



2017 Investment Management Division Major Initiatives

March 29, 2017



North Carolina Department of State Treasurer
Investment Management

Learn. Invest. Grow. Prosper.

“Taken Off the List”

1. Research and develop Long-term Stewardship (“ESG”) policies and strategies
2. Transition oversight of Ancillary Funds, including establish a new long-term fixed income product for certain clients and facilitate movement of assets
3. Implement Managed Accounts Program and initial components of direct Hedged Equity program
4. Update asset-liability study and support review of the NCRS discount rate/investment return assumption
5. Institute 360 degree feedback for senior management
6. Implement BNY Mellon Private Investment Asset Service processes
7. New IMD role with unbundled Supplemental Retirement Plan
8. Implement Venture Capital Multiplier Fund (Escheats Fund)
9. Conduct third-party review of budget practices, fees, incentives and policy compliance



Major IMD Initiatives

1. Facilitate Treasurer transition
2. Investment program cost-efficiencies initiative
3. Evaluate restructuring/exiting Fund of Funds and legacy low-conviction funds/managers
4. Internal equity index fund implementation
5. Establish career development program for team leaders, portfolio managers, and analysts



Cost-Efficiencies Initiative: Goal

1. Obtain \$100 million of incremental cost-efficiencies for the NCRS investment program, consistent with fiduciary requirements and the NCRS investment objectives
2. The \$100 million goal would be measured on a cumulative basis over a four year timeframe
3. The FY15-16 base is \$606.99 million of NCRS investment program costs, consisting of:
 - a. \$513.28 million in investment management and incentive fees
 - b. \$61.32 million in other external manager fund expenses (i.e., 2/3) and direct operating expenses (i.e., 1/3)
 - c. \$32.35 million in fees and expenses deducted from the returns of fund-of-funds



Cost-Efficiencies Initiative: Context

NCRS Total External Investment Manager Fees Paid Fiscal Year ended June 30, 2016

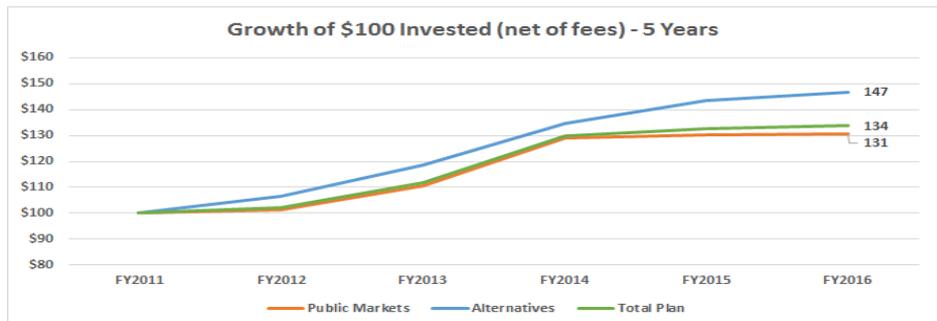
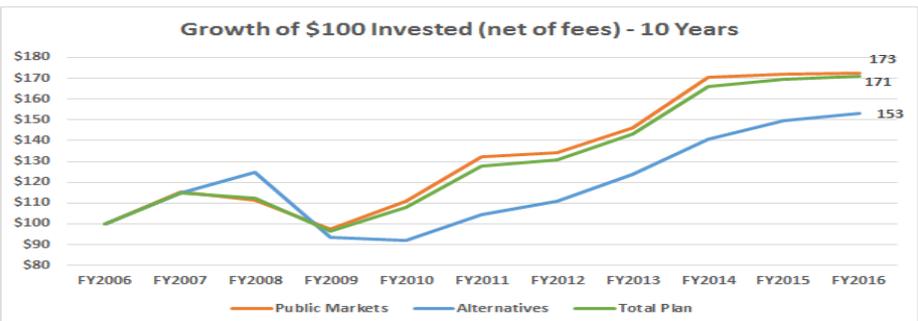
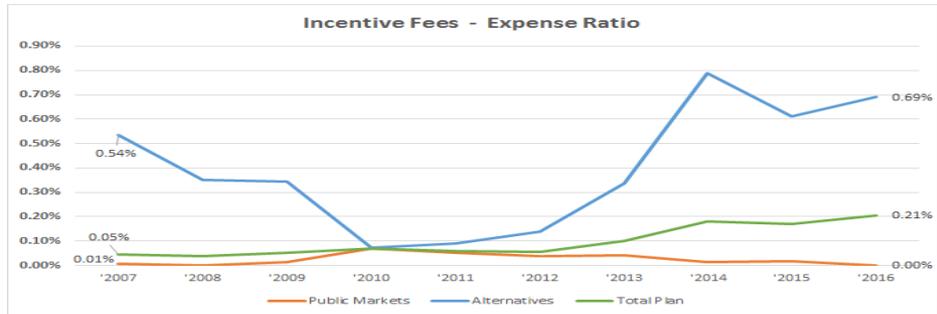
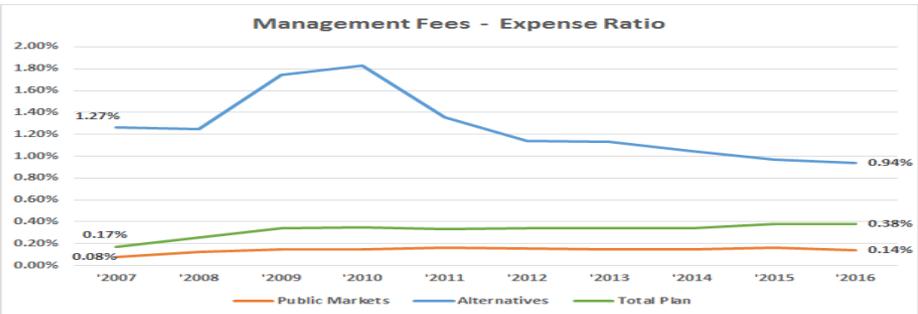
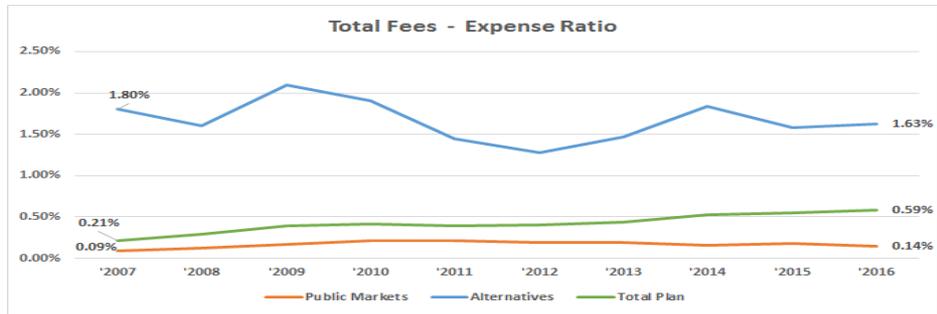
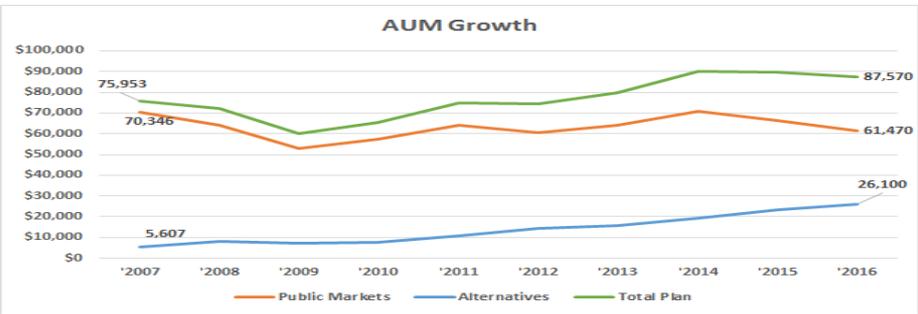
	<u>Management Fees</u>	<u>Incentive Fees</u>	<u>Total</u>	<u>June 30, 2016 Portfolio MV</u>	<u>Expense Ratio (vs 6/30 MV)</u>
Public Equity	\$85,999,119	\$0	\$85,999,119	\$37,256,098,009	0.23%
Private Equity	\$51,923,362	\$40,934,608	\$92,857,970	\$4,375,776,820	2.12%
Real Estate	\$79,688,446	\$116,444,049	\$196,132,495	\$8,353,122,404	2.35%
Multi-Strategy	\$4,022,952	\$107,175	\$4,130,127	\$1,617,323,452	0.26%
Opportunistic Fixed Income	\$57,554,980	\$22,155,142	\$79,710,122	\$5,259,504,719	1.52%
Inflation	\$51,665,952	\$1,497,298	\$53,163,250	\$5,192,457,132	1.02%
Investment Grade Fixed Income	\$1,283,356	\$0	\$1,283,356	\$25,515,800,146	NM
Total	\$332,138,167	\$181,138,272	\$513,276,439	\$87,570,082,682	0.59%
Fees as % of plan	0.38%	0.21%	0.59%		

Source: Financial Operations Division, utilizing work-papers for DST audited financials statements.



Cost-Efficiencies Initiative: Context

Public Markets vs. Alternatives



Cost-Efficiencies Initiative: Strategic/Tactical Focus

1. Strategic: CEM Benchmarking studies have been conducted on the NCRS since 2013 and they have identified cost-inefficiencies relative to peers:
 - a. Deemphasize/eliminate fund-of-funds
 - b. Substitute lower cost passive and internal management for external active management
 - c. Use more separate accounts in real estate, natural resources, and other private markets

2. Tactical: Prioritizing work already underway in light of the expected “return on fees”
 - a. Increasing the use of index funds in public equity given the disappointing performance of several domestic equity active managers
 - b. Increasing the use of lower-cost high yield fixed income managers and direct lending managers given the disappointing performance of several credit hedge funds
 - c. Exiting low conviction real estate, private equity, and other direct private funds through potential secondary sales facilitated by Houlihan Lokey
 - d. Restructuring or exiting low conviction fund-of-funds
 - e. Utilizing larger allocations with high conviction relationships/managers, within and across asset classes, to simplify asset classes’ manager lineups and improve cost-effectiveness



11/16 Structure Review – Historical Performance

Callan Indices	NC composite
Russell 1000	Dom Large Cap Active Core
Russell 1000 Growth	Dom Large Cap Active Growth
Russell 1000 Value	Dom Large Cap Active Value
Russell Midcap	Domestic Mid Cap Active
Russell Midcap Growth	Domestic Mid Cap Active Growth
Russell Midcap Value	N/A
Russell 2000	Domestic Small Cap Active
Russell 2000 Growth	Dom Small Cap Active Growth
Russell 2000 Value	Dom Small Cap Active Value
Russell 3000	Domestic Active
Russell 3000 Growth	N/A
Russell 3000 Value	N/A
EAFE	International Active EAFE
World ex USA Small	N/A
Emerging Markets	Emerging Composite
Emerging Markets Small	N/A
Frontier Markets	N/A
ACWI ex USA	Intl Active ACWI Ex-US
ACWI ex USA Small	Intl Active Small Cap
ACWI ex USA IMI	International Active
ACWI	Global Equity
Totals Active	Total Active Equity
Totals	TOTAL EQUITY

Callan Historical		
Net Excess	Fees	Tracking Error
-0.01%	0.30%	2.74%
0.00%	0.30%	3.90%
-0.02%	0.30%	3.42%
-0.28%	0.40%	4.26%
-0.28%	0.40%	5.33%
-0.27%	0.40%	4.73%
0.63%	0.50%	4.62%
-0.01%	0.50%	6.28%
1.27%	0.50%	5.50%
-0.10%	0.35%	3.89%
-0.10%	0.35%	6.39%
-0.10%	0.35%	5.27%
0.56%	0.40%	3.25%
1.37%	0.65%	5.89%
0.24%	0.60%	3.72%
0.30%	0.65%	6.50%
-0.75%	0.75%	0.00%
0.25%	0.45%	4.62%
0.35%	0.65%	6.04%
0.25%	0.50%	4.83%
0.87%	0.45%	4.22%
0.34%	0.45%	
0.14%	0.25%	

NCRS Historical 5 year		
Net Excess	Fees	Tracking Error
-4.36%	0.98%	3.77%
-0.73%	0.51%	5.45%
-0.42%	0.46%	2.17%
-0.77%	0.66%	2.58%
0.51%	0.78%	3.18%
2.05%	0.66%	3.01%
1.78%	0.66%	4.73%
2.13%	0.68%	2.61%
-1.34%	0.63%	2.56%
0.34%	0.34%	3.14%
1.43%	0.59%	3.05%
1.90%	0.35%	1.75%
3.15%	0.69%	3.27%
1.10%	0.43%	1.32%
4.90%	0.49%	3.18%
0.33%	0.48%	1.32%
0.89%	0.28%	0.67%

Source: Callan, NCRS



11/16 Structure Review – Strawman Portfolio

Active Management Allocation Guidelines

	Actual 9/30/16	Transitional	Strategic
U.S. Equity	37%	20% - 30%	20%
Non-US Equity	57%	45% to 55%	45%
Global Equity	72%	75% to 100%	75%
Equity Hedge	14%	14% to 75%	75%
Total	47%	42%	39%

Active Risk

Monitoring Threshold	0.75%
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Escalation Threshold	1.50%
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Misfit

Monitoring Threshold	0.15%
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Escalation Threshold	0.30%
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Cost-Efficiencies Initiative: Progress to Date

1. Terminated 6 public equity managers with FY15-16 annual fees of ~\$17 million and evaluating other public equity manager terminations with FY15-16 fees of \$15 to \$20 million
2. Credit hedge fund redemptions (last year and this year) should result in annual fee reductions of ~\$10 million and added separate account high yield and bank loan managers in 2016
3. Testing the market with a limited scale secondary sales transaction
4. NCRS's total fund-of-funds exposure now \$800 million below the peak through terminations/redemptions/distributions and top-level management fees were ~\$3 million lower in FY15-16 than the prior year
5. Utilizing larger allocations with high conviction relationships/managers, within and across asset classes, to simplify asset classes' manager lineups and improve cost-effectiveness



2016 Vintage NCRS Commitments

Commitment Amount (\$)	Count	Wtd. Avg. Term (Years)	Wtd. Avg. Standard Fee (%)	Wtd. Avg. NCRS Fee (%)	Wtd. Avg. Annual Fee Savings (%)	Total Annual Fee Savings (\$)
< 100MM**	12	8.0	1.47%	0.96%	0.50%	3,368,243
100MM - 249MM	23	6.4	1.40%	1.06%	0.34%	11,540,843
> 250MM	7	6.0	1.06%	0.52%	0.54%	13,287,458
Totals					0.43%	28,196,544

Notes:

While average annual fee savings over the full lives of the funds are shown, NCRS negotiations within Private Equity primarily impact commitment period fees -- as such, savings shown herein understate the true savings realized at the beginning of a Private Equity fund's life.

** The term shown for one fund in the <100MM range is estimated based on the expected life of its single underlying investment.

Fees are stated as a percentage of total commitment.

Incentive and performance fees are excluded.

Open-ended funds are excluded from the average term calculation.

Weighted averages are weighted based on commitment amounts.

