



# TCDRS RETIREMENT PRESENTATION

FY2022 Budget Workshop

# BENEFITS PROVIDED

- Employee Deposit Rate 7%
- Matching Rate 200%\*
- Vesting Period 8 years
- Retirement Eligibility
  - Age 60 & 8 years of service
  - 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	2021	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\*\*All surveyed cities have adopted a repeating COLA that remains in effect until rescinded.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
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%
2020	10.5%

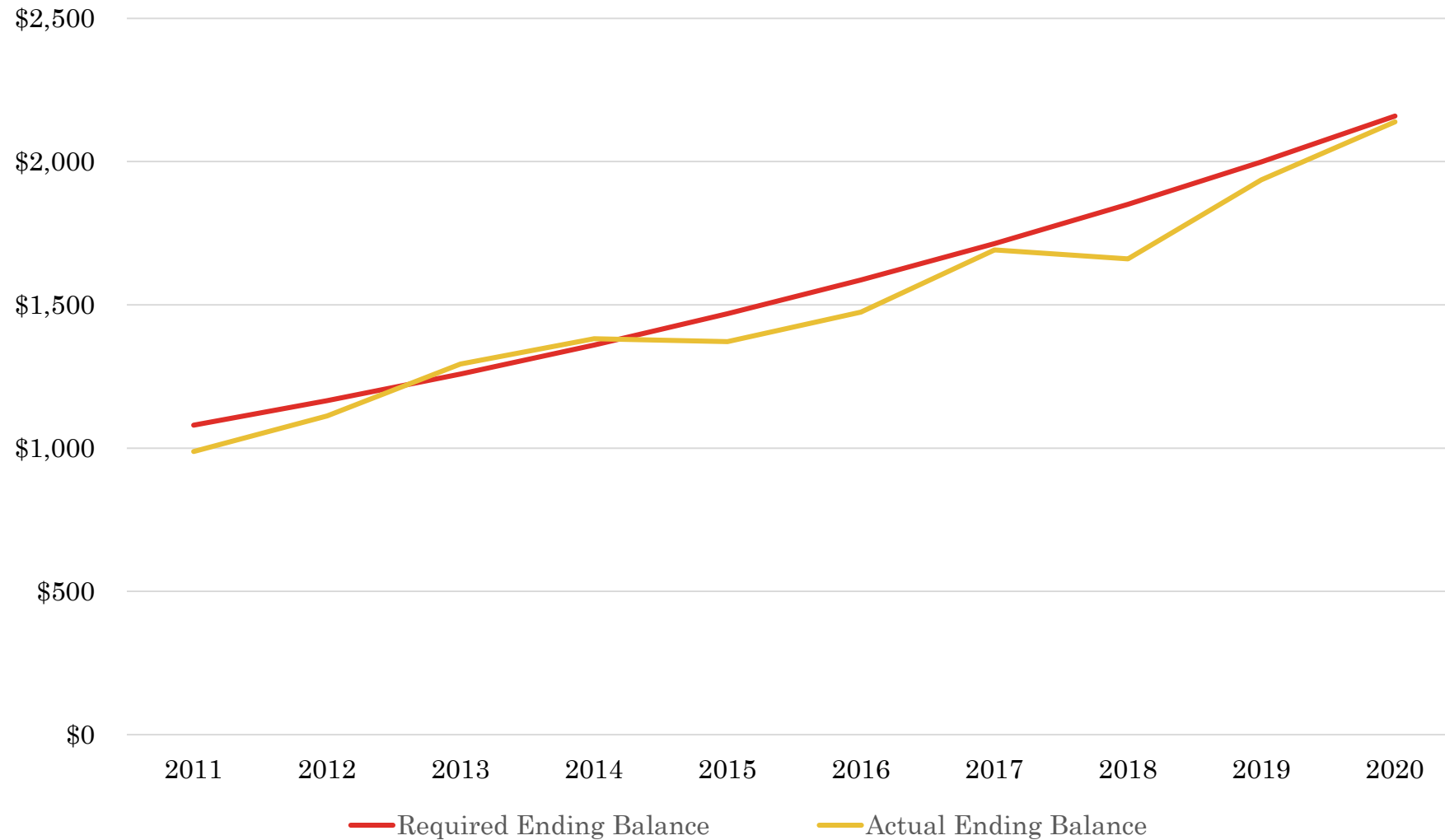
Total Fund Return		
	As of 12/2020	As of 12/2019
1 year	10.5%	16.6%
3 years	8.1%	9.5%
5 years	9.3%	7.0%
10 years	7.9%	8.1%
20 years	7.2%	7.2%
30 years	8.1%	8.0%

# 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
2011	\$1,000	\$80	\$1,080	\$1,000	-\$12	\$988
2012	\$1,080	\$86	\$1,166	\$988	\$124	\$1,112
2013	\$1,166	\$93	\$1,259	\$1,112	\$182	\$1,294
2014	\$1,259	\$101	\$1,360	\$1,294	\$88	\$1,382
2015	\$1,360	\$109	\$1,469	\$1,382	-\$10	\$1,372
2016	\$1,469	\$118	\$1,587	\$1,372	\$103	\$1,475
2017	\$1,587	\$127	\$1,714	\$1,475	\$217	\$1,692
2018	\$1,714	\$137	\$1,851	\$1,692	-\$32	\$1,660
2019	\$1,851	\$148	\$1,999	\$1,660	\$276	\$1,936
2020	\$1,999	\$160	\$2,159	\$1,936	\$203	\$2,139



# 10 YEAR RATE OF RETURN (ILLUSTRATION ONLY) - TCDRS

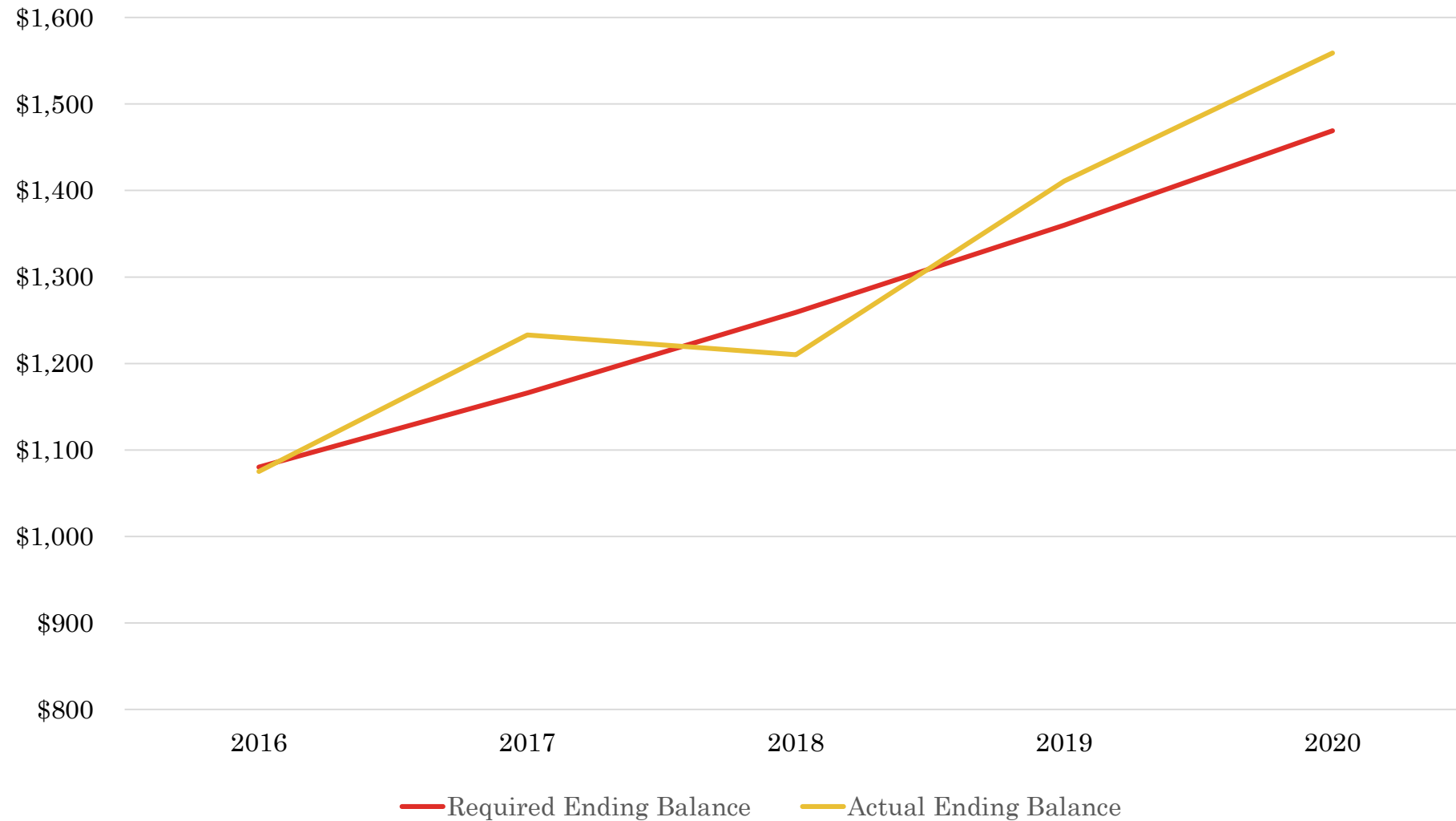


# 5 YEAR RATE OF RETURN (ILLUSTRATION ONLY) - TCDRS

Year	Required Account Value	Required Rate of Return	Required Ending Balance	Actual Account Value	Actual Rate of Return	Actual Ending Balance
2016	\$1,000	\$80	\$1,080	\$1,000	\$75	\$1,075
2017	\$1,080	\$86	\$1,166	\$1,075	\$158	\$1,233
2018	\$1,166	\$93	\$1,259	\$1,233	-\$23	\$1,210
2019	\$1,259	\$101	\$1,360	\$1,210	\$201	\$1,411
2020	\$1,360	\$109	\$1,469	\$1,411	\$148	\$1,559



# 5 YEAR RATE OF RETURN (ILLUSTRATION ONLY) - TCDRS

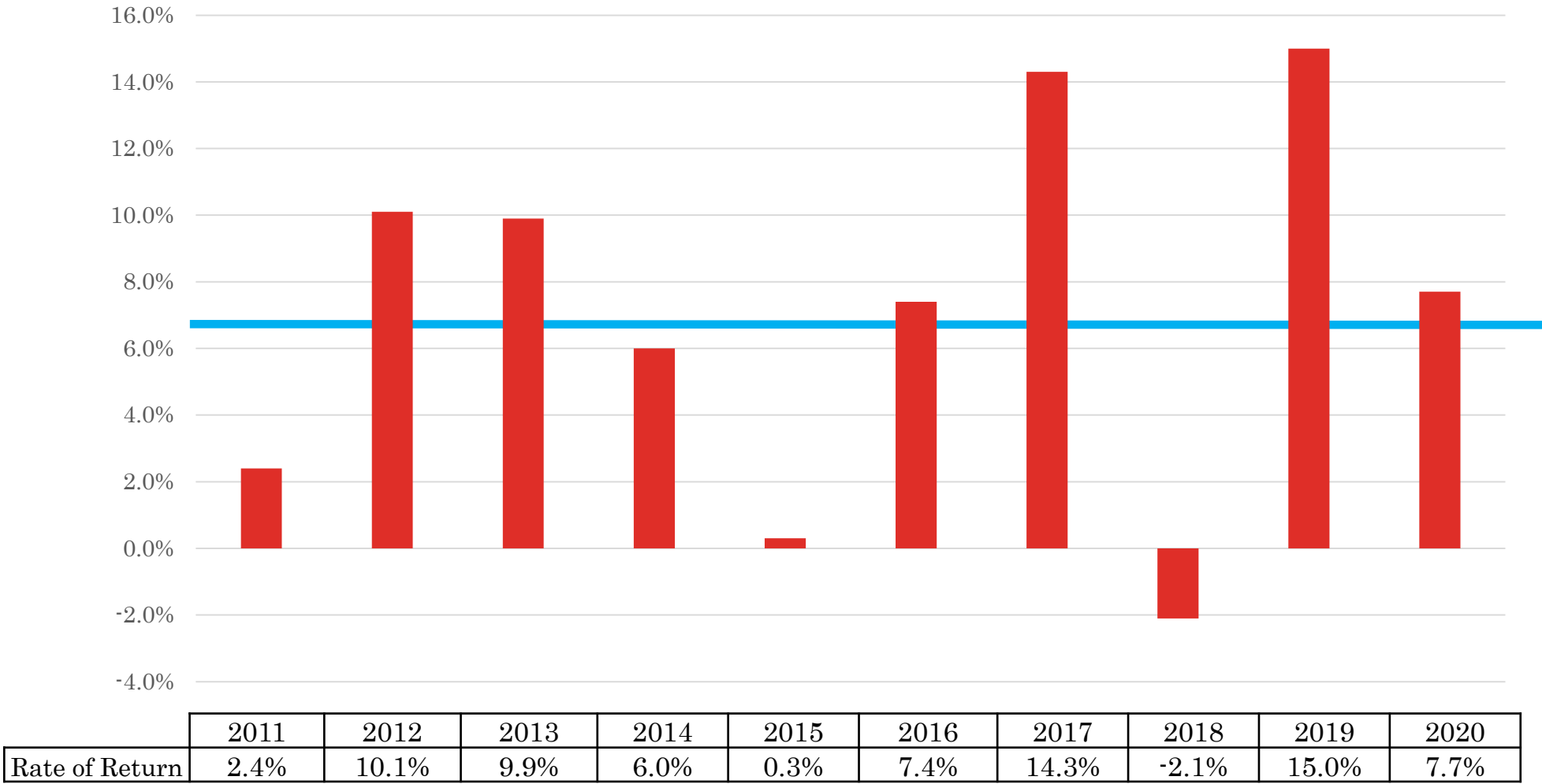


# PORTFOLIO RATE OF RETURN - TMRS

Year	Return
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%
2020	7.7%

Total Fund Return		
	As of 12/2020	As of 12/2019
1 year	7.7%	15.0%
3 years	6.5%	8.8%
5 years	8.0%	6.8%
10 years	6.7%	7.1%

# RATE OF RETURN (ILLUSTRATION ONLY) - TMRS



— 6.75% return required to cover guaranteed return for employee accounts

# PORTFOLIO RATE OF RETURN COMPARISON

Year	TCDRS Return	TMRS Return
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%
2020	10.5%	7.7%

Total fund return as of 12/2020		
	TCDRS	TMRS
1 year	10.5%	7.7%
3 years	8.1%	6.5%
5 years	9.3%	8.0%
10 years	7.9%	6.7%

# COST

Year	Normal Rate (%)	UAAL Rate (%)	COLA Rate (%)	Total (%)	County Contribution (%)
2013	7.56	0.45	.05	8.01	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
Made a lump sum payment of \$3,800,554 in August 2020					
2021	6.91	-0.05	.00	6.86	8.00
2022	8.47	1.39	.00	9.86	8.00* (budgeted)

\* Lump sum payment will be required to continue at 8%.

# TCDRS CHANGES

- Reduced the investment return assumption to 7.5% beginning in 2021.
- Rate mitigation – Distributed \$800 million from reserves.
- Reamortized entities unfunded liabilities over 20 years.



# COUNTY RATE COMPARISON

County	2021 Required Rate	2021 Elected Rate	2022 Required Rate
Collin	6.86%	8.00%	9.86%
Bexar	13.63%	13.86%	14.44%
Dallas	13.09%	N/A	13.93%
Denton	13.61%	N/A	14.62%
El Paso	18.01%	N/A	18.63%
Fort Bend	12.33%	N/A	13.45%
Harris	14.61%	15.10%	15.70%
Hidalgo	12.50%	N/A	13.03%
Montgomery	10.90%	12.27%	12.71%
Tarrant	13.50%	19.50%	13.86%
Travis	16.08%	16.19%	17.17%
Williamson	14.56%	N/A	16.00%

# CITY RATE COMPARISON

City	2021 Required Rate	2022 Required Rate
Allen	14.51%	14.30%
Frisco	14.54%	14.36%
McKinney	15.04%	15.13%
Plano	16.68%	16.35%
Richardson	14.80%	14.07%
Wylie	15.50%	15.39%

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
2011	Standard Payment Lump Sum Payment	\$11,699,770 \$35,500,000	1790	\$6,536 \$19,832
2012	Standard Payment Lump Sum Payment	\$6,702,402 \$2,045,000	1811	\$3,701 \$1,129
2013	Standard Payment Lump Sum Payment	\$7,437,259 \$11,608,062	1824	\$4,077 \$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 Lump Sum Payment	\$8,045,603 \$2,471,616	1943	\$4,141 \$1,272
2018	Standard Payment Lump Sum Payment	\$8,721,011 \$1,160,641	1943	\$4,488 \$597
2019	Standard Payment Lump Sum Payment	\$8,839,887 \$13,274,384	2010	\$4,398 \$6,604
2020	Standard Payment Lump Sum Payment	\$9,826,263 \$3,800,554	1986	\$4,948 \$1,914
2011 - 2020	Total Payments	\$153,375,856	1891	\$81,108

# UNFUNDED LIABILITY UPDATE

- As of December 2020, our plan has \$21,536,178 of unfunded liability using the Five-year Asset Recognition method which is a funded ratio of 96.8%.
- If an Immediate Asset Recognition method were used instead of a delayed asset recognition the unfunded liability would be \$24,080,153, which is a funded ratio of 96.4%.
- The minimum required contribution rate for 2022 is 9.86%.
- TCDRS exceeded their investment return goal of 8% for 2020. Actual return was 10.5%.
- Actuarial gains and losses are smoothed over 5 years and will be recognized over time.

# LIABILITY HISTORY

Calendar Year End	Budget Year	Five-year Asset Recognition Unfunded Liability	Five-year Asset Recognition Funded Percentage	Immediate Asset Recognition Unfunded Liability	Immediate Asset Recognition Funded Percentage
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 (paid to fund COLA)					
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					
2020	2022	\$21,536,178	96.8%	\$24,080,153	96.4%
Made a lump sum payment of \$3,800,554 in August 2020					

# UNFUNDED LIABILITY

<b>Actual Unfunded Liability as of 12/31/2019</b>	<b>\$267,254</b>
Adjustment due to Decrease in Discount Period	\$302,903
Scheduled OAAL Drawdown	(\$218,851)
Recognition of Investment Gains and Losses for 2016-2020 (Using the Five-year Recognition Method)	\$938,067
Gain due to Additional Employer Contributions (Elected Rate greater than Required Rate)	(\$1,326,544)
Gain due to Additional Employer Contributions (Lump Sum Contribution)	(\$3,800,554)
Loss due to changes in Assumptions & Methods	\$25,257,661
Loss due to payroll and salary increase variations	\$1,574,395
Gain due to Termination and Withdrawal Experience	(\$437,598)
Gain due to Retirements Different than Expected (Includes disability)	(\$60,197)
Gain due to Less than Expected Retiree Mortality	(\$1,099,343)
Net Actuarial Gain from All Other Sources (Active death, proportionate service, etc.)	\$138,985
<b>Actual Underfunded Liability as of 12/31/2020</b>	<b>\$21,536,178</b>



# UNFUNDED LIABILITY HISTORY

	2015	2016	2017	2018	2019
Actual Over/Underfunded Liability as of December 31	\$11,690,000	\$4,076,000	(\$1,161,000)	(\$13,274,000)	\$267,254
Adjustment due to Decrease in Discount Period	\$935,000	\$326,000	(\$93,000)	(\$1,062,000)	\$302,903
Scheduled OAAL Drawdown	(\$1,248,000)	(\$841,000)	(\$200,000)	(\$42,000)	(\$218,851)
Recognition of Investment Gains and Losses for Previous Five Years (Using the Five-year Recognition Method)	(\$11,370,000)	(\$2,817,000)	(\$12,392,000)	(\$821,000)	\$938,067
Gain/Loss due to Additional Employer Contributions (Elected Rate greater than Required Rate)	\$2,121,000	\$1,737,000	\$1,302,000	\$1,238,000	(\$1,326,544)
Gain/Loss due to Additional Employer Contributions (Lump Sum Contribution)		\$2,472,000	\$1,161,000	\$13,274,000	(\$3,800,554)
Gain/Loss due to Adoption of 40% CPI-based COLA		(\$2,472,000)			
Gain/Loss due to Change in Actuarial Assumptions and Methods		(\$3,189,000)			\$25,257,661
Gain/Loss due to Greater/Less than Expected Salary Increases	(\$590,000)	(\$605,000)	(\$1,113,000)	(\$303,000)	\$1,574,395
Gain/Loss due to Greater/Less than Expected Terminations and Withdrawals	\$956,000	(\$75,000)	\$190,000	\$611,000	(\$437,598)
Gain/Loss due to Retirements Different than Expected (Includes Disability)	\$250,000	\$424,000	\$7,000	\$329,000	(\$60,197)
Gain/Loss due to Greater/Less than Expected Retiree Mortality	\$439,000	(\$197,000)	(\$975,000)	(\$143,000)	(\$1,099,343)
Net Actuarial Gain/Loss from All Other Sources (Active Death, Proportionate Service, Etc.)	\$893,000	\$0	\$0	(\$74,000)	\$138,985
Actual Under/Overfunded Liability as of December 31 the Following Year	\$4,076,000	(\$1,161,000)	(\$13,274,000)	(\$267,000)	\$21,536,178

# 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.
- Any significant volatility experienced in pension liability will be reflected on the CAFR.
- 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.
- 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.

# 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 2020, there were 889 individuals collecting TCDRS benefits, an increase of 40 since the prior year. 391 active employees were eligible to retire, and 349 additional employees will be eligible to retire in the next 5 years.

## Pre-funded cost to add COLA in 2021:

Type of COLA	Pre-fund Cost
40% of CPI	\$6,585,655
60% of CPI	\$12,377,197
80% of CPI	\$18,493,773
1% Flat Rate	\$2,712,116

# ALTERNATE RATE OPTIONS

	Current	Option 1	Option 2	Option 3	Option 4
Required Rate	9.86%	9.50%	9.01%	7.95%	7.07%
Lump Sum Required	N/A	\$6,200,000	\$14,500,000	\$35,000,000	\$55,000,000
Funded Ratio	96.8%	97.7%	98.8%	101.6%	104.4%
Unfunded/ (Overfunded) Liability	\$21,536,178	\$15,768,736	(\$8,047,806)	(\$11,021,962)	(\$29,626,613)

## Additional Options:

- Paying the unfunded liability using Five-year Asset Recognition of \$21,536,178 will decrease the required rate to 8.60%.
- Paying the unfunded liability from the Immediate Asset Recognition method of \$24,080,153 will decrease the required rate to 8.46%.

# COURT DETERMINATION BUDGET INFORMATION

- Employer contribution rate
- Payment of any lump sum contribution for unfunded liability
- Determination of any retiree COLA