

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

Quantity	Security	Unit Cost	Total Cost	Price	Market Value	Pct. Assets	Cur. Yield
CASH AND EQUIVALENTS							
	BNY MELLON MMF		58,013.53		58,013.53	0.3	0.0
	Dividend Accruals		4,504.03		4,504.03	0.0	0.0
			62,517.56		62,517.56	0.3	0.0
COMMON STOCK							
6,126.0000	Adobe Systems Inc.	87.71	537,302.70	99.47	609,353.22	3.2	0.0
3,582.0000	Alexion Pharmaceuticals	129.33	463,253.83	150.90	540,523.80	2.8	0.0
1,226.0000	Alphabet Inc. Class C	634.09	777,393.91	735.72	901,992.72	4.7	0.0
1,372.0000	Amazon.com Inc.	304.75	418,112.61	722.79	991,667.88	5.2	0.0
1,570.0000	Baidu, Inc. ADS	228.07	358,069.74	178.54	280,307.80	1.5	0.0
1,568.0000	BioMarin Pharmaceutical	124.55	195,297.07	89.65	140,571.20	0.7	0.0
655.0000	Biogen Inc.	377.68	247,380.96	289.73	189,773.15	1.0	0.0
6,677.0000	Celgene Corp.	78.01	520,847.32	105.52	704,557.04	3.7	0.0
1,780.0000	Domino's Pizza, Inc.	109.44	194,799.64	120.88	215,166.40	1.1	1.3
2,455.0000	Edwards Lifesciences Corp.	105.82	259,790.16	98.50	241,817.50	1.3	0.0
12,758.0000	Facebook, Inc. cl A	41.56	530,178.77	118.81	1,515,777.98	8.0	0.0
1,395.0000	Home Depot Inc.	135.64	189,221.99	132.12	184,307.40	1.0	2.1
3,081.0000	Illumina Inc	189.39	583,499.36	144.83	446,221.23	2.3	0.0
1,686.0000	LinkedIn Corp cl A	216.79	365,507.83	136.50	230,139.00	1.2	0.0
8,450.0000	Mastercard Inc.	54.55	460,972.85	95.90	810,355.00	4.3	0.8
3,550.0000	Middleby Corporation	84.56	300,184.17	124.20	440,910.00	2.3	0.0
4,632.0000	Nike Inc cl B	64.53	298,922.11	55.22	255,779.04	1.3	1.2
670.0000	O'Reilly Automotive, Inc.	255.47	171,167.24	264.43	177,168.10	0.9	0.0
2,866.0000	Palo Alto Networks, Inc.	162.76	466,468.28	130.46	373,898.36	2.0	0.0
10,542.0000	PayPal Holdings, Inc.	38.67	407,668.63	37.79	398,382.18	2.1	0.0
1,721.0000	Regeneron Pharmaceuticals	287.18	494,240.48	398.93	686,558.53	3.6	0.0
13,833.0000	Salesforce.com Inc	47.74	660,439.62	83.71	1,157,960.43	6.1	0.0
6,155.0000	Splunk Inc.	43.57	268,164.60	57.45	353,604.75	1.9	0.0
19,570.0000	Starbucks Corporation	32.66	639,195.58	54.89	1,074,197.30	5.6	1.5
6,256.0000	TJX Companies Inc.	68.08	425,929.12	76.12	476,206.72	2.5	1.4
755.0000	The Priceline Group Inc.	707.95	534,502.25	1,264.33	954,569.15	5.0	0.0
2,145.0000	Transdigm Group, Inc.	123.35	264,580.94	263.54	565,293.30	3.0	0.0
3,730.0000	TripAdvisor, Inc.	89.91	335,382.84	67.74	252,670.20	1.3	0.0
4,387.0000	Ulta Salon, Cosmetics	161.68	709,280.51	233.01	1,022,214.87	5.4	0.0
1,531.0000	Ultimate Software Group Inc.	178.81	273,764.55	204.48	313,058.88	1.6	0.0
8,529.0000	Under Armour, Inc. Cl A	14.90	127,109.77	37.73	321,799.17	1.7	0.0
8,529.0000	Under Armour, Inc. Cl C	14.52	123,847.33	34.97	298,259.13	1.6	0.0
13,678.0000	VISA Inc.	47.81	653,877.71	78.94	1,079,741.32	5.7	0.7
4,799.0000	Walt Disney Company	91.54	439,316.01	99.22	476,156.78	2.5	1.4
4,040.0000	Workday, Inc.	76.31	308,307.33	75.84	306,393.60	1.6	0.0
			14,003,977.81		18,987,353.13	99.7	0.3
TOTAL PORTFOLIO			14,066,495.37		19,049,870.69	100.0	0.3

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

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
03-31-2016 to 04-30-2016			0.51	-0.91	-0.78	0.27	140.68	142.05	140.96	129.28
04-30-2016 to 05-31-2016			2.33	1.94	2.00	1.53	143.95	144.81	143.78	131.26
Date to Date										
05-02-2013 to 05-31-2016			43.95	44.81	43.78	31.26				
Annualized			12.56	12.78	12.52	9.23				

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

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
03-31-2016	to	04-30-2016	0.65	-0.91	-0.78	0.27	143.55	142.05	140.96	129.28
04-30-2016	to	05-31-2016	2.33	1.94	2.00	1.53	146.89	144.81	143.78	131.26
Date to Date										
05-02-2013	to	05-31-2016	46.89	44.81	43.78	31.26				

The Ithaka Group
TRANSACTION SUMMARY
North Carolina Retirement System
North Carolina Department of State Treasurer
From 05-01-2016 To 05-31-2016

Tran Code	Security	Trade Date	Settle Date	Quantity	Close Meth.	S/D Type	S/D Symbol	Trade Amount	Lot
in	BNY MELLON MMF	05-03-2016	05-03-2016			caus	BNYMMF	113.41	
dv	Starbucks Corporation	05-03-2016	05-20-2016			caus	divacc	3,914.00	
wd	Dividend Accruals	05-09-2016	05-09-2016			caus	BNYMMF	1,605.50	
dv	TJX Companies Inc.	05-10-2016	06-02-2016			caus	divacc	1,626.56	
dv	VISA Inc.	05-11-2016	06-07-2016			caus	divacc	1,914.92	
sl	Netflix Inc	05-12-2016	05-17-2016	1,199.0000	f	caus	BNYMMF	104,055.22	1
by	Adobe Systems Inc.	05-17-2016	05-20-2016	906.0000		caus	BNYMMF	87,801.46	3
wd	Dividend Accruals	05-20-2016	05-20-2016			caus	BNYMMF	3,914.00	
by	Edwards Lifesciences Corp.	05-25-2016	05-31-2016	710.0000		caus	BNYMMF	71,231.74	2
dv	Home Depot Inc.	05-31-2016	06-16-2016			caus	divacc	962.55	