

DEPARTMENT OF STATE TREASURER

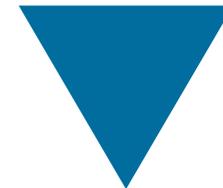
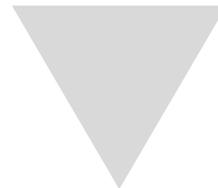
INVESTMENT MANAGEMENT DIVISION – COMPENSATION STRUCTURE UPDATE

November 16, 2016

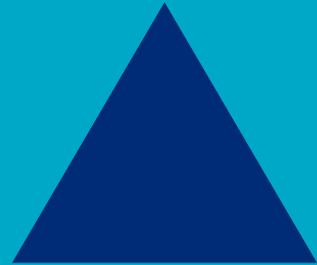
Josh Wilson
Partner

Jon Mason
Principal

Allison Wisialowski
Senior Analyst



FY2015 STRUCTURE



FY2015 STRUCTURE OVERVIEW

- In December 2014, the North Carolina Department of State Treasurer (NCDST) engaged Mercer to develop a compensation structure for investment-related classification titles, to be used in Fiscal Year 2015 (FY2015).
- The structure was built using the following methodology:
 - All classification titles were market priced using the 2014 McLagan US Public Funds Compensation Survey, 2013 Mercer Compensation Design for Public Pension Fund Investment Professionals Survey, and/or the 2014 Mercer Benchmark Database (to the degree a relevant match was available from each source).
 - The target positioning for each classification title was based on the average of the 50th and 75th percentiles of base salary from the McLagan and Mercer surveys (survey sources weighted equally). We recognized that some other State Pension Plans have incentive plans in addition to salary. While NCDST does not offer incentive compensation, this target positioning on base salary will help attract and retain top talent.
- Based on the market data, Mercer created a 16-grade salary structure to help NCDST administer compensation.
 - Each grade has a midpoint, a minimum and a maximum. The minimums and maximums are +/- 25% of midpoint, and grade midpoints are 12.5% to 15% apart.
 - The ranges and progressions are also based on market data and are consistent with market best practices.

FY2015 STRUCTURE OVERVIEW

- To slot classification titles into the 16-grade structure, Mercer assigned each classification title to the grade where the midpoint was closest to the market value for the classification title, as discussed previously. Some classification titles were slotted in lower or higher grades than the market data recommended; this decision was based on Mercer and NCDST's understanding of a classification title's relative level compared to other roles in NCDST.
- Individual employee compensation was then compared to the salary structure based on incumbents' current pay and their assigned grade's midpoint, minimum and maximum. Individual compensation decisions were made by NCDST based on a combination of factors, including performance, tenure, experience and position in grade.
- The FY2015 structure is on the following page.

FY2015 STRUCTURE

COMPENSATION STRUCTURE

- Mercer developed a 16-grade traditional structure using a target market positioning between the 50th and 75th percentiles:

Grade	Min	Mid	Max	Midpoint Progression	Range Width
10	\$44,000	\$55,000	\$66,000		50%
11	\$50,000	\$62,000	\$75,000	12.5%	50%
12	\$56,000	\$70,000	\$84,000	12.5%	50%
13	\$63,000	\$79,000	\$95,000	12.5%	50%
14	\$71,000	\$89,000	\$107,000	12.5%	50%
15	\$80,000	\$100,000	\$120,000	12.5%	50%
16	\$90,000	\$113,000	\$135,000	12.5%	50%
17	\$102,000	\$127,000	\$153,000	12.5%	50%
18	\$114,000	\$143,000	\$171,000	12.5%	50%
19	\$129,000	\$161,000	\$194,000	12.5%	50%
20	\$145,000	\$181,000	\$218,000	12.5%	50%
21	\$163,000	\$204,000	\$245,000	12.5%	50%
22	\$188,000	\$235,000	\$282,000	15.0%	50%
23	\$216,000	\$270,000	\$324,000	15.0%	50%
24	\$249,000	\$311,000	\$374,000	15.0%	50%
25	\$286,000	\$358,000	\$429,000	15.0%	50%

Grade labels begin at 10; these can be adjusted as desired.

Range widths were set at a constant 50%, allowing an ample range relative to the midpoint for differences based on employee performance, experience, etc.

Midpoint progressions reflect typical level differentiation between jobs in the structure (increase from 12.5% up through 15% at the highest levels).

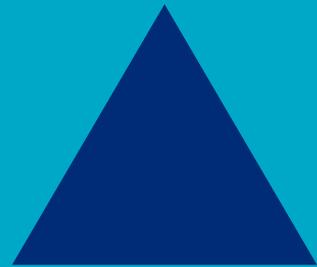
FY2015 STRUCTURE

JOB SLOTTING

- Investment-related classification titles were slotted into grades based on competitive market benchmarking and relative level compared to other roles within NCDST:

Grade	Job Titles	Min	Mid	Max	Midpoint Progression	Range Width
10		\$44,000	\$55,000	\$66,000		50%
11		\$50,000	\$62,000	\$75,000	12.5%	50%
12	Investment Analyst - C	\$56,000	\$70,000	\$84,000	12.5%	50%
13	Investment Analyst - J,	\$63,000	\$79,000	\$95,000	12.5%	50%
14	Investment Analyst - A	\$71,000	\$89,000	\$107,000	12.5%	50%
15	Accounting Manager	\$80,000	\$100,000	\$120,000	12.5%	50%
16		\$90,000	\$113,000	\$135,000	12.5%	50%
17		\$102,000	\$127,000	\$153,000	12.5%	50%
18	Portfolio Manager - C, Legal Counsel - A, Deputy Director Financial Operations	\$114,000	\$143,000	\$171,000	12.5%	50%
19	Portfolio Manager - J, General Counsel	\$129,000	\$161,000	\$194,000	12.5%	50%
20	Portfolio Manager - A	\$145,000	\$181,000	\$218,000	12.5%	50%
21	Investment Director - C, CFO	\$163,000	\$204,000	\$245,000	12.5%	50%
22	Investment Director - J	\$188,000	\$235,000	\$282,000	15.0%	50%
23	Investment Director - A	\$216,000	\$270,000	\$324,000	15.0%	50%
24		\$249,000	\$311,000	\$374,000	15.0%	50%
25	Chief Investment Officer	\$286,000	\$358,000	\$429,000	15.0%	50%

FY2017 STRUCTURE



FY2017 STRUCTURE OVERVIEW

- NCDST re-engaged Mercer to update the compensation structure based on market movement. NCDST plans to implement the updated structure in Fiscal Year 2017 (FY2017).
- To update the structure, Mercer analyzed the latest market data for the investment-related classification titles within the structure.
 - The exact methodology and surveys used in this analysis are shown on the following page.
- Mercer then compared the new market data to the FY2015 market data to determine the market movement for these classification titles. The market movement is reflected in the updated structure, detailed later in this report.

FY2017 STRUCTURE BENCHMARKING METHODOLOGY

- To benchmark NCDST’s investment-related classification titles, Mercer used the most recent versions of the survey sources used in the FY2015 study. These surveys represent other large public funds that are comparable to NCDST. The sources are listed below:

FY2017 Structure Sources	FY2015 Structure Sources
Mercer’s 2015 Compensation Design for Public Pension Fund Investment Professionals Survey	Mercer’s 2013 Compensation Design for Public Pension Fund Investment Professionals Survey
McLagan’s 2016 US Public Funds Compensation Survey	McLagan’s 2014 US Public Funds Compensation Survey
Mercer’s 2016 Benchmark Database	Mercer’s 2014 Benchmark Database

- All market data for the updated structure was trended forward to November 1, 2016. An annual increase rate of 3% was used, based on the median actual increases for US employees in 2015 and 2016¹.

FY2017 STRUCTURE

STRUCTURE METHODOLOGY

- In order to determine how much to adjust the FY2015 structure, Mercer compared the benchmarking results in FY2017 against the benchmarking results in FY2015 for like classification titles. The median change between the FY2015 jobs and FY2017 jobs was approximately 8.4%.
 - The detailed classification title analysis is in the appendix.
 - The median was selected as the metric for comparison because it is the most accurate representation of market movement. The median eliminates the bias of classification titles where the market movement was particularly high or low between studies, which may reflect incumbent movement more than market movement.
 - To reflect the aggregate market movement for investment-related classification titles within NCDST, we have adjusted the FY2015 compensation structure by approximately 8%, rounded to the nearest \$1,000.
- The updated FY2017 structure is shown on the following page.

FY2017 STRUCTURE

COMPENSATION STRUCTURE

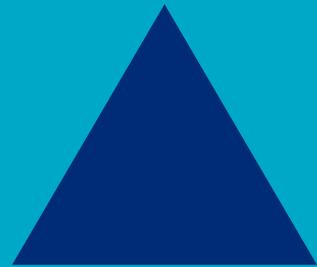
Grade	Min	Mid	Max	Midpoint Progression	Range Width
10	\$48,000	\$59,000	\$71,000		50%
11	\$54,000	\$67,000	\$81,000	12.5%	50%
12	\$60,000	\$76,000	\$91,000	12.5%	50%
13	\$68,000	\$85,000	\$103,000	12.5%	50%
14	\$77,000	\$96,000	\$116,000	12.5%	50%
15	\$86,000	\$108,000	\$130,000	12.5%	50%
16	\$97,000	\$122,000	\$146,000	12.5%	50%
17	\$110,000	\$137,000	\$165,000	12.5%	50%
18	\$123,000	\$154,000	\$185,000	12.5%	50%
19	\$139,000	\$174,000	\$210,000	12.5%	50%
20	\$157,000	\$195,000	\$235,000	12.5%	50%
21	\$176,000	\$220,000	\$265,000	12.5%	50%
22	\$203,000	\$254,000	\$305,000	15.0%	50%
23	\$233,000	\$292,000	\$350,000	15.0%	50%
24	\$269,000	\$336,000	\$404,000	15.0%	50%
25	\$309,000	\$387,000	\$463,000	15.0%	50%

FY2017 STRUCTURE SLOTING

- Mercer determined on a case-by-case basis whether market adjustments for individual classification titles warranted a grade adjustment. Based on our analysis of the market data, we do not recommend any grade changes from the previous study at this time. The slotting of the investment-related classification titles into the updated structure is shown below:

Grade	Job Titles	Min	Mid	Max	Midpoint Progression	Range Width
10		\$48,000	\$59,000	\$71,000		50%
11		\$54,000	\$67,000	\$81,000	12.5%	50%
12	Investment Analyst - C	\$60,000	\$76,000	\$91,000	12.5%	50%
13	Investment Analyst - J,	\$68,000	\$85,000	\$103,000	12.5%	50%
14	Investment Analyst - A	\$77,000	\$96,000	\$116,000	12.5%	50%
15	Accounting Manager	\$86,000	\$108,000	\$130,000	12.5%	50%
16		\$97,000	\$122,000	\$146,000	12.5%	50%
17		\$110,000	\$137,000	\$165,000	12.5%	50%
18	Portfolio Manager - C, Legal Counsel - A, Deputy Director Financial Operations	\$123,000	\$154,000	\$185,000	12.5%	50%
19	Portfolio Manager - J, General Counsel	\$139,000	\$174,000	\$210,000	12.5%	50%
20	Portfolio Manager - A	\$157,000	\$195,000	\$235,000	12.5%	50%
21	Investment Director - C, CFO	\$176,000	\$220,000	\$265,000	12.5%	50%
22	Investment Director - J	\$203,000	\$254,000	\$305,000	15.0%	50%
23	Investment Director - A	\$233,000	\$292,000	\$350,000	15.0%	50%
24		\$269,000	\$336,000	\$404,000	15.0%	50%
25	Chief Investment Officer	\$309,000	\$387,000	\$463,000	15.0%	50%

APPENDIX



APPENDIX

DETAILED MARKET DATA

Title	Mercer Title Match	McLagan Title Match	FY2017 Study Mercer & McLagan Blend	FY2015 Study Mercer & McLagan Blend	% Change
Accountant	Accountant - Experienced	Intermediate Staff	\$66,052	\$62,728	5%
Accounting Manager	Accounting Manager	Team Lead, Supervisor	\$106,219	\$104,373	2%
Accounting Supervisor	Accounting - Team Leader	Senior Staff	\$84,639	\$79,955	6%
Accounting Technician	Accountant - Entry	Intermediate Staff, -15%	\$55,782	\$52,942	5%
Accounting Technician	Accountant - Entry	Intermediate Staff, -15%	\$55,782	\$52,942	5%
Investment Analyst - J (Operations)	Not Available	Sec Ops/Port Admin - Specialist	\$72,257	\$69,822	3%
Investment Analyst - J (Operations)	Not Available	Senior Investment Performance Analyst	\$84,944	\$80,308	6%
Investment Analyst - J (Operations)	Not Available	Senior Investment Performance Analyst	\$84,944	\$80,308	6%
Investment Analyst - J (Real Estate)	Interm. Inv. Analyst	Intermediate Analyst External Investments - All Specialties Combined	\$95,294	\$88,148	8%
Investment Analyst - J (Opps Fixed/Inflation)	Interm. Inv. Analyst	Intermediate Analyst External Investments - All Specialties Combined	\$95,294	\$88,148	8%
Investment Analyst - J (Private Equity)	Interm. Inv. Analyst	Intermediate Analyst External Investments - All Specialties Combined	\$95,294	\$88,148	8%
Investment Analyst - J (Opps Fixed/Inflation)	Interm. Inv. Analyst	Intermediate Analyst External Investments - All Specialties Combined	\$95,294	\$88,148	8%
Investment Analyst - J (Public Equity)	Interm. Inv. Analyst	Intermediate Analyst External Investments - All Specialties Combined	\$95,294	\$88,148	8%
Investment Analyst - J (Operations)	Not Available	Sec Ops/Port Admin - Senior/Lead Specialist	\$83,740	\$89,685	-7%
Investment Analyst - J (Operations)	Not Available	Sec Ops/Port Admin - Senior/Lead Specialist	\$83,740	\$89,685	-7%

APPENDIX

DETAILED MARKET DATA

Title	Mercer Title Match	McLagan Title Match	FY2017 Study Mercer & McLagan Blend	FY2015 Study Mercer & McLagan Blend	% Change
CFO	Head of Financial Control - Controller	Head of Investment Accounting +15%	\$204,092	\$198,745	3%
Chief Investment Officer	Top Investment Officer	Most Senior Investment Position	\$386,740	\$361,442	7%
Deputy Director Financial Operations	Accounting Director	Head of Investment Accounting	\$144,826	\$138,481	5%
Legal Counsel - A	Legal Counsel - Experienced +10%	Corporate Governance Director	\$146,061	\$134,945	8%
General Counsel	Legal Counsel - Senior	Corporate Governance Director +15%	\$173,922	\$165,274	5%
Investment Director - J	Hybrid: 65% Inv. Ops. Director + 35% Sen. Inv. Director	Hybrid: 65% Chief Operating/Admin Officer + 35% Deputy CIO	\$272,106	\$233,046	17%
Investment Director - J (Credit/Inflation)	Senior Investment Executive	Team Leader - Alternative Products - Manager of Managers	\$262,084	\$232,654	13%
Investment Director - J (Alternative Investments)	Senior Investment Executive	Team Leader - Alternative Products - Manager of Managers	\$262,084	\$232,654	13%
Investment Director - J (Fixed Income)	Senior Investment Executive	Head of Area/Asset Class - Fundamental Fixed Income	\$274,268	\$244,728	12%
Investment Director - J (Multi-Strategy)	Senior Investment Executive	Team Leader - Alternative Products - Manager of Managers	\$262,084	\$232,654	13%
Investment Director - J (Public Equities)	Senior Investment Executive	Team Leader - Traditional Products - Manager of Managers	\$255,139	\$225,218	13%
Investment Director - J (Real Estate)	Senior Investment Executive	Head of Area/Asset Class - Real Estate	\$263,086	\$231,394	14%
Investment Director - J	Senior Risk Management/Asset Allocation Director	Head Risk/Inv Strategy	\$258,160	\$186,639	38%
Investment Director - C	Hybrid: Sen. Inv Dir + Inv Director	Hybrid: Team Leader - Alt Prod/Sr Mgr - Ext Inv - All Specialties Combined	\$232,220	\$206,890	12%
Investment Director - C (Fixed Income)	Hybrid: Sen. Inv Dir + Inv Director	Hybrid: Head of Area -Fund. FI/Senior PM I - Fund. Fixed Income	\$246,386	\$222,480	11%

APPENDIX

DETAILED MARKET DATA

Title	Mercer Title Match	McLagan Title Match	FY2017 Study Mercer & McLagan Blend	FY2015 Study Mercer & McLagan Blend	% Change
Portfolio Manager - J (Fixed Income)	Not Available	Sr Research Analyst I and II Combined- All Specialties Combined	\$151,134	\$143,627	5%
Portfolio Manager - J (Risk and Asset Allocation)	Not Available	Senior Risk/Investment Strategist	\$166,929	\$157,793	6%
Portfolio Manager - J (Equity)	Investment Manager	Hybrid: Senior Manager + Senior Analyst External Investments - Equity	\$173,587	\$159,963	9%
Portfolio Manager - J (Equity)	Investment Manager	Hybrid: Senior Manager + Senior Analyst External Investments - Equity	\$173,587	\$159,963	9%
Portfolio Manager - J (Equity)	Investment Manager	Hybrid: Senior Manager + Senior Analyst External Investments - Equity	\$173,587	\$159,963	9%
Portfolio Manager - J (Real Estate)	Investment Manager	Hybrid: Senior Manager + Senior Analyst - All Specialties Combines	\$173,587	\$159,963	9%
Portfolio Manager - J (Opps Fixed/Inflation)	Investment Manager	Hybrid: Senior Manager + Senior Analyst - All Specialties Combines	\$173,587	\$159,963	9%
Portfolio Manager - J (Fixed Income)	Not Available	Hybrid: Sr PM I - Fundamental Fixed- Income + Senior Trader	\$177,835	\$161,650	10%
Portfolio Manager - J (Private Equity)	Second Level Investment Executive	Senior Manager External Investments - All Specialties Combined	\$202,356	\$167,474	21%
Portfolio Manager - J (Real Estate)	Second Level Investment Executive	Senior Manager External Investments - All Specialties Combined	\$202,356	\$181,126	12%
Portfolio Manager - J (Opps Fixed/Inflation)	Second Level Investment Executive	Senior Manager External Investments - All Specialties Combined	\$202,356	\$181,126	12%
Portfolio Manager - J (Private Equity)	Second Level Investment Executive	Senior Manager External Investments - All Specialties Combined	\$202,356	\$181,126	12%
Portfolio Manager - J (Multi- Strategy)	Second Level Investment Executive	Senior Manager External Investments - All Specialties Combined	\$202,356	\$181,126	12%
Portfolio Manager - J (Fixed Income)	Not Available	Manager, Research - All Specialties Combined	\$213,914	\$189,150	13%
Portfolio Manager - A (Real Estate)	Second Level Investment Executive	Senior Manager External Investments - All Specialties Combined	\$202,356	\$181,126	12%
Portfolio Manager - C	Not Available	Hybrid: Sr PM II - Fundamental Fixed- Income + Interm. Trader	\$151,810	\$143,173	6%

Median % Change 8.38%



MERCER

MAKE TOMORROW, TODAY