



TCDRS RETIREMENT PRESENTATION

FY2021 Budget Workshop

BENEFITS PROVIDED

Deposit Rate	7%
Matching Rate	200%*
Vesting Period	8 years
Retirement Eligibility	
<ul style="list-style-type: none">• Age 60 & 8 years of service (Vesting)• At any age with 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 Benefit
Collin	7	200	8	75	2018	CPI 40%	No
Bexar*	7	200	8	75	2018	CPI 10%	No
Dallas	7	200	10	80	-	-	No
Denton*	7	225	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	2019	Flat 2%	No
Montgomery	6	250	8	75	2017	CPI 10%	No
Tarrant	7	200	8	75	2019	Flat 1%	No
Travis	7	225	8	75	2019	CPI 50%	No
Williamson	7	250	8	75	2019	Flat 1%	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	Rate of Retiree COLA**	Retiree Death Benefit
Allen	7	200	5	Age 60+5 yrs.	CPI 70%	Active & Retiree
Frisco	7	200	5	Age 60+5 yrs.	CPI 70%	Active & Retiree
McKinney	7	200	5	Age 60+5 yrs.	CPI 70%	Active & Retiree
Plano	7	200	5	Age 60+5 yrs.	CPI 70%	No
Richardson*	7	200	5	Age 60+5 yrs.	CPI 50%	No
Wylie	7	200	5	Age 60+5 yrs.	CPI 70%	Active & Retiree

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

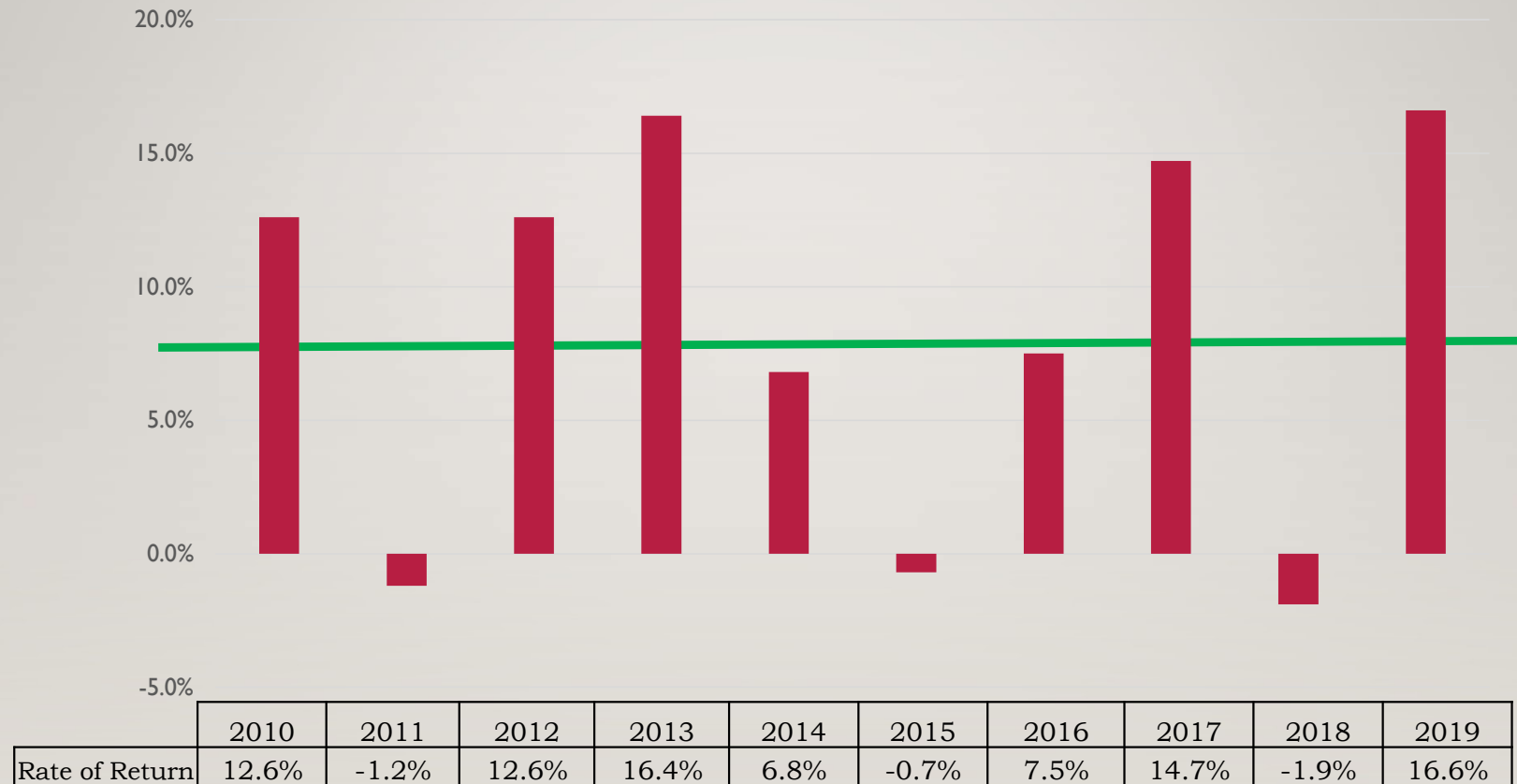
****All surveyed cities have adopted a repeating COLA that remains in effect until rescinded**

PORTFOLIO RATE OF RETURN - TCDRS

Year	Return
2010	12.6%
2011	-1.2%
2012	12.6%
2013	16.4%
2014	6.8%
2015	-0.7%
2016	7.5%
2017	14.7%
2018	-1.9%
2019	16.6%

Total Fund Return		
	As of 12/2019	As of 12/2018
1 year	16.6%	-1.9%
3 years	9.5%	6.6%
5 years	7.0%	5.1%
10 years	8.1%	9.0%
20 years	7.2%	6.4%
30 years	8.0%	8.0%

RATE OF RETURN (ILLUSTRATION ONLY) - TCDRS



8% return required to cover guaranteed return for employee accounts

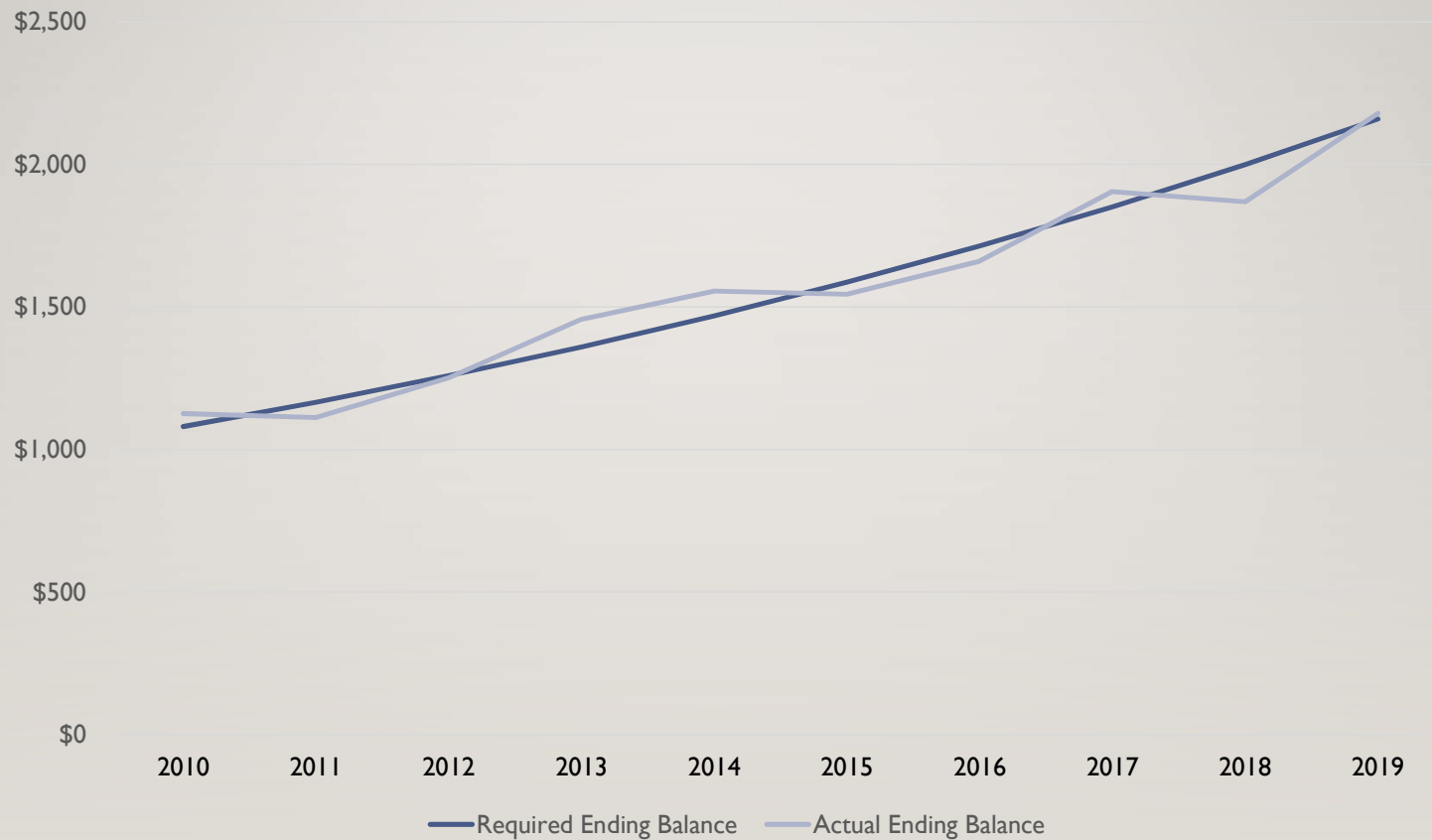
10 YEAR RATE OF RETURN (ILLUSTRATION ONLY) - TCDRS

Year	Required Account Value	Required Rate of Return	Required Ending Balance	Actual Account Value	Actual Rate of Return	Actual Ending Balance
2010	\$1,000	\$80	\$1,080	\$1,000	\$126	\$1,126
2011	\$1,080	\$86	\$1,166	\$1,126	-\$14	\$1,112
2012	\$1,166	\$93	\$1,259	\$1,112	\$140	\$1,252
2013	\$1,259	\$101	\$1,360	\$1,252	\$205	\$1,457
2014	\$1,360	\$109	\$1,469	\$1,457	\$99	\$1,556
2015	\$1,469	\$118	\$1,587	\$1,556	-\$11	\$1,545
2016	\$1,587	\$127	\$1,714	\$1,545	\$116	\$1,661
2017	\$1,714	\$137	\$1,851	\$1,661	\$244	\$1,905
2018	\$1,851	\$148	\$1,999	\$1,905	-\$36	\$1,869
2019	\$1,999	\$160	\$2,159	\$1,869	\$310	\$2,179

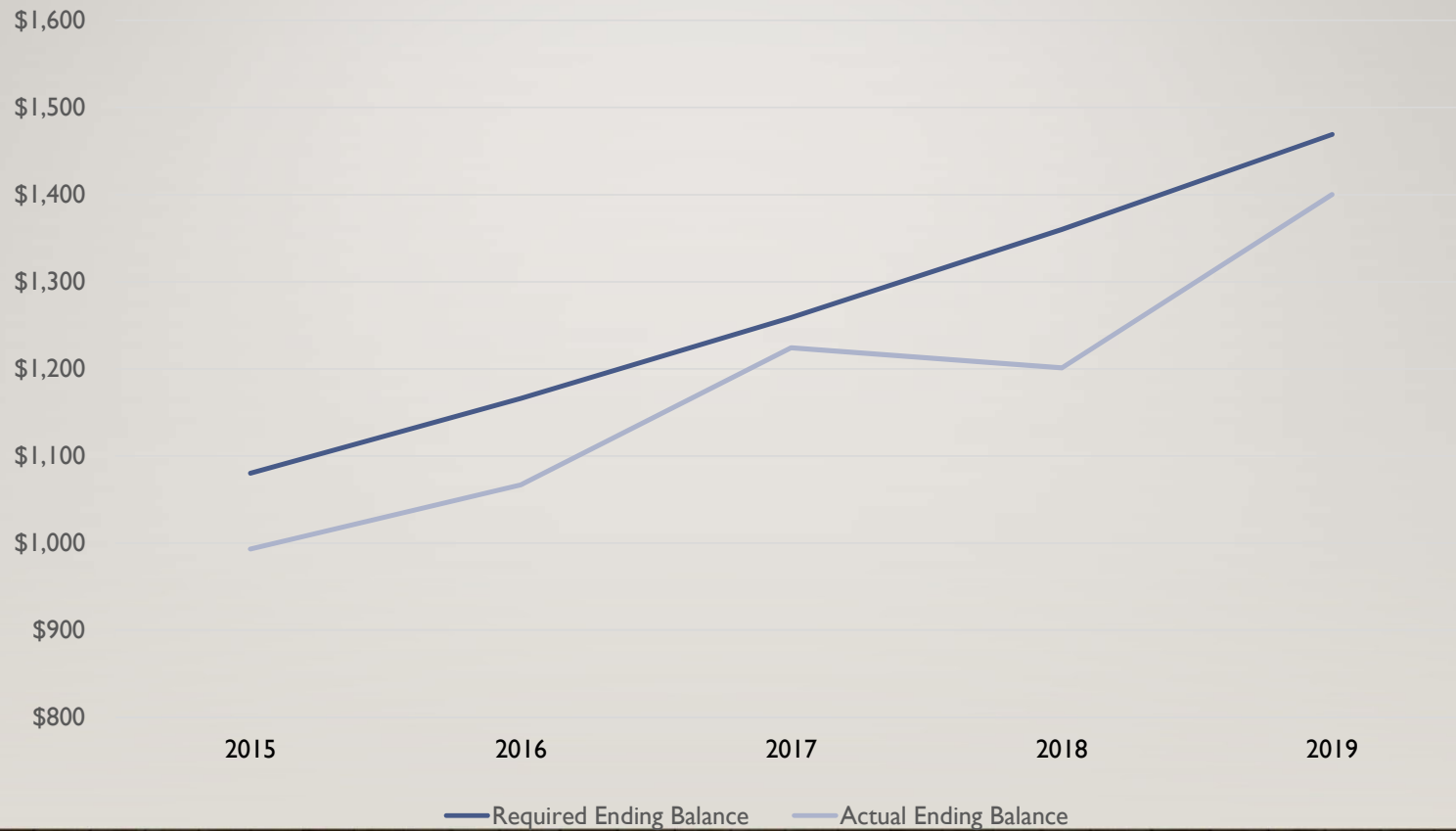
5 YEAR RATE OF RETURN (ILLUSTRATION ONLY) - TCDRS

Year	Required Account Value	Required Rate of Return	Required Ending Balance	Actual Account Value	Actual Rate of Return	Actual Ending Balance
2015	\$1,000	\$80	\$1,080	\$1,000	-\$7	\$993
2016	\$1,080	\$86	\$1,166	\$993	\$74	\$1,067
2017	\$1,166	\$93	\$1,259	\$1,067	\$157	\$1,224
2018	\$1,259	\$101	\$1,360	\$1,224	-\$23	\$1,201
2019	\$1,360	\$109	\$1,469	\$1,201	\$199	\$1,400

10 YEAR RATE OF RETURN (ILLUSTRATION ONLY) - TCDCRS



5 YEAR RATE OF RETURN (ILLUSTRATION ONLY) - TCDRS

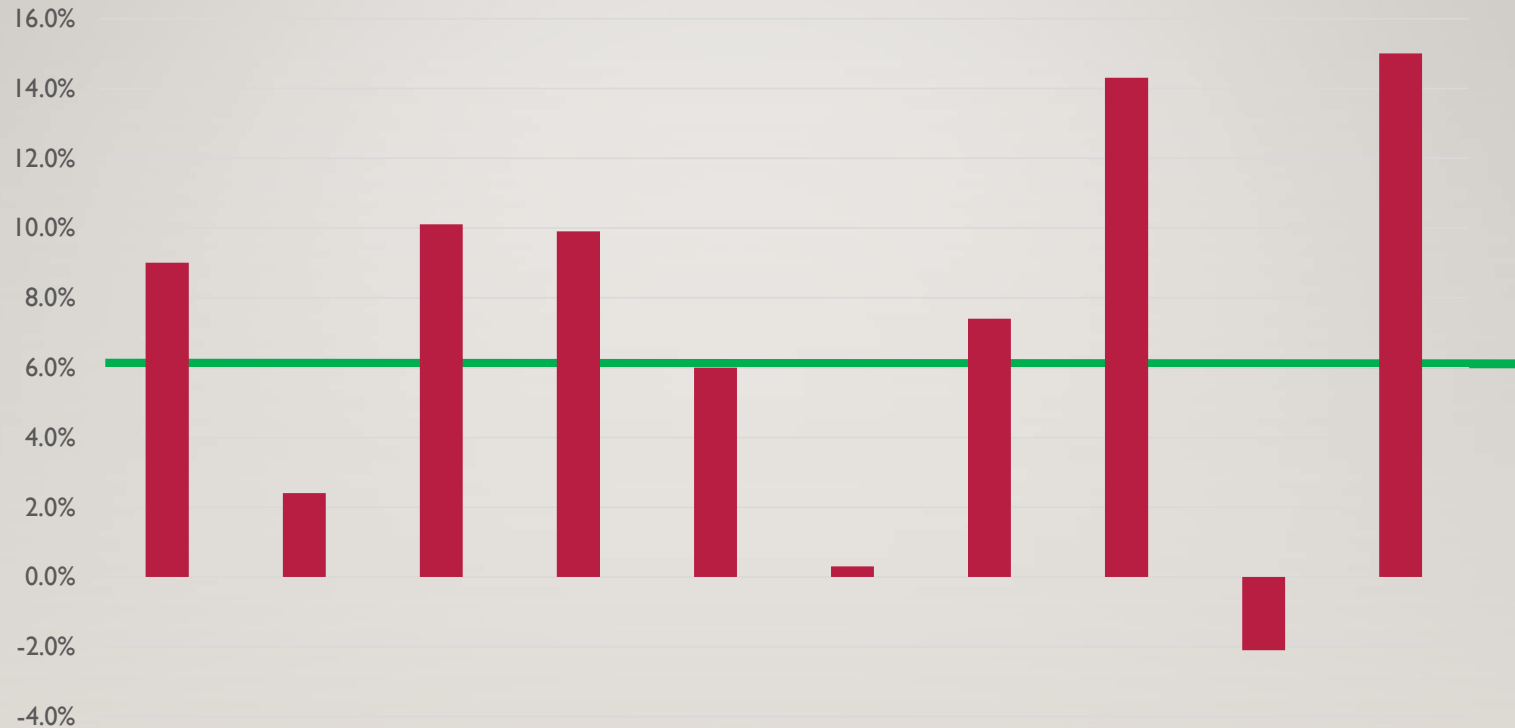


PORTFOLIO RATE OF RETURN - TMRS

Year	Return
2010	10.2%
2011	2.4%
2012	10.1%
2013	9.9%
2014	6.0%
2015	0.3%
2016	7.4%
2017	14.3%
2018	-2.1%
2019	15.0%

Total fund return as of 12/2019	
1 year	15.0%
3 years	8.8%
5 years	6.8%
10 years	7.1%

RATE OF RETURN (ILLUSTRATION ONLY) - TMRS



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Rate of Return	10.2%	2.4%	10.1%	9.9%	6.0%	0.3%	7.4%	14.3%	-2.1%	15.0%

6.75% return required to cover guaranteed return for employee accounts

PORTFOLIO RATE OF RETURN COMPARISON

Year	TCDRS Return	TMRS Return
2010	12.6%	10.2%
2011	-1.2%	2.4%
2012	12.6%	10.1%
2013	16.4%	9.9%
2014	6.8%	6.0%
2015	-0.7%	0.3%
2016	7.5%	7.4%
2017	14.7%	14.3%
2018	-1.9%	-2.1%
2019	16.6%	15.0%

Total fund return as of 12/2019		
	TCDRS	TMRS
1 year	16.6%	15.0%
3 years	9.5%	8.8%
5 years	7.0%	6.8%
10 years	8.1%	7.1%

COST

Year	Normal Rate (%)	UAAL Rate (%)	COLA Rate (%)	Total (%)	County Contribution (%)
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 \$2,045,000 in October 2012*					
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 \$11,608,062 in November 2013*					
2014	7.55	0.51	.00	8.06	8.50 (original)
2014	7.55	0.00	.00	7.55	8.50 (revised)
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
Made a lump sum payment of \$2,471,616 in December 2017*					
2018	7.09	-0.32	.00	6.77	8.00
Made a lump sum payment of \$1,160,641 in October 2018*					
2019	6.94	0.01	.00	6.95	8.00
Made a lump sum payment of \$13,274,348 in November 2019*					
2020	6.93	0.91	.00	7.84	8.00
2021	6.91	-0.05	.00	6.86	8.00 (budgeted)
* Lump sum payments were made to reduce the unfunded actuarial liability and/or fund an adopted COLA					

COUNTY RATE COMPARISON

County	2020 Required Rate	2020 Elected Rate	2021 Required Rate
Collin	7.84%	8.00%	6.86%
Bexar	13.86%	13.86%	13.63%
Dallas	13.36%	N/A	13.09%
Denton	13.78%	N/A	13.61%
El Paso	17.90%	N/A	18.01%
Fort Bend	12.49%	N/A	12.33%
Harris	14.92%	15.10%	14.61%
Hidalgo	12.73%	N/A	12.50%
Montgomery	11.23%	12.27%	10.90%
Tarrant	14.11%	19.50%	13.50%
Travis	16.19%	16.19%	16.08%
Williamson	14.53%	N/A	14.56%

- If an elected rate is lower than a required rate, the entity must contribute at least the required rate.

CITY RATE COMPARISON

City	2020 Required Rate	2021 Required Rate
Allen	14.15%	14.51%
Frisco	14.20%	14.54%
McKinney	15.03%	15.04%
Plano	16.71%	16.68%
Richardson	14.72%	14.80%
Wylie	14.86%	15.50%

TMRS does not have elected rates. Cities contribute the required rate but have the option to make additional payments during the year.

EMPLOYER CONTRIBUTIONS

Calendar Year	Payment Type	Total Employer Deposits	Contributing Employees	Cost Per Employee
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	Standard Payment	\$7,222,299	1848	\$3,908
2015	Standard Payment	\$7,368,276	1854	\$3,974
2016	Standard Payment	\$7,652,829	1898	\$4,032
2017	Standard Payment	\$8,045,603	1943	\$4,141
	Lump Sum Payment	\$2,471,616		\$1,272
2018	Standard Payment	\$8,721,011	1943	\$4,488
	Lump Sum Payment	\$1,160,641		\$597
2019	Standard Payment	\$8,839,887	2010	\$4,398
	Lump Sum Payment	\$13,274,384		\$6,604
2010-2019	Total Payments	\$156,519,223	1868	\$83,790

UNFUNDED LIABILITY UPDATE

- Currently there is unfunded liability using the 5-year asset recognition method.
- As of December 2019, our plan has \$267,254 of unfunded liability which is a funded ratio of 100.0%.
- 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 \$3,800,554, which is a funded ratio of 99.4%.
- The minimum required contribution rate for 2021 is 6.86%.
- TCDRS exceeded their investment return goal of 8% for 2019. Actual return was 16.6%. Actuarial gains and losses are smoothed over 5 years and will be recognized over time.

LIABILITY HISTORY

Calendar Year End	Budget Year	5 Yr.Asset Recognition Unfunded Liability	5 Yr.Asset Recognition Funded Percentage	Immediate Asset Recognition Unfunded Liability	Immediate Asset Recognition Funded Percentage
2010	2012	\$34,553,355	87.5%	No Data	No Data
Made a lump sum payment of \$5,000,000 in October 2010					
2011	2013	\$2,044,817	99.0%	\$30,199,573	90%
Made a lump sum payment of \$35,500,000 in October 2011					
2012	2014	\$2,794,438	99.1%	\$11,608,062	96%
Made a lump sum payment of \$2,045,000 in October 2012					
2013	2015	(\$14,704,583)	104.5%	(\$32,286,282)	109.8%
Made a lump sum payment of \$11,608,062 in November 2013					
2014	2016	(\$21,504,628)	106.2%	(\$27,012,753)	107.8%
2015	2017	(\$11,689,647)	103.1%	\$23,468,041	93.7%
2016	2018	(\$4,076,091)	100.8%	\$22,292,175	95.5%
2017	2019	\$1,160,641	99.8%	\$3,114,182	99.4%
Made a lump sum payment of \$2,471,616 in December 2017*					
2018	2020	\$13,274,348	97.6%	\$60,434,843	89%
Made a lump sum payment of \$1,160,641 in October 2018					
2019	2021	\$267,254	100.0%	\$3,800,554	99.4%
Made a lump sum payment of \$13,274,348 in November 2019					

*Lump-sum payment funded COLA for retirees

UNFUNDED LIABILITY

Actual Unfunded Liability as of 12/31/2018	(\$13,274,000)
Adjustment due to Decrease in Discount Period	(\$1,062,000)
Scheduled OAAL Drawdown	(\$42,000)
Recognition of Investment Gains and Losses for 2015-2019 (Using the Five-Year Recognition Method)	(\$821,000)
Gain due to Additional Employer Contributions (Elected Rate Greater than Required Rate)	\$1,238,000
Gain due to Additional Employer Contributions (Lump Sum Contribution)	\$13,274,000
Loss due to Greater than Expected Salary Increases	(\$303,000)
Gain due to Termination and Withdrawal Experience	\$611,000
Gain due to Retirements Different than Expected (Includes Disability)	\$329,000
Loss due to Less than Expected Retiree Mortality	(\$143,000)
Net Actuarial Loss from All Other Sources (Active Death, Proportionate Service, etc.)	(\$74,000)
Actual Underfunded Liability as of 12/31/2019	(\$267,000)

UNFUNDED LIABILITY HISTORY

	2014	2015	2016	2017	2018
Actual Over/Underfunded Liability as of December 31	(\$21,505,000)	\$11,690,000	\$4,076,000	(\$1,161,000)	(\$13,274,000)
Adjustment due to Decrease in Discount Period	(\$1,935,000)	\$935,000	\$326,000	(\$93,000)	(\$1,062,000)
Scheduled OAAL Drawdown	\$1,076,000	(\$1,248,000)	(\$841,000)	(\$200,000)	(\$42,000)
Recognition of Investment Gains and Losses for Previous Five Years (Using the Five-Year Recognition Method)	\$9,337,000	(\$11,370,000)	(\$2,817,000)	(\$12,392,000)	(\$821,000)
Gain/Loss due to Additional Employer Contributions (Elected Rate greater than Required Rate)	(\$1,599,000)	\$2,121,000	\$1,737,000	\$1,302,000	\$1,238,000
Gain/Loss due to Additional Employer Contributions (Lump Sum Contribution)			\$2,472,000	\$1,161,000	\$13,274,000
Gain/Loss due to Adoption of 40% CPI-based COLA			(\$2,472,000)		
Gain/Loss due to Change in Actuarial Assumptions and Methods	\$4,364,000		(\$3,189,000)		
Gain/Loss due to Greater/Less than Expected Salary Increases			(\$605,000)	(\$1,113,000)	(\$303,000)
Gain/Loss due to Lower than Expected Payroll Variation		(\$590,000)			
Gain/Loss due to Greater/Less than Expected Withdrawals			\$74,000		
Gain/Loss due to Greater/Less than Expected Terminations and Withdrawals	(\$831,000)	\$956,000		\$190,000	\$611,000
Gain/Loss due to More/Fewer than Expected Terminations (Excluding Withdrawals)			(\$149,000)		
Gain/Loss due to Retirements Different than Expected (Includes Disability)		\$250,000	\$424,000	\$7,000	\$329,000
Gain/Loss due to Less than Expected Retiree Mortality			(\$197,000)	(\$975,000)	(\$143,000)
Gain/Loss due to Greater/Less than Expected Retiree Mortality		\$439,000			
Net Actuarial Gain/Loss from All Other Sources (Active Death, Proportionate Service, Etc.)	(\$597,000)	\$893,000	\$0	\$0	(\$74,000)
Actual Under/Overfunded Liability as of December 31 the Following Year	(\$11,690,000)	\$4,076,000	(\$1,161,000)	(\$13,274,000)	(\$267,000)

GASB STATEMENT 68

- Requires Collin County to report TCDRS pension liability/assets on the CAFR.
- Reporting requirements do not change how TCDRS plan funding is calculated.
- Repeating Cost of Living Adjustments (COLAs) increase the calculated rate of financial reporting, as they assume annual COLAs for all plan participants continuously into the future and require this pension liability to be reported on the CAFR.
- Any significant volatility experienced in pension liability will be reflected on the CAFR.
- The repeating COLA designation has no effect on the plan funding. It does not impact the plan's funded ratio or the required contribution rate, which are calculated for the purpose of funding the plan.

GASB STATEMENT 75

- Post employment benefits other than pensions (OPEB)
 - For financial reporting purposes only – does not impact costs.
 - We no longer have post employment benefits other than pension (OPEB), because we do not have retiree life insurance.

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, may 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 if a cost of living increase will be awarded 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.
 - **No COLA**

RETIREE COLA

- COLAs are funded over a 15-year period.
- Collin County has historically adopted various COLA options including:
 - 40% to 100% of CPI
 - 1% - 8% Flat Rate
 - No COLA
- The last COLA adopted was 40% CPI, which was approved for plan year 2018.
- As of the end of December 2019, there were 859 individuals collecting TCDRS benefits, an increase of 57 since the prior year. 368 active employees were eligible to retire, and 346 additional employees will be eligible to retire in the next 5 years.
- Pre-funded cost to add COLA in 2020:

Type of COLA	Pre-fund Cost
40% of CPI	\$5,142,848
60% of CPI	\$10,155,299
80% of CPI	\$15,516,943
1% Flat Rate	\$2,496,583

COURT DETERMINATION BUDGET INFORMATION

- Employer contribution rate to remain at 8%
- Payment of any lump sum contribution for unfunded liability
- Determination of any retiree COLA