

The Ithaka Group
PORTFOLIO APPRAISAL
North Carolina Retirement System
North Carolina Department of State Treasurer
March 31, 2016

Quantity	Security	Unit Cost	Total Cost	Price	Market Value	Pct. Assets	Cur. Yield
CASH AND EQUIVALENTS							
	BNY MELLON MMF		389,247.39		389,247.39	2.1	0.0
	Dividend Accruals		741.12		741.12	0.0	0.0
			389,988.51		389,988.51	2.1	0.0
COMMON STOCK							
5,220.0000	Adobe Systems Inc.	86.11	449,501.24	93.80	489,636.00	2.6	0.0
3,582.0000	Alexion Pharmaceuticals	129.33	463,253.83	139.22	498,686.04	2.7	0.0
1,226.0000	Alphabet Inc. Class C	634.09	777,393.91	744.95	913,308.70	4.9	0.0
1,372.0000	Amazon.com Inc.	304.75	418,112.61	593.64	814,474.08	4.4	0.0
1,570.0000	Baidu, Inc. ADS	228.07	358,069.74	190.88	299,681.60	1.6	0.0
1,568.0000	BioMarin Pharmaceutical	124.55	195,297.07	82.48	129,328.64	0.7	0.0
655.0000	Biogen Inc.	377.68	247,380.96	260.32	170,509.60	0.9	0.0
6,677.0000	Celgene Corp.	78.01	520,847.32	100.09	668,300.93	3.6	0.0
1,780.0000	Domino's Pizza, Inc.	109.44	194,799.64	131.86	234,710.80	1.3	1.2
12,758.0000	Facebook, Inc. cl A	41.56	530,178.77	114.10	1,455,687.80	7.9	0.0
3,081.0000	Illumina Inc	189.39	583,499.36	162.11	499,460.91	2.7	0.0
1,686.0000	LinkedIn Corp cl A	216.79	365,507.83	114.35	192,794.10	1.0	0.0
8,450.0000	Mastercard Inc.	54.55	460,972.85	94.50	798,525.00	4.3	0.8
3,550.0000	Middleby Corporation	84.56	300,184.17	106.77	379,033.50	2.0	0.0
1,199.0000	Netflix Inc	116.81	140,050.64	102.23	122,573.77	0.7	0.0
4,632.0000	Nike Inc cl B	64.53	298,922.11	61.47	284,729.04	1.5	1.0
670.0000	O'Reilly Automotive, Inc.	255.47	171,167.24	273.66	183,352.20	1.0	0.0
2,866.0000	Palo Alto Networks, Inc.	162.76	466,468.28	163.14	467,559.24	2.5	0.0
10,542.0000	PayPal Holdings, Inc.	38.67	407,668.63	38.60	406,921.20	2.2	0.0
1,721.0000	Regeneron Pharmaceuticals	287.18	494,240.48	360.44	620,317.24	3.3	0.0
13,833.0000	Salesforce.com Inc	47.74	660,439.62	73.83	1,021,290.39	5.5	0.0
6,155.0000	Splunk Inc.	43.57	268,164.60	48.93	301,164.15	1.6	0.0
21,672.0000	Starbucks Corporation	32.42	702,654.96	59.70	1,293,818.40	7.0	1.3
6,256.0000	TJX Companies Inc.	68.08	425,929.12	78.35	490,157.60	2.6	1.1
755.0000	The Priceline Group Inc.	707.95	534,502.25	1,288.96	973,164.80	5.3	0.0
2,145.0000	Transdigm Group, Inc.	123.35	264,580.94	220.34	472,629.30	2.6	0.0
3,730.0000	TripAdvisor, Inc.	89.91	335,382.84	66.50	248,045.00	1.3	0.0
4,387.0000	Ulta Salon, Cosmetics	161.68	709,280.51	193.74	849,937.38	4.6	0.0
1,531.0000	Ultimate Software Group Inc.	178.81	273,764.55	193.50	296,248.50	1.6	0.0
8,529.0000	Under Armour, Inc. Cl A	29.42	250,957.10	84.83	723,515.07	3.9	0.0
13,678.0000	VISA Inc.	47.81	653,877.71	76.48	1,046,093.44	5.6	0.7
4,799.0000	Walt Disney Company	91.54	439,316.01	99.31	476,588.69	2.6	1.4
4,040.0000	Workday, Inc.	76.31	308,307.33	76.84	310,433.60	1.7	0.0
			13,670,674.22		18,132,676.71	97.9	0.3
TOTAL PORTFOLIO			14,060,662.73		18,522,665.22	100.0	0.3

The Ithaka Group
PERFORMANCE HISTORY
NET OF FEES
North Carolina Retirement System
From 05-02-13 to 03-31-16

Time Period			Percent Return				Cumulative TWR			
			Portfolio	Russell 1000 Growth	Russell 3000 Growth	S&P 500	Basis = 100			
05-02-2013 to 05-02-2013							100.00	100.00	100.00	100.00
05-02-2013	to	05-31-2013	1.82	1.69	2.00	2.08	101.82	101.69	102.00	102.08
05-31-2013	to	06-30-2013	-2.21	-1.88	-1.78	-1.50	99.57	99.78	100.18	100.54
06-30-2013	to	07-31-2013	7.69	5.30	5.48	4.95	107.22	105.07	105.68	105.52
07-31-2013	to	08-31-2013	1.83	-1.71	-1.73	-3.13	109.19	103.27	103.84	102.21
08-31-2013	to	09-30-2013	8.56	4.46	4.66	2.97	118.53	107.87	108.68	105.26
09-30-2013	to	10-31-2013	2.80	4.42	4.21	4.46	121.85	112.64	113.26	109.95
10-31-2013	to	11-30-2013	3.28	2.82	2.92	2.80	125.84	115.82	116.57	113.03
11-30-2013	to	12-31-2013	2.75	2.86	2.79	2.36	129.30	119.13	119.82	115.70
12-31-2013	to	01-31-2014	-1.21	-2.85	-2.76	-3.56	127.74	115.73	116.51	111.58
01-31-2014	to	02-28-2014	6.81	5.15	5.12	4.31	136.44	121.69	122.48	116.39
02-28-2014	to	03-31-2014	-7.00	-1.01	-1.13	0.69	126.88	120.46	121.10	117.20
03-31-2014	to	04-30-2014	-5.12	0.00	-0.41	0.62	120.39	120.47	120.61	117.92
04-30-2014	to	05-31-2014	2.87	3.12	2.95	2.10	123.85	124.22	124.16	120.40
05-31-2014	to	06-30-2014	2.94	1.95	2.27	1.91	127.49	126.64	126.98	122.70
06-30-2014	to	07-31-2014	0.37	-1.53	-1.89	-1.51	127.96	124.70	124.58	120.85
07-31-2014	to	08-31-2014	5.38	4.58	4.66	3.77	134.85	130.42	130.39	125.40
08-31-2014	to	09-30-2014	-2.44	-1.45	-1.75	-1.55	131.56	128.53	128.11	123.45
09-30-2014	to	10-31-2014	3.03	2.64	2.90	2.32	135.55	131.91	131.82	126.32
10-31-2014	to	11-30-2014	1.56	3.17	2.98	2.45	137.66	136.09	135.74	129.42
11-30-2014	to	12-31-2014	-1.83	-1.04	-0.75	-0.42	135.14	134.67	134.73	128.88
12-31-2014	to	01-31-2015	0.72	-1.53	-1.59	-3.10	136.12	132.61	132.59	124.87
01-31-2015	to	02-28-2015	8.35	6.67	6.71	5.49	147.49	141.45	141.48	131.73
02-28-2015	to	03-31-2015	-1.45	-1.14	-0.92	-1.74	145.36	139.84	140.18	129.44
03-31-2015	to	04-30-2015	-0.32	0.50	0.23	0.85	144.89	140.54	140.51	130.54
04-30-2015	to	05-31-2015	0.28	1.41	1.58	1.05	145.30	142.52	142.73	131.91
05-31-2015	to	06-30-2015	1.24	-1.76	-1.52	-2.10	147.10	140.01	140.56	129.14
06-30-2015	to	07-31-2015	5.21	3.39	3.14	1.97	154.76	144.76	144.98	131.69
07-31-2015	to	08-31-2015	-6.87	-6.07	-6.19	-6.26	144.14	135.97	136.00	123.45
08-31-2015	to	09-30-2015	-2.66	-2.47	-2.78	-2.64	140.30	132.60	132.22	120.18
09-30-2015	to	10-31-2015	9.66	8.61	8.39	8.30	153.86	144.02	143.31	130.16
10-31-2015	to	11-30-2015	-0.14	0.28	0.53	0.05	153.65	144.43	144.07	130.22
11-30-2015	to	12-31-2015	-1.13	-1.47	-1.72	-1.75	151.91	142.31	141.59	127.94
12-31-2015	to	01-31-2016	-8.77	-5.58	-5.97	-5.07	138.59	134.36	133.13	121.45
01-31-2016	to	02-29-2016	-4.20	-0.04	-0.09	-0.41	132.77	134.31	133.01	120.95
02-29-2016	to	03-31-2016	5.42	6.74	6.81	6.60	139.97	143.36	142.07	128.93
Date to Date										
05-02-2013	to	03-31-2016	39.97	43.36	42.07	28.93				
Annualized			12.24	13.16	12.81	9.12				

The Ithaka Group
PERFORMANCE HISTORY
GROSS OF FEES
North Carolina Retirement System
From 05-02-13 to 03-31-16

Time Period			Percent Return				Cumulative TWR			
			Portfolio	Per Period		S&P 500	Basis = 100			
				Russell 1000 Growth	Russell 3000 Growth					
05-02-2013	to	05-02-2013					100.00	100.00	100.00	100.00
05-02-2013	to	05-31-2013	1.82	1.69	2.00	2.08	101.82	101.69	102.00	102.08
05-31-2013	to	06-30-2013	-2.21	-1.88	-1.78	-1.50	99.57	99.78	100.18	100.54
06-30-2013	to	07-31-2013	7.78	5.30	5.48	4.95	107.32	105.07	105.68	105.52
07-31-2013	to	08-31-2013	1.83	-1.71	-1.73	-3.13	109.28	103.27	103.84	102.21
08-31-2013	to	09-30-2013	8.60	4.46	4.66	2.97	118.68	107.87	108.68	105.26
09-30-2013	to	10-31-2013	2.94	4.42	4.21	4.46	122.17	112.64	113.26	109.95
10-31-2013	to	11-30-2013	3.28	2.82	2.92	2.80	126.18	115.82	116.57	113.03
11-30-2013	to	12-31-2013	2.75	2.86	2.79	2.36	129.64	119.13	119.82	115.70
12-31-2013	to	01-31-2014	-1.07	-2.85	-2.76	-3.56	128.26	115.73	116.51	111.58
01-31-2014	to	02-28-2014	6.81	5.15	5.12	4.31	137.00	121.69	122.48	116.39
02-28-2014	to	03-31-2014	-7.00	-1.01	-1.13	0.69	127.41	120.46	121.10	117.20
03-31-2014	to	04-30-2014	-4.97	0.00	-0.41	0.62	121.07	120.47	120.61	117.92
04-30-2014	to	05-31-2014	2.87	3.12	2.95	2.10	124.55	124.22	124.16	120.40
05-31-2014	to	06-30-2014	2.94	1.95	2.27	1.91	128.21	126.64	126.98	122.70
06-30-2014	to	07-31-2014	0.51	-1.53	-1.89	-1.51	128.87	124.70	124.58	120.85
07-31-2014	to	08-31-2014	5.38	4.58	4.66	3.77	135.81	130.42	130.39	125.40
08-31-2014	to	09-30-2014	-2.44	-1.45	-1.75	-1.55	132.49	128.53	128.11	123.45
09-30-2014	to	10-31-2014	3.18	2.64	2.90	2.32	136.71	131.91	131.82	126.32
10-31-2014	to	11-30-2014	1.56	3.17	2.98	2.45	138.84	136.09	135.74	129.42
11-30-2014	to	12-31-2014	-1.83	-1.04	-0.75	-0.42	136.30	134.67	134.73	128.88
12-31-2014	to	01-31-2015	0.87	-1.53	-1.59	-3.10	137.48	132.61	132.59	124.87
01-31-2015	to	02-28-2015	8.35	6.67	6.71	5.49	148.97	141.45	141.48	131.73
02-28-2015	to	03-31-2015	-1.39	-1.14	-0.92	-1.74	146.89	139.84	140.18	129.44
03-31-2015	to	04-30-2015	-0.32	0.50	0.23	0.85	146.42	140.54	140.51	130.54
04-30-2015	to	05-31-2015	0.28	1.41	1.58	1.05	146.83	142.52	142.73	131.91
05-31-2015	to	06-30-2015	1.44	-1.76	-1.52	-2.10	148.95	140.01	140.56	129.14
06-30-2015	to	07-31-2015	5.21	3.39	3.14	1.97	156.71	144.76	144.98	131.69
07-31-2015	to	08-31-2015	-6.87	-6.07	-6.19	-6.26	145.95	135.97	136.00	123.45
08-31-2015	to	09-30-2015	-2.45	-2.47	-2.78	-2.64	142.37	132.60	132.22	120.18
09-30-2015	to	10-31-2015	9.81	8.61	8.39	8.30	156.33	144.02	143.31	130.16
10-31-2015	to	11-30-2015	-0.14	0.28	0.53	0.05	156.12	144.43	144.07	130.22
11-30-2015	to	12-31-2015	-1.07	-1.47	-1.72	-1.75	154.45	142.31	141.59	127.94
12-31-2015	to	01-31-2016	-8.62	-5.58	-5.97	-5.07	141.13	134.36	133.13	121.45
01-31-2016	to	02-29-2016	-4.13	-0.04	-0.09	-0.41	135.30	134.31	133.01	120.95
02-29-2016	to	03-31-2016	5.42	6.74	6.81	6.60	142.63	143.36	142.07	128.93
Date to Date										
05-02-2013	to	03-31-2016	42.63	43.36	42.07	28.93				

The Ithaka Group
TRANSACTION SUMMARY
North Carolina Retirement System
North Carolina Department of State Treasurer
From 03-01-2016 To 03-31-2016

Tran Code	Security	Trade Date	Settle Date	Quantity	Close Meth.	S/D Type	S/D Symbol	Trade Amount	Lot
wd	Dividend Accruals	03-01-2016	03-01-2016			caus	BNYMMF	1,914.92	
in	BNY MELLON MMF	03-02-2016	03-02-2016			caus	BNYMMF	42.80	
wd	Dividend Accruals	03-03-2016	03-03-2016			caus	BNYMMF	1,313.76	
dv	Nike Inc cl B	03-03-2016	04-04-2016			caus	divacc	741.12	
sl	Facebook, Inc. cl A	03-11-2016	03-16-2016	1,765.0000	f	caus	BNYMMF	191,403.36	1
sl	Restoration Hardware Hldgs Inc	03-11-2016	03-16-2016	1,916.0000	f	caus	BNYMMF	76,349.78	1
dv	Domino's Pizza, Inc.	03-11-2016	03-30-2016			caus	divacc	676.40	
by	Ultimate Software Group Inc.	03-14-2016	03-17-2016	1,531.0000		caus	BNYMMF	273,764.55	1
by	PayPal Holdings, Inc.	03-15-2016	03-18-2016	2,564.0000		caus	BNYMMF	101,019.04	2
sl	LinkedIn Corp cl A	03-29-2016	04-01-2016	2,982.0000	f	caus	BNYMMF	327,105.14	1
wd	Dividend Accruals	03-30-2016	03-30-2016			caus	BNYMMF	676.40	
in	cdus990000pj4 ?% Due ??-??-??	03-31-2016	03-31-2016			caus	BNYMMF	-1.70	