



# Collin County TCDRS Retirement Plan

Amy Bishop and Erika Nieto

November 5, 2018

# TCDRS Does Retirement Right

Here's why:

- ★ Savings-based benefits
- ★ Responsible plan funding
- ★ Flexibility and local control



294,000

members and retirees



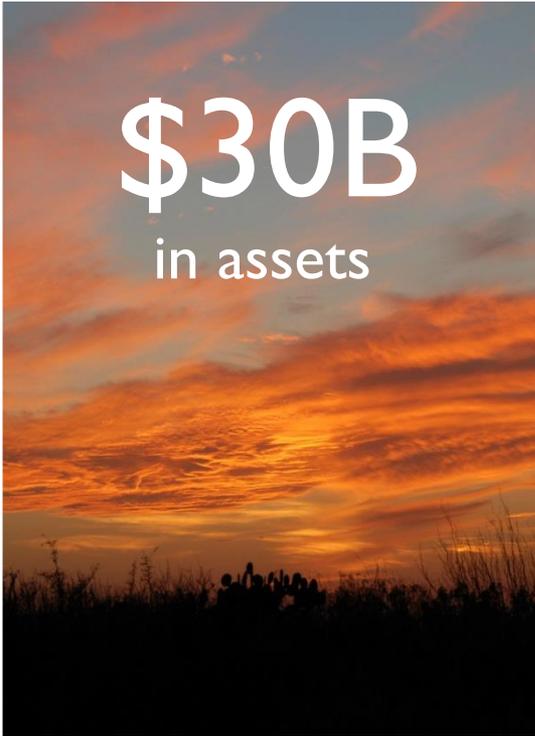
760

employers



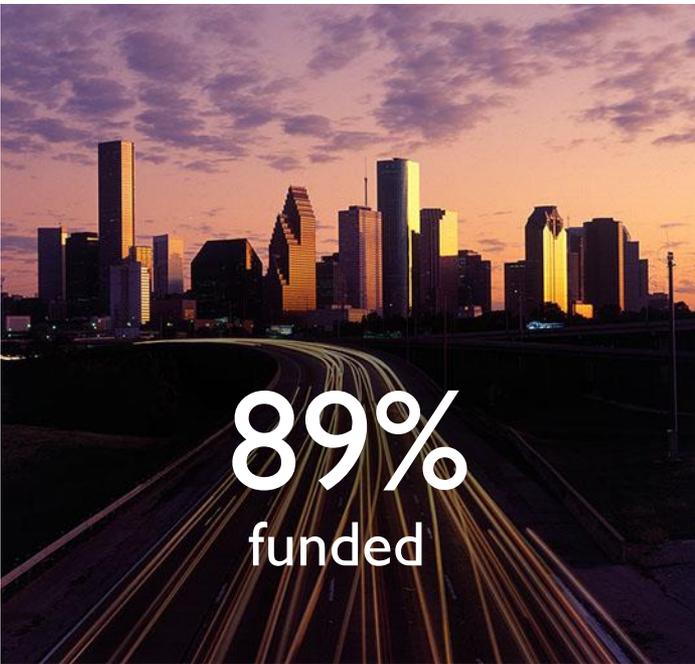
9.1%

35-year return



\$30B

in assets



89%

funded

# Benefits Texas

- ★ \$1.4 billion in benefits paid in 2017
- ★ Benefits paid in Collin County:
  - \$24,326,771
- ★ Supports:
  - \$2 billion in total economic output
  - 14,752 jobs created
  - \$1.1 billion added to Texas GDP

# Average Employee and Retiree Profile

## Your employees:

- ★ 44 years old
- ★ 10 years of TCDRS service
- ★ \$50,592 average account balance

## Your retirees:

- ★ 62 years old at retirement
- ★ 18 years of service at retirement
- ★ \$28,900 in TCDRS benefits annually

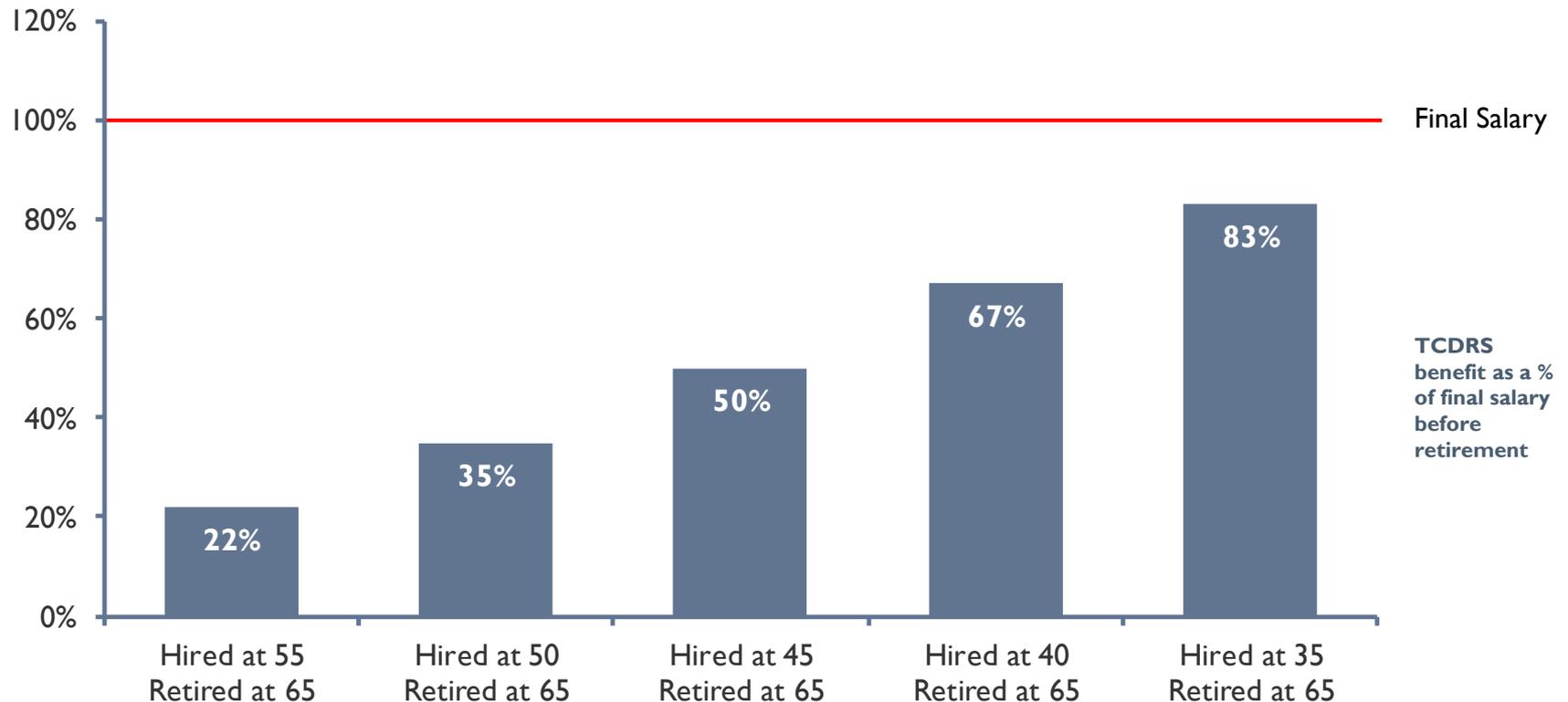
Based on actuarial valuation data as of Dec. 31, 2017

# Your Plan of Benefits

- ★ Employee deposit rate: 7%
- ★ Employer matching rate: 200%
- ★ Vesting: 8 years of service
- ★ Retirement eligibility:
  - Age 60 with 8 years of service
  - Rule of 75 (must be vested)
  - 30 years of service at any age
- ★ Partial Lump-Sum Distribution
- ★ Group Term Life: Active employees and retirees

# What You Provide at Retirement

The following chart shows the estimated TCDRS benefit as a percentage of final salary prior to retirement for a new hire:



## Assumptions

- Employees are new hires and will work for you until retirement.
- Your current plan provisions will remain in effect through employee's retirement.
- Current laws governing TCDRS will continue as they are.
- Graded salary scales give bigger raises early in careers, with smaller raises later in careers (see Summary Valuation Report at [www.tcdrs.org](http://www.tcdrs.org)).
- Based on Single Life benefit.

# You Fund Your Plan Responsibly

- ★ Employer rate for 2019: 6.95% of payroll.
- ★ Elected rate: 8.00% of payroll.
- ★ Your rate is doing two things:
  - Investing for your current employees' future benefits
  - Paying down your unfunded liabilities within 20 years
- ★ Funded ratio is 99.8% as of Dec. 31, 2017.

# Your Plan Rate Change: 2018 to 2019

<b>Reason for change</b>	<b>2018–2019</b>
<b>2018 Rate</b>	<b>6.77%</b>
Plan changes adopted	TBD
Investment return	0.18%
Elected rate / lump sum	-0.07%
Demographic / other changes	0.03%
Assumptions / methods	0.04%
<b>2019 Rate</b>	<b>6.95%</b>

# You Make the Call Each Year

## 2019 Contribution Rates\*

		Employee Deposit Rate			
		7%	6%	5%	4%
Matching Rate	250%	9.54%	7.87%	6.28%	4.73%
	225%	8.25%	6.78%	5.41%	4.05%
	200%	6.95%	5.75%	4.56%	3.36%
	175%	5.74%	4.72%	3.69%	2.67%
	150%	4.54%	3.69%	2.83%	1.98%
	125%	3.34%	2.66%	1.98%	1.29%
	100%	2.13%	1.61%	1.11%	0.60%

\* All benefit changes presented are prospective only.



# Long-Term Investors

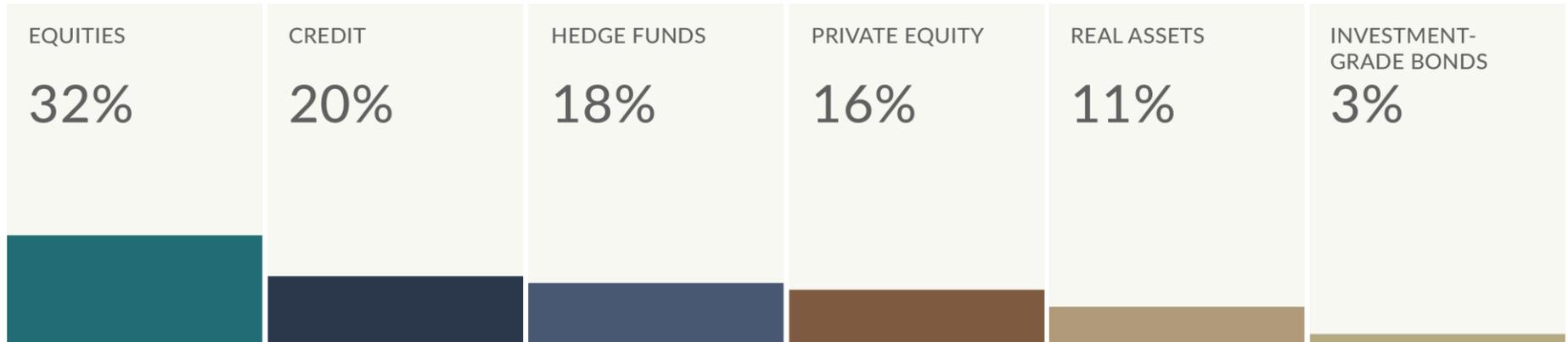
# Investment Earnings Fund Benefits



Estimated

# Diversified Portfolio Reduces Risk

As of April 2018



Target Asset Allocation

# Investment Returns (Net of All Fees)

As of Dec. 31, 2017

<b>Annualized Returns</b>	<b>2017 Return</b>	<b>5 Year</b>	<b>10 Year</b>	<b>15 Year</b>	<b>20 Year</b>	<b>25 Year</b>	<b>30 Year</b>	<b>35 Year</b>
<b>Total Fund</b>	<b>14.7%</b>	<b>8.8%</b>	<b>5.6%</b>	<b>7.8%</b>	<b>7.1%</b>	<b>7.6%</b>	<b>8.4%</b>	<b>9.1%</b>
<b>Benchmark</b>	<b>14.7%</b>	<b>7.4%</b>	<b>4.6%</b>	<b>7.1%</b>	<b>6.3%</b>	<b>6.6%</b>	<b>7.3%</b>	<b>8.0%</b>

# Achieving Long-term Investment Goals (Net of All Fees)





# Collin County Economic Rate Modeling



# Economic Rate Modeling

- ★ As your plan matures, the assets grow large relative to your payroll.
- ★ This is a **good thing** because asset growth is essential for funding your benefits and higher growth lowers your overall rate.
- ★ However, maturing does mean that your rate will be more volatile from year to year.
- ★ This is because variation in investment results on your larger pool of invested assets is absorbed by your smaller payroll.

# Rate Modeling Studies

Can help you:

- ★ Get an idea of how much your rate might change under different scenarios
- ★ Determine how likely it is that an elected rate will hold
- ★ See how elected rates and benefit changes can impact future rate stability

Not for budgeting purposes

# Assumptions

- ★ This study assumes the following:
  - No changes in benefits
  - No changes in TCDRS asset allocation
  - No changes in the capital market assumptions
- ★ The further the projection is in the future, the more uncertainty

# Economic Rate Modeling

- ★ Models rates under various economic scenarios.
- ★ Uses TCDRS' asset allocation and capital market assumptions. Capital market assumptions are forward-looking projections of the returns, volatility and correlation of each asset class.
- ★ Runs thousands of multiyear simulations to determine up, average and down market investment return scenarios.

# Annual Geometric Returns

Annual Geometric Returns Net of Expenses for Period Beginning in 2018\*

<b>Year Period Ending</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Down Market (75 <sup>th</sup> Percentile)	-0.16%	2.16%	3.21%	3.84%
Average Market (50 <sup>th</sup> Percentile)	8.00%	8.00%	8.00%	8.00%
Up Market (25 <sup>th</sup> Percentile)	16.82%	14.16%	13.00%	12.32%

\*Based on current TCDRS capital market assumptions and target asset portfolio



# Study Results

# Current Plan - 8% Elected Rate & Additional Lump Sum Contribution

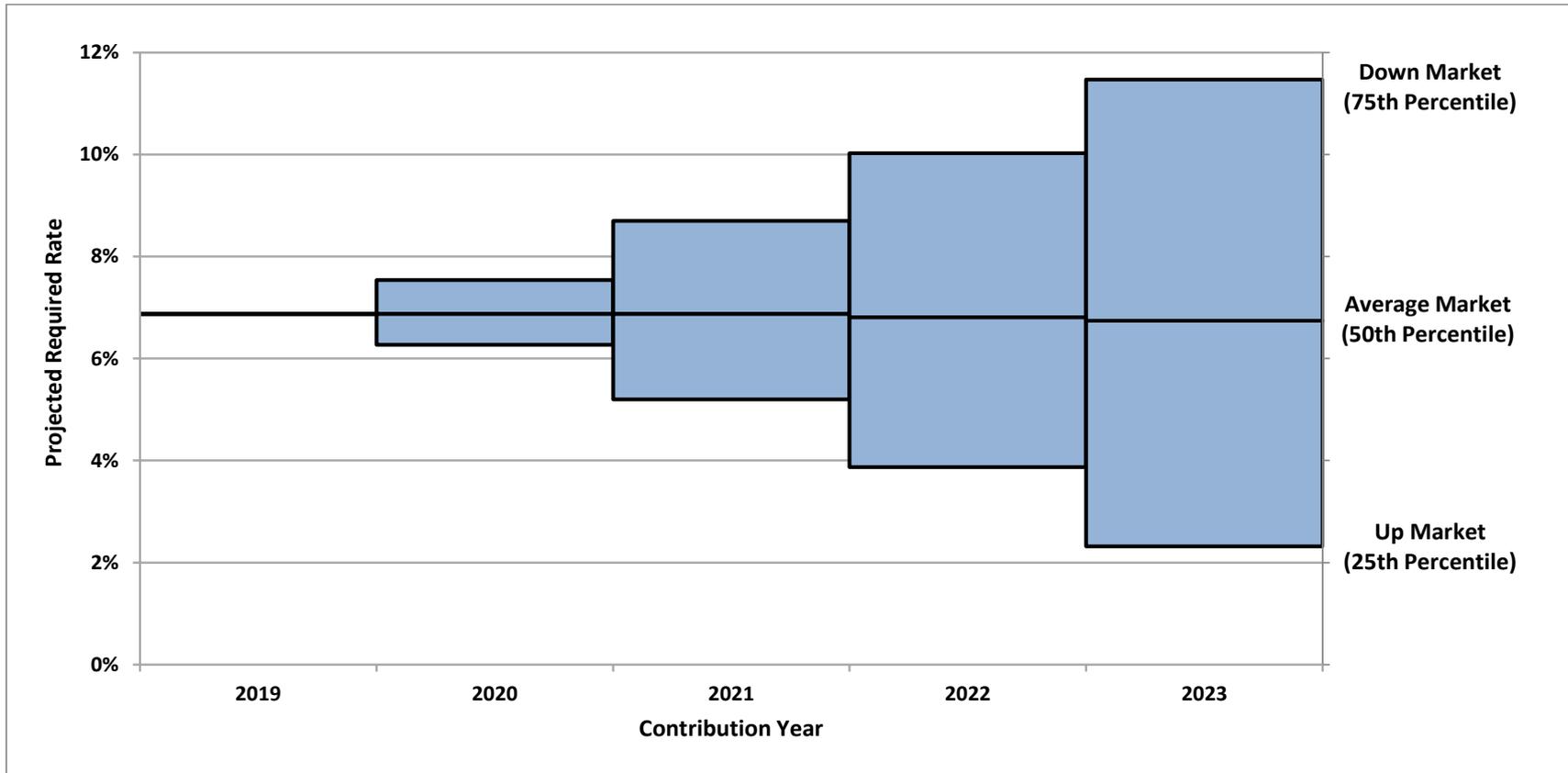
Projected Required Rate for Year\*

	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
Down Market (75 <sup>th</sup> Percentile)	6.88%	7.54%	8.70%	10.03%	11.47%
Average Market (50 <sup>th</sup> Percentile)	6.88%	6.88%	6.88%	6.81%	6.74%
Up Market (25 <sup>th</sup> Percentile)	6.88%	6.27%	5.20%	3.87%	2.32%

\*Projections Based on December 31, 2017 actuarial valuation. These results assume no changes to your plan of benefits, continuation of your 8% elected rate and an additional employer contribution in 2018 of \$1,160,641.

# Current Plan - 8% Elected Rate & Additional Lump Sum Contribution (continued)

## Projected Required Rate for Year



# Alternative Plan I – 9.5% Elected Rate & Additional Lump Sum Contribution

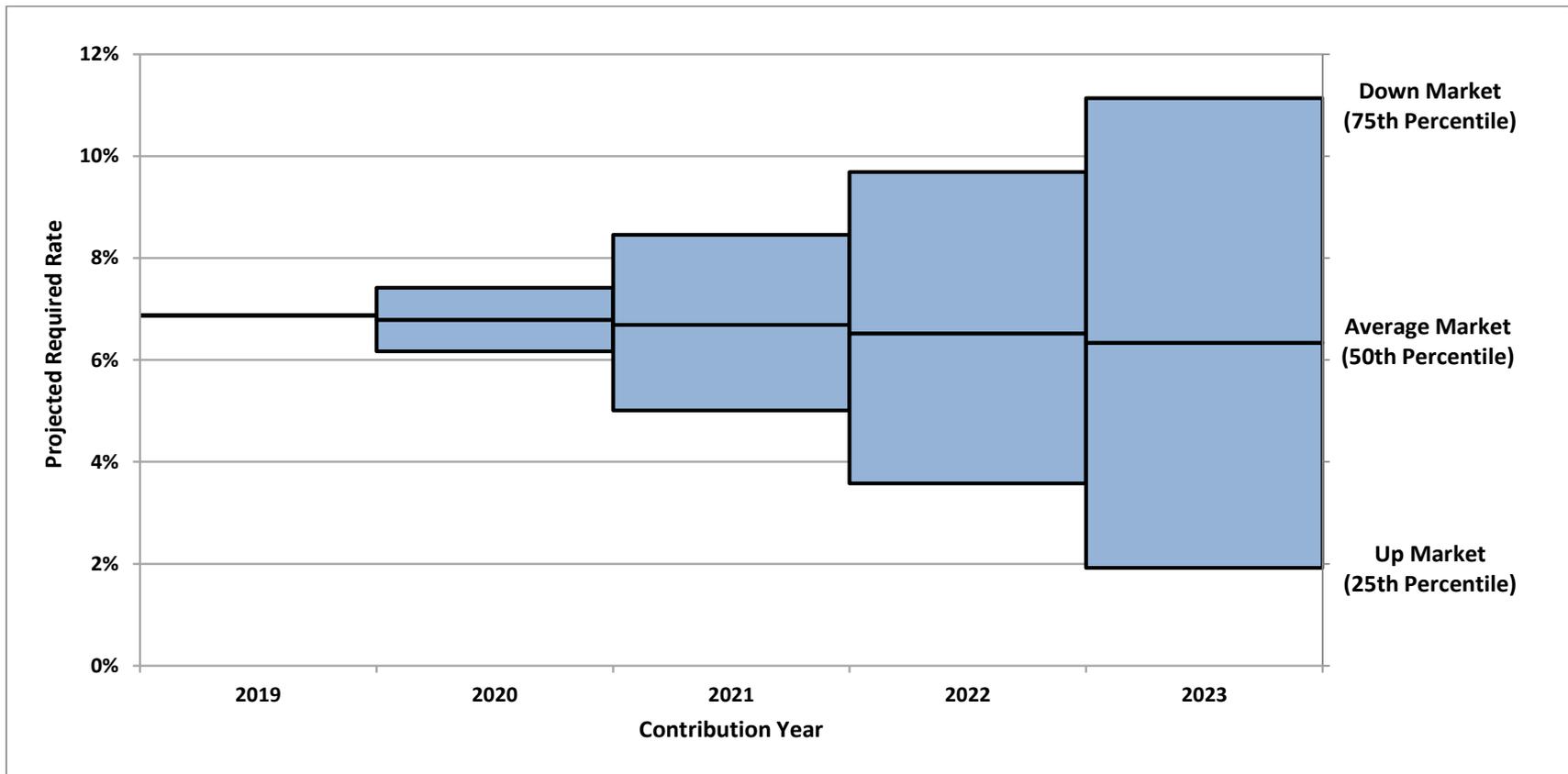
## Projected Required Rate for Year\*

	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
Down Market (75 <sup>th</sup> Percentile)	6.88%	7.42%	8.46%	9.69%	11.14%
Average Market (50 <sup>th</sup> Percentile)	6.88%	6.79%	6.69%	6.52%	6.34%
Up Market (25 <sup>th</sup> Percentile)	6.88%	6.17%	5.01%	3.58%	1.92%

\* Projections Based on December 31, 2017 actuarial valuation. These results assume employer makes an additional employer contribution in 2018 of \$1,160,641, adopts a 9.5% elected rate beginning in 2019 and no changes to plan of benefits.

# Alternative Plan I – 9.5% Elected Rate & Additional Lump Sum Contribution (continued)

Projected Required Rate for Current Plan with AEC and 9.5% elected rate



# Alternative Plan 2 – 11% Elected Rate & Additional Lump Sum Contribution

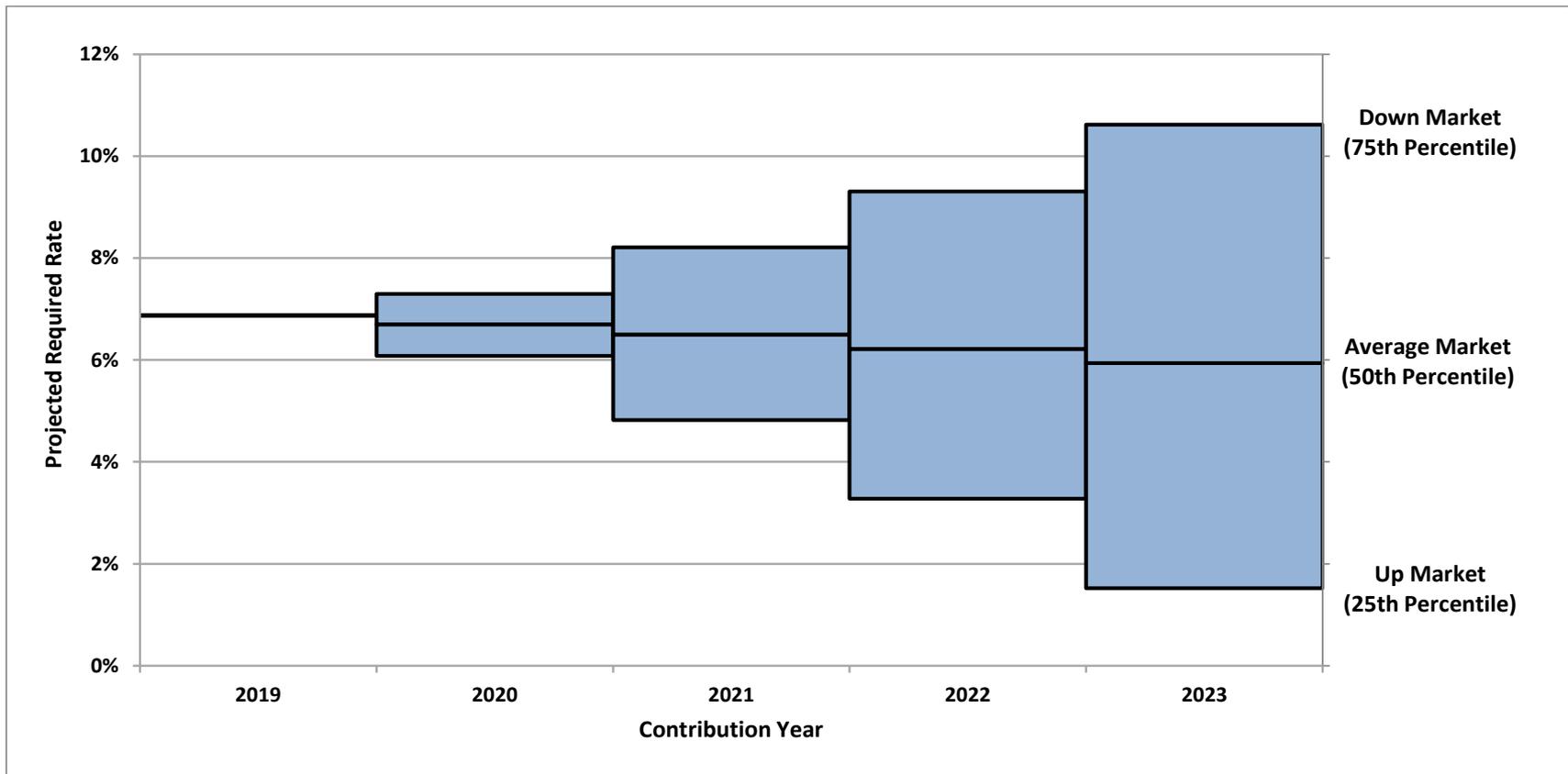
## Projected Required Rate for Year\*

	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
Down Market (75 <sup>th</sup> Percentile)	6.88%	7.30%	8.21%	9.31%	10.62%
Average Market (50 <sup>th</sup> Percentile)	6.88%	6.70%	6.50%	6.22%	5.94%
Up Market (25 <sup>th</sup> Percentile)	6.88%	6.08%	4.82%	3.28%	1.52%

\* Projections Based on December 31, 2017 actuarial valuation. These results assume employer makes an additional employer contribution in 2018 of \$1,160,641, adopts an 11% elected rate beginning in 2019 and no changes to plan of benefits.

# Alternative Plan 2 – 11% Elected Rate & Additional Lump Sum Contribution (continued)

Projected Required Rate for Current Plan with AEC and 11% elected rate





Questions?

[www.tcdrs.org](http://www.tcdrs.org)