended for the use of the Board of Trustees for the Dallas Police and Fire Pension System, and is a supplement to Segal Consulting's full valuation reports for the System as of January 1, 2017.
- Please refer to the full valuation reports for a description of assumptions and plan provisions reflected in the results shown in this presentation. The reports also include more comprehensive information regarding the System's membership, assets, and experience during the most recent plan year.
- Projections, by their nature, are not a guarantee of future results. They are intended to serve as estimates of future financial outcomes that are based on assumptions about future experience and the information available to us at the time the modeling is undertaken and completed. The projected future results included in this presentation show how the Fund would be affected if specific investment return, salary, mortality, turnover, disability and retirement assumptions are met. Actual results may differ due to such variables as demographic experience, the economy, stock market performance and the regulatory environment.
- The calculations included in this presentation were completed under the supervision of Leon F. (Rocky) Joyner, FCA, ASA, MAAA, EA, Jeffrey S. Williams, FCA, ASA, MAAA, EA, and Deborah K. Brigham, FCA, ASA, MAAA, EA.

# Questions?

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