Collin County
TCDRS Retirement Plan

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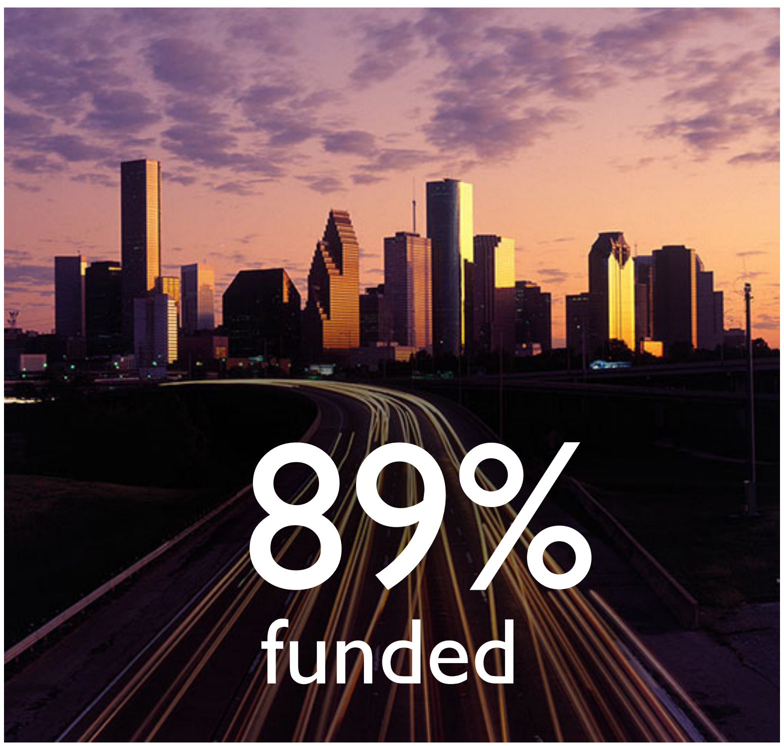
700
employers
NATIONAL MAP COMPANY'S
Map of
TEXAS


270,000
members and retirees


89%
funded


9.6%
35-year return

TCDRS Does Retirement Right

Here's why:

★ Savings-based benefits

★ Responsible plan funding

★ Flexibility and local control

TCDRS Does Retirement Right

- ★ Savings-based benefits
  - – Members save over their careers for retirement
  - – Savings earn 7%, set by statute
  - – At retirement, benefit is based on savings account balance and employer matching

Benefits Texas

★ $1.2 billion in benefits paid in 2015

★ Benefits paid in Collin County:
- $21,819,342

★ Supports:
- $1.6 billion in total economic output
- 13,592 jobs created
- $962 million added to Texas GDP

Average Employee and Retiree Profile

Your employees:

- ★ 44 years old
- ★ 11 years of TCDRS service
- ★ $49,733 average account balance

Your retirees:

- ★ 62 years old at retirement
- ★ 17 years of service at retirement
- ★ $26,300 in TCDRS benefits annually

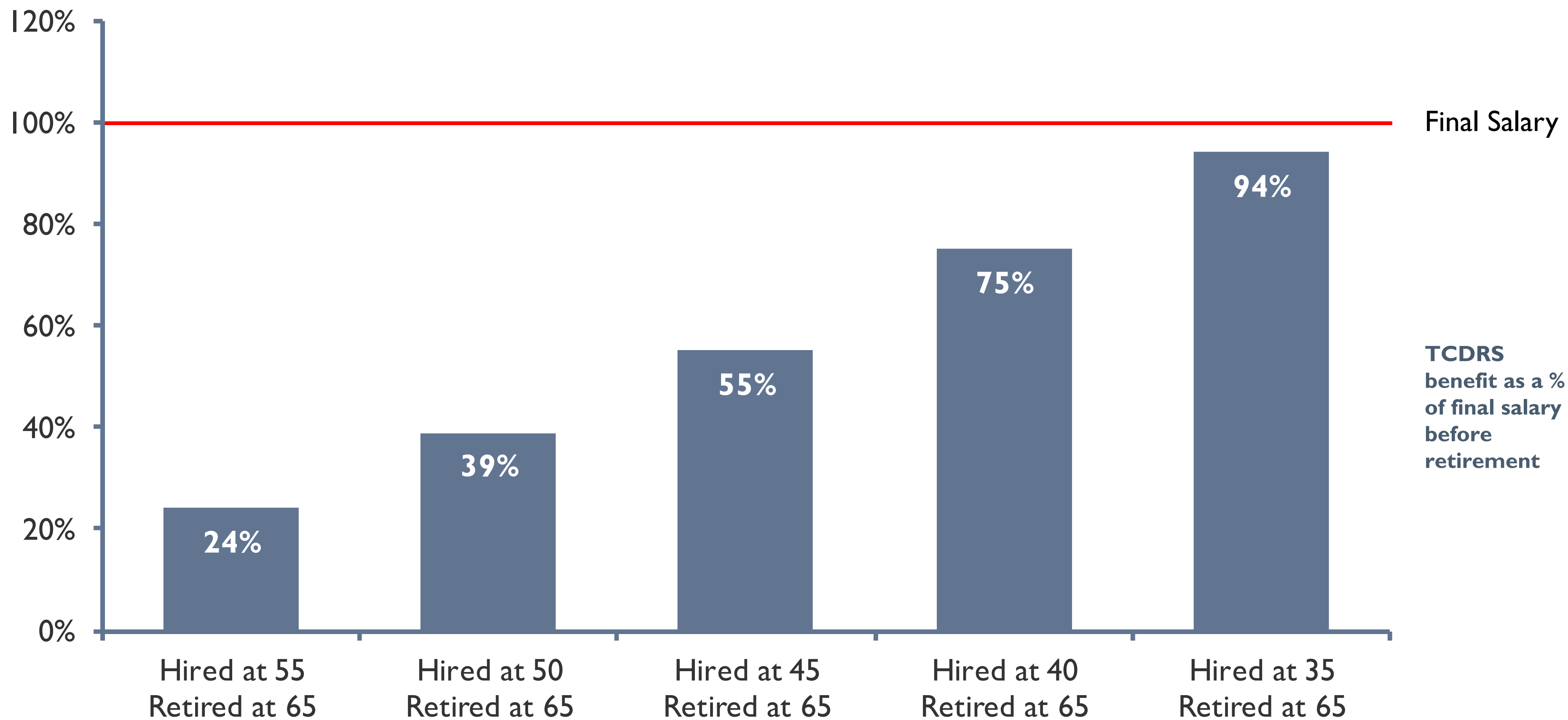
Based on actuarial valuation data as of Dec. 31, 2015

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

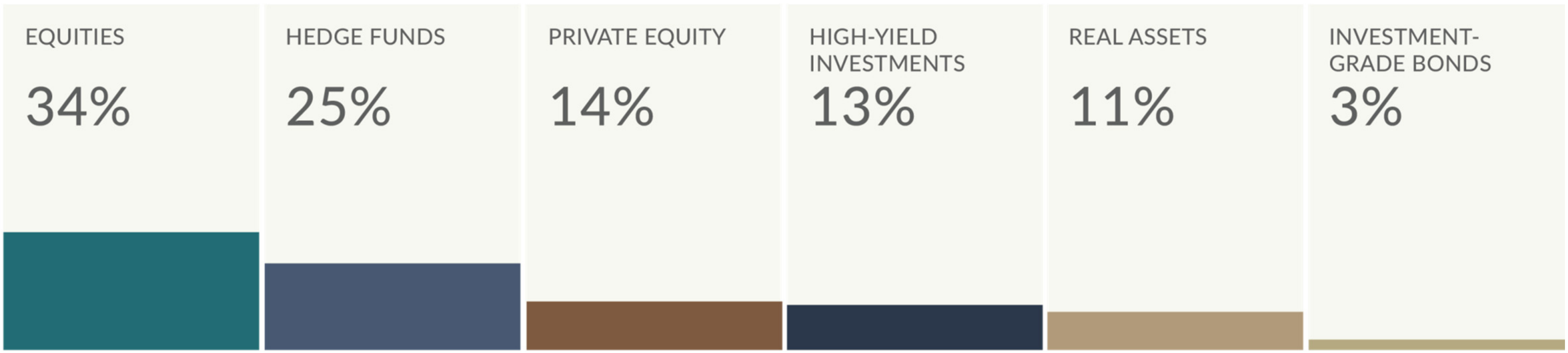
- Employees are new hires and will work for you until retirement.
- Your current plan provisions will remain in effect through employee's retirement.
- Current laws governing TCDRS will continue as they are.
- Graded salary scales give bigger raises early in careers, with smaller raises later in careers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

Investment Earnings Fund Benefits

Estimated

Diversified Portfolio Reduces Risk

As of April 2016



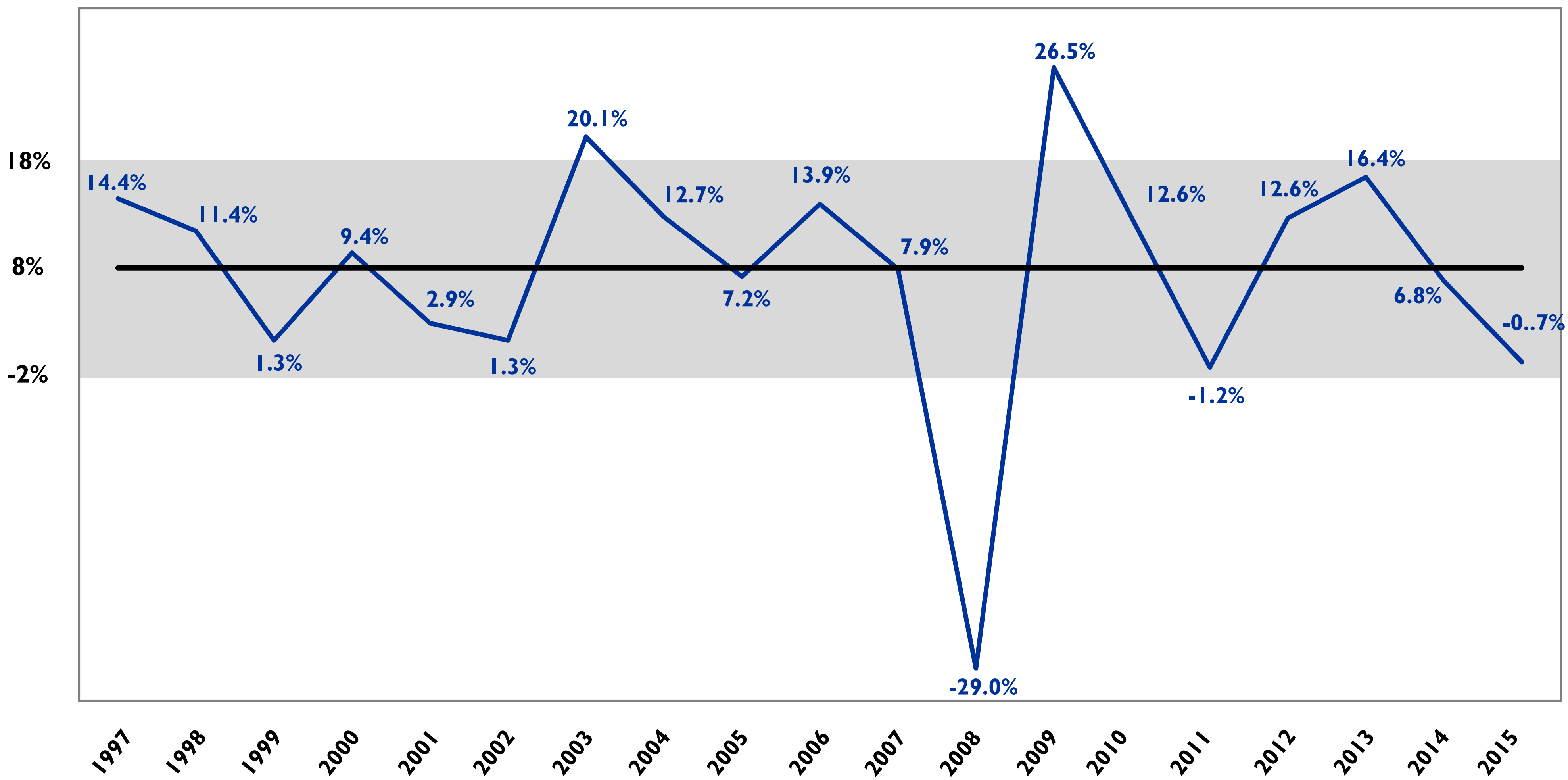
Target Asset Allocation

Investment Returns (Net of All Fees)

As of Dec. 31, 2015

Annualized Returns	2015 Return	5 Year	10 Year	15 Year	20 Year	25 Year	30 Year	35 Year
Total Fund	-0.7%	6.6%	5.5%	6.6%	6.8%	7.8%	8.3%	9.6%
Benchmark	-2.5%	4.9%	4.6%	5.7%	5.9%	6.6%	7.1%	8.4%

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



You Fund Your Plan Responsibly

- ★ Employer rate for 2017: 6.22% 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

Your Plan Rate Change: 2016 to 2017

Reason for change	2016–2017
2016 Rate	**5.71%**
Plan changes adopted	TBD
Investment return	0.56%
Elected rate / lump sum	-0.15%
Demographic / other changes	-0.12%
Assumptions / methods	0.22%
2017 Rate	**6.22%**

Your Plan is 103.1% Funded

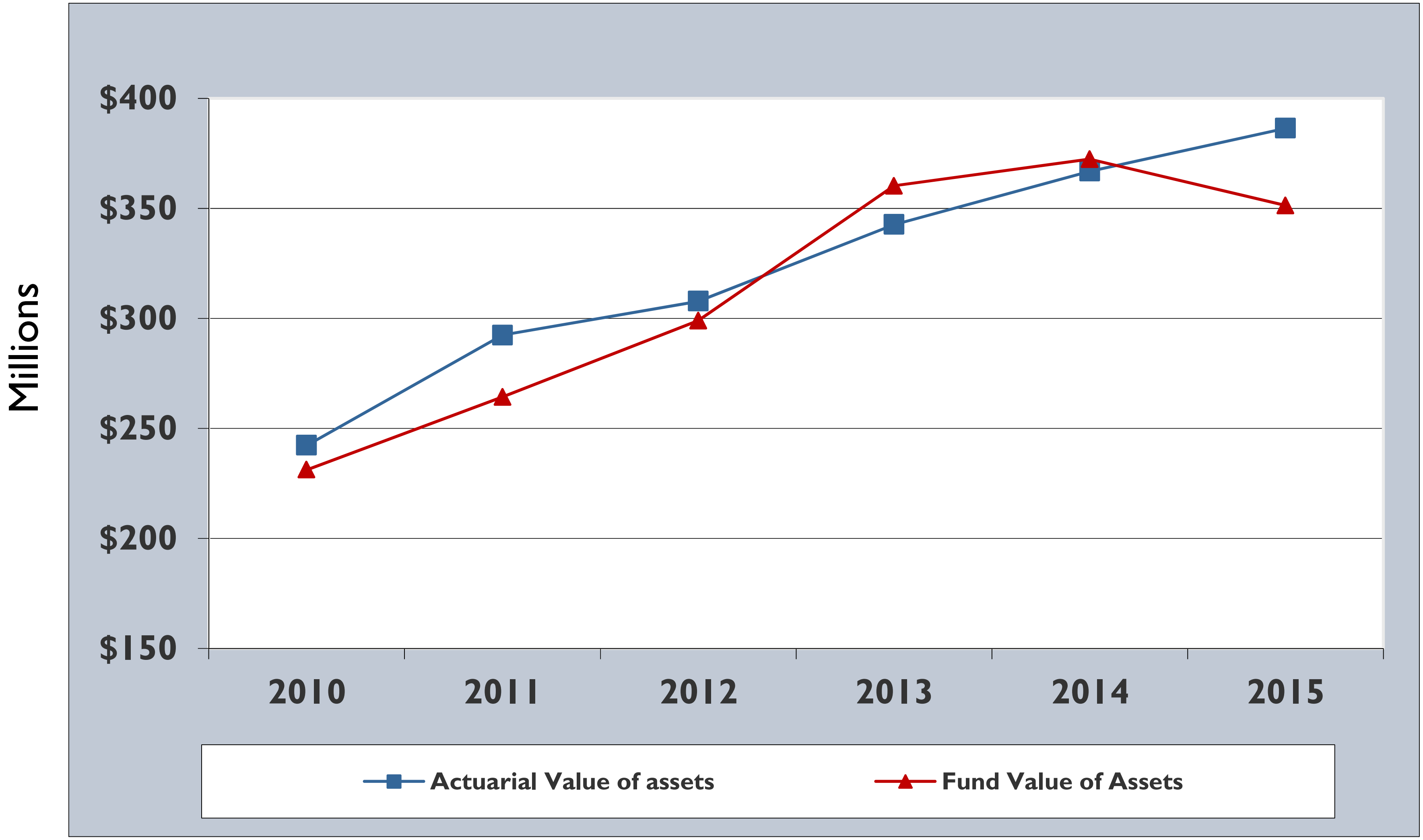
As of Dec. 31, 2015:

Plan Liabilities	$ 374,689,371
Plan Assets	$ 386,379,018
Overfunded Accrued Actuarial Liability	$ (11,689,647)

OAAL Reconciliation: 2014 to 2015

OAAL as of December 31, 2014	**$(21,505,000)**
Adjustment due to Decrease in Discount Period	(1,935,000)
Scheduled OAAL Drawdown	1,076,000
Recognition of Investment Gains and Losses for 2011 - 2015	9,337,000
Gain due to Additional Employer Contributions	(1,599,000)
Loss due to Change in Assumptions and Methods	4,364,000
Gain due to Greater than Expected Terminations and Withdrawals	(831,000)
Net Actuarial Gain From All Other Sources	(597,000)
OAAL as of December 31, 2015	**$(11,690,000)**

Actuarial Value of Assets Smoothed to Provide Rate and Benefit Stability



*Results provided by Milliman. Assumes all future actuarial assumptions are met including 8% investment return.

Comparison with Fund Value of Assets

	Plan Liabilities	Plan Assets	(OAAL)/UAAL (Liabilities – Assets)	Funded Ratio (Assets / Liabilities)
Five-year Asset Recognition (current method)[1]	$374,689,371	$386,379,018	$(11,689,647)	103.1%
Immediate Asset Recognition[2]	$374,689,371	$351,221,330	$23,468,041	93.7%

1 **Five-year Asset Recognition:** Value of assets is based on recognizing actuarial asset gains and losses over five-year periods. This recognition method, currently in use at TCDRS, helps prevent large swings in required employer contribution rates by smoothing out the impact of year to year volatility in investment returns. In addition, it gives markets time to recover from large one-year market swings. This approach helps you to keep benefits and costs more stable.

2 **Immediate Asset Recognition:** Value of assets immediately recognizes actuarial asset gains and losses. These values do not reflect the current valuation method for your plan. With the immediate asset recognition method, year to year investment return volatility can cause large swings in required employer contribution rates, making budgeting for retirement plan costs much less predictable. In addition, using this method may over- or under-estimate the true cost of the plan especially after significant market volatility. Note that these results are different from your plan's funded status on a plan termination basis.

You Make the Call Each Year

2017 Contribution Rates*

		Employee Deposit Rate			
		7%	6%	5%	4%
Matching Rate	250%	8.68%	7.10%	5.53%	3.96%
	225%	7.45%	6.05%	4.65%	3.26%
	200%	6.22%	5.00%	3.77%	2.55%
	175%	4.99%	3.94%	2.89%	1.85%
	150%	3.76%	2.89%	2.02%	1.15%
	125%	2.53%	1.83%	1.15%	0.45%
	100%	1.31%	0.78%	0.26%	0.00%

* All benefit changes presented are prospective only.

Planning Cycle

We Are Here to Help!

- **Employer Services**
  - Information regarding plan options
  - Rate information and analysis
  - Special plan studies
- **Education opportunities**
  - Annual Conference: July 27–29, 2016
  - Free webinars
- **Contact information**
  - Phone: 800-651-3848
  - Email: EmployerServices@tcdrs.org
  - Website: www.tcdrs.org/employer

TEXAS COUNTY & DISTRICT RETIREMENT SYSTEM