

## 2013 Defined Contribution Benchmarking Results For North Carolina Retirement Systems



## Thank you

This free report is our 'thank you' for completing CEM's annual DC plan cost and performance survey. It summarizes your plan's overall return and cost performance compared to the U.S. universe.

We recommend that you upgrade to CEM's more comprehensive peer-based BenchmarkDC report. The BenchmarkDC report is designed to provide plan fiduciaries with documented evidence on the reasonableness of plan expenses, as is required by ERISA 408(b)(2). See page 16 for more details.

If you have any questions about your results or would like more information, contact Jonathan Epstein by phone at: 312-399-1058 (direct) or 416-369-0568 (main number) or by email at [Jonathan@cembenchmarking.com](mailto:Jonathan@cembenchmarking.com).

## About CEM Benchmarking

CEM has been measuring the investment performance and costs of DC and DB pension plans worldwide since 1991.

- CEM currently serves over 350 blue-chip corporate and government clients worldwide. Clients include 30 of the Fortune 100 corporations and over 20 state-level pension systems
- CEM's DC database has 146 U.S. participants representing 7.5 million plan members and \$0.9 trillion in plan assets
- CEM's DB database has 331 funds representing over \$7.0 trillion in plan assets
- CEM's performance databases have been used in award winning research on plan costs, performance and characteristics of top performing plans

## Table of contents

|                                                         |    |
|---------------------------------------------------------|----|
| <i>Universe Characteristics</i>                         |    |
| • The benchmarking universe                             | 2  |
| • Plan assets                                           | 3  |
| • Average account balance                               | 4  |
| <i>Diversification</i>                                  |    |
| • Investment options                                    | 5  |
| • Average participant asset mix                         | 6  |
| <i>Total Plan Performance</i>                           |    |
| • Average total return of plan participants             | 7  |
| • Total plan value added                                | 8  |
| <i>Costs</i>                                            |    |
| • Your total plan costs                                 | 10 |
| • Costs, returns and value added by investment option   | 11 |
| • Total plan cost versus the U.S. universe              | 12 |
| • Benchmark cost analysis                               | 13 |
| • Calculation of your plan's benchmark cost             | 14 |
| <i>Cost effectiveness</i>                               | 15 |
| <i>Benefits of upgrading to peer-based benchmarking</i> | 16 |
| <i>Appendix A - Data Quality</i>                        | 17 |
| <i>Appendix B - Your Data Summary</i>                   | 18 |

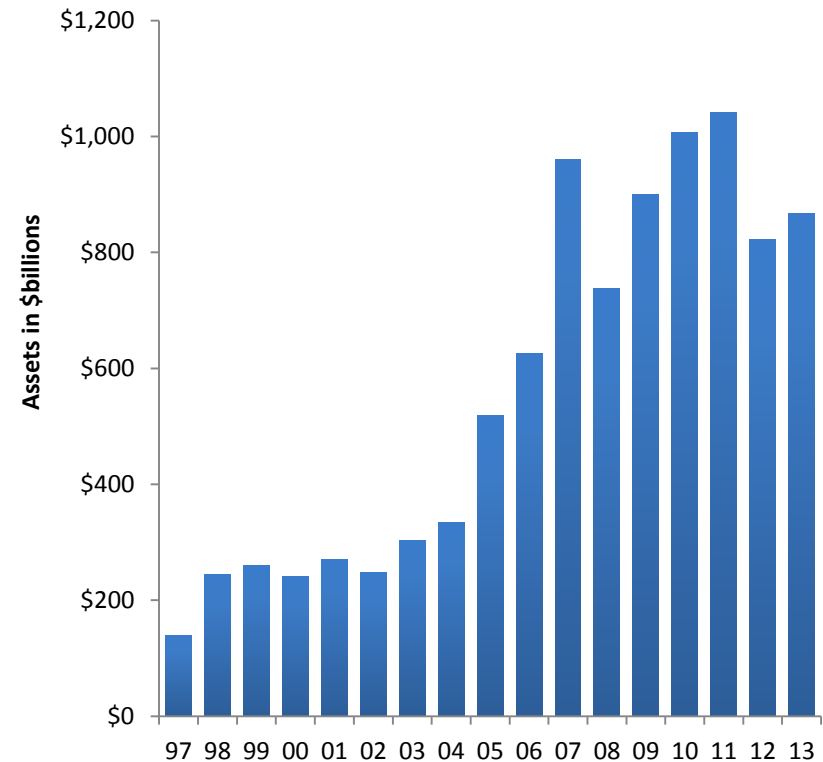
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Prepared on September 23, 2014.

## The benchmarking universe

In this free report, your costs and performance are compared to the 2013 CEM U.S. defined contribution benchmarking universe. It is comprised of 146 defined contribution plans with aggregate assets of \$866 billion. 123 are corporate plans, 23 are public or other.

CEM has benchmarked the performance of defined contribution plans since 1997.

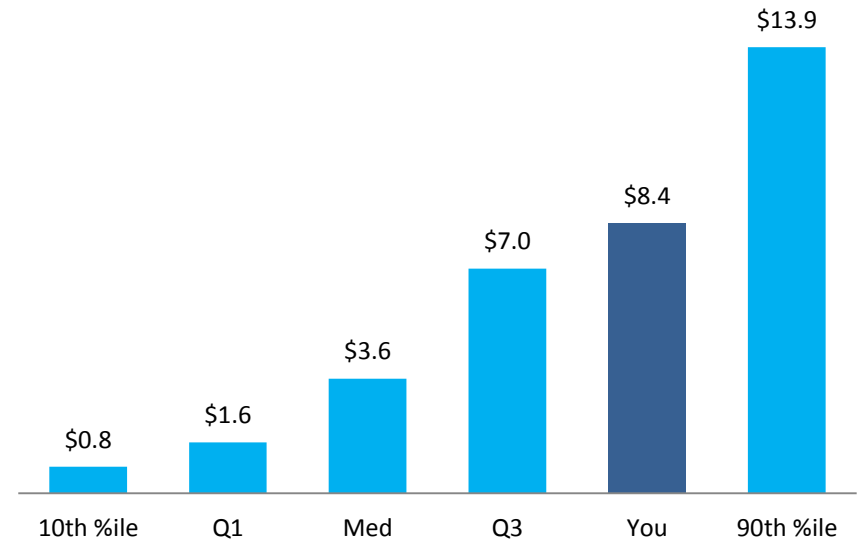
**U.S. defined contribution universe: Total participating assets**



## Plan assets

Your plan had \$8.4 billion total plan assets at the end of 2013. This was above the U.S. universe median of \$3.6 billion.

**2013 Total plan assets in \$ billions**

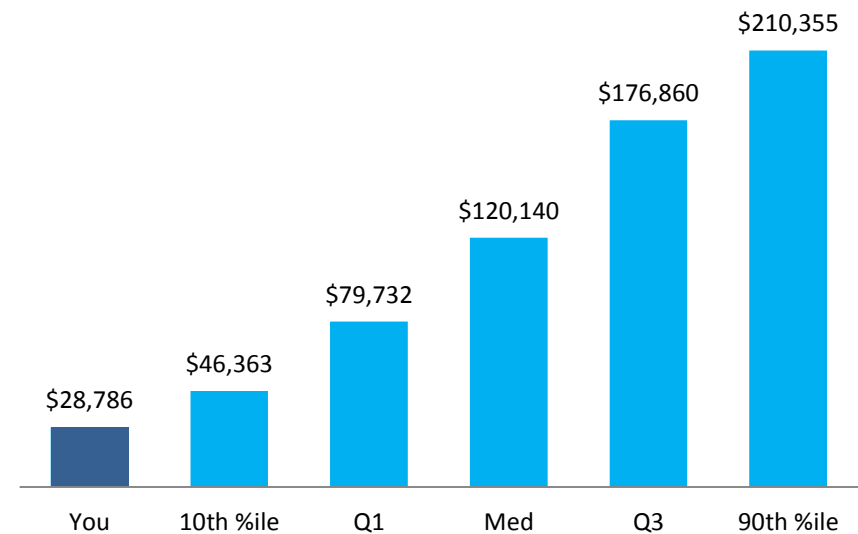


## Average account balance

The average account balance of participants in your plan was \$28,786 in 2013. This was below the U.S. universe median of \$120,140. Differences in average account balance reflect differences in:

- Employer and employee contribution rates
- Long-term plan success (returns, cost effectiveness, investment option asset mix)
- Plan design and participant education because they impact both of the above
- Education and communication
- Whether the DC plan is the primary or supplemental retirement savings vehicle for participants
- Participant demographics including age, education levels, compensation and time in plan

2013 Participant average account balance



## Investment options

Your plan offered 13 investment options in 2013. This was below the universe median of 15.

Offering more investment options to participants is not necessarily better. When there are too many choices, the process can be overwhelming to many participants. In addition, you have a fiduciary duty to monitor each of the investment options that you offer participants to ensure that they continue to be prudent choices.

### Type and number of investment options

| Asset class                         | Your plan | 2013 Average | 2013 Median |
|-------------------------------------|-----------|--------------|-------------|
| Employer Stock Discretionary        | 0         | 0.7          | 1.0         |
| Stock U.S.                          | 6         | 6.0          | 6.0         |
| Stock Non U.S. & Global             | 3         | 2.3          | 2.0         |
| Bonds                               | 3         | 2.6          | 2.0         |
| Balanced                            | 0         | 1.2          | 1.0         |
| Target date (families) <sup>1</sup> | 0         | 0.8          | 1.0         |
| Stable Value                        | 1         | 0.8          | 1.0         |
| Cash, Money Market                  | 0         | 0.6          | 1.0         |
| Mutual Fund Window                  | 0         | 0.2          | 0.0         |
| Participant Brokerage Account       | 0         | 0.3          | 0.0         |
| Priv Eq, REIT, Other (ex Loans)     | 0         | 0.6          | 0.0         |
| Total (excl. Loans)                 | 13        | 16.1         | 15.0        |

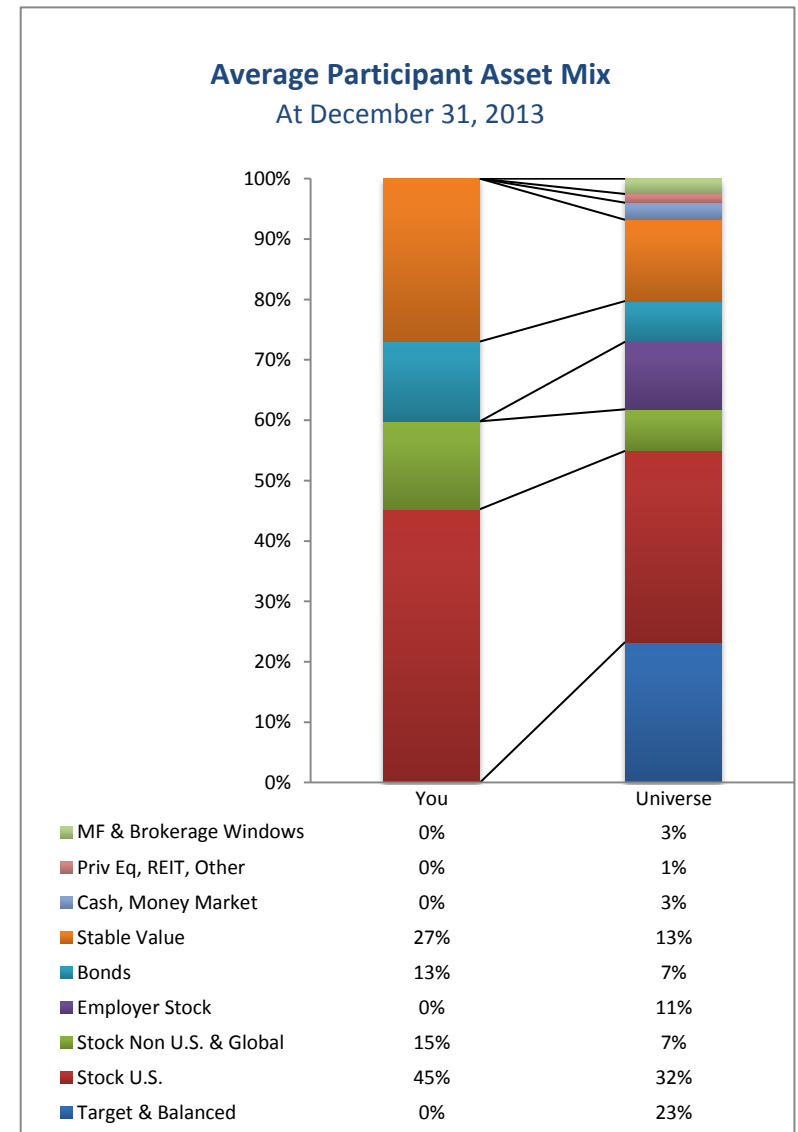
1. Target Date families are counted as one option.

## Average participant asset mix

As fiduciaries you should monitor asset mix because it is often the biggest reason for differences in the total returns of plan participants. Asset mix red-flags that you should review are:

**Employer stock** - Employer stock can substantially increase the volatility of the average participant's returns (i.e., it increases risk). This is not an issue for your plan because it does not offer an employer stock option.

**Stable value and cash** - On average your plan participants had a combined 27% of their assets in stable value and/or cash options. This was above the U.S. universe average of 16%. Professionally managed defined benefit plans typically have less than 1% of their assets in these options. Although these options have relatively low risk of loss, they also have relatively low long-term expected returns. Therefore, high holdings of cash and stable value, especially among younger participants, increase the risk that these participants will not achieve their retirement objectives. Mitigating arguments in favor of stable value and cash include: (i) they are low risk, (ii) participants can elect to switch into options with higher expected returns and risk, (iii) tools and education can help participants be more aware of risk return tradeoffs and make decisions that are appropriate to their circumstances.



## Average total return of plan participants

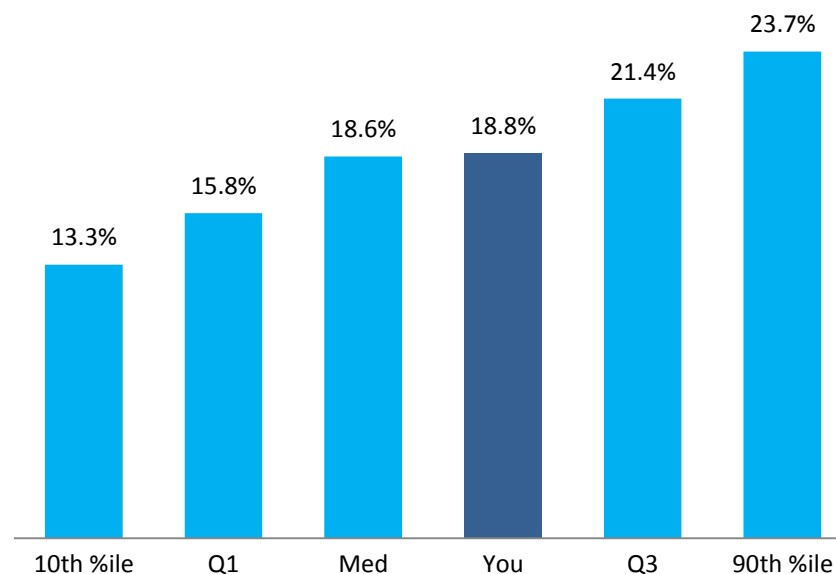
Your plan participants' average net total return was 18.8% in 2013. This was above the U.S. universe median of 18.6%.

Average net total return measures the change in the average participant's account balance as a result of the net investment returns earned by their investment options weighted by their holdings. The calculation is shown on page 9.

There are two primary causes of differences in participants' average net total return:

- Asset mix differences (see previous page) - Asset mix differences are usually the primary reason for differences in the average total return performance of plan participants because different asset categories can have very different returns. For example, the best performing asset category in 2013 was Employer Stock. It had a universe average return of 38.0%. This compares to a universe average of -1.6% for the poorest performing asset category, Bonds.
- Value added performance - Differences in value added performance can also impact total returns. Value added is a measure of the amount by which investment options outperformed their benchmark indices. See next page.

2013 Plan participants' average net total return





## Total plan value added

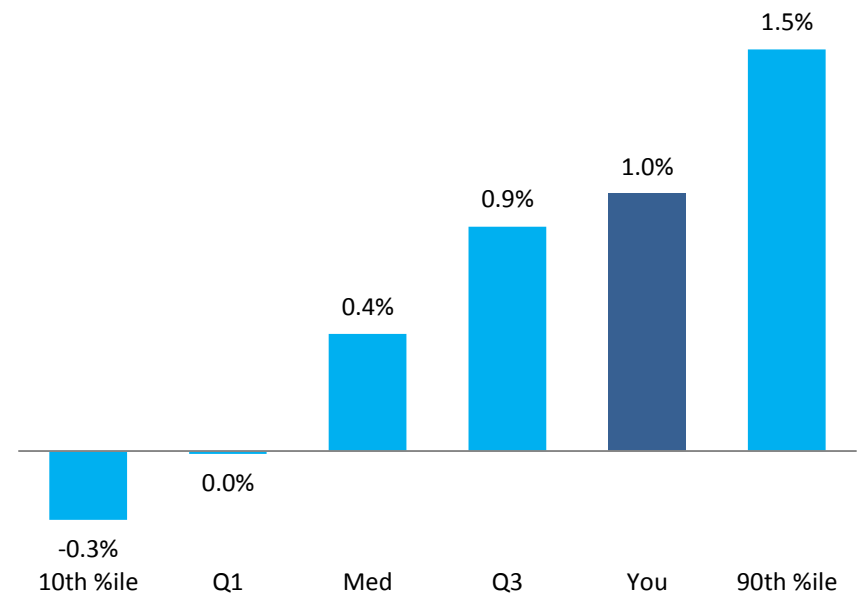
The weighted average net value added earned across all of your plan's options was 1.0% in 2013. This was above the U.S. universe median of 0.4%.

Total plan net value added shows how your plan's investment options performed on an overall basis. Positive value added indicates that, on average, your plan's investment options are outperforming their benchmark indices, whereas negative value added indicates that they are underperforming.

Total plan net value added equals the holdings weighted average of the net value added for all of the investment options in your plan. Net value added equals the total return for an investment option minus its benchmark return minus costs associated with managing and administering the investment option. The benchmark return is the return on a relevant market index, such as the S&P 500 for U.S. large capitalization stock mandates.

Monitoring total plan value added serves a very different fiduciary purpose than monitoring the value added from individual investment options. Total plan value added shows you whether your process for adding and dropping investment options over time has been effective.

### 2013 Total plan net value added



# Calculation of your plan participants' average total return and value added

Your participants earned an average net total return of 18.8%, of which active management contributed 1.0%. Average total return measures the average change in your participants' account balances as a result of the returns earned by the investment options.

- Positive total average return means that your participants' account balances grew, even without further contribution.
- Negative total average return means that your participants' account balances decreased, even without withdrawals.

Total value added is a single measure of the average contribution or loss to your participants' average total return that resulted from active management. It is the value produced over what could have been earned passively. It equals the net return minus the benchmark return.

- Positive total value added means that, on average, your options performed better than their indexed/passive benchmarks.
- Negative total value added implies that, on average, your options did not perform as well as indexed/passive alternatives.

| Your investment options                         | % Beginning holdings <sup>1</sup> | Net return <sup>2</sup> | Benchmark return | Value added <sup>3</sup> |
|-------------------------------------------------|-----------------------------------|-------------------------|------------------|--------------------------|
| Multi-Mgr - North Carolina Large Cap Value      | 10.1%                             | 35.1%                   | 32.5%            | 2.6%                     |
| Multi-Mgr - North Carolina Large Cap Growth     | 9.8%                              | 36.3%                   | 33.5%            | 2.8%                     |
| BlackRock - North Carolina Large Cap Passive    | 14.7%                             | 32.3%                   | 32.4%            | -0.1%                    |
| BlackRock - North Carolina SMID Cap Passive     | 5.1%                              | 36.6%                   | 36.8%            | -0.2%                    |
| Multi-Mgr - North Carolina SMID Growth          | 2.0%                              | 41.4%                   | 40.7%            | 0.8%                     |
| Multi-Mgr - North Carolina SMID Value           | 3.3%                              | 36.6%                   | 33.3%            | 3.3%                     |
| Multi-Mgr - North Carolina Int'l Equity         | 6.2%                              | 14.9%                   | 15.8%            | -0.9%                    |
| Multi-Mgr - North Carolina Global Equity        | 2.3%                              | 32.3%                   | 23.2%            | 9.1%                     |
| BlackRock - North Carolina Int'l Passive        | 4.1%                              | 14.4%                   | 15.8%            | -1.4%                    |
| Multi-Mgr - North Carolina Fixed Income         | 7.3%                              | 1.1%                    | 2.0%             | -0.9%                    |
| BlackRock - North Carolina Fixed Income Passive | 3.5%                              | 2.0%                    | 2.0%             | 0.0%                     |
| PIMCO - North Carolina Infl. Responsive         | 0.0%                              | -9.6%*                  | -8.6%            | -1.0%                    |
| Galliard - North Carolina Stable Value          | 31.6%                             | 2.1%                    | 1.0%             | 1.1%                     |

|                                                                                         |              |
|-----------------------------------------------------------------------------------------|--------------|
| <b>Average Net Total Return</b> (Sum of % beginning holdings X net return)              | <b>18.8%</b> |
| <b>Weighted Total Benchmark Return</b> (Sum of % beginning holdings X benchmark return) | <b>17.8%</b> |
| <b>Total Value Added</b> (Average total return less weighted benchmark return)          | <b>1.0%</b>  |

1. Beginning of year holdings are used as the weight for returns because annual returns are earned on beginning of year assets. Options discontinued during the year, loans and self-directed windows are excluded from weighted returns because return data was unavailable for these options. If beginning of year holdings were unavailable because you did not participate last year, they were estimated to equal end of year assets / (1 + return).

2. Net returns are net of all costs including administration costs.

3. Value added = net return - benchmark return. Value added from employer stock is neutralized by setting its benchmark return equal to its actual return. It is neutralized in this report so we can show the value added from diversified plan options.

\* Missing return, used benchmark as option return.

## Your total plan costs

Your plan's total cost in 2013, excluding individual expenses, was \$37.9 million which equals 0.49% as a percentage of total assets or \$130 per participant.

The Department of Labor regulations, ERISA 408(b)(2) and 404(a)(5), categorize expenses into three main categories: investment option expenses, administrative expenses and individual expenses. Individual expenses are excluded from total plan cost because individuals can choose whether they incur these fees (which include fees for loan processing, transfers, redemptions, QDROs, brokerage windows, managed accounts and investment advice).

1. Costs in dollars were estimated by multiplying the basis point cost you provided by the average holdings [average holdings =(beginning of year + end of year)/2]. If beginning of year holdings were not available, because you did not participate last year, then we estimated beginning of year holdings =end of year holdings / (1 + return on holdings).

2. If you were unable to provide a detailed breakdown of your administrative and fiduciary costs, your total administrative and fiduciary cost was placed in recordkeeping, as this generally represents the bulk of these costs.

| Investment options                              | Expense ratio in % | \$000s <sup>1</sup> |
|-------------------------------------------------|--------------------|---------------------|
| Multi-Mgr - North Carolina Large Cap Value      | 0.57%              | 4,460               |
| Multi-Mgr - North Carolina Large Cap Growth     | 0.57%              | 4,354               |
| BlackRock - North Carolina Large Cap Passive    | 0.20%              | 2,195               |
| BlackRock - North Carolina SMID Cap Passive     | 0.26%              | 729                 |
| Multi-Mgr - North Carolina SMID Growth          | 0.90%              | 2,012               |
| Multi-Mgr - North Carolina SMID Value           | 0.81%              | 2,620               |
| Multi-Mgr - North Carolina Int'l Equity         | 0.70%              | 3,339               |
| Multi-Mgr - North Carolina Global Equity        | 0.76%              | 3,146               |
| BlackRock - North Carolina Int'l Passive        | 0.32%              | 523                 |
| Multi-Mgr - North Carolina Fixed Income         | 0.42%              | 2,184               |
| BlackRock - North Carolina Fixed Income Passive | 0.25%              | 667                 |
| PIMCO - North Carolina Infl. Responsive         | 0.98%              | 1,406               |
| Galliard - North Carolina Stable Value          | 0.46%              | 10,295              |

|                                            |       |          |
|--------------------------------------------|-------|----------|
| Total investment option expense ratios (A) | 0.49% | \$37,931 |
|--------------------------------------------|-------|----------|

| Administrative expenses                               |       |         |
|-------------------------------------------------------|-------|---------|
| Recordkeeping and administration <sup>2</sup>         | 0.10% | \$7,462 |
| Custodial and trustee                                 | 0.00% | \$0     |
| Internal oversight                                    | 0.02% | \$1,923 |
| Consulting                                            | 0.00% | \$0     |
| Other plan costs (legal, audit, etc)                  | 0.00% | \$0     |
| less costs paid from expense ratio of invest. options | 0.12% | \$9,385 |
| Net administrative costs (B)                          | 0.00% | \$0     |

|                          |       |          |
|--------------------------|-------|----------|
| Total plan costs (A + B) | 0.49% | \$37,931 |
|--------------------------|-------|----------|

| Individual participant expenses                       |       |     |
|-------------------------------------------------------|-------|-----|
| Participant advice                                    | 0.00% | \$0 |
| Managed account fees                                  | 0.00% | \$0 |
| Other participant expenses (for loans, QDROs, etc.)   | 0.00% | \$0 |
| less costs paid from expense ratio of invest. options | 0.00% | \$0 |
| Net individual participant expenses                   | 0.00% | \$0 |

# Costs, returns and value added by investment option

## Costs, returns and value added by investment option - 2013

| Investment option                               | Cost <sup>1</sup> |          | Net total return |          | Net value added |          | Option type                                |
|-------------------------------------------------|-------------------|----------|------------------|----------|-----------------|----------|--------------------------------------------|
|                                                 | Your              | Univ Med | Your             | Univ Med | Your            | Univ Med |                                            |
| Multi-Mgr - North Carolina Large Cap Value      | 0.57%             | 0.53%    | 35.1%            | 34.3%    | 2.6%            | 1.8%     | Stock U.S. Broad or Large Cap Broad Active |
| Multi-Mgr - North Carolina Large Cap Growth     | 0.57%             | 0.53%    | 36.3%            | 34.3%    | 2.8%            | 1.8%     | Stock U.S. Broad or Large Cap Broad Active |
| BlackRock - North Carolina Large Cap Passive    | 0.20%             | 0.09%    | 32.3%            | 32.4%    | -0.1%           | -0.1%    | Stock U.S. Broad or Large Cap Indexed      |
| BlackRock - North Carolina SMID Cap Passive     | 0.26%             | 0.13%    | 36.6%            | 35.2%    | -0.2%           | -0.1%    | Stock U.S. Mid Cap Indexed                 |
| Multi-Mgr - North Carolina SMID Growth          | 0.90%             | 0.86%    | 41.4%            | 37.4%    | 0.8%            | 1.7%     | Stock U.S. Mid Cap Growth Active           |
| Multi-Mgr - North Carolina SMID Value           | 0.81%             | 0.80%    | 36.6%            | 34.1%    | 3.3%            | 0.6%     | Stock U.S. Mid Cap Value Active            |
| Multi-Mgr - North Carolina Int'l Equity         | 0.70%             | 0.74%    | 14.9%            | 25.4%    | -0.9%           | 0.3%     | Stock Global Active                        |
| Multi-Mgr - North Carolina Global Equity        | 0.76%             | 0.74%    | 32.3%            | 25.4%    | 9.1%            | 0.3%     | Stock Global Active                        |
| BlackRock - North Carolina Int'l Passive        | 0.32%             | 0.22%    | 14.4%            | 18.5%    | -1.4%           | -0.5%    | Stock Global Indexed                       |
| Multi-Mgr - North Carolina Fixed Income         | 0.42%             | 0.42%    | 1.1%             | -1.8%    | -0.9%           | -0.4%    | Bonds Other Active                         |
| BlackRock - North Carolina Fixed Income Passive | 0.25%             | 0.12%    | 2.0%             | -2.2%    | 0.0%            | -0.1%    | Bonds Indexed                              |
| PIMCO - North Carolina Infl. Responsive         | 0.98%             | 0.33%    | -9.6%            | -8.8%    | -1.0%           | -0.2%    | Bonds TIPS Active                          |
| Galliard - North Carolina Stable Value          | 0.46%             | 0.37%    | 2.1%             | 1.9%     | 1.1%            | 1.2%     | Stable / GIC                               |

1. Cost is the expense ratio of each investment option plus your net administrative expenses of 0.00% (i.e., any administrative expenses and rebates that were not already included in the option expense ratios; see page 10) which were added pro rata to investment option costs. Their inclusion ensures comparability between plans using bundled providers, whose administrative costs are already included as part of the management fees, and plans that do not have bundled arrangements, which pay administrative costs separately.

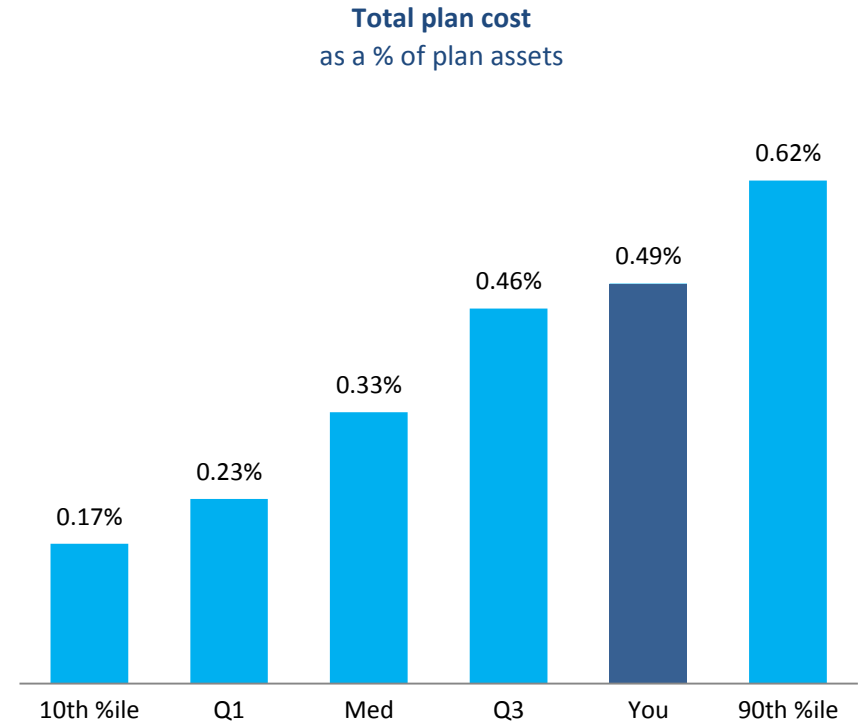
## Total plan cost versus the U.S. universe

Your total plan cost, excluding individual expenses, of 0.49% was above the U.S. universe median of 0.33%.

As a fiduciary, it is very important that you assess whether your costs are reasonable. But comparing total plan cost provides only limited insight because differences in total cost often reflect differences in:

- Asset mix, particularly low cost options and options without an explicit cost such as employer stock
- Economies of scale due to plan size and average account balance

Therefore, to help you assess whether your plan costs are reasonable, CEM calculates a benchmark cost for your plan that adjusts for the above differences. Your performance versus benchmark cost is shown on the next page.



## Benchmark cost analysis

Your plan's total cost of 0.49% is below its benchmark cost of 0.54%. This suggests that your plan is low cost after adjusting for its size (i.e., total assets and average account balance) and asset mix. All of these factors impact costs and are not directly within your control. The calculation of your benchmark cost is shown on page 14.

Being low or high cost is neither good nor bad by itself. What matters is what you get in performance and services in return for what you pay.

Key reasons why plans are high or low cost after adjusting for size and asset mix are:

- Differences in fees paid for similar investment options. These differences often result from:
  - Negotiation
  - Differences in providers
  - The proportion of assets invested in retail versus institutionally priced mutual funds
  - The number of investment options offered; with fewer managers, you can often achieve cost economies
- Differences in recordkeeping and other administrative costs
- Differences in the proportion of assets invested in indexed options. Indexed options are much lower cost than active mandates

To understand in detail the impact of each of the above factors we recommend our peer-based BenchmarkDC report (see page 16).

| Your 2013 benchmark cost analysis |                            | \$000s   | %      |
|-----------------------------------|----------------------------|----------|--------|
|                                   | Your plan's total cost     | \$37,931 | 0.49%  |
| <i>less</i>                       | Your plan's benchmark cost | \$41,170 | 0.54%  |
| <i>equals</i>                     | Your plan's excess cost    | -\$3,239 | -0.04% |

# Calculation of your plan's benchmark cost

## Calculation of your plan's 2013 benchmark cost

| Asset Category | Universe median cost <sup>1</sup> | Your plan's average holdings \$000s | Benchmark \$000s |
|----------------|-----------------------------------|-------------------------------------|------------------|
|                | (A)                               | (B)                                 | (A X B)          |
| Stock          | 0.35%                             | \$4,525,650                         | \$16,010         |
| Bonds          | 0.26%                             | \$930,400                           | \$2,377          |
| Stable Value   | 0.33%                             | \$2,238,000                         | \$7,343          |
| Subtotal       |                                   | \$7,694,050                         | \$25,729         |

|                                | per member | # members (000s) |          |
|--------------------------------|------------|------------------|----------|
| Recordkeeping                  | \$55       | 291.4            | \$16,132 |
| Size adjustment <sup>2</sup>   |            |                  | -\$691   |
| Total benchmark cost           |            |                  | \$41,170 |
| Total as a % of average assets |            |                  | 0.54%    |

### Notes

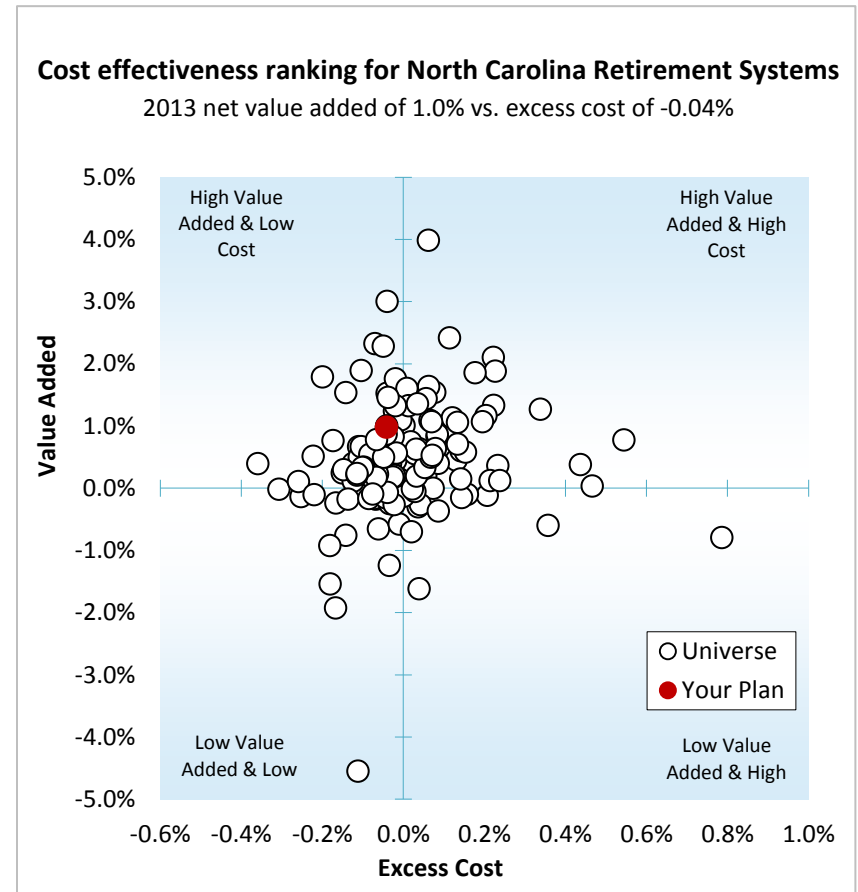
1. The universe median cost equals the median expense ratio of all funds in the U.S. universe for each asset category. Indexed and active styles are combined in each asset category. To ensure comparability between bundled and unbundled plans, net administrative expenses excluding recordkeeping are added to all expense ratios. Record keeping is excluded because a benchmark is calculated for it separately.

2. The size adjustment is based on regression analysis. It equals your plan's average assets with explicit fees X (0.200% - 0.054% x Log 10 of average assets with explicit fees in \$mils). Your plan's average assets with explicit fees were \$7,694 million which equals your 2013 total plan average assets of \$7,694 million minus your hidden and low cost assets of \$0 million. Hidden and low cost assets are traditional GICs, employer stock, loans, and self-directed accounts.

## Cost effectiveness

In 2013, your plan ranked in the high value added, low cost quadrant on the cost effectiveness chart.

In an ideal world, the more you pay (i.e., the larger your excess cost) the more you get (i.e., the higher your value added). If this were true, you would see an upward sloping relationship in this graph. Clearly, this is not the case. CEM's research has shown consistently that there is no relationship between what plans spend and what they received.





## Benefits of upgrading to peer-based benchmarking

The Department of Labor requires plan fiduciaries to ensure that their DC plan costs are reasonable. The best way to do this is through peer-based benchmarking. Therefore, we recommend you upgrade to CEM's peer-based BenchmarkDC report. It enables fiduciaries to assess and document their plan's cost reasonableness by comparing plan costs, performance and the services received to peer plans.

Benefits of upgrading to the include:

- Peer-based - A proposed peer group for your plan is shown on the right. It was selected based on plan size and average account balance because our research shows that these two factors are the primary drivers of cost
- Multi-year - Multi-year periods are critical for assessing investment performance
- More comprehensive cost comparisons including investment fees, recordkeeping fees, advisory fees, fiduciary oversight and other administration fees, and individual expenses including managed account fees
- Insights into trends in plan design and fund governance
- Customized executive summary
- In-person, on-site presentation of your results

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### Proposed peer group for North Carolina Retirement Systems

- The following 17 peers were chosen as your custom peer group
- Median size of \$8,388M compared to your \$8,388M.

3M Company

Alcatel-Lucent Master Pension Trust

American Airlines, Inc

BP America Inc.

Caterpillar Inc.

Dow Chemical Company

Federal Reserve Office of Employee Benefits

Florida State Board of Administration

Merck & Co., Inc.

North Carolina Retirement Systems

NRECA

PepsiCo Inc.

Prudential Financial Inc.

Siemens Corp

Target Corporation

United Parcel Service Inc.

Verizon Union Plan

## Appendix A - Data quality

We recognize that the value of the information contained in these reports is only as good as the quality of the data we receive. Therefore, we work very hard at getting good data. Our procedures for checking and improving the data include:

- **Improved Survey Clarity** - 17 years of feedback from survey participants has led to improved definitions and survey clarity.
- **Customer Confirmation** - A six page summary of each respondent's data as it appears in our database was sent to all survey participants for confirmation prior to preparing this report. Your data is summarized in Appendix B (which begins on the following page).
- **Computer and Analyst Verification** - We compare responses to norms for the survey universe and to each sponsor's prior year data when available. This typically results in questions that we send to each survey respondent and follow-up by phone and/or email.

In addition, the quality of our data continues to improve because of:

- **Learning Curve** - This is our 17th year of gathering this data and experience is teaching us and the participants how to do a better job.
- **Growing Universe** - As our universe of respondents continues to increase in size, so does our confidence in the results as unbiased errors tend to average themselves out. As a result of the above, data quality has improved dramatically over the seventeen year period we have been benchmarking. We feel there will always be room for improvement and we welcome any suggestions on how to further improve data quality.

## Appendix B - Your survey responses

Your data is summarized on the following 6 pages. As discussed with you (or the person who provided your plan's data) during the data confirmation process, your original survey responses may have changed for the following reasons:

- 1. Gross versus Net Returns** - We permit participants to report returns on either a net or gross basis. In order to ensure 'apples-to-apples' comparisons, we use returns net of all costs, including administration costs.
- 2. Returns not available** - We requested that you indicate 'n/a' if full year returns were unavailable for an investment option. The default for an unavailable return is to set it equal to your investment option's benchmark return.
- 3. Costs not provided** - One of our key themes is that you must know your costs if you want to manage your plan effectively. We recognize, however, that some costs such as Fiduciary Oversight costs can be difficult to obtain. Therefore, if you were unable to provide us with your costs, or your best estimate of these costs, we imputed a figure using industry data.
- 4. Your benchmark was ineligible** - To ensure apples-to-apples comparisons we insist that benchmark returns reflect an investable universe for an annual period. If your benchmarks include premiums such as the S&P500 + 1% we have used the base as your benchmark and ignored the premium. Similarly, if you have indicated a non-investable benchmark such as 'Lipper Averages', we have substituted our default benchmark portfolios in its place.

## Your survey responses

North Carolina Retirement Systems

| General                                               | 2013            | 2012            | 2011           | 2010           | 2009              |
|-------------------------------------------------------|-----------------|-----------------|----------------|----------------|-------------------|
| Contact                                               | Mary Buonfiglio | Mary Buonfiglio |                | Kitty McCollum | Ellen Richardson  |
| Data provided by:                                     | Rekha Krishnan  | Rekha Krishnan  | Rekha Krishnan | Timothy Dale   | David Vanderweide |
| Corporate, public, other?                             | Public          | Public          | Public         | Public         | Public            |
| Market value of plan assets (\$ millions)             | \$8,388         | \$7,000         | \$6,107        | \$5,872        | \$5,049           |
| Number of plan participants                           | 291,394         | 272,206         | 262,900        | 258,266        | 250,115           |
| % of eligible employees participating                 |                 | 27%             |                | 26%            | 26%               |
| Are some DC participants covered by a DB plan?        | Yes             | Yes             | Yes            | Yes            | Yes               |
| Administrative costs, plan expenses (\$000s)          | 2013            | 2012            | 2011           | 2010           | 2009              |
| Recordkeeping <sup>1</sup>                            | 7,462           | 6,363           |                | 6,165          | 5,301             |
| paid from expense ratio of invest. options            | 7,462           |                 |                |                |                   |
| charged to individuals or participant accounts        |                 | 6,363           |                | 6,165          | 5,301             |
| paid by plan sponsor                                  |                 |                 |                |                |                   |
| Custodial & trustee                                   |                 |                 |                | 1,468          | 2,197             |
| paid from expense ratio of invest. options            |                 |                 |                |                |                   |
| charged to individuals or participant accounts        |                 |                 |                | 1,468          | 2,197             |
| paid by plan sponsor                                  |                 |                 |                |                |                   |
| Oversight internal <sup>2</sup>                       | 1,923           | 1,657           | 200            | 128            | 200               |
| paid from expense ratio of invest. options            | 1,923           |                 |                |                |                   |
| charged to individuals or participant accounts        |                 | 1,657           |                |                | 200               |
| paid by plan sponsor                                  | 0               | 0               | 200            | 128            | 0                 |
| Consulting                                            |                 |                 |                | 113            | 774               |
| paid from expense ratio of invest. options            |                 |                 |                |                |                   |
| charged to individuals or participant accounts        |                 |                 |                |                | 774               |
| paid by plan sponsor                                  |                 |                 |                | 113            |                   |
| Other                                                 |                 |                 |                | 360            | 288               |
| paid from expense ratio of invest. options            |                 |                 |                |                |                   |
| charged to individuals or participant accounts        |                 |                 |                |                | 288               |
| paid by plan sponsor                                  |                 |                 |                | 360            |                   |
| less rebates to participants from reimburse. accounts |                 |                 |                |                |                   |
| less costs paid from option expense ratio             | 9,385           |                 |                |                |                   |
| Total Plan Expenses                                   | 9,385           | 8,020           | 200            | 8,234          | 8,760             |
| Participant Expenses (\$000s)                         | 2013            | 2012            | 2011           | 2010           | 2009              |
| Participant advice                                    |                 |                 |                |                |                   |
| paid from expense ratio of invest. options            |                 |                 |                |                |                   |
| charged to individuals or participant accounts        |                 |                 |                |                |                   |
| paid by plan sponsor                                  |                 |                 |                |                |                   |
| Managed account fees                                  |                 |                 |                |                |                   |
| paid from expense ratio of invest. options            |                 |                 |                |                |                   |
| charged to individuals or participant accounts        |                 |                 |                |                |                   |
| paid by plan sponsor                                  |                 |                 |                |                |                   |
| Other participant expenses (for loans, QDROs, etc.)   |                 |                 |                |                |                   |
| paid from expense ratio of invest. options            |                 |                 |                |                |                   |
| charged to individuals or participant accounts        |                 |                 |                |                |                   |
| paid by plan sponsor                                  |                 |                 |                |                |                   |
| less costs paid from option expense ratio             |                 |                 |                |                |                   |
| Total Participant Expenses                            |                 |                 |                |                |                   |

1. If you were unable to provide a breakdown of your administrative & fiduciary costs, the total was included in recordkeeping because it usually represents the bulk of administrative & fiduciary costs.

2. If you were unable to provide costs for Fiduciary oversight internal, we applied a default value. If the number of internal FTEs is available, default equals

\$100,000 x FTE. Otherwise, it is 0.0001 x Market value of plan assets.

## Your survey responses

North Carolina Retirement Systems

| About your options                       | 2013                  | 2012               | 2011           | 2010           | 2009                  |
|------------------------------------------|-----------------------|--------------------|----------------|----------------|-----------------------|
| Do you have a default investment option? | No                    | Yes                | Yes            | Yes            | Yes                   |
| If yes, what is the default option?      |                       | Target / lifecycle | Other          | Other          | Other                 |
| Option returns are:                      | Net mgmt & admin fees | Net mgmt fees      | Gross all fees | Gross all fees | Net mgmt & admin fees |

| Cost drivers and allocation                                                         | 2013        | 2012        | 2011 | 2010 | 2009 |
|-------------------------------------------------------------------------------------|-------------|-------------|------|------|------|
| FTE fulfilling fiduciary/oversight functions                                        | 4.0         | 2.5         | 2.0  | 2.0  | 2.0  |
| Does the plan offer a managed account service?                                      | No          | No          | No   | No   | No   |
| Number with managed accounts                                                        |             |             |      |      |      |
| Market value in managed accounts                                                    |             |             |      |      |      |
| Do you receive revenue sharing from your providers?                                 | No          | No          | No   | No   | No   |
| Is it used to reduce management fee?                                                |             |             |      |      |      |
| Is it used to reduce admin. or fiduciary costs?                                     |             |             |      |      |      |
| Are any administration costs allocated to participants via fee allocation or wraps? | Yes         | Yes         |      |      |      |
| Allocation is: asset based, flat fee, both, or other                                | asset based | asset based |      |      |      |
| If other, describe                                                                  |             |             |      |      |      |

| Contributions                                     | 2013 | 2012 | 2011 | 2010 | 2009 |
|---------------------------------------------------|------|------|------|------|------|
| Employer contributions (\$ millions)              | 167  | 57   |      |      |      |
| Participant contributions (\$ millions)           | 298  | 263  |      |      |      |
| % of participants making voluntary contributions? | 28%  |      |      |      |      |

| Loan features                                 | 2013   | 2012   | 2011 | 2010   | 2009   |
|-----------------------------------------------|--------|--------|------|--------|--------|
| Does your plan allow loans?                   | Yes    | Yes    | Yes  | Yes    | Yes    |
| Total number of outstanding loans             | 53,411 | 52,301 |      | 50,562 | 46,482 |
| Average loan balance, (\$)                    | 5,692  | 5,519  |      | 4,914  | 3,692  |
| Does your plan allow for hardship withdrawals | Yes    | Yes    | Yes  | Yes    | Yes    |

| Participant transaction rules and restrictions   | 2013                  | 2012                  | 2011 | 2010 | 2009 |
|--------------------------------------------------|-----------------------|-----------------------|------|------|------|
| Limits on the number of transactions?            | Yes                   | No                    | Yes  | Yes  | Yes  |
| Limits on international funds?                   | Yes                   | Yes                   | Yes  | Yes  | Yes  |
| Limits on any other funds (excl. international)? | Yes                   | No                    |      |      |      |
| Excessive trading penalties?                     |                       | No                    |      |      |      |
| Describe other limits if any                     | Trades should be made | Trades should be made |      |      |      |

Assumed retirement age for your target date funds?  
Do you customize or use an off shelf target date fund?

## Your survey responses

North Carolina Retirement Systems

| Participant deferrals (DC is primary, no DB) | 2013 | 2012 | 2011 | 2010 | 2009 |
|----------------------------------------------|------|------|------|------|------|
|----------------------------------------------|------|------|------|------|------|

Can participants make:

- a. After-tax Roth 401(k) contributions?
- b. After-tax non-Roth 401(k) contributions?

Is investment in employer stock required to some extent?

Is there a mandatory fixed or minimum contribution rate for full-time employees?

If yes, what is the mandatory contribution rate as a % of salary ?

Does the plan have automatic enrolment?

If yes:

- a. Initial automatic contribution as a % of salary
- b. What (if any) is the automatic annual increase in the contribution rate?
- c. Maximum rate achieved via automatic increases?

Applied to all/new employees only when introduced?

| Participant deferrals (DC is suppl. to DB) | 2013 | 2012 | 2011 | 2010 | 2009 |
|--------------------------------------------|------|------|------|------|------|
|--------------------------------------------|------|------|------|------|------|

Can participants make:

- a. After-tax Roth 401(k) contributions?
- b. After-tax non-Roth 401(k) contributions?

Is investment in employer stock required to some extent?

Is there a mandatory fixed or minimum contribution rate for full-time employees?

If yes, what is the mandatory contribution rate as a % of salary ?

Does the plan have automatic enrolment?

If yes:

- a. Initial automatic contribution as a % of salary
- b. What (if any) is the automatic annual increase in the contribution rate?
- c. Maximum rate achieved via automatic increases?

Applied to all employees or new only when introduced?

## Your survey responses

North Carolina Retirement Systems

| Employer contributions (if DC is primary, no DB) | 2013 | 2012 | 2011 | 2010 | 2009 |
|--------------------------------------------------|------|------|------|------|------|
|--------------------------------------------------|------|------|------|------|------|

Are employer contributions made in employer stock, cash or both?

Is there a profit sharing component to employer contributions?

Is there an automatic fixed employer contribution rate?

If yes, what is the automatic fixed employer contribution rate?

Is there an after-tax employer match?

Is there a before-tax employer match?

% of participants earning the maximum match

Indicate the match terms below:

Percentage match on the first:

Percentage of salary contributed:

Percentage on the next:

Percentage of salary contributed:

Or describe:

| Employer contributions (if DC is suppl. to DB) | 2013 | 2012 | 2011 | 2010 | 2009 |
|------------------------------------------------|------|------|------|------|------|
|------------------------------------------------|------|------|------|------|------|

Are employer contributions made in employer stock, cash or both?

Is there a profit sharing component to employer contributions?

Is there an automatic fixed employer contribution rate?

If yes, what is the automatic fixed employer contribution rate?

Is there an after-tax employer match?

Is there a before-tax employer match?

% of participants earning the maximum match

Indicate the match terms below:

Percentage match on the first:

Percentage of salary contributed:

Percentage on the next:

Percentage of salary contributed:

Or describe:

varies by  
participating

varies by  
participating

varies by  
participating

## Your survey responses

North Carolina Retirement Systems

| <b>Fiduciary</b>                                                                                                                                                      | <b>2013</b> | <b>2012</b> | <b>2011</b> | <b>2010</b> | <b>2009</b> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|
| Named fiduciary?                                                                                                                                                      | committee   | committee   | committee   |             |             |
| If named fiduciary is a committee:                                                                                                                                    |             |             |             |             |             |
| Number of committee members?                                                                                                                                          | 9           | 9           | 9           |             |             |
| Number of meetings in the past year?                                                                                                                                  | 10          | 8           | 8           |             |             |
| Are the meeting minutes documented?                                                                                                                                   | Yes         | Yes         | Yes         |             |             |
| Are the named fiduciaries:                                                                                                                                            |             |             |             |             |             |
| Provided formal training?                                                                                                                                             | Yes         | Yes         | Yes         |             |             |
| Required to sign an acknowledgement form?                                                                                                                             | Yes         | No          | No          |             |             |
| Have third parties been appointed as:                                                                                                                                 |             |             |             |             |             |
| • Investment manager with full discretionary powers for selecting, monitoring, replacing investment options?                                                          | No          | No          |             |             |             |
| • Investment advisor to provide advice regarding the selection and retention of investment options?                                                                   | Yes         | Yes         |             |             |             |
| • Plan administrator responsible for regulatory filings, disclosures to participants and hiring plan service providers if no other fiduciary has that responsibility? | Yes         | Yes         | Yes         |             |             |
| Is there documentation that identifies the process for:                                                                                                               |             |             |             |             |             |
| • Selection and monitoring of third-party fiduciaries and other plan service providers?                                                                               | No          | No          | Yes         |             |             |
| • Investment policy                                                                                                                                                   | Yes         | Yes         | Yes         |             |             |
| • Oversight of internal employees involved in operating the plan (i.e., internal fiduciaries, HR staff enrolling employees in the plan, posting deferrals, etc)       | Yes         | Yes         | Yes         |             |             |
| • Fulfilling administration responsibilities (regulatory filings, disclosures to participants)                                                                        | Yes         | Yes         | Yes         |             |             |
| <b>Education and other</b>                                                                                                                                            | <b>2013</b> | <b>2012</b> | <b>2011</b> | <b>2010</b> | <b>2009</b> |
| Is individual investment counseling/advice offered to plan participants?                                                                                              | No          | No          |             |             |             |
| • Is it provided by advisor, computer, both?                                                                                                                          |             |             |             |             |             |
| Does your plan offer financial education via:                                                                                                                         |             |             |             |             |             |
| • Group meetings?                                                                                                                                                     | Yes         | Yes         |             |             |             |
| • One-on-one meetings?                                                                                                                                                | Yes         | Yes         |             |             |             |
| Do plan participants receive projections of annual income in retirement:                                                                                              |             |             |             |             |             |
| • In their participant statements?                                                                                                                                    | Yes         | Yes         |             |             |             |
| • Online?                                                                                                                                                             | Yes         | Yes         |             |             |             |
| • Via separate communication?                                                                                                                                         | No          | No          |             |             |             |
| Does your plan have marketing campaigns to:                                                                                                                           |             |             |             |             |             |
| • Increase employee contribution/deferral rates?                                                                                                                      | Yes         | Yes         |             |             |             |
| • Increase participation by eligible non-participants?                                                                                                                | Yes         | Yes         |             |             |             |
| • Educate on the savers tax credit for lower income participants?                                                                                                     | No          | No          |             |             |             |
| • Other?                                                                                                                                                              |             | No          |             |             |             |
| Does your plan offer:                                                                                                                                                 |             |             |             |             |             |
| • Out-of-plan guaranteed lifetime income product (i.e, annuity, etc)?                                                                                                 | Yes         | Yes         |             |             |             |
| • In-plan guaranteed lifetime income product? (i.e., deferred annuity, etc)                                                                                           | No          | No          |             |             |             |
| Does your plan offer automatic rebalancing?                                                                                                                           | Yes         | Yes         |             |             |             |



## Your survey responses

North Carolina Retirement Systems

### Your plan's 2013 investment options

| Provider & Option name                          | Type                       | %<br>Indxd | Inst'l or<br>Retail | \$ mils at<br>12/31/13 | Annual<br>Return | Benchmark                 |       | Cost  |
|-------------------------------------------------|----------------------------|------------|---------------------|------------------------|------------------|---------------------------|-------|-------|
| Multi-Mgr - North Carolina Large Cap Value      | Stk U.S. Broad or LC Broad |            | Inst'l              | 861                    | 35.1%            | Russell 1000 Value        | 32.5% | 0.57% |
| Multi-Mgr - North Carolina Large Cap Growth     | Stk U.S. Broad or LC Broad |            | Inst'l              | 839                    | 36.3%            | Russell 1000 Growth       | 33.5% | 0.57% |
| BlackRock - North Carolina Large Cap Passive    | Stk U.S. Broad or LC Broad | 100%       | Inst'l              | 1,166                  | 32.3%            | S&P 500                   | 32.4% | 0.20% |
| BlackRock - North Carolina SMID Cap Passive     | Stk U.S. MC Broad          | 100%       | Inst'l              | 207                    | 36.6%            | Russell 2500              | 36.8% | 0.26% |
| Multi-Mgr - North Carolina SMID Growth          | Stk U.S. MC Growth         |            | Inst'l              | 306                    | 41.4%            | Russell 2500 Growth       | 40.7% | 0.90% |
| Multi-Mgr - North Carolina SMID Value           | Stk U.S. MC Value          |            | Inst'l              | 418                    | 36.6%            | Russell 2500 Value        | 33.3% | 0.81% |
| Multi-Mgr - North Carolina Int'l Equity         | Stk Global                 |            | Inst'l              | 518                    | 14.9%            | MSCI ACWI ex USA Gross    | 15.8% | 0.70% |
| Multi-Mgr - North Carolina Global Equity        | Stk Global                 |            | Inst'l              | 665                    | 32.3%            | MSCI ACWI Gross           | 23.2% | 0.76% |
| BlackRock - North Carolina Int'l Passive        | Stk Global                 | 100%       | Inst'l              | 38                     | 14.4%            | MSCI ACWI ex USA Gross    | 15.8% | 0.32% |
| Multi-Mgr - North Carolina Fixed Income         | Bonds Other                |            | Inst'l              | 529                    | 1.1%             | Barc. Aggr.               | 2.0%  | 0.42% |
| BlackRock - North Carolina Fixed Income Passive | Bonds Other                | 100%       | Inst'l              | 292                    | 2.0%             | Barc. Aggr.               | 2.0%  | 0.25% |
| PIMCO - North Carolina Infl. Responsive         | Bonds TIPS                 |            | Inst'l              | 287                    |                  | Barc. US TIPS             | -8.6% | 0.98% |
| Galliard - North Carolina Stable Value          | Stable Value               |            | Inst'l              | 2,262                  | 2.1%             | 30 days T-Bills + 100 bps | 1.0%  | 0.46% |
| Total                                           |                            |            |                     | 8,388                  |                  |                           |       | 0.49% |