

# PENSION FUNDED STATUS TRACKER

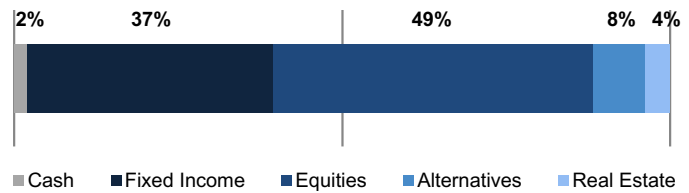
JANUARY 2018

## January 2018 Results

The first month of 2018 brought good fortune to the average corporate defined benefit pension plan as the funding level jumped by a whopping 4% in January:

- Asset classes had a mixed start to the year:
  - After a stellar 2017, equity markets witnessed strong performance in January and contributed the most to asset portfolio gains
  - However, bond markets failed to deliver and prices dropped as yields ticked upwards
- Decrease in liabilities:
  - The effective discount rate jumped 20 basis points in January sparking a sharp decline in liabilities
  - Corporate spreads tightened and offset only some of the decline in liabilities

## Asset Allocation



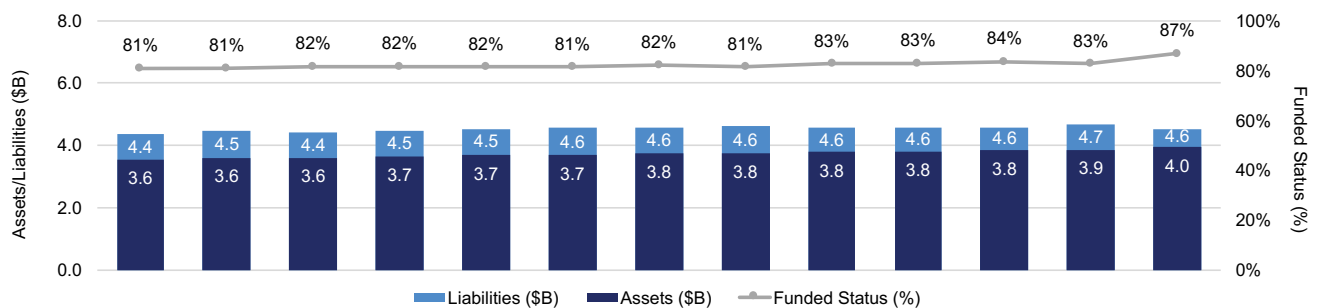
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As of January 31, 2018

## Key Metrics

Pension Plan	Assets	Liabilities <sup>†</sup>	Funded Status <sup>†</sup>
Valuation (\$B)	3.96	4.55	87%
Duration (Yr)	4.0	13.4	<b>Interest Rate Hedge Ratio</b>
Dollar Duration (\$mm)	1.6	6.1	
Yield* / Discount Rate	3.5%	3.7%	26%

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As of January 31, 2018 \*Yield quoted as duration-weighted yield  
<sup>†</sup> Funded Status is hypothetical and calculated according to the Data and Methodology section outlined on Page 3. Refer to the Hypothetical Model Disclosures (page 3) for more important information.

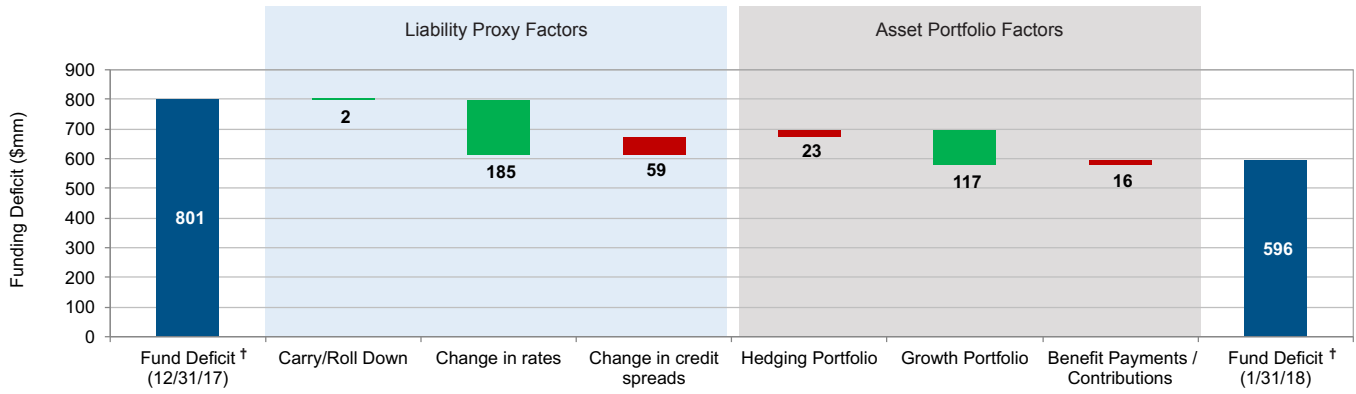
## Pension Plan Tracker (January 2018 YTD)<sup>†</sup>



Pension Plan	Jan '17	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan '18
Funded Status (%)	81%	81%	82%	82%	82%	81%	82%	81%	83%	83%	84%	83%	87%
Assets (\$B)	3.55	3.62	3.62	3.66	3.70	3.71	3.76	3.77	3.79	3.81	3.84	3.88	3.96
Liabilities (\$B)	4.39	4.46	4.41	4.47	4.54	4.55	4.57	4.63	4.58	4.60	4.59	4.68	4.55
Discount Rate (GAAP)	3.9%	3.8%	3.9%	3.8%	3.7%	3.7%	3.6%	3.5%	3.6%	3.6%	3.6%	3.6%	3.7%

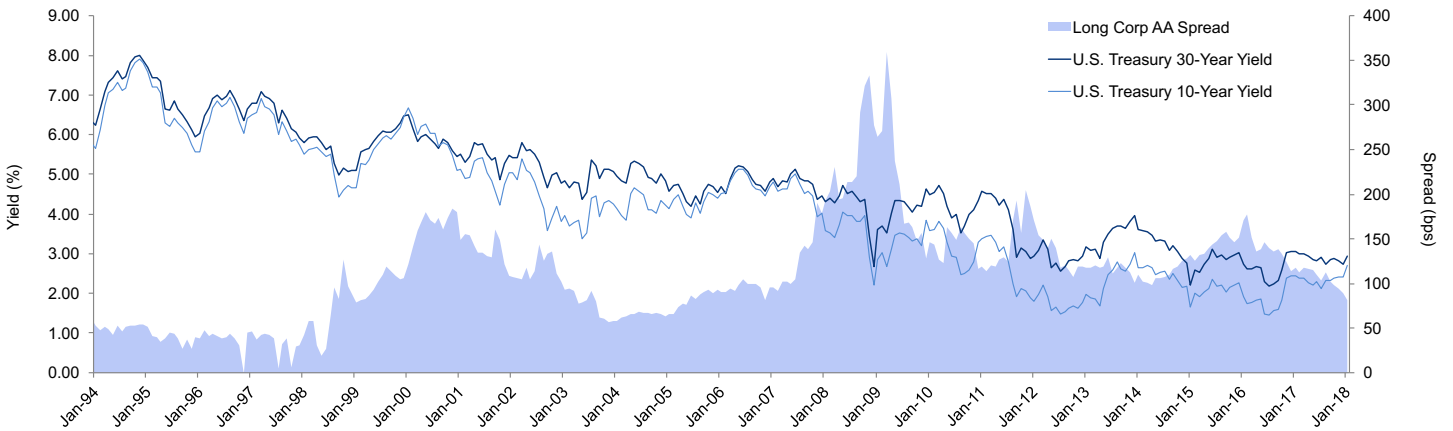
<sup>†</sup> Pension Plan Tracker Funded Status & Liabilities results presented do not reflect actual performance. The results are hypothetical, and are generated according to the Data and Methodology section outlined on Page 3. Refer to the Hypothetical Model Disclosures (page 3) for more important information.  
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## Funded Status Attribution (December 31, 2017 - January 31, 2018)



† Pension Plan Tracker Funded Deficit Results presented do not reflect actual performance. The results are hypothetical, and are generated according to the Data and Methodology section outlined on Page 3. Refer to the Hypothetical Model Disclosures (page 3) for more important information. Chart shows the liability proxy and asset portfolio factors that contributed to the change in funded status over the month. Prepared by Conning, Inc., for illustrative purposes only. Source: ©2018 Bloomberg, L.P.

## Yields and Corporate Spreads



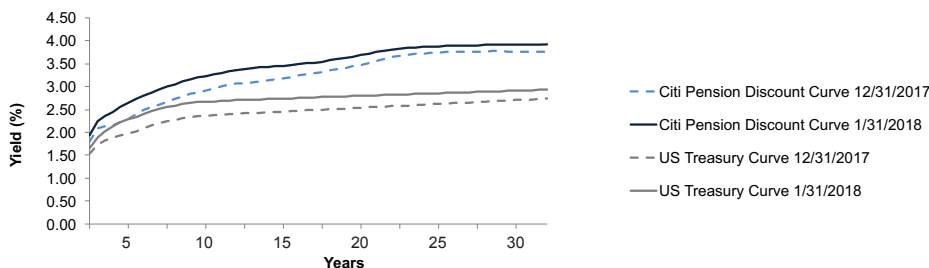
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## Market Performance (January 2018 YTD)

		MTD	QTD	YTD
<b>Equities</b>	S&P 500	5.7%	5.7%	5.7%
	Russell 2000	2.6%	2.6%	2.6%
	MSCI World ACWI	5.7%	5.7%	5.7%
	EAFE	5.0%	5.0%	5.0%
<b>Alternatives</b>	Private Equity	5.0%	5.0%	5.0%
	Hedge Funds	2.8%	2.8%	2.8%
	Real Estate	-2.9%	-2.9%	-2.9%
<b>Fixed Income</b>	High Yield	0.6%	0.6%	0.6%
	US Aggregate	-1.2%	-1.2%	-1.2%
	US Long Gov/Credit	-2.1%	-2.1%	-2.1%
	US Long Credit	-1.3%	-1.3%	-1.3%
	US Long Corporate AA	-2.0%	-2.0%	-2.0%

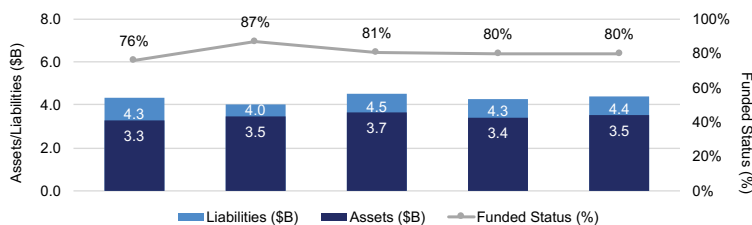
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## Liability Discount Curve



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## Pension Plan Tracker (Annual 2012-2016)



Pension Plan	2012	2013	2014	2015	2016
Funded Status	76%	87%	81%	80%	80%
Assets (\$B)	3.3	3.5	3.7	3.4	3.5
Liabilities / PBO (\$B)	4.3	4.0	4.5	4.3	4.4
Discount Rate (GAAP)	3.7%	4.6%	3.7%	4.1%	3.9%

Prepared by Conning, Inc. Source: ©2012-2016 Bloomberg, L.P.

## Conning's LDI Team

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## Conning Pension Risk Analyzer®

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Contact us at [LDI@conning.com](mailto:LDI@conning.com)

## ABOUT CONNING®

Conning ([www.conning.com](http://www.conning.com)) is a leading global investment management firm with approximately \$121 billion in global assets under management as of December 31, 2017.\* With a long history of serving the insurance industry, Conning supports institutional investors, including pension plans, with investment solutions and asset management offerings, award-winning risk modeling software, and industry research. Founded in 1912, Conning has offices in Boston, Cologne, Hartford, Hong Kong, London, New York, and Tokyo.

\*As of December 31, 2017, represents the combined global assets under management for the affiliated firms under Conning Holdings Limited, and Cathay Securities Investment Trust Co., Ltd. ("SITE"). SITE reports internally into Conning Asia Pacific Limited, but is a separate legal entity under Cathay Financial Holding Co., Ltd. which is the ultimate controlling parent of all Conning entities.

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## Data and Methodology

Conning's Funded Status Tracker is a monthly publication that tracks the performance of the average defined benefit pension plan (the "Plan") of corporate sponsors comprising the Russell 3000 Index. The average plan size is approximately \$3.8 billion in assets and \$4.6 billion in liabilities. The Plan's liability is a hypothetical cash flow generated from our proprietary model to reflect a 13-year duration and valuation equivalent to the Plan's PBO on a US GAAP valuation basis.

The data in this monthly review was reported in the 10-Ks of 389 publicly traded companies. These companies were selected because they had consistently filed pension data every year for the period of 2012 through 2016.

Conning categorized these companies based on their plan assets and their business sector. Note, those assets may include non-U.S. pension plans. In aggregate, these 389 reported \$1.4 trillion in plan assets and \$1.7 trillion in plan liabilities.

It is important to note that asset definitions are not uniform. Conning's analysis of companies' financial statements has found that some firms only report individual stocks as equities, while other firms include stock mutual funds. A similar mixing of types occurs in fixed income. In this analysis, Conning has used the allocations as reported by the companies and not adjusted them. Funded status is the percentage of liabilities that are covered by assets. Interest rate hedge ratio is the dollar duration of assets as a percentage of liability dollar duration.

## LDI Hypothetical Model Disclosures

The proprietary model analysis presented herein is for illustrative purposes only. The model relies on a number of assumptions that are generally stated in the Data and Methodology and within the illustrations. The assumptions can be subject to significant uncertainties and contingencies, and such illustrations may change materially in response to small changes in one or more of such assumptions. The data used for this model was obtained from sources deemed reliable, and then organized by Conning, Inc. and was not audited by any third party. Errors could have occurred in the data, in the calculations, or in the preparation of this analysis. Therefore, information contained in this analysis may not be precise. C: 6717686