



TCDRS

Retirement Presentation

FY2018 BUDGET WORKSHOP

Benefits Provided

Deposit Rate	7%
Matching Rate	200%*
Vesting Period	8 years
Retirement Eligibility	
➤ Age 60 & 8 years of service	
➤ 30 years of service	
➤ Age + years of service = 75	
Guaranteed Interest Rate	7%

*for employee contributions made on or after 1/1/2011

County Comparison

County	Employee Contribution %	County Match %	Years of Service for Vesting	Retirement Eligibility Rule	Most Recent Retiree COLA	Type and Rate of Retiree COLA	Group Term Life
Collin	7	200	8	75	2013	CPI 60%	Active & Retiree
Bexar*	7	200	8	75	2014	Flat 2%	No
Dallas	7	200	10	80	-	-	No
Denton*	7	220	8	75	2017	CPI 80%	Active
El Paso*	7	250	8	75	2016	Flat 1%	No
Fort Bend	7	200	8	75	2014	CPI 10%	No
Harris	7	225	8	75	-	-	No
Hidalgo*	7	200	8	75	2016	CPI 100%	No
Montgomery	6	250	8	75	2017	CPI 10%	No
Tarrant	7	200	8	75	2017	CPI 50%	No
Travis	7	225	8	75	2016	CPI 50%	No
Williamson	7	250	8	75	2016	CPI 60%	No

*Allows 20 years of service for retirement at any age, all others require 30 years of service for retirement at any age.

City Comparison

City	Employee Contribution %	City Match %	Years of Service for Vesting	Retirement Eligibility Rule	Retiree Increases 2017	Retiree Death Benefit
Allen	7	200	5	N/A	CPI 70%	Active & Retiree
Frisco	7	200	5	N/A	CPI 70%	Active & Retiree
McKinney	7	200	5	N/A	CPI 70%	Active & Retiree
Plano	7	200	5	N/A	CPI 70%	No
Richardson*	7	200	5	N/A	CPI 50%	No
Wylie	7	200	5	N/A	CPI 70%	Active & Retiree

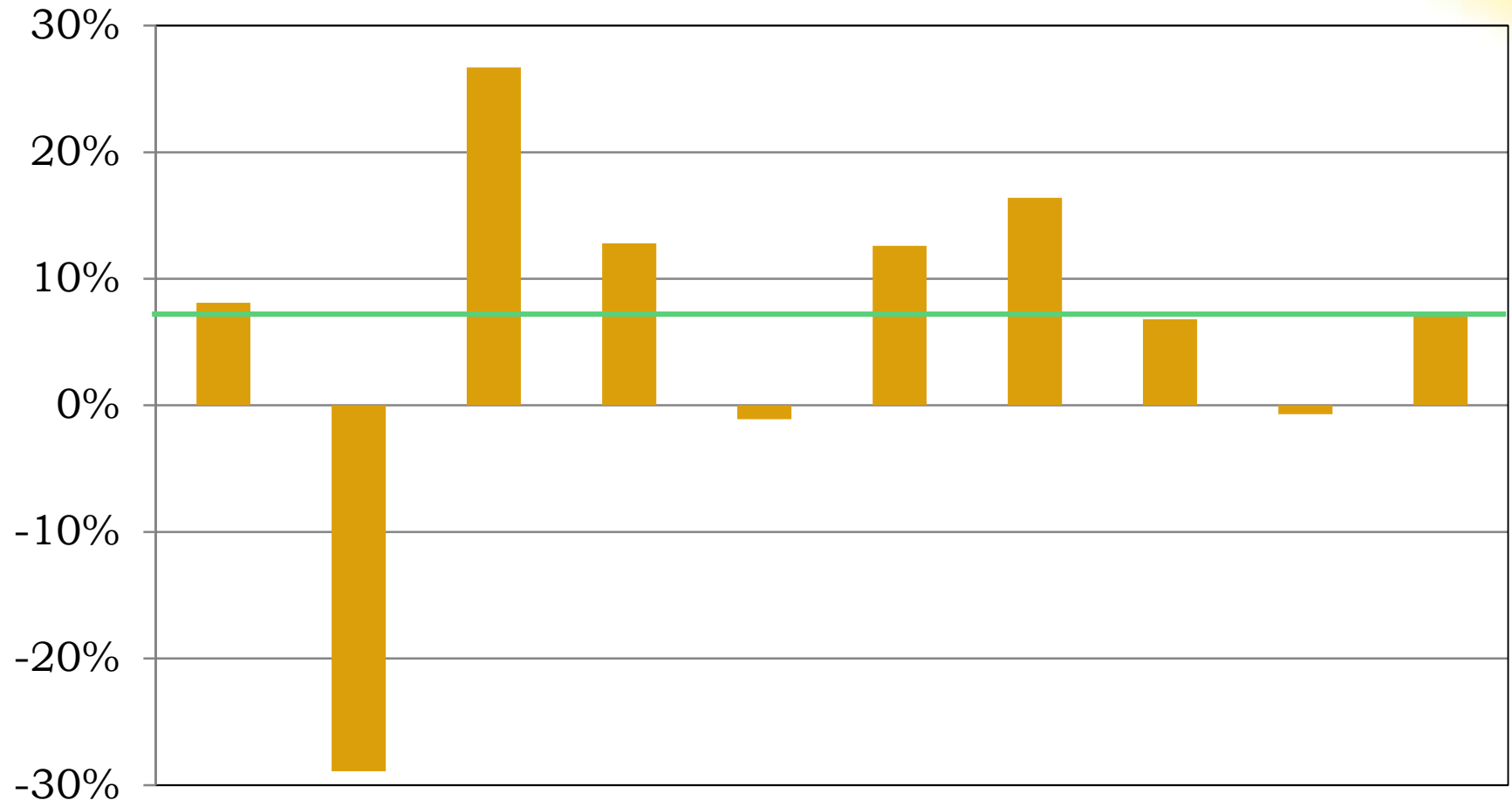
*Requires 25 years of service for retirement at any age, all others allows 20 years of service for retirement at any age.

Portfolio Rate of Return

Year	Return
2007	8.1%
2008	(28.9)%
2009	26.7%
2010	12.8%
2011	(1.0)%
2012	12.6%
2013	16.4%
2014	6.8%
2015	(0.7)%
2016	7.5%

Total fund return as of 12/2016	
1 year	7.5%
3 year	4.5%
5 years	8.3%
10 years	4.9%
20 years	7.1%
30 years	8.0%

Rate of Return (Illustration Only)



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Rate of Return	8.10%	-28.90%	26.70%	12.80%	-1.0%	12.60%	16.4%	6.8%	-0.7%	7.5%

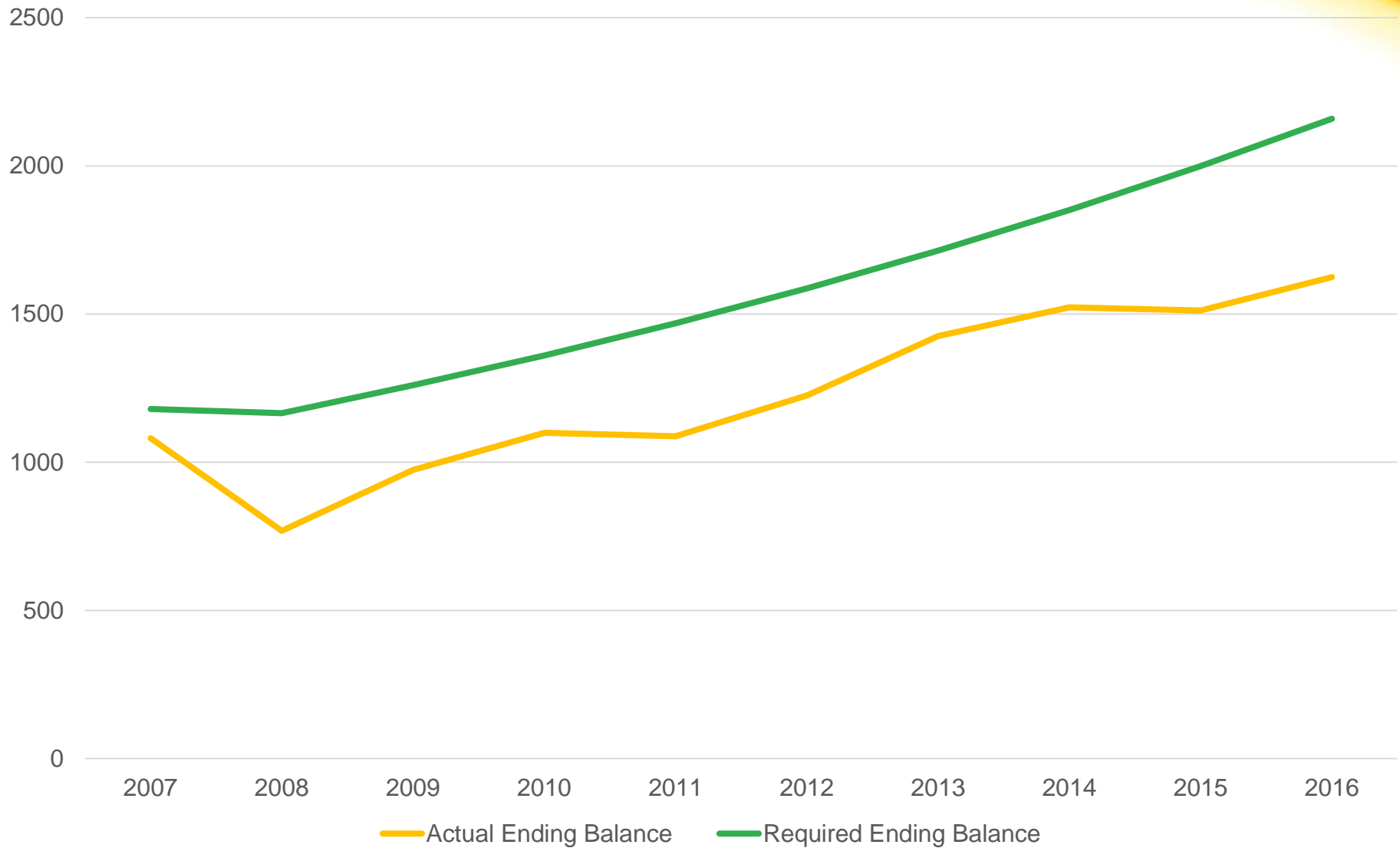
— 8% return required to cover guaranteed return

Rate of Return (Illustration Only)

Year	Required Account Value	Required Rate of Return	Required Ending Balance	Actual Account Value	Actual Return	Actual Ending Balance
2007	\$1,000	\$ 80	\$1,180	\$1,000	\$ 81	\$1,081
2008	\$1,180	\$ 86	\$1,166	\$1,081	-\$312	\$ 769
2009	\$1,166	\$93	\$1,260	\$769	\$205	\$ 974
2010	\$1,260	\$101	\$1,360	\$974	\$125	\$1,099
2011	\$1,360	\$109	\$1,469	\$1,099	-\$ 11	\$1,088
2012	\$1,469	\$118	\$1,587	\$1,088	\$137	\$1,225
2013	\$1,587	\$127	\$1,714	\$1,225	\$201	\$1,426
2014	\$1,714	\$137	\$1,851	\$1,426	\$ 97	\$1,523
2015	\$1,851	\$148	\$1,999	\$1,523	-\$ 11	\$1,512
2016	\$2,999	\$160	\$2,159	\$1,512	\$113	\$1,625

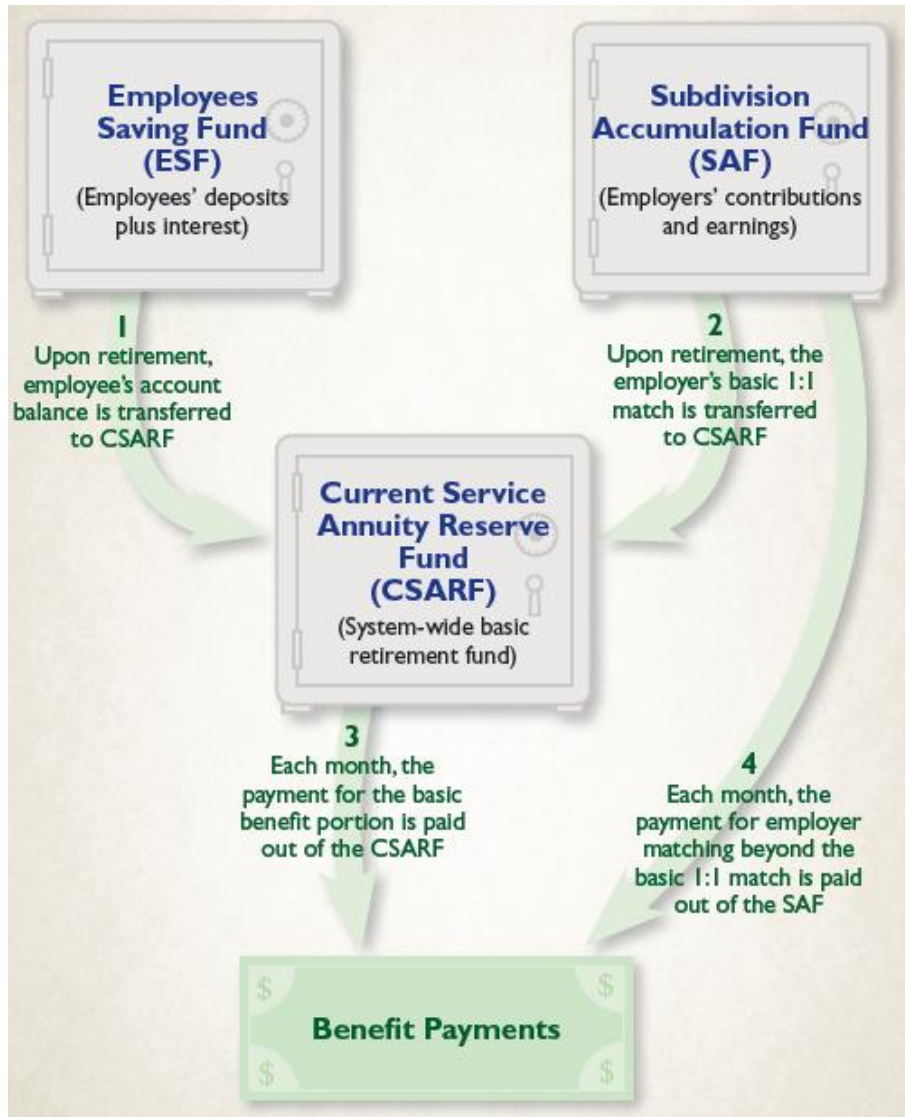
Returns over and under 8% may be allocated to or from reserves, rather than to the account, dependent upon the decision made each year by the TCDRS board. This illustration shows actual returns without taking into account any funds allocated to and from reserves. This calculation does not reflect the smoothing process that occurs for losses and gains over a 5-year time period.

Rate of Return (Illustration Only)

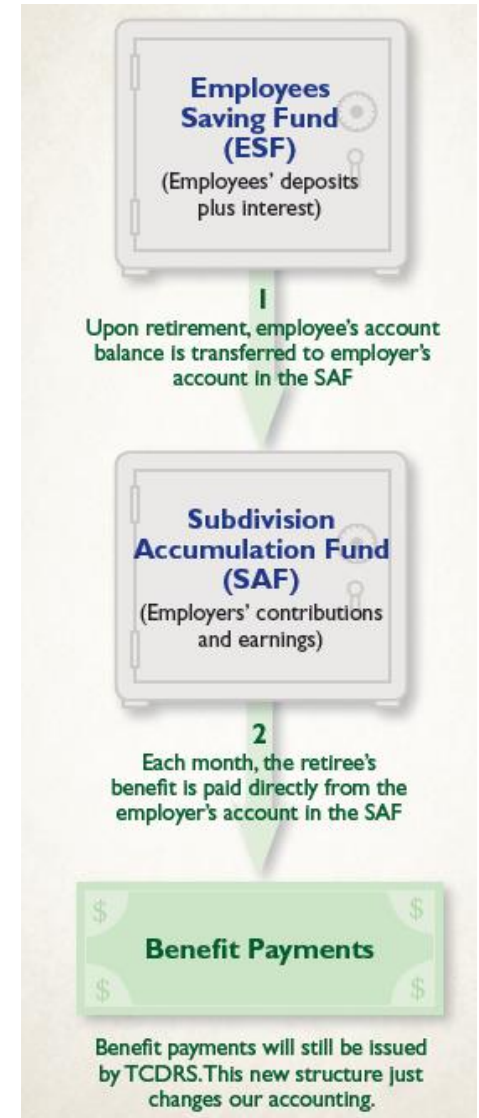


Change in Fund Structure

Previous Structure



Current Structure



Change in Annuity Purchase Rates

- Benefits based on member deposits prior to January 1, 2018, will not be affected.
- People are expected to live longer. Benefits based on member deposits on or after January 1, 2018, will be based on adjusted mortality tables.
- This change does not affect employee's retirement eligibility.

Cost

	Normal Rate (%)	UAAL Rate (%)	COLA RATE(%)	Total (%)	County Contribution (%)
2009	9.09	2.81	.23	12.13	13.00
2010	9.10	3.74	.00	12.84	13.50
Made a lump sum payment of \$1,130,000 in October 2009					
2011	9.38	3.43	.08	12.89	13.50 (original)
2011	7.59	2.92	.08	10.59	13.50 (revised)
Made a lump sum payment of \$5 million in October 2010					
2012	7.57	2.90	.07	10.54	13.50 (original)
2012	7.57	0.00	.07	7.64	7.70 (revised)
Made a lump sum payment of \$35.5 million in October 2011					
2013	7.56	0.45	.05	8.06	8.50 (original)
2013	7.56	0.00	.05	7.61	8.50 (revised)
Made a lump sum payment of \$2,045,000 in October 2012					
2014	7.55	0.51	.00	8.06	8.50 (original)
2014	7.55	0.00	.00	7.55	8.50 (revised)
Made a lump sum payment of \$11,608,062 in November 2013					
2015	7.43	-1.22	.00	6.21	8.00
2016	7.44	-1.73	.00	5.71	8.00
2017	7.08	-0.86	.00	6.22	8.00
2018	7.09	-0.32	Not Decided	6.77	8.00 (budgeted)

Lump sum payments were made to reduce the unfunded actuarial liability

County Rate Comparison

County	Required Rate	Elected Rate
Collin	6.77%	8.00%
Bexar	11.91%	15.48%
Dallas	12.27%	12.27%
Denton	12.97%	12.97%
El Paso	16.78%	16.78%
Fort Bend	12.12%	12.12%
Harris	14.35%	14.35%
Hidalgo	11.80%	11.80%
Montgomery	11.03%	12.27%
Tarrant	14.30%	18.75%
Travis	14.91%	14.91%
Williamson	13.94%	13.94%

City Rate Comparison

City	Required Rate	Elected Rate
Allen	14.08%	14.08%
Frisco	14.29%	14.29%
McKinney	15.43%	15.43%
Plano	17.32%	17.32%
Richardson	14.58%	14.58%
Wylie	15.08%	15.08%

Employer Contributions

Calendar Year	Total Employer Deposits	Contributing Employees	Cost Per Employee
2007	\$10,027,538	1747	\$5,740
2008	\$10,431,480	1809	\$5,766
2009			
Standard Payment	\$11,642,578	1786	\$6,519
Lump Sum Payment	\$1,130,000		\$633
2010			
Standard Payment	\$11,770,220	1755	\$6,707
Lump Sum Payment	\$5,000,000		\$2,849
2011			
Standard Payment	\$11,699,770	1790	\$6,536
Lump Sum Payment	\$35,500,000		\$19,832
2012			
Standard Payment	\$6,702,402	1811	\$3,701
Lump Sum Payment	\$2,045,000		\$1,129
2013			
Standard Payment	\$7,437,259	1824	\$4,077
Lump Sum Payment	\$11,608,062		\$6,364
2014	\$7,222,299	1848	\$3,908
2015	\$7,368,276	1854	\$3,974
2016	\$7,652,829	1898	\$3,905
Total 2007-2016	\$147,237,713	1,812	\$81,257

Unfunded Liability Update

- Currently there is no unfunded liability using the 5 year asset recognition method.
- As of December 2016, our plan has a reserve of \$4,076,091, which is a funded ratio of 100.8%.
- Gains or losses that are smoothed are not reflected in the overfunded/unfunded liability. If an immediate asset recognition method were used instead of a delayed asset recognition the unfunded liability would be \$22,292,175, which is a funded ratio of 95.5%.
- The minimum required contribution rate for 2018 is 6.77%.
- TCDRS did not reach their investment return goal of 8% for 2016. Actuarial gains and losses are smoothed over 5 years and will be recognized over time.

Unfunded Liability History – 5 Year Asset Recognition Method

Calendar Year End	Budget Year	Unfunded Liability	Funded Percentage	Notes
2007	2009	\$24,873,034	88.2%	
2008	2010	\$41,594,399	82.0%	
Made a lump sum payment of \$1,130,000 in October 2009				
2009	2011	\$40,273,716	84.5%	before reduced match
2009	2011	\$36,309,269	85.8%	with reduced match
Made a lump sum payment of \$5 million in October 2010				
2010	2012	\$34,553,355	87.5%	
Made a lump sum payment of \$35.5 million in October 2011				
2011	2013	\$ 2,044,817	99.0%	
Made a lump sum payment of \$2,045,000 in October 2012				
2012	2014	\$ 2,794,438	99.1%	
Made a lump sum payment of \$11,608,062 in November 2013				
2013	2015	(\$14,704,583)	104.5%	
2014	2016	(\$21,504,628)	106.2%	
2015	2017	(\$11,689,647)	103.1%	
2016	2018	(\$4,076,091)	100.8%	

Unfunded Liability

Actual Overfunded Liability as of 12/31/2015	\$11,690,000
Adjustment Due to Decrease in Discount Period (formerly notated as interest)	\$935,000
Scheduled OAAL Drawdown	(\$1,248,000)
Recognition of Actuarial Asset Gains and Losses for 2012-2016 (using the five-year recognition method)	(\$11,370,000)
Gain Due to Additional Employer Contributions (Elected Rate greater than Required Rate)	\$2,121,000
Loss due to Change in Assumptions and Methods	(\$590,000)
Gain Due to Greater than Expected Terminations and Withdrawals	\$956,000
Gain due to Greater than Expected Retirement (includes disability)	\$250,000
Gain due to Greater than Expected Retiree Mortality	\$439,000
Net Actuarial Losses from All Other Sources (retirement, death, individual salary increases, payroll growth, disability, etc.)	\$893,000
Actual Overfunded Liability as of 12/31/2016	\$4,076,000

GASB Statement 68

- Requires Collin County to report TCDRS pension liability/assets on the CAFR.
- Effective for plan year beginning January 1, 2015.
- Reporting requirements do not change how TCDRS plan funding is calculated.
- Automatic COLAs increase the calculated rate of funding, as they assume annual COLAs for all plan participants continuously into the future and require funding of this liability to be reported on the CAFR.
- Any significant volatility experienced in pension liability will be reflected on the CAFR.

Cost of Living Adjustment (COLA)

- The TCDRS retirement benefit is a fixed benefit payment.
- The costs of goods and services, such as health care expenses, go up each year due to inflation.
- A Cost of Living Adjustment (COLA) restores some of the purchasing power that the benefit loses over time.
- Electing a COLA is only effective for one plan year and is reassessed on a year to year basis. Court determines the cost of living increase each year. There are three options:
 - **Flat Rate COLA:** Flat percentage increase is applied to all retiree benefits.
 - **CPI-based COLA:** Based on how much inflation has occurred since each employee retired. Adjustments for one retiree could differ from that of another retiree if they retired at different times.
 - **Nothing**

Retiree COLA

- COLA's are funded over a 15-year period.
- Collin County has historically adopted various COLA options including:
 - 60% to 100% of CPI
 - 3% - 8% Flat Rate
 - No COLA
- Last year, a COLA was not approved for plan year 2017.
- The last COLA elected was 60% of CPI for plan year 2013.
- Collin County is eligible to adopt a COLA for 2018 without incurring a repeating-COLA designation.
- As of the end of December 2016, there were 734 individuals collecting TCDRS benefits, 297 active employees were eligible to retire, and 344 additional employees will be eligible to retire in the next 5 years.

COLA Options:

- The COLA options for the 2018 plan year are:

COLA Type	Percentage	Additional Rate (%)	Estimated Annual Cost *	Estimated Prefunded Cost**
CPI – 60%		.28	\$178,824	\$4,597,694
CPI – 80%		.50	\$319,329	\$7,253,812
CPI – 100%		.77	\$491,766	\$10,131,874
Flat Rate	1%	.11	\$ 70,252	\$1,923,627

*Based on 2016 Total Gross Wages

** Prefunded based on a 15-year amortization period

- CPI can be in 10% increments.
- The additional rates are added to the required minimum rate of 6.77% for a total percent applied to all payroll dollars. If COLA is prefunded, additional rates are not applied.
- The actual amount received by the retiree will vary.
- If a COLA is elected this year, it will not be assumed that COLAs will continue to be adopted in future years.

Court Determination Budget Information

- Employer contribution rate to remain at 8%.
- Determination of any retiree COLA.