BOARD OF TRUSTEES OF THE FIREFIGHTERS' PENSION FUND

901 W DEVON AVENUE • PARK RIDGE, ILLINOIS 60068 • 847.318.5283

Posted: **August 11, 2015**

NOTICE OF THE QUARTERLY MEETING

The Board of Trustees of the Park Ridge Firefighters' Pension Fund will conduct a quarterly meeting on Tuesday,A ugust 18, 2015 at 10:00 AM at Park Ridge Fire Station 36, 1000 N. Greenwood Ave., Park Ridge, IL 60068.

AGENDA FOR THE QUARTERLY MEETING

CALL TO ORDER
ROLL CALL
Introduction of New Board Member
Kevin Buggy (Mayoral Appointment)
PUBLIC COMMENT
APPROVAL OF MINUTES
July 13, 2015

TREASURER'S REPORT
A.J. Weber – Board Accountant
Discussion / Action Monthly Accounting Statements – Lauterbach & Amen
Review and Payment of Bills
May 2015 - $ 255,589.38
June 2015 - $ 263,376.11
July 2015 - $ provided at the meeting

Status of DOI Annual Statement preparation

Mike Piotrowski – Board Financial Advisor
Discussion/ Action Marquette Associates Report
Discussion / Action Investment strategies
Discussion / Action Investment Policy
Discussion / Action Custodial Agreement

City Finance Director
Status of City Audit – GASB coordination
Status of possible City Funding Policy

COMMUNICATIONS OR REPORTS
Carolyn Clifford- Board Attorney

Status of annual IMEs of disabled members Carrillo and Franzen

OLD BUSINESS
Status of actuarial process for 2015
Discussion / Action Actuarial assumptions and recommendation

NEW BUSINESS
Discussion / Action New Hire Application
Discussion / Action Potential Retirement Applications
Discussion / Action on Disability Application (Zermano)
Discussion / Action on Pension contribution refund

CLOSED SESSION -- If needed

BENEFIT OF THE BOARD
Discussion / Action Resolution Carl Brauweiler

PENSION TRUSTEE TRAINING
2015 IPFA Fall Seminar Friday November 6, 2015
2015 IPPFA Midwest Pension Conference October 6th- October 9th, 2015
PUBLIC COMMENT
ADJOURNMENT

Respectfully submitted,

JD Bruchsale

JD Bruchsaler
Board Secretary

Park Ridge Firefighters' Pension Fund

Monthly Financial Report

For the Month Ended
July 31, 2015

Prepared by:

Lauterbach & Amen, LLP

Park Ridge Firefighters' Pension Fund

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Accountant's Compilation Report

Lauterbach & Amen, LLP
CERTIFIED PUBLIC ACCOUNTANTS
27W457 WARRENVILLE RD • WARRENVILLE, ILLINOIS 60555
PHONE 630.393.1483 • FAX 630.393.2516
www.lauterbachamen.com

August 7, 2015

Members of the Pension Board of Trustees
Park Ridge Firefighters' Pension Fund
Park Ridge, IL 60068

We have compiled the accompanying modified cash basis statement of net position of the Park Ridge Firefighters' Pension Fund as of July 31, 2015 and the related modified cash basis statement of changes in net position for the three months then ended, and the accompanying other supplementary information as referred to in the table of contents. We have not audited or reviewed the accompanying financial statements and other supplementary information and, accordingly, do not express an opinion or provide any assurance about whether the financial statements and other supplementary information are in accordance with the modified cash basis of accounting.

Management is responsible for the preparation and fair presentation of the financial statements and other supplementary information in accordance with the modified cash basis of accounting and for designing, implementing, and maintaining internal controls relevant to the preparation and fair presentation of the financial statements and other supplementary information.

Our responsibility is to conduct the compilation in accordance with Statements for Standards and Review Services issued by the American Institute of Certified Public Accountants. The objective of a compilation is to assist the management in presenting financial information in the form of financial statements and other supplementary information without undertaking to obtain or provide any assurance that there are no material modifications that should be made to the financial statements and other supplementary information.

Management has elected to omit substantially all of the disclosures, Management Discussion and Analysis (MD&A), and Required Supplementary Information (RSI) required by the modified cash basis of accounting. If the omitted disclosures were included in the financial statements and other supplementary information, they might influence the user's conclusions about the Pension Fund's assets, liabilities, fund balance, revenues and expenses. Accordingly, these financial statements and other supplementary information are not designed for those who are not informed about such matters.

We are not independent with respect to the Park Ridge Firefighters' Pension Fund.

Cordially,

Lauterbach & Amen, LLP

Lauterbach & Amen, LLP

Financial Statements

Park Ridge Firefighters' Pension Fund
Statement of Net Position - Modified Cash Basis
As of July 31, 2015

Assets	
Cash and Cash Equivalents	$ 9,310.00
Investments, at Fair Value	
Money Market Mutual Funds	1,555,404.54
Fixed Income	16,002,800.10
Stock Equities	12,302,127.67
Mutual Funds	11,145,917.55
Total Cash and Investments	41,015,559.86
Accrued Interest	273,208.09
Prepaids	13,209.49
Total Assets	41,301,977.44
Liabilities	
Expenses Due/Unpaid	10,489.48
Total Liabilities	10,489.48
Net Position Held in Trust for Pension Benefits	41,291,487.96

See Accountants' Compilation Report

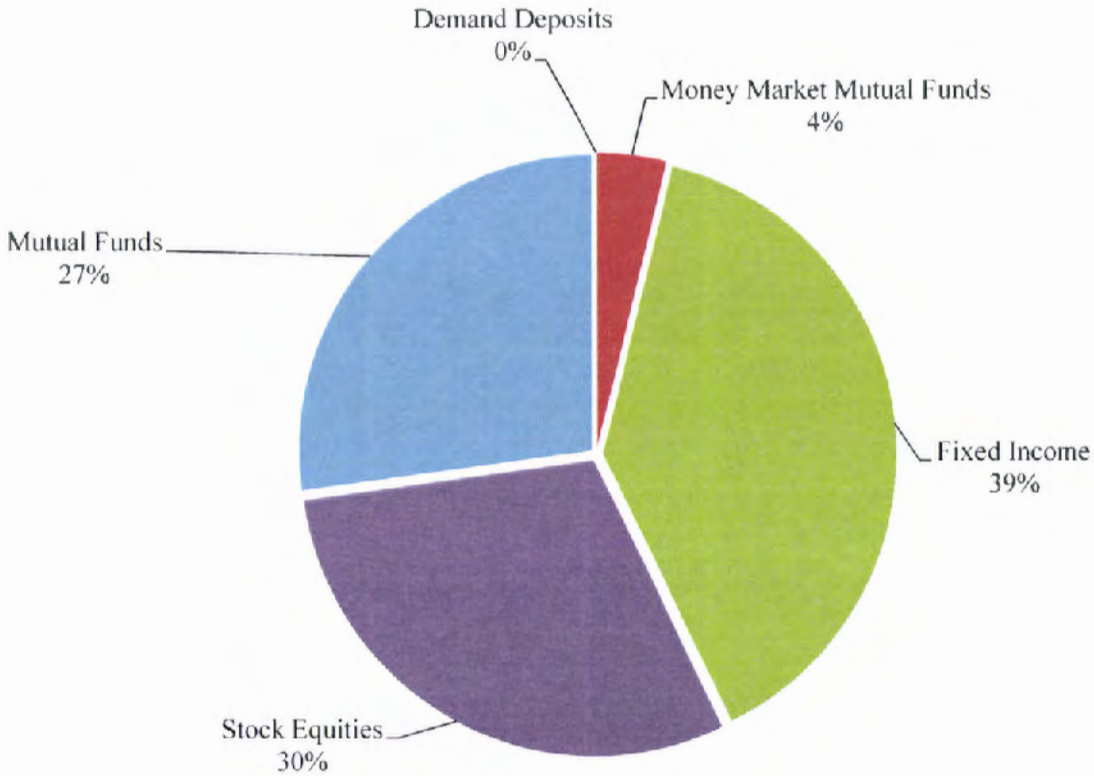
Park Ridge Firefighters' Pension Fund
Statement of Changes in Net Position - Modified Cash Basis
For the Three Months Ended July 31, 2015

Additions	
Contributions - Employer	$ 341,933.70
Contributions - Employee	105,898.66
Total Contributions	447,832.36
Investment Income	
Interest and Dividends Earned	269,613.66
Net Change in Fair Value	(101,159.17)
Total Investment Income	168,454.49
Less: Investment Expense	(37,791.10)
Net Investment Income	130,663.39
Total Additions	578,495.75
Deductions	
Administration	15,131.93
Benefits and Refunds	
Benefits	731,078.84
Refunds	0.00
Total Deductions	746,210.77
Change in Position	(167,715.02)
Net Position Held in Trust for Pension Benefits	
Beginning of Year	41,459,202.98
End of Period	41,291,487.96

See Accountants' Compilation Report

Other Supplementary Information

Park Ridge Firefighters' Pension Fund
Cash and Investments

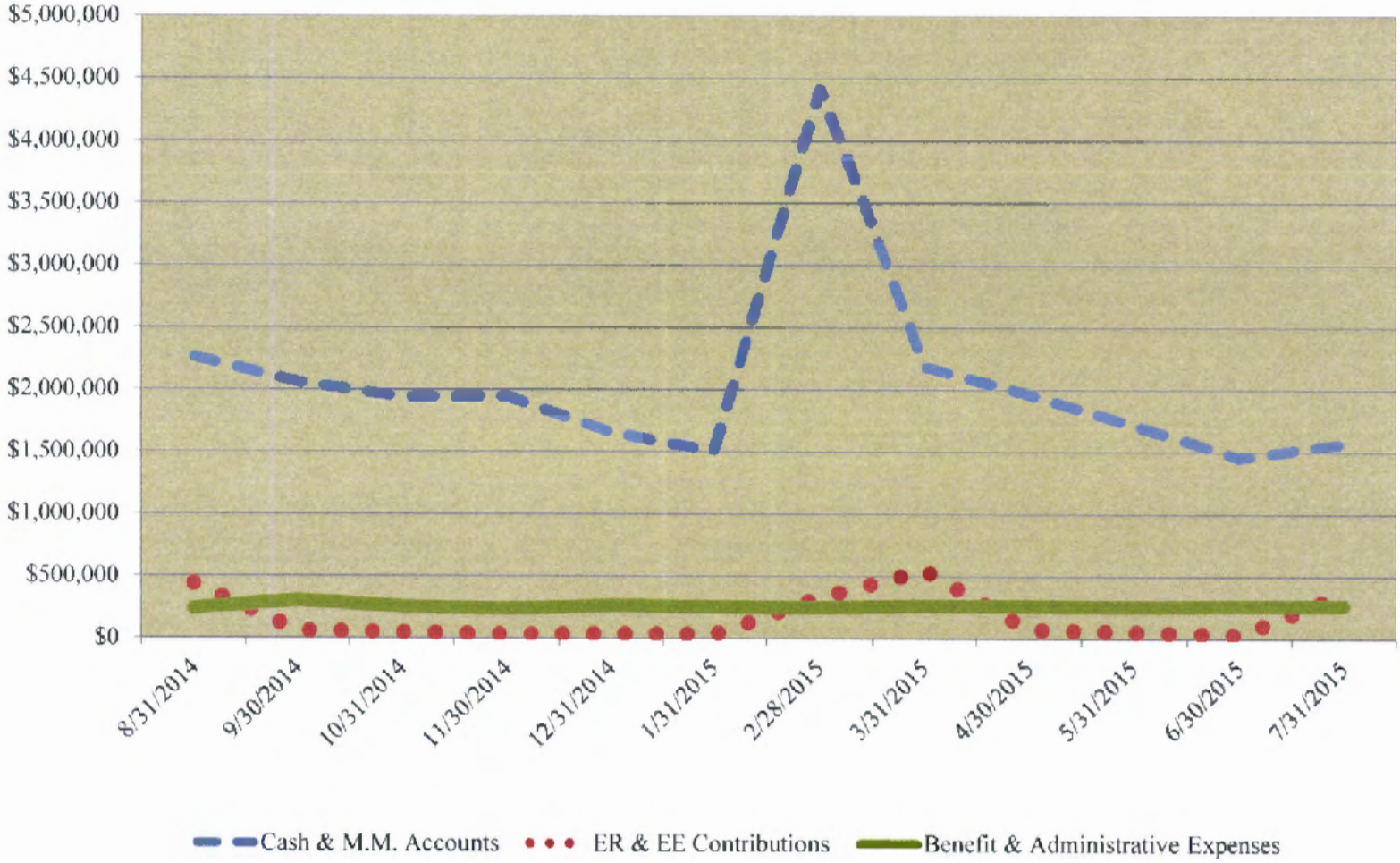


Park Ridge Firefighters' Pension Fund
Cash Analysis Report
For the Twelve Periods Ending July 31, 2015

Financial Institutions		8/31/14 Balance	9/30/14 Balance	10/31/14 Balance	11/30/14 Balance	12/31/14 Balance	1/31/15 Balance	2/28/15 Balance	3/31/15 Balance	4/30/15 Balance	5/31/15 Balance	6/30/15 Balance	7/31/15 Balance
CK - Harris Bank	#317-540-	8,100	10,000	6,940	10,000	2,778	9,890	9,752	10,585	6,912	2,073	9,310	9,310
		8,100	10,000	6,940	10,000	2,778	9,890	9,752	10,585	6,912	2,073	9,310	9,310
SB - Pension	#918712	64,673	62,679	65,734	36,484	41,269	58,187	44,190	49,876	43,746	45,295	70,579	37,635
SB - Madison	#918720	242,370	206,097	257,258	301,090	215,529	196,631	240,515	239,024	154,621	138,634	140,783	114,371
SB - RBC	#918751	46,309	18,839	26,981	27,868	42,132	15,811	24,334	38,084	52,979	69,643	57,180	41,603
SB - Atalanta	#918750	117,542	143,815	125,513	109,146	125,652	230,379	81,755	107,464	40,258	68,944	51,233	124,671
SB - Cambiar	#918749	51,097	102,028	71,994	112,586	66,435	68,857	40,570	139,102	176,173	129,329	78,625	75,525
SB - Wells	#918748	16,068	12,879	17,122	18,849	25,931	32,504	31,366	34,629	37,942	37,159	70,424	45,243
SB - Advisor	#918783	111	111	111	111	111	111	111	112	112	112	112	112
SB - Wire Acct	#253-90510-17	430,711	205,305	19,649	19,340	23,064	4,267	248,752	553,338	384,118	188,648	33,031	247,346
SB - Fixed Income	#918794	1,262,062	1,262,073	1,262,084	1,249,986	1,050,076	855,925	895,779	895,787	895,795	992,252	927,261	828,268
SB - Fixed Income	#017455	18,599	33,867	85,847	57,497	62,080	30,728	2,797,812	115,508	167,628	43,694	11,415	40,630
		2,249,542	2,047,694	1,932,293	1,932,957	1,652,278	1,493,400	4,405,184	2,172,923	1,953,372	1,713,710	1,440,642	1,555,405
Totals		2,257,642	2,057,694	1,939,233	1,942,957	1,655,056	1,503,290	4,414,937	2,183,508	1,960,284	1,715,783	1,449,952	1,564,715
Contributions													
Current Tax		407,865	30,940	3,992	4,258	7,956	4,257	296,162	515,502	21,921	7,420	1,083	333,431
Personal Property Replacement Tax		-	-	-	-	-	-	-	-	20,680	-	-	-
Contributions - Current Year		31,024	30,809	45,602	30,108	30,184	30,331	30,675	30,307	30,690	45,530	30,192	30,177
Contributions - Prior Year		-	-	-	-	-	-	-	5,279	-	-	-	-
Interest Received from Members		-	-	-	-	-	-	-	721	-	-	-	-
		438,889	61,750	49,594	34,367	38,140	34,589	326,837	551,809	73,291	52,950	31,274	363,608
Expenses													
Benefits		234,327	234,327	234,327	234,327	234,327	240,334	240,334	240,486	240,486	240,486	243,966	246,627
Refunds/Transfers of Service		-	48,062	-	-	-	-	-	-	-	-	-	-
Administration		5,259	23,938	21,226	4,534	28,351	16,317	8,887	24,580	22,473	15,104	19,410	18,409
		239,586	306,327	255,553	238,861	262,678	256,651	249,221	265,066	262,959	255,589	263,376	265,036
Total Contributions less Expenses		199,303	(244,577)	(205,959)	(204,495)	(224,538)	(222,062)	77,617	286,743	(189,668)	(202,640)	(232,102)	98,572

See Accountants' Compilation Report

Park Ridge Firefighters' Pension Fund
Cash Analysis Summary

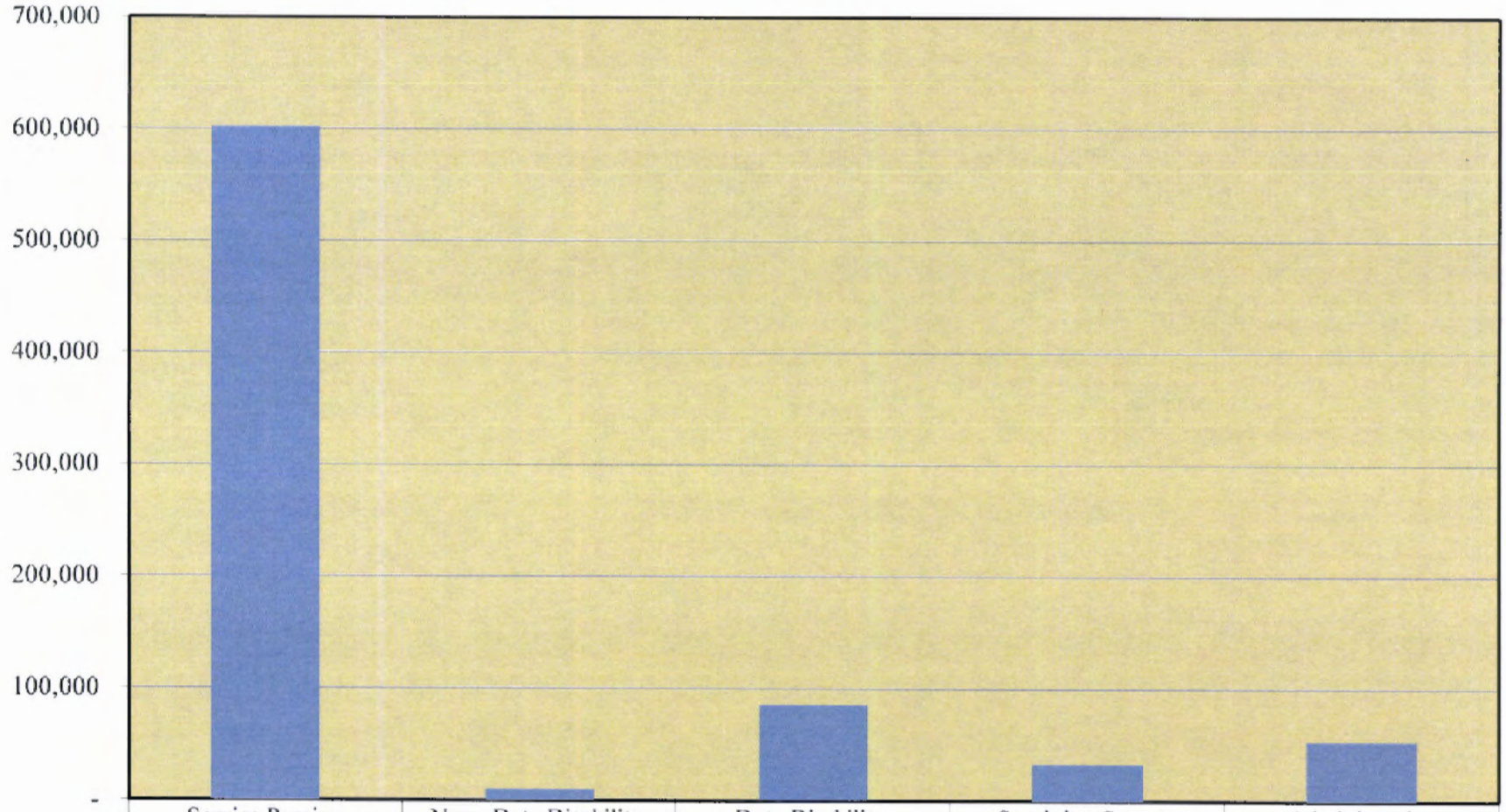


Park Ridge Firefighters' Pension Fund
Revenue Report as of July 31, 2015

		Received this Month	Received this Year
Revenues			
Municipal and Member Contributions			
Municipal Contributions			
41-210-00 - Current Tax		333,430.92	341,933.70
		333,430.92	341,933.70
Member Contributions			
41-410-00 - Contributions - Current Year		30,177.41	105,898.66
		30,177.41	105,898.66
Total Municipal and Member Contributions		363,608.33	447,832.36
Investment Income			
Interest and Dividends			
43-105-10 - SB - Wire Acct	#253-90510-17	0.56	4.55
43-252-11 - SB - Fixed Income	#918794	7.60	96,473.58
43-252-12 - SB - Fixed Income	#017455	10,074.14	31,916.12
43-450-01 - SB - Stock Equities	#918712	3,384.47	10,060.34
43-450-02 - SB - Stock Equities	#918720	1,847.73	4,918.01
43-450-03 - SB - Stock Equities	#918751	431.14	1,672.13
43-450-04 - SB - Stock Equities	#918750	2,991.72	7,727.97
43-450-05 - SB - Stock Equities	#918749	4,298.25	12,343.05
43-450-06 - SB - Stock Equities	#918748	159.72	2,558.61
43-550-08 - SB - Mutual Funds	#918783	0.00	37,057.94
		23,195.33	204,732.30
Gains and Losses			
44-252-11 - SB - Fixed Income	#918794	58,971.50	(178,669.90)
44-252-12 - SB - Fixed Income	#017455	1,225.62	(72,074.74)
44-450-01 - SB - Stock Equities	#918712	2,218.48	(31,695.76)
44-450-02 - SB - Stock Equities	#918720	24,081.35	12,161.59
44-450-03 - SB - Stock Equities	#918751	23,462.10	81,578.04
44-450-04 - SB - Stock Equities	#918750	42,600.20	49,028.68
44-450-05 - SB - Stock Equities	#918749	37,435.00	37,470.94
44-450-06 - SB - Stock Equities	#918748	50,311.89	58,643.45
44-550-08 - SB - Mutual Funds	#918783	83,889.43	(57,601.47)
		324,195.57	(101,159.17)
Other Income			
45-200-00 - Accrued Interest		54,738.82	64,881.36
49-000-01 - Other Income		0.00	0.00
		54,738.82	64,881.36
Total Investment Income		402,129.72	168,454.49
Total Revenues		765,738.05	616,286.85

See Accountants' Compilation Report

Park Ridge Firefighters' Pension Fund
Expenses



	Service Pension	Non - Duty Disability	Duty Disability	Surviving Spouse	Administrative
Expenses	601,855	10,108	85,820	33,296	52,923

Park Ridge Firefighters' Pension Fund
Expense Report as of July 31, 2015

	Expended this Month	Expended this Year
Expenses		
Pensions and Benefits		
51-020-00 - Service Pensions	203,552.45	601,854.53
51-030-00 - Non-Duty Disability Pensions	3,369.38	10,108.14
51-040-00 - Duty Disability Pensions	28,606.61	85,819.83
51-050-00 - Occupational Disease Pensions	0.00	0.00
51-060-00 - Surviving Spouse Pensions	11,098.78	33,296.34
51-070-00 - Children's Pensions	0.00	0.00
51-080-00 - Parent's Pensions	0.00	0.00
51-090-00 - Handicapped Annuitant Pensions	0.00	0.00
51-100-00 - Refund of Contributions	0.00	0.00
51-110-00 - Transfers to Other Pensions	0.00	0.00
	246,627.22	731,078.84
Administrative		
Professional Services		
52-170-03 - Accounting & Bookkeeping Services	690.00	2,720.00
52-170-05 - Legal Services	609.00	3,417.00
	1,299.00	6,137.00
Investment		
52-190-01 - Investment Manager/Advisor Fees	16,743.16	37,777.58
52-190-02 - Custodial Fees	0.00	13.52
	16,743.16	37,791.10
Electronic Data		
52-210-01 - IT Equipment Purchases	267.00	267.00
	267.00	267.00
Other Expense		
52-290-26 - Association Dues	0.00	150.00
52-290-27 - Travel Expense	0.00	500.64
52-290-31 - Telecommunications Expense	100.00	150.00
52-290-34 - IDOI Filing Fee Expense	0.00	7,927.29
	100.00	8,727.93
Total Administrative	18,409.16	52,923.03
Total Expenses	265,036.38	784,001.87

See Accountants' Compilation Report

Park Ridge Firefighters' Pension Fund
Member Contribution Report
As of Month Ended - July 31, 2015

Name	Thru Prior Fiscal Year	Current Fiscal Year	Service Purchase	Refunds	Total Contributions
Ascione, Joseph A.	$ 76,815.16	2,161.10	0.00	0.00	78,976.26
Bieniek, John C.	152,431.88	2,051.28	0.00	0.00	154,483.16
Blane, Aaron M.	97,495.55	2,167.98	0.00	0.00	99,663.53
Boeringa, John I. III	166,337.10	2,585.84	0.00	0.00	168,922.94
Bruchsaler, John D.	123,487.04	2,203.00	0.00	0.00	125,690.04
Buckley, Christopher P.	115,389.84	2,173.14	0.00	0.00	117,562.98
Cleary, Christopher T.	47,696.25	2,133.02	0.00	0.00	49,829.27
Debs, Timothy C.	160,729.88	2,493.96	0.00	0.00	163,223.84
Decker, Derek R.	104,413.79	2,531.69	0.00	0.00	106,945.48
Falco, Nicholas	116,664.36	2,063.10	0.00	0.00	118,727.46
Finn, Jeffrey M. Jr.	14,318.63	1,677.96	0.00	0.00	15,996.59
Garland, Gregory	80,640.99	2,161.10	0.00	0.00	82,802.09
Hanson, John M.	137,995.47	2,827.20	0.00	0.00	140,822.67
Harris, Paul D.	84,551.00	2,161.10	0.00	0.00	86,712.10
Herling, Christopher D.	53,681.90	2,133.02	0.00	0.00	55,814.92
Hohmeier, David P.	156,913.07	2,181.12	0.00	0.00	159,094.19
Isom, Michael A.	111,864.65	2,173.14	0.00	0.00	114,037.79
Jarka, Matthew	108,202.07	2,231.68	0.00	0.00	110,433.75
Knautz, Jeremy	45,370.81	2,133.02	0.00	0.00	47,503.83
Kuester, Aaron K.	4,665.27	1,559.92	0.00	0.00	6,225.19
Kuzmanovich, Zivko	111,831.27	2,173.14	0.00	0.00	114,004.41
Laube, Jeffrey J.	68,358.18	2,149.07	0.00	0.00	70,507.25
Lazenby, Wedge C.	116,435.85	2,404.26	0.00	0.00	118,840.11
Malcomson, David L. II	76,965.77	2,161.10	0.00	0.00	79,126.87
McFarlin, Jesse T.	14,136.95	1,666.14	0.00	0.00	15,803.09
Mleko, Geoffrey S.	95,642.32	2,161.10	0.00	0.00	97,803.42
Naffziger, Joel F.	123,288.03	2,181.12	0.00	0.00	125,469.15
Norton, Timothy J.	177,362.89	2,762.70	0.00	0.00	180,125.59
Ortlund, John L.	131,339.56	2,397.08	0.00	0.00	133,736.64
Pavone, Brian M.	97,190.22	2,167.98	0.00	0.00	99,358.20
Piltaver, John M.	56,334.09	2,133.02	0.00	0.00	58,467.11
Plach, Kevin S.	136,075.16	2,528.89	0.00	0.00	138,604.05
Portell, Alvin T.	167,738.61	2,500.75	0.00	0.00	170,239.36
Sankey, Scott E.	108,910.35	2,743.26	0.00	0.00	111,653.61
Schneider, Timothy A.	55,375.33	2,133.02	0.00	0.00	57,508.35
Scott, John F.	103,040.03	2,053.02	0.00	0.00	105,093.05
Sempoch, Robert J.	68,880.94	2,149.07	0.00	0.00	71,030.01
Skinner, Kurt F.	110,504.63	2,173.14	0.00	0.00	112,677.77
Smaha, William C.	55,367.54	2,133.02	0.00	0.00	57,500.56

Park Ridge Firefighters' Pension Fund
Member Contribution Report
As of Month Ended - July 31, 2015

Name	Thru Prior Fiscal Year	Current Fiscal Year	Service Purchase	Refunds	Total Contributions
Sorensen, Jeffrey T.	153,250.47	3,659.25	0.00	0.00	156,909.72
Vaci, Daniel	7,787.84	1,613.90	0.00	0.00	9,401.74
Villari, Frank J.	115,586.62	2,173.14	0.00	0.00	117,759.76
Weingart, Kenneth I.	92,333.06	2,390.89	0.00	0.00	94,723.95
Wilson, Aaron A.	10,671.57	1,634.17	0.00	0.00	12,305.74
Wolff, Raymond	48,300.67	2,133.02	0.00	0.00	50,433.69
Woodford, Gregory A.	94,705.46	2,161.10	0.00	0.00	96,866.56
Zermeno, Anthony J.	108,040.47	2,053.02	0.00	0.00	110,093.49
	4,465,118.59	104,392.74	0.00	0.00	4,569,511.33
Terminated/Removed Members					
Krause, Ronald W.	172,463.28	1,505.92	0.00	0.00	173,969.20
Total	4,637,581.87	105,898.66	0.00	0.00	4,743,480.53

Park Ridge Firefighters' Pension Fund
Vendor Checks Report

Vendor Name	Chk. No.	Check Date	Amount	
ALIBABA GROUP HOLDING LTD	50332	05/04/15	13.52	
EAST PEORIA EMBASSY SUITES	30280	05/07/15	500.64	
MSSB (MCDONNELL)	50333	05/08/15	2,314.21	
JOHN D BRUCHSALER *	30282	05/12/15	50.00	
OTTOSEN BRITZ KELLY COOPER & GILBI	30281	05/13/15	2,808.00	**Electronic**
LAUTERBACH & AMEN LLP	30283	05/18/15	1,340.00	**Electronic**
CARL BRAUWEILER*	30284	05/19/15	150.00	
ILLINOIS STATE TREASURER	30286	05/21/15	7,927.29	
CITY OF PARK RIDGE	30285	05/29/15	13,368.34	**Electronic**
MSSB (ATALANTA SOSNOFF CAPITAL LL	50335	06/12/15	4,542.89	
MSSB (CAMBIAR INVESTORS LLC)	50336	06/12/15	5,636.24	
MSSB (RBC GLOBAL ASSET MGMT)	50334	06/12/15	4,613.55	
MSSB (WELLS CAPITAL MGMT)	50337	06/12/15	3,927.53	
		Subtotal	18,720.21	
LAUTERBACH & AMEN LLP	30287	06/29/15	690.00	**Electronic**
CITY OF PARK RIDGE	30286	06/30/15	13,856.85	**Electronic**
DIGITAL PAPER SOLUTIONS INC	30289	07/08/15	267.00	
JOHN D BRUCHSALER *	30290	07/08/15	100.00	
		Subtotal	367.00	
OTTOSEN BRITZ KELLY COOPER & GILBI	30288	07/09/15	609.00	**Electronic**
MSSB (FAYEZ SAROFIM & CO)	50339	07/15/15	3,451.29	
MSSB (MADISON INVESTMENT)	50341	07/15/15	5,726.10	
MSSB (MCDONNELL)	50338	07/15/15	1,152.76	
MSSB (SB ADVISOR)	50340	07/15/15	6,413.01	
		Subtotal	16,743.16	
LAUTERBACH & AMEN LLP	30292	07/29/15	690.00	**Electronic**
CITY OF PARK RIDGE	30291	07/31/15	11,764.81	**Electronic**
		TOTAL	91,913.03	

Lauterbach & Amen, LLP
27W457 Warrenville Road
Warrenville, IL 60555-3902

Actuarial Valuation
as of May 1, 2015

DRAFT

PARK RIDGE FIREFIGHTERS' PENSION FUND

Utilizing Data as of April 30, 2015
For the Contribution Year May 1, 2015 to April 30, 2016

LAUTERBACH & AMEN, LLP

Actuarial Valuation – Funding Recommendation

Lauterbach & Amen, LLP

CERTIFIED PUBLIC ACCOUNTANTS

PARK RIDGE FIREFIGHTERS' PENSION FUND

Contribution Year Ending: April 30, 2016
Actuarial Valuation Date: May 1, 2015
Utilizing Data as of April 30, 2015

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Submitted by:

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LAUTERBACH & AMEN, LLP

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ACTUARIAL CERTIFICATION

This report documents the results of the Actuarial valuation of the Park Ridge Firefighters' Pension Fund. The purpose is to report the actuarial contribution requirement for the contribution year May 1, 2015 to April 30, 2016. Determinations for purposes other than meeting the employer's actuarial contribution requirements may be significantly different from the results herein.

The results in this report are based on information and data submitted by the Park Ridge Firefighters' Pension Fund including studies performed by prior actuaries. We did not prepare the actuarial valuations for the years prior to May 1, 2014. Those Valuations were prepared by other actuaries whose reports have been furnished to us, and our disclosures are based upon those reports. An audit of the information was not performed, but high-level reviews were performed for general reasonableness, as appropriate, based on the purpose of the valuation. The accuracy of the results is dependent upon the accuracy and completeness of the underlying information. The results of the actuarial valuation and these supplemental disclosures rely on the information provided.

The valuation results summarized in this report involve actuarial calculations that require assumptions about future events. The Park Ridge Firefighters' Pension Fund selected certain assumptions, while others were the result of guidance and/or judgment. We believe that the assumptions used in this valuation are reasonable and appropriate for the purposes for which they have been used.

To the best of our knowledge, all calculations are in accordance with the applicable funding requirements, and the procedures followed and presentation of results conform to generally accepted actuarial principles and practices. The undersigned of Lauterbach & Amen, LLP, with actuarial credentials, meets the Qualification Standards of the American Academy of Actuaries to render this Actuarial Opinion. There is no relationship between the Park Ridge Firefighters' Pension Fund and Lauterbach & Amen, LLP that impairs our objectivity.

The information contained in this report was prepared for the use of the Park Ridge Firefighters' Pension Fund and the City of Park Ridge in connection with our actuarial valuation. It is not intended or necessarily suitable for other purposes. It is intended to be used in its entirety to avoid misrepresentations.

Respectfully Submitted,

LAUTERBACH & AMEN, LLP

Todd A. Schroeder, EA

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MANAGEMENT SUMMARY

Contribution Recommendation
Funded Status
Management Summary

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CONTRIBUTION RECOMMENDATION

	Prior Valuation	Current Valuation
Contribution Requirement	$1,751,579	$1,745,429
Expected Payroll	$4,252,513	$4,213,726
Contribution Requirement as a Percent of Expected Payroll	41.19%	41.42%

Recommended Contribution has Decreased $6,150 from Prior Year.

FUNDED STATUS

	Prior Valuation	Current Valuation
Normal Cost	$1,048,764	$997,064
Market Value of Assets	$39,626,500	$41,459,203
Actuarial Value of Assets	$39,290,206	$41,205,166
Actuarial Accrued Liability	$58,523,644	$60,869,970
Unfunded Actuarial Accrued Liability	$19,233,438	$19,664,804
Percent Funded		
Actuarial Value of Assets	67.14%	67.69%
Market Value of Assets	67.71%	68.11%

Funded Percentage has Increased 0.55 on an Actuarial Value of Assets Basis.

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MANAGEMENT SUMMARY – COMMENTS AND ANALYSIS

Contribution Results

The contribution recommendation is based on the funding policies and procedures that are outlined in the "Actuarial Funding Policies" section of this report.

The State of Illinois statutes for pension funds contain parameters that should be used to determine the minimum amount of contribution to a public pension fund. Those parameters and the resulting minimum contribution can be found in the "Illinois Statutory Minimum Contribution" section of this report.

Defined Benefit Plan Risks

Asset Growth

Pension funding involves preparing plan assets to pay benefits for the members when they retire. During their working careers, assets need to build with contributions and investment earnings, and then the pension fund distributes assets during retirement. Based on the fund's current mix of employees and funded status, the fund should be experiencing positive asset growth on average if requested contributions are made and expected investment earnings come in. In the current year the fund asset growth was positive by approximately $1,800,000.

Asset growth is important long-term. Long-term cash flow out of the pension fund is primarily benefit payments. Expenses make up a smaller portion. The fund should monitor the impact of expected benefit payments and the impact on asset growth in the future. In the next 5 years, benefits payments are anticipated to increase 30-35%, or approximately $890,000. In the next 10 years, the expected increase in benefit payments is 60-65%, or approximately $1.8 million dollars.

Unfunded Liability:

Unfunded liability represents dollars we expect to be in the pension fund already for the fund members based on funding policy. To the extent dollars are not in the pension fund the fund is losing investment returns on those dollars going forward. Payments to unfunded liability pay for the lost investment earnings, as well as the outstanding unfunded amount. If payment is not made, the unfunded liability will grow.

In the early 1990s, many pension funds in Illinois adopted an increasing payment to handle unfunded liability due to a change in legislation. The initial payments decreased, and payments were anticipated to increase annually after that. In many situations, payments early on may be less than the interest on unfunded liability, which means unfunded liability is expected to *increase* even if contributions are at the recommended level.

The current contribution recommendation includes a payment to unfunded liability that is currently $247,903 less than interest on the unfunded liability. All else being equal and contributions being made, unfunded liability would still be expected to increase. The employer and the fund should anticipate currently that improvement in the funded percent will be mitigated in the short-term. The employer and the fund should understand this impact as we progress forward to manage expectations.

Actuarial Value of Assets:
The pension fund smooths asset returns that vary from expectations over a five year period. The intention over time is that asset returns for purposes of funding recommendations are a combination of several years. The impact is intended to smooth out the volatility of contribution recommendations over time, but not necessarily increase or decrease the level of contributions over the long-term.

When asset returns are smoothed, there are always gains or losses on the Market Value of Assets that are going to be deferred for current funding purposes, and recognized in future years. Currently, the pension fund is deferring approximately $254,000 in gains on the Market Value of Assets. These are asset gains that will be recognized in upcoming periods, independent of the future performance of the Market Value of Assets.

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Plan Assets
The results in this report are based on the Assets held in the pension fund. Assets consist of funds held for investment and for benefit payments as of the Valuation Date. In addition, Assets may be adjusted for other events representing dollars that are reasonably expected to be paid out from the pension fund or deposited into the pension fund after the Actuarial Valuation Date as well.

The current fund Assets are Unaudited. As of the date of this report, the audit of the fund assets is not complete, not available, or has not been provided.

The Plan Assets Used in this Report are Unaudited.

The current fund Assets are based on the year-end financials as prepared by the pension fund accountant. The year-end financials represent a full accrual version of the fiduciary fund as of the end of the fiscal year, prepared in preparation for the audit. The changes to the fund cash balance as of the fiscal year-end are non-cash items that can include accrued interest, due/unpaid expenses, prepaids and other adjustments.

The actuarial value of assets under the funding policy is equal to the fair market value of assets, with unexpected gains and losses smoothed over 5 years. More detail on the Actuarial Value of Assets can be found in the funding policy section of the report.

Demographic Data

Demographic factors can change from year to year within a pension fund. Changes in this category include hiring new employees, employees retiring or becoming disabled, retirees passing away, and other changes. Demographic changes can cause an actuarial gain (contribution that is less than expected compared to the prior year) or an actuarial loss (contribution that is greater than expected compared to the prior year).

Demographic gains and losses occur when the assumptions over the one-year period for employee changes do not meet our long-term expectation. For example, if no employees become disabled during the year, we would expect a liability gain. If more employees become disabled than anticipated last year, we would expect a liability loss. Generally we expect short-term fluctuations in demographic experience to create 1%-3% gains or losses in any given year, but to balance out in the long-term.

In the current report, the key demographic changes were as follows:

New hires: The fund added 1 new active members in the current year through hiring. When a new member is admitted to the pension fund, the employer contribution will increase to reflect the new member. The increase in the recommended contribution in the current year for new fund members is approximately $15,500.

Termination: There was 1 member of the fund who terminated employment during the year. The member took a refund. The fund is no longer obligated to pay a benefit to the member in the future. The decrease in the recommended contribution in the current year due to the termination experience is approximately $48,000.

Salary Increases: Salary increases were less than anticipated in the current year. Most active members did not receive an increase. This caused a decrease in the recommended contribution in the current year of approximately $75,000.

Assumption Changes

The actuarial assumptions were not changed in the current year.

Funding Policy Changes

The funding policy was not changed in the current year.

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ACTUARIAL CONTRIBUTION RECOMMENDATION - RECONCILIATION

Actuarial liability is expected to increase each year for both interest for the year and as active employees earn additional service years towards retirement. Similarly actuarial liability is expected to decrease when the fund pays benefits to inactive employees.

Contributions are expected to increase as expected pay increases under the funding policy for the Fund.

	Actuarial Liability	Contribution Recommendation
Prior Valuation	$ 58,523,644	$ 1,751,579
Expected Changes	2,075,407	61,305
Initial Expected Current Valuation	$ 60,599,051	$ 1,812,884

Other increases or decreases in actuarial liability (key changes noted below) will increase or decrease the amount of unfunded liability in the plan. To the extent unfunded liability increases or decreases unexpectedly, the contribution towards unfunded liability will also change unexpectedly.

	Actuarial Liability	Contribution Recommendation
Salary Increase Less than Expected	(892,864)	(74,811)
Demographic Changes	1,163,783	10,739
Asset Return Greater than Expected *	-	(10,964)
Contributions Less than Expected	-	7,581
Total Actuarial Experience	$ 270,919	$ (67,455)
Current Valuation	$ 60,869,970	$ 1,745,429

*The impact on contribution due to asset performance is based on the Actuarial Value of Assets.

Key demographic changes were discussed in the prior section.

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VALUATION OF FUND ASSETS

Market Value of Assets
Actuarial Value of Assets

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MARKET VALUE OF ASSETS

Statement of Assets

	Prior Valuation	Current Valuation
Cash and Cash Equivalents	$ 6,834	$ 6,912
Money Market	2,264,969	1,953,372
Fixed Income	17,142,122	16,098,099
Stock Equities	14,894,302	12,023,312
Mutual Funds	5,024,202	11,166,461
Receivables (Net of Payables)	294,071	211,047
Net Assets Available for Pensions	$ 39,626,500	$ 41,459,203

The Total Value of Assets has Increased $1,832,703 from Prior Valuation.

Statement of Changes in Assets

Total Market Value - Prior Valuation	$ 39,626,500
Plus - Employer Contributions	1,611,360
Plus - Employee Contributions	404,193
Plus - Return on Investments	2,801,289
Less - Benefit and Related Payments	(2,921,833)
Less - Other Expenses	(62,305)
Total Market Value - Current Valuation	$ 41,459,203

The Return on Investment on the Market Value of Assets for the Fund was Approximately 7.0% Net of Administrative Expenses.

The return on investments shown has been determined as the Return on Assets from the statement of changes in assets, as a percent of the average of the beginning and ending Market Value of Assets. Return on Investment is net of the Other Expenses as shown. The Return on Investments has been excluded from the Total Market Value of Assets at the end of the year for this calculation.

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MARKET VALUE OF ASSETS (GAIN)/LOSS

Current Year (Gain)/Loss on Market Value of Assets

Total Market Value - Prior Valuation	$ 39,626,500
Contributions	2,015,552
Benefit Payments	(2,921,833)
Expected Return on Investments	2,644,202
Expected Total Market Value - Current Valuation	41,364,421
Actual Total Market Value - Current Valuation	41,459,203
Current Market Value (Gain)/Loss	$ (94,782)

The Return on the Market Value of Assets was Higher than Expected Over the Most Recent Year.

Expected Return on Investments	$ 2,644,202
Actual Return on Investments (Net of Expenses)	2,738,984
Current Market Value (Gain)/Loss	$ (94,782)

The (Gain)/Loss on the Market Value of Assets has been determined based on expected returns at the actuarial rate.

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DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

Total Market Value - Current Valuation		$ 41,459,203
Adjustment for Prior (Gains)/Losses		
	Full Amount	
First Preceding Year	$ (94,782)	(75,825)
Second Preceding Year	268,051	160,831
Third Preceding Year	(636,761)	(254,704)
Fourth Preceding Year	(421,694)	(84,339)
Total Deferred (Gain)/Loss		(254,037)
Initial Actuarial Value of Assets - Current Valuation		41,205,166
Less Contributions for the Current Year and Interest		-
Less Adjustment for the Corridor		-
Actuarial Value of Assets - Current Valuation		$ 41,205,166

The Actuarial Value of Assets is Equal to the Fair Market Value of Assets with Unanticipated Gains/Losses Recognized over 5 Years. The Actuarial Value of Assets is Currently 99% of the Market Value.

(GAIN)/LOSS ON THE ACTUARIAL VALUE OF ASSETS

Total Actuarial Value - Prior Valuation	$ 39,290,206
Plus - Employer Contributions	1,611,360
Plus - Employee Contributions	404,193
Plus - Return on Investments	2,883,546
Less - Benefit and Related Payments	(2,921,833)
Less - Other Expenses	(62,305)
Total Actuarial Value - Current Valuation	$ 41,205,166

The Return on Investment on the Actuarial Value of Assets for the Fund was Approximately 7.3% Net of Administrative Expenses.

The Actuarial Value of Assets incorporates portions of gains and losses over multiple years.

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HISTORICAL ASSET PERFORMANCE

The chart below shows the historical rates of return on plan assets for both Market Value of Assets and Actuarial Value of Assets.

	Market Value	Actuarial Value
First Preceding Year	7.0%	7.3%

The returns on assets shown above were calculated based on the annual return on investment for the year, as a percentage of the average value of the assets for the year.

For purposes of determining the average value of assets during the year, the ending market value of assets has been adjusted to net out to the portion related to the investment returns themselves. All other cash flows are included.

For purposes of determining the annual return on investment we have adjusted the figures shown on the preceding pages. The figures shown on the preceding pages are net of investment expenses. We have made an additional adjustment to net out administrative expenses. Netting out administrative expenses allows us to capture returns for the year that can be used to make benefit payments as part of the ongoing actuarial process.

The adjustment we make is for actuarial reporting purposes only. By netting out administrative expenses and capturing return dollars that are available to pay benefits, it provides us a comparison to the estimated rate of return on assets, but does not provide a figure that would be consistent with the return rates that are determined by other parties. Therefore this calculated rate of return should not be used to analyze investment performance of the Fund or the performance of the investment professionals.

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RECOMMENDED CONTRIBUTION DETAIL

Actuarial Accrued Liability
Funded Status
Development of the Normal Cost
Recommended Contribution
Actuarial Methods – Recommended Contribution

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ACTUARIAL ACCRUED LIABILITY

	Prior Valuation	Current Valuation
Active Employees	$ 23,256,962	$ 24,992,750
Inactive Employees		
Terminated Employees - Vested	-	509,559
Retired Employees	29,098,408	29,131,861
Disabled Employees	5,100,054	5,201,102
Other Beneficiaries	1,068,220	1,034,698
Total Inactive Employees	35,266,682	35,877,220
Total Actuarial Accrued Liability	$ 58,523,644	$ 60,869,970

The Total Actuarial Liability has Increased $2,346,326 from Prior Valuation.

FUNDED STATUS

	Prior Valuation	Current Valuation
Total Actuarial Accrued Liability	$ 58,523,644	$ 60,869,970
Total Actuarial Value of Assets	39,290,206	41,205,166
Unfunded Actuarial Accrued Liability	$ 19,233,438	$ 19,664,804
Total Market Value of Assets	$ 39,626,500	$ 41,459,203
Percent Funded		
Actuarial Value of Assets	67.14%	67.69%
Market Value of Assets	67.71%	68.11%

Funded Percentage as of the Valuation Date is Subject to Volatility on Assets and Liability in the Short-Term.

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RECOMMENDED CONTRIBUTION DETAIL

DEVELOPMENT OF THE EMPLOYER NORMAL COST

	Prior Valuation	Current Valuation
Total Normal Cost	$ 1,048,764	$ 997,064
Estimated Employee Contributions	(402,075)	(398,408)
Employer Normal Cost	$ 646,689	$ 598,656

At a 100% Funding Level, the Normal Cost Contribution is Still Required.

NORMAL COST AS A PERCENTAGE OF EXPECTED PAYROLL

	Prior Valuation	Current Valuation
Expected Payroll	$ 4,252,513	$ 4,213,726
Employee Normal Cost Rate	9.455%	9.455%
Employer Normal Cost Rate	15.21%	14.21%
Total Normal Cost Rate	24.66%	23.66%

Ideally the Employer Normal Cost Rate will Remain Stable.

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CONTRIBUTION RECOMMENDATION

	Prior Valuation	Current Valuation
Employer Normal Cost*	$ 717,481	$ 665,958
Amortization of Unfunded Accrued Liability/(Surplus)	1,034,098	1,079,471
Funding Requirement	$ 1,751,579	$ 1,745,429

*Employer Normal Cost Includes Interest Through the End of the Year.

The Recommended Contribution has Decreased 0.4% from the Prior Valuation (See the Management Summary).

ACTUARIAL METHODS – RECOMMENDED CONTRIBUTION

Actuarial Valuation Date	May 1, 2015
Data Collection Date	April 30, 2015
Actuarial Cost Method	Entry Age Normal (Level % Pay)
Amortization Method	Level % Pay (Closed)
Amortization Target	100% Funded in year 2040
Asset Valuation Method	5-Year Smoothed Market Value

The contribution and benefit values of the Pension Fund are calculated by applying actuarial assumptions to the benefit provisions and census information furnished, using the actuarial cost methods described. The actuarial cost and amortization method allocates the projected obligations of the plan over the working lifetimes of the plan participants.

The recommended contribution amount shown in this report is based on the methods summarized above. The Actuarial Funding Policies section of the report will include a more detail description of the funding methods being used.

The Actuarial Funding Methods are meant to provide a systematic process for determining contributions on an annual basis. The methods do not impact the expectation of future benefit payments. The methods only impact the way dollars are contributed towards future benefit payments.

Different Actuarial Funding Methods may achieve funding goals with differing levels of success. Certain methods are more efficient and more stable on an annual basis.

ILLINOIS STATUTORY MINIMUM CONTRIBUTION

Minimum Contribution
Methods and Assumptions

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STATUTORY MINIMUM CONTRIBUTION

	Minimum Contribution
Contribution Requirement	$1,398,942
Expected Payroll	$4,213,726
Contribution Requirement as a Percent of Expected Payroll	33.20%

FUNDED STATUS – STATUTORY MINIMUM

	Minimum Contribution
Normal Cost	$1,310,994
Market Value of Assets	$41,459,203
Actuarial Value of Assets	$41,205,166
Actuarial Accrued Liability	$53,106,263
Unfunded Actuarial Accrued Liability	$11,901,097
Percent Funded	
Actuarial Value of Assets	77.59%
Market Value of Assets	78.07%

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ILLINOIS STATUTORY MINIMUM CONTRIBUTION

The Statutory Minimum Contribution is based on funding methods and funding parameters in the Illinois statutes for pension funding. The resulting contribution is lower than the recommended contribution for the current plan year. The lower contribution amount is not recommended because it represents a deferral of contributions when compared to the recommended contribution method.

The recommended contribution method is intended to allocate pension contributions in a manner that provides for increases that are manageable going forward. When contributions are lowered in current years, the resulting contributions in future years can increase more rapidly, with the risk of becoming unmanageable. The Securities and Exchange Commission in 2013 used the phrase "Statutory Underfunding" to describe situations where contributions appear to be more manageable in the short-term, but set up future contribution requirements that are less likely to be manageable.

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ACTUARIAL METHODS – ILLINOIS STATUTORY MINIMUM CONTRIBUTION

Actuarial Valuation Date	May 1, 2015
Data Collection Date	April 30, 2015
Actuarial Cost Method	Projected Unit Credit (Level % of Pay)
Amortization Method	Level % Pay (Closed)
Remaining Amortization Period	90% Funded in year 2040
Asset Valuation Method	5-Year Smoothed Market Value

The contribution and benefit values of the Pension Fund are calculated by applying actuarial assumptions to the benefit provisions and census information furnished, using the actuarial cost methods described. The actuarial cost and amortization method allocates the projected obligations of the plan over the working lifetimes of the plan participants.

The recommended contribution amount shown in this report is based on the methods summarized above. The Actuarial Funding Policies section of the report will include a more detail description of the funding methods being used.

The Actuarial Funding Methods are meant to provide a systematic process for determining contributions on an annual basis. The methods do not impact the expectation of future benefit payments. The methods only impact the way dollars are contributed towards future benefit payments.

Different Actuarial Funding Methods may achieve funding goals with differing levels of success. Certain methods are more efficient and more stable on an annual basis.

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ACTUARIAL VALUATION DATA

Active Employees
Retirees and Beneficiaries

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ACTIVE EMPLOYEES

	Prior Valuation	Current Valuation
Vested	36	34
Nonvested	12	14
Total Active Employees	48	48
Total Payroll	$ 4,179,374	$ 4,141,254

INACTIVE EMPLOYEES

	Prior Valuation	Current Valuation
Terminated Employees - Vested	2	2
Retired Employees	34	34
Disabled Employees	8	8
Other Beneficiaries	7	7
Total Inactive Employees	51	51

SUMMARY OF BENEFIT PAYMENTS

	Prior Valuation	Current Valuation
Terminated Employees - Vested	$ -	$ 7,386
Retired Employees	191,661	197,411
Disabled Employees	31,496	31,903
Other Beneficiaries	11,170	11,172
Total Inactive Employees	$ 234,327	$ 247,871

Benefits shown for terminated employees under deferred retirement are not currently in pay status.

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ACTUARIAL FUNDING POLICIES

Actuarial Cost Method
Financing Unfunded Accrued Liability
Actuarial Value of Assets

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ACTUARIAL COST METHOD

The actuarial cost method allocates the projected obligations of the plan over the working lifetimes of the plan participants.

In accordance with the Pension Fund's Funding Policy the actuarial cost method for the recommended contribution basis is Entry Age Normal (Level Percent of Pay). The Entry Age Normal Cost Method is a method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age. The portion of this actuarial present value allocated to a valuation year is called normal cost. The portion of the actuarial present value not provided at a valuation date by the actuarial present value of future normal costs is called the actuarial liability.

FINANCING UNFUNDED ACTUARIAL ACCRUED LIABILITY

The Unfunded Actuarial Accrued Liability may be amortized over a period either in level dollar amounts or as a level percentage of projected payroll.

In accordance with the Pension Fund's Funding Policy, unfunded liability as of 4/30/2014 will be established and paid off 100% over 30 years from that date on a level percent of pay basis. Future unfunded liability will be handled separately.

ACTUARIAL VALUE OF ASSETS

The pension fund is an ongoing plan. The employer wishes to smooth the effect of volatility in the market value of assets on the annual contribution. The Actuarial Value of Assets is equal to the Market Value of Assets with unanticipated gains/losses recognized over five years.

The asset valuation method is intended to create an Actuarial Value of Assets that remains reasonable in relation to the Market Value of Assets over time. The method produces results that can fall above and below the Market Value of Assets. The period of recognition is short.

It is intended that the period of recognition is short enough to keep the Actuarial Value of Assets within a decent range of the Market Value. The employer has not placed a specific corridor around the Market Value of Assets.

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ACTUARIAL ASSUMPTIONS

Nature of Actuarial Calculations
Actuarial Assumptions in the Valuation Process
Actuarial Assumptions Utilized

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NATURE OF ACTUARIAL CALCULATIONS

The results documented in this report are estimates based on data that may be imperfect and on assumptions about future events. Certain plan provisions may be approximated or deemed immaterial, and, therefore, are not valued. Assumptions may be made about participant data or other factors. Reasonable efforts were made in this valuation to ensure that significant items in the context of the actuarial liabilities or costs are treated appropriately, and not excluded or included inappropriately.

Actual future experience will differ from the assumptions used in the calculations. As these differences arise, the expense for accounting purposes will be adjusted in future valuations to reflect such actual experience.

A range of results different from those presented in this report could be considered reasonable. The numbers are not rounded, but this is for convenience only and should not imply precision which is not inherent in actuarial calculations.

ACTUARIAL ASSUMPTIONS IN THE VALUATION PROCESS

The contribution and benefit values of the Pension Fund are calculated by applying actuarial assumptions to the benefit provisions and census information furnished, using the actuarial cost methods described in the previous section.

The principal areas of financial risk which require assumptions about future experience are:

- Long-term Rates of Investment Return
- Patterns of Pay Increases for Members
- Rates of Mortality Among Members and Beneficiaries
- Rates of Withdrawal of Active Members
- Rates of Disability Among Members
- Age Patterns of Actual Retirement

Actual experience of the Pension Fund will not coincide exactly with assumed experience. Each valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of adjustments to the computed contribution requirement.

From time to time it becomes appropriate to modify one or more of the assumptions, to reflect experience trends (but not random year-to-year fluctuations).

ACTUARIAL ASSUMPTIONS

Details behind the selection of the actuarial assumptions can be found in the assumption document provided to the client. The client has reviewed and approved the assumptions as a reasonable expectation of the future anticipated experience under the plan.

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ACTUARIAL ASSUMPTIONS UTILIZED

Expected Return on Investments 6.75% net of adminstrative expenses.

CPI-U 3.00%

Total Payroll Increases 3.50%

Individual Pay Increases 4.25% - 12.25%

Individual salary increases include a long-term average increase for inflation, average annual increases for promotions, and any additional increases for a step program. Sample Rates as Follows:

Service	Rate	Service	Rate
0	12.25%	8	4.25%
1	12.25%	9	4.25%
2	12.25%	10	4.25%
3	12.25%	15	4.25%
4	4.25%	20	4.25%
5	4.25%	25	4.25%
6	4.25%	30	4.25%
7	4.25%	35	4.25%

Retirement Rates 100% of the L&A Assumption Study Cap Age 65 for Firefighters 2012. Sample Rates as Follows:

Age	Rate	Age	Rate
50	0.000	53	0.180
51	0.000	54	0.180
52	0.100	55	0.180

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Withdrawal Rates

100% of the L&A Assumption Study for Firefighters 2012. Sample Rates as Follows:

Age	Rate	Age	Rate
25	0.049	40	0.008
30	0.030	45	0.004
35	0.016	50	0.002

Disability Rates

100% of the L&A Assumption Study for Firefighters 2012. Sample Rates as Follows:

Age	Rate	Age	Rate
25	0.000	40	0.004
30	0.000	45	0.007
35	0.002	50	0.012

Mortality Rates

L&A Assumption Study for Firefighters 2012. Sample Rates as Follows:

Age	Rate	Age	Rate
25	0.0005	40	0.0005
30	0.0003	45	0.0008
35	0.0003	50	0.0013

Married Participants

80% of Active Participants are Assumed to be Married. Female Spouses are Assumed to be the Same Age as Male Spouses.

DRAFT

NORMAL RETIREMENT PENSION BENEFIT - CONTINUED

Hired on or After January 1, 2011

Eligibility: Age 55 with at least 10 years of creditable service and no longer a firefighter.

Benefit: 2.5% of final average salary for each year of service is payable at retirement (not to exceed 75% of final average salary). "Final average salary" is determined by dividing the highest total salary over 96 consecutive months of service in the last 120 months of service by the total number of months of service in the period. Annual salary for this purpose will not exceed $106,800, indexed hy the lesser of 3% or ½ of the CPI-U for the 12 months ending with the September preceding each November 1. The salary cap will not decrease.

Annual Increase in Benefit: The initial increase date will be the January 1st following the attainment of age 60, or the first anniversary of the date of retirement. Subsequent increases will occur on each subsequent January 1st. The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1, applied to the original pension amount.

EARLY RETIREMENT PENSION BENEFIT

Hired Prior to January 1, 2011

None

Hired on or After January 1, 2011

Eligibility: Age 50 with at least 10 years of creditahle service and no longer a firefighter.

Benefit: The normal retirement pension benefit reduced by ½ of 1% for each month that the firefighter's age is under age 55.

Annual Increase in Benefit: The initial increase date will be the January 1st following the attainment of age 60, or the first anniversary of the date of retirement. Subsequent increases will occur on each subsequent January 1st. The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1, applied to the original pension amount.

DRAFT

PENSION TO SURVIVORS

Hired Prior to January 1, 2011

Death - Line of Duty

Surviving spouse is entitled to 100% of the salary attached to the rank of the firefighter on the last day of service, payable immediately.

Death - Non-Duty

Current Pensioners (Including Disabled Pensioners): Surviving spouse to receive continuation of the pension at the time of death or 54% of pensionable salary at the time pension began, if greater.

Active Employee with 20+ Years of Service: Surviving spouse is entitled to the full pension earned by the firefighter at the time of death, or 54% of the pensionable salary at death if greater.

Active Employee with 10-20 Years of service: Surviving spouse is entitled to 54% of the salary attached to the rank of the firefighter on the last day of service, payable immediately

Annual Increase in Benefit: None.

Hired on or After January 1, 2011

Death - Line of Duty

Surviving spouse is entitled to 100% of the salary attached to the rank of the firefighter on the last day of service, payable immediately.

Death - Non-Duty

Current Pensioners (Including Disabled Pensioners), Active Employee with 20+ Years of Service, and Active Employee with 10-20 Years of service: Surviving spouse to receive 66 ⅔% of the firefighter's earned pension at the date of death.

Annual Increase in Benefit: The initial increase date will be the January 1st after the attainment of age 60 by the recipient of the survivor's pension. Subsequent increases will occur on each subsequent January 1st. The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1, applied to the original survivor's pension amount.

DRAFT

TERMINATION BENEFIT

Hired Prior to January 1, 2011

Eligibility: At least 10 years but less than 20 years of creditable service.

Benefit: An accrual factor times final salary for each year of service is payable beginning at age 60. "Accrual Factor" is a factor of 1.5% at 10 years of service, increasing ratably up to 2.4% at 19 years of service. "Final salary" is based on the pay rate for the firefighter on the date of separation.

Annual Increase in Benefit: A firefighter will receive an initial increase of 3% on the first anniversary of the date of start of payments. Subsequent increases of 3% of the current pension amount will be provided in each January thereafter.

Hired on or After January 1, 2011

Eligibility: At least 10 years but less than 20 years of creditable service.

Benefit: An accrual factor times final salary for each year of service is payable beginning at age 60. "Accrual Factor" is a factor of 1.5% at 10 years of service, increasing ratably up to 2.4% at 19 years of service. "Final salary" is based on the greater of salary during the last year of service prior to termination of employment or the pay rate for the firefighter at termination of employment. Annual salary for this purpose will not exceed $106,800, indexed by the lesser of 3% or ½ of the CPI-U for the 12 months ending with the September preceding each November 1. The salary cap will not decrease.

Annual Increase in Benefit: The initial increase date will be the January 1st following the first payment. Subsequent increases will occur on each subsequent January 1st. The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1, applied to the original pension amount.

DRAFT

DISABILITY BENEFIT

Hired Prior to January 1, 2011

Eligibility: Disability (duty; or non-duty with 7 years of service).

Benefit: A firefighter who becomes disabled on duty is entitled to receive a pension equal to the greatest of 65% of final salary or the pension they would have been entitled to upon retirement at the time of disability. For a non-duty disability, the firefighter is entitled to 50% of final salary. "Final salary" is based on the pay rate for the firefighter at retirement.

Annual Increase in Benefit: The initial increase date will be the January 1st following the attainment of age 60. Subsequent increases will occur on each subsequent January 1st. The first increase is 3% of the original benefit for each full year that has passed since the pension began. Subsequent increases are 3% of the original pension benefit amount.

Hired on or after January 1, 2011

Eligibility: Disability (duty; or non-duty with 7 years of service).

Benefit: A firefighter who becomes disabled on duty is entitled to receive a pension equal to the greater of 65% of final salary or the pension they would have been entitled to upon retirement at the time of disability. For a non-duty disability, the firefighter is entitled to 50% of final salary. "Final salary" is based on the pay rate for the firefighter at last day of service.

Annual Increase in Benefit: The initial increase date will be the January 1st following the attainment of age 60. Subsequent increases will occur on each subsequent January 1st. The first increase and subsequent increases will be the lesser of 3% of the original benefit or ½ of the CPI-U for the 12 months ending with the September preceding each November 1, applied to the original pension amount.

DRAFT

GLOSSARY OF TERMS

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GLOSSARY OF TERMS

Actuarial Accrued Liability –The actuarial present value of future benefits based on employees' service rendered to the measurement date using the selected actuarial cost method. It is that portion of the Actuarial Present Value of plan benefits and expenses allocated to prior years of employment. It is not provided for by future Normal Costs.

Actuarial Cost Method – The method used to allocate the projected obligations of the plan over the working lifetimes of the plan participants.

Actuarial Value of Asset – The value of the assets used in the determination of the Unfunded Actuarial Accrued Liability. The Actuarial Value of Assets is related to Market Value of Assets, with adjustments made to spread unanticipated gains and losses for a given year over a period of several years. Actuarial Value of Assets is generally equally likely to fall above or below the Market Value of Assets, and generally does not experience as much volatility over time as the Market Value of Assets.

Asset Valuation Method – A valuation method designed to smooth random fluctuations in asset values. The objective underlying the use of an asset valuation method is to provide for the long-term stability of employer contributions.

Funding Policy – A set of procedures for a Pension Fund that outlines the "best practices" for funding the pension benefits based on the goals of the plan sponsor. A Funding Policy discusses items such as assumptions, Actuarial Cost Method, assets, and other parameters that will best help the sponsor meet their goal of working in the best interest of the plan participant.

Market Value of Assets – The value of the cash, bonds, securities and other assets held in the pension trust as of the measurement date.

Normal Cost –The present value of future benefits earned by employees during the current fiscal year. It is that portion of the Actuarial Present Value of benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

Unfunded Actuarial Accrued Liability – The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The Unfunded Actuarial Accrued Liability is amortized over a period either in level dollar amounts or as a level percentage of projected payroll

DRAFT

Ottosen Britz Pension Practice
Quarterly Insights for Pension Trustees (Third Quarter 2015)

A pure heart and an empty head are not good enough: Lessons from *Tibble* on a fiduciary's duty to monitor fund investments

Background of Tibble v. Edison International (135 S. Ct. 1823 (May 18, 2015))

The case involved a challenge by 401(k) plan participants, alleging breach of fiduciary duty and seeking to recover losses suffered by the plan, as the result of the fiduciaries' retention of higher priced retail class mutual funds when materially identical lower priced institutional class mutual funds were available. The U.S. Supreme Court unanimously concluded that the ERISA plan's fiduciaries' duty of prudence included a duty to continuously monitor plan investments and remanded the case to the federal appeals court to consider whether the plan fiduciaries breached that duty. Technically, ERISA does not apply to governmental plans; however, court decisions involving ERISA provide substantial guidance with respect to governmental plans procedures.

What is the fiduciary's duty regarding ongoing investment monitoring?

The U.S. Supreme Court emphasized that under trust law, a fiduciary is required to conduct a regular review of the plan's investments, and furthermore, a trustee has a continuing duty to monitor those investments and remove imprudent ones. Specifically, this continuing duty is separate and apart from the trustee's duty to exercise prudence in initially selecting investments. The Court noted that trustees must "systematically" consider all investments at "regular intervals" to ensure they are appropriate, exercising its duty of diligence of a prudent investor in "continuing responsibility for oversight of the suitability of the investments already made." As a result, a plaintiff may allege that a fiduciary has breached the duty of prudence by failing to properly monitor investments and remove imprudent ones.

What are the "takeaways" for public pension fund trustees?

While the Court did not expressly state a view on the scope of the fiduciary duty in this case or establish precise guidelines for investment monitoring, public pension fund trustees can learn a few lessons from *Tibble:*

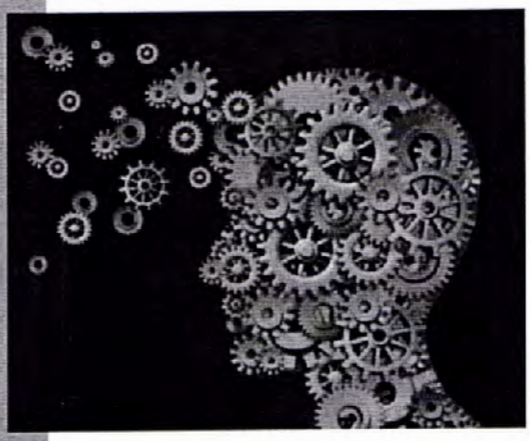
- **"Set it and forget it" is a recipe for fiduciary disaster.** – It is incumbent on pension boards to continue to monitor asset allocations, investment policies, investment performance, investment fees, as well as specific investment selections. Periodically evaluating your investment professionals is important, as well, to benchmark fees and performance.

- **The only foolish question is the one not asked.** – Insist that your investment and financial professionals provide periodic reports. Read those reports, and if you don't understand them, ask for an explanation. What do you call a fiduciary who never asks questions? A defendant.

- **Maintain contemporaneous written records of investment monitoring.** – The board's minutes should reflect the thorough and thoughtful review of investment reports, as well as any specific steps taken to evaluate investment performance.

- **Always remember that the role of the fiduciary is *active*, not passive.** – Most fiduciary breach cases are about imprudence, not about willful wrongdoing. Having a policy or procedure to remind the board to affirmatively take steps for investment review is a good step in the right direction, along with maintaining investment review on the board's meeting agenda. When a decision is made to retain or remove specific investments or investment providers, document the Board's process and the reasons.

- **Amateur hour is over.** – The Court has made it clear that pension fund fiduciaries need to take its responsibilities for investments seriously. Trustees need to know the fund's investments and insure they are receiving advice from strong, competent and independent investment professionals.



The Rise in Psychological Disability Claims in Public Safety Plans

Public Safety Affinity Group -- NAPPA Conference 2015

A Panel Discussion Presented at the National Association of Public Pension Attorneys Annual Conference - June 2015

Convener

- **Mary Beth Foley,** General Counsel
  Ohio Police and Fire Pension Fund (OP&F)

Featured Speaker

- **Dr. Joel S. Steinberg, Forensic Psychiatrist**
  Disability and Impairment Evaluations
  DEP Medical Advisor, OP&F

Panel members

- **Michael W. Sutherland,** Benefits Counsel
  Fire and Police Pension Fund Association of Colorado
- **Carolyn Welch Clifford,** Partner
  Ottosen Britz Kelly Cooper Gilbert & DiNolfo, Ltd.
  Naperville, Illinois

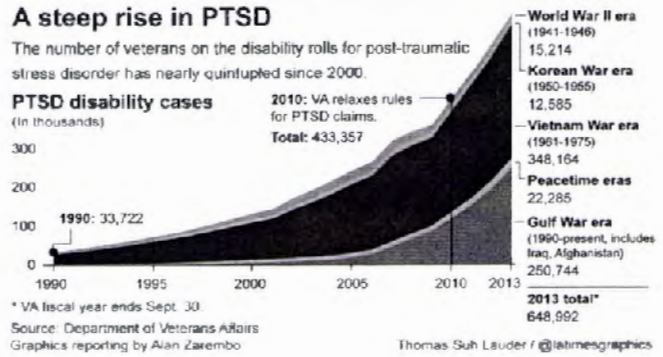
The Rise in Psychological Disability Claims in Public Safety Plans: A Psychiatrist's View and Suggested Processes to Ensure Legitimate Awards

- **PART ONE:** The Rise in Psychological Disability claims for Psychiatric Disorders -- Trends observed in Ohio, Colorado and Illinois.
- **PART TWO:** The Response of the Psychological Community to Claims of Mental Illness.
- **PART THREE:** Suggested Processes for Public Pension Funds to Ensure Legitimate Awards for Psychological Disability Claims.

The Rise of Post-Traumatic Stress Disorder and Other Mental Disability Claims in Public Safety

PART ONE

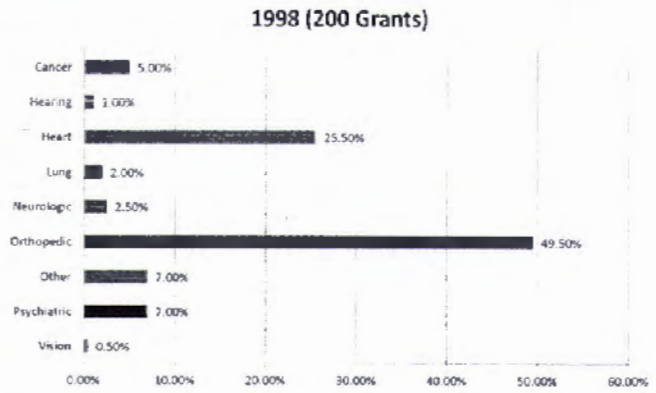
By the Numbers: the VA



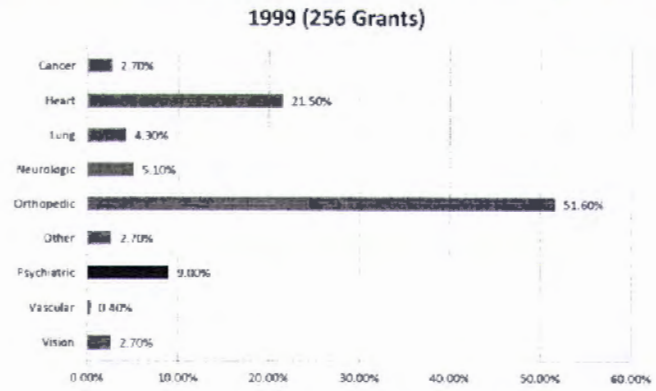
By the numbers: Trends at OP&F

- Tracking of claims for "psychiatric conditions" begins at OP&F in 1998 -- some facts about the data.
- Most common psychiatric conditions included in applications over this period are major and minor depressive disorders, anxiety disorders (i.e. panic attacks, etc.). "Anxiety disorders" used to include PTSD; today, PTSD is a separate diagnosis.
- Data from the National Comorbidity Survey indicate that at least one additional psychiatric disorder is present in 88.3% of men and 79.0% of women who have a history of PTSD.
- More than one half of men with PTSD also have a comorbid alcohol problem, and a significant portion of men and women who have PTSD have a comorbid illicit-substance use problem.
- **59% of men and 44% of women who have PTSD meet the criteria for three or more psychiatric diagnoses.**

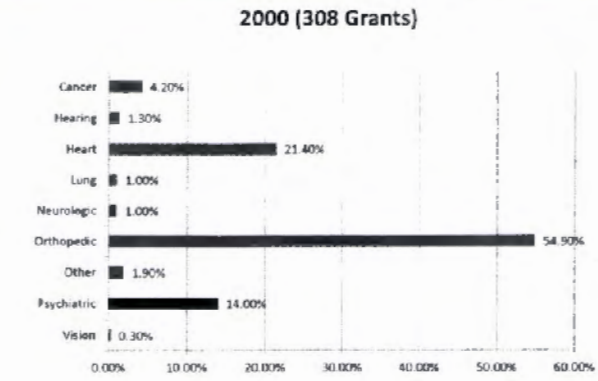
By the numbers: Trends at OP&F



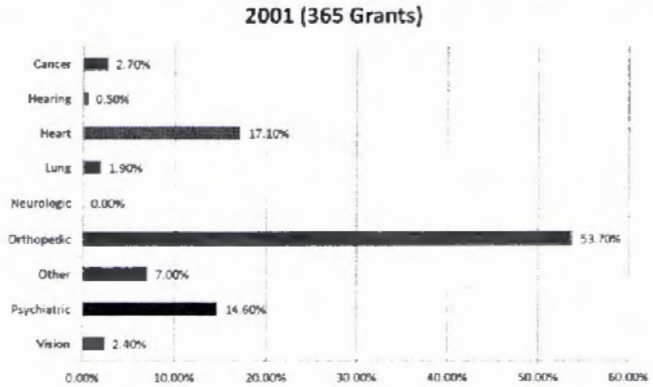
By the numbers: Trends at OP&F



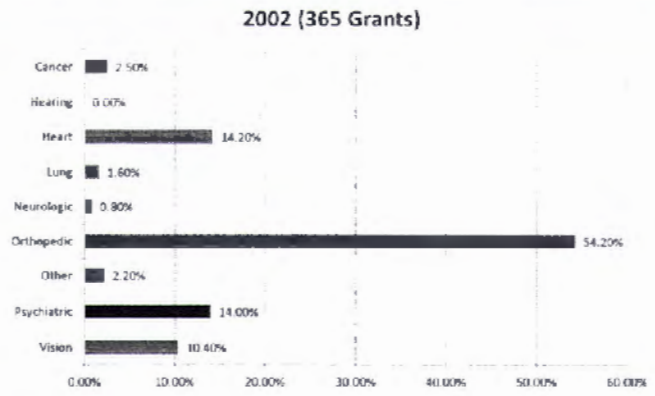
By the numbers: Trends at OP&F



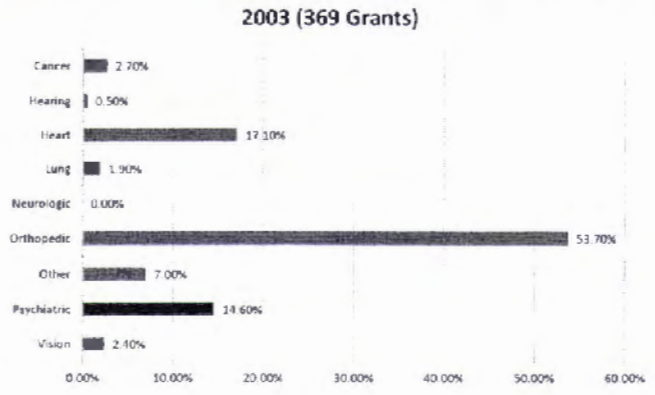
By the numbers: Trends at OP&F



By the numbers: Trends at OP&F



By the numbers: Trends at OP&F



By the numbers: Trends at OP&F

We observe over twice the number of grants with psych claims as the primary medical condition listed by the member -- **from 7% in 1998 to a high of 18% in 2008:**

Primary Medical Condition

	lung	heart	ortho	psych	other	Neuro	cancer	vision
2004	1%	16%	61%	12%	5%	2%	3%	0%
2005	1%	14%	54%	15%	6%	6%	1%	3%
2006	1%	13%	61%	16%	3%	4%	2%	0%
2007	2%	14%	54%	18%	6%	2%	3%	1%
2008	4%	10%	54%	18%	5%	4%	5%	0%
2009	1%	10%	58%	13%	7%	4%	5%	2%

By the numbers: Trends at OP&F

The last five years saw a dramatic decrease in all grants, including psych claims:

Primary Medical Condition

	Lung	Heart	Ortho	Psych	Other	Neuro	Cancer	Vision	Total grants
2010	0%	9%	63%	11%	5%	7%	5%	0%	192
2011	1%	10%	62%	11%	5%	6%	4%	0%	205
2012	5%	11%	55%	7%	8%	8%	4%	2%	182
2013	5%	10%	64%	9%	1%	7%	3%	0%	147
2014	3%	18%	51%	4%	8%	7%	7%	0%	107

By the numbers: Trends at OP&F

- **Why? Several factors may contribute:**
- Over this same ten year period, the OP&F Board of Trustees, like all public funds, was dealing with financial crises in all areas of benefit funding: health care, regular pensions and disabilities.
- The Board moved on many fronts to control costs and ensure future stability: painful changes were made to the health care plan, a DROP program was added to incentivize retention of first responders, and -- with the help of our medical advisors -- changes were made to the disability program to conserve funds for present and future OP&F members.

By the numbers: Trends at OP&F

- **February 2010**: The Board adopted the *AMA Guides* **6th ed.** Ch. 14 "Mental and Behavioral Disorders" and removed non-disabling conditions from consideration in the WPI.
- **May 2011:** The Board authorize the administration of the Personality Assessment Inventory **(PAI)** for all psych evaluations.
- **August 2013:** Began administering both the Medical Symptom Validity Test **(MSVT)** and Nonverbal **(NV-MSVT)** -- aka "Green's Tests" -- for all psych evaluations.
- Dr. Steinberg will review the significance of each.

By the numbers: Colorado's PTSD Experience

- Fire and Police Pension Fund Association of Colorado -- PTSD cases since 2000
- PTSD cases on the rise since 2011

By the numbers: Colorado's PTSD Experience

PTSD Applications 2000 to 2005

2000 – 3; All police	All approved on-duty
2001 – 3; 2 police, 1 fire	All approved, 2 on-duty
2002 - 2; 1 police, 1 fire	Both approved on-duty
2003 – 3; All police	All approved, 2 on-duty
2004 – 1; Police	Approved off-duty
2005 - 0	

By the numbers: Colorado's PTSD Experience

PTSD Applications 2006 to 2010

- 2006 – 1; Fire — Approved on-duty
- 2007 – 0
- 2008 – 0
- 2009 – 0
- 2010 – 1; Police — Approved on-duty

By the numbers: Colorado's PTSD Experience

PTSD Applications 2011 to 2015

- 2011 – 0
- 2012 – 6; 3 Police, 3 Fire — 6 approved, 3 on-duty
- 2013 – 7; 4 Police, 3 Fire — 7 approved, 5 on-duty*
- 2014 – 6; All Police — 6 approved, 4 on-duty**
- 2015 – 1; Police; 1 pending review. — 1 approved, denied on-duty pending hearing

** 1 applicant denied on-duty*
***1 granted at hearing*

By the Numbers: Colorado's PTSD Experience

- Two Police PTSD applications withdrawn during 2014
- Both requested on-duty determinations

By the Numbers: Colorado's PTSD Experience

Why the spike in PTSD applications after 2011?

- ***Aurora theater shooting?*** No, only one from Aurora which was withdrawn. Too early for those applications. Standby...!
- ***Increase in Colorado wildfires?*** No, most applications are from Police by a 15 to 6 margin.
- ***Applicants unsuccessful proving and obtaining substantial PTSD workers' comp claims?*** Perhaps, because claimants limited to only 12 weeks of permanent disability for "mental – mental" claims.
- **No explanation for spike based upon current data.**

By the numbers: Illinois' PTSD Experience

General Disability Experience amongst Illinois' Fire and Police Pension Funds

Illinois Department of Insurance does not track the number of mental disability claims made amongst the 654 fire and police funds in Illinois. However, it does track the number of members receiving disability pension benefits each year.

	Duty	Non-Duty	Occupational	TOTALS
Fire 2013 (297 funds):	1032	113	155	**1300**
Fire 2012 (297 funds):	994	118	172	**1284**
	Duty	Non-Duty	Occupational	TOTALS
Police 2013 (357 funds):	842	279	2	**1123**
Police 2012 (355 funds):	811	263	1	**1075**

By the numbers: Illinois' PTSD Experience

In a sample of seven (7) Illinois police pension funds over a 15-year period (2000 to 2015)

- Thirteen (13) total disability applications granted.
- Of those 13 applications, only one (1) was for a mental disability (which included a claim of PTSD).
- **The one mental disability applicant was granted a non-duty disability pension benefit.**

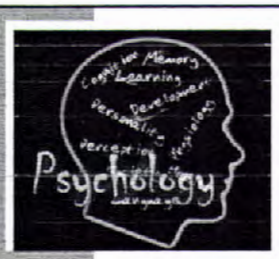
By the numbers: Illinois' PTSD Experience

In a sample of thirty-one (31) Illinois firefighter pension funds over a 15-year period (2000 to 2015)

- Seventy-one (71) total disability applications reviewed with only two (2) of those applications denied.
- Of those 71 applications, seven (7) were for a mental disability.
- Two (2) of the seven (7) mental disability applications included a claim of PTSD.
- **One (1) of these PTSD claims was denied; the other PTSD applicant was granted non-duty disability benefits.**

By the numbers: Illinois' PTSD Experience

- **Anecdotally, most Illinois fire and police pension fund attorneys have not noticed a rise in either mental disability or specifically PTSD claims in Illinois.**
- This may the result of the difficulty under the Illinois Pension Code to prove a line-of-duty disability for a mental disability claim.
- However, there is generally more awareness of PTSD and general mental health issues – particularly in the Illinois fire service.



A Psychiatrist's View on Correctly Evaluating Claims of Mental Impairment

Dr. Joel S. Steinberg, MD, FP

PART TWO

The Evaluator's Dilemma

"Evidence which is simply information recorded by a medical examiner, unenhanced by any additional medical comment by that examiner, does not constitute 'competent medical evidence' and a mere transcription of lay history is not transformed into 'competent medical evidence' merely because the transcriber is a medical professional."

The Evaluator's Dilemma

"Similarly, an opinion as to the cause of a disability, its relationship to an event or injury, or its relationship to another disability without any factual information regarding the basis of the opinion is not of sufficient probative value to establish a connection, even if the opinion is expressed by a medical doctor or someone in the medical profession."

US Department of Veteran's Affairs, Office of Hearings and Appeals

The Evaluator's Dilemma

- Psychiatrists and psychologists are trained to believe patients.
- Mental health professionals have been found to more susceptible to manipulation than most other professionals; **the least susceptible have been found to be attorneys.** ☺
- In this area, it easy to be deceived.
- An evaluator must remember that unlike those who simply seek treatment for mental illness, there is significant pecuniary gain at stake for disability applicants.

The Evaluator's dilemma

- Without laboratory tests or other means to confirm or exclude diagnostic considerations, mental health professionals are dependent on the history offered.
- Most of you are probably familiar with fibromyalgia, chronic fatigue syndrome, irritable bowel syndrome, and possibly multiple chemical sensitivities. These are examples of illness without disease or "Medically Unexplained Symptomatology" (MUS).

The Evaluator's dilemma

- In a way, psychiatric symptoms are quite similar to multisymptom illness. Psychiatric patients do report having many symptoms, but there are no objective tests to confirm an underlying disease in most cases.
- How many of you know about the **"SURVIVOR QUILT?"**

The Evaluator's Dilemma

- The Disabled American Veterans published a newsletter about PTSD. They made a typographical error. They indicated that among other symptoms **SURVIVOR QUILT** was one of the characteristic symptoms that veterans with PTSD experienced.
- Would you believe that within the next several months, there were a number of Veterans who came to apply for benefits claiming, among other things, that they had **SURVIVOR QUILT?** When asked what that was, they responded with, **"I don't know, but I've got it!"**

The Evaluator's Dilemma

Primary Care PTSD Screen

Ask the patient, "In your life have you ever had any experience that was so frightening, horrible, or upsetting that in the past month you:

1. Have had nightmares about it or thought about it when you did not want to?
2. Tried hard not to think about it or went out of your way to avoid situations that reminded you of it?
3. Were constantly on guard, watchful, or easily startled?
4. Felt numb or detached from others, activities, or your surroundings?

Three or more "yes" answers to these questions represent a positive result for PTSD. Public funds need to do more.

The Evaluator's Dilemma

2005 NDSD* Mental Health Screening

- Nearly 300,000 screenings were completed at 8,000 sites and through SMH's**
- Year-round, online screening offered by hospitals, community groups, colleges, workplaces, and health care companies.

** National Depression Screening Day*

*** Screening for Mental Health*

The Evaluator's Dilemma

2005 NDSD* Mental Health Screening

- People who scored positive on the generalized anxiety disorder screening:

  Scored 26% in-person and 82% online

- People who scored positive on the PTSD screening:

  17% in-person and 65% online

Due to the self-referred nature of the online screenings, historically, we tend to see a larger percentage of positive scores than for the in-person events where screenings are offered to the public at large, not just those who come out of concern for themselves.

How do we solve the Dilemma?

- Thus, adoption of appropriate standards is essential to ensuring the most appropriate award is given to a disability applicant.
- The goal is to make sure those who are truly suffering receive appropriate benefits. And to make sure those who are not entitled do not receive them.

Suggestions for Public Funds to ensure Legitimate Awards

PART THREE

How do we solve the Dilemma?

- Consider adopting the *AMA Guides* **6th ed.,** Ch. 14 "Mental and Behavioral Disorders"
- Require Fund Evaluators to use one or all of the following tests:
  - ✓ The Personality Assessment Inventory (**PAI**)
  - ✓ The Medical Symptom Validity Test (**MSVT**) and Nonverbal Medical Symptom Validity Test (**NV-MSVT**)...aka **Green's Tests**...

...or like tests for all psych evaluations.

How do we solve the Dilemma? Adopt the 6TH Edition to AMA Guides for Mental Impairments

Classification of Impairments
4th Edition: Table, page 301
[also p. 363 Guides 5]

Class 1: No Impairment
Class 2: Mild, compatible with most ...
Class 3: Moderate, some but not all...
Class 4: Marked, significantly impede...
Class 5: Extreme, Preclude ...

USEFUL FUNCTIONING

How do we solve the Dilemma? Adopt the 6TH Edition to AMA Guides for Mental Impairments

IMPAIRMENT: % = **Second Edition**

(Similar to Chapter 4, Table 3 (p. 142))

- Class 1, No/Normal 0-5%
- Class 2, Mild/Mild 10-20%
- Class 3, Mod/Mod 25-50%
- Class 4, Marked/Mod Severe 55-75%
- Class 5, Extreme/Severe >75%

Fourth Edition, % in text, not in table (p. 301)

Fifth Edition, % **not** in the chapter, **not** anywhere

How do we solve the Dilemma? Adopt the 6TH Edition to AMA Guides for Mental Impairments

The 6th Edition is more specific and can result in a significant reduction in the impairment percentage:

GAF Value	81 – 100	71 – 80; 61 - 70	51 – 60	41 – 50, 31 -40	21 – 30; 11-20; 1-10
Whole Person Impairment % Guides Second Edition [3, 4, 5, top]	0 – 5	10 – 20	25 – 50	55 – 75	> 75%
Sixth Edition	0	0/5	10	15/20	30/40/ 50

How do we solve the Dilemma? Adopt the 6TH Edition to AMA Guides for Mental Impairments

The reduced percentages have born out so far for OP&F:

- We have seen a reduction in then percentage of WPI in awards for mental impairment.
- WPI was **15-20%** for psych conditions and higher under the 5th Edition.
- Under the 6th Edition WPI is now between **5-10%.**

How do we solve the Dilemma? Implement additional testing and Malingering indices

The Personality Assessment Inventory (PAI)

The 344 items on the PAI constitute 22 non-overlapping scales covering the constructs most relevant to a broad-based assessment of mental disorders:

- ✓ four validity scales,
- ✓ 11 clinical scales,
- ✓ five treatment scales, and
- ✓ two interpersonal scales.

To facilitate interpretation -- and to cover the full range of complex clinical constructs -- 10 scales contain conceptually derived subscales.

How do we solve the Dilemma? Implement additional testing and Malingering indices

- The **"Green's Tests"** help in discriminating between genuine cognitive impairment versus feigned impairment or results that are unreliable for some other reason (e.g. lack of engagement in testing).
- **Dr. Green's** Word Memory Test (WMT), Medical Symptom Validity Test (MSVT) and nonverbal MSVT are computerized memory tests with multiple subtests measuring verbal and nonverbal memory. They contain hidden measures, which serve to check the validity of the patient's test scores.

How do we solve the Dilemma? The Rey Test

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How do we solve the Dilemma? Implement additional testing and Malingering indices

A B C

1 2 3

a b c

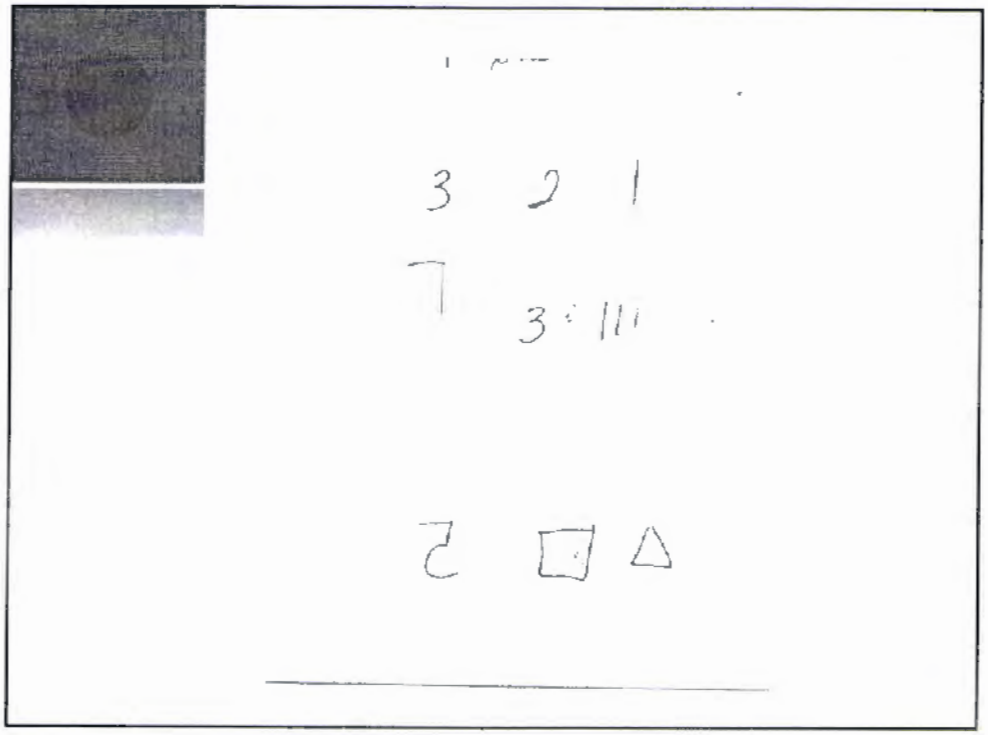
O □ Δ

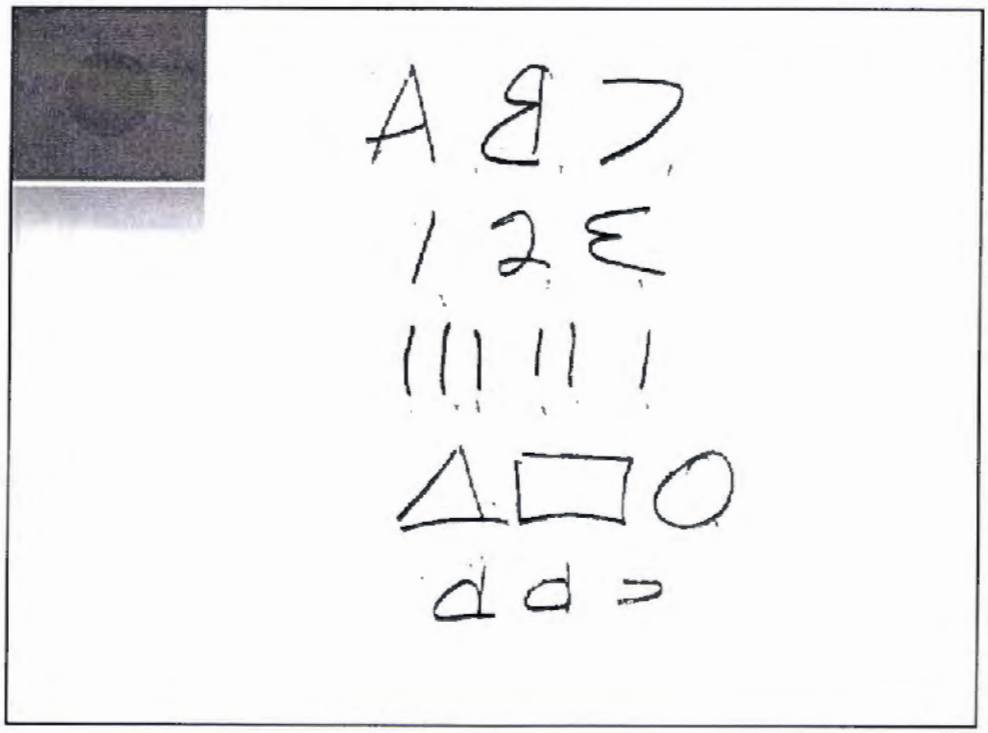
I II III

ABC

I II III

CAR





How do we solve the Dilemma? Encouraging Entry-level Psychological Evaluations

- **Entry-level exams for fire and police candidates critical** -- easiest time to address unreasonable predisposing risk factor conditions within legal limits
- **Nature of the examination**
  - Essential components of the evaluation should include mental health issues
  - Baseline evaluation and documentation critical for potential pension claims in the future
- **Communicate to employers the importance of entry-level screening for "psychological" fit for public safety work**

How do we solve the Dilemma? Employer Support of Public Safety Workers' Mental Well-Being?

- Two chapters in the 2013 edition of NFPA 1500 were re-titled— now "Behavioral Health and Wellness Programs" and "Occupational Exposure to Atypically Stressful Events"—to broaden the perspective of firefighter health and to allow for a more comprehensive application of behavioral health programs.
- Discussions are also underway to include additional material on behavioral health for emergency responders in NFPA 1582, Comprehensive Occupational Medical Program for Fire Departments.
- "Tying behavioral health into the annual fire service physical would provide another opportunity to detect these kinds of problems and to address them," according to Ken Holland of NFPA.

How do we solve the Dilemma? Tools all funds can use

- Volume of applications and expense is a consideration for plans when deciding what tools to implement.
- For large funds, DEP panels for evaluation of claims are a great help with processing; retain a Medical Advisor for advice on these issues.
- Review your fund's current standards for evaluation to unsure they are up to date. Contract with examiners from many disciplines.
- **Pay for the additional psychological testing** -- some are relatively inexpensive.

Articles of Interest

- "As disability awards grow, so do concerns with veracity of PTSD claims," by Robert Zarembo, *Los Angeles Times* (August 4, 2014)
- "Impact on impairment ratings from switching to the American Medical Association's Sixth Edition of the Guides to the Evaluation of Permanent Impairment," by Robert Moss, David McFarland, C J Mohin and Ben Haynes.
- "Malingering Psychological Symptoms: An Empirical Review," by Sara Duffy, Master of Science Candidate, Department of Psychology, Illinois State University.
- "Trouble in Mind," by Janet A. Wilmoth, *NFPA Journal* (May/June 2014)

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Summaries of Illinois Fire and Police Pension Fund Reported Appellate Disability Cases Involving Psychological Injuries

Compiled by Carolyn Welch Clifford and John Motylinski
Ottosen Britz Kelly Cooper Gilbert & DiNolfo, Ltd.
Naperville, Illinois

The Rise in Psychological Disability Claims in Public Safety Plans: A Psychiatrist's View and Suggested Processes to Ensure Legitimate Awards

Presented at the National Association of Public Pension Attorneys
Annual Conference - Austin, Texas - June 2015

Resulting in Line-of-Duty Disability Benefits

1. ***Knight v. Village of Bartlett*, 338 Ill.App.3d 892 (1st Dist. 2003)**

A police officer worked in an undercover narcotics unit that often entailed physical violence. The officer began experiencing emotional problems and trouble sleeping. In particular, the officer had nightmares and dreamt about shooting people at a staff meeting. He was then removed from the police force and applied for pension benefits. Two psychologists and three psychiatrists found the applicant to be unfit for duty, yet the pension board denied the officer's application. On review, the appellate court found that the pension board was wrong: the applicant had suffered a mental disability that prohibited him from working as a police officer. Also, the applicant's disability clearly occurred in the line of duty, as it stemmed from the applicant's time in the undercover narcotics unit. Therefore, the court granted the applicant a line-of-duty pension.

2. ***Village of Stickney v. Board of Trustees of the Police Pension Fund of the Village of Stickney*, 363 Ill.App.3d 58 (1st Dist. 2005)**

A police officer applied for a line-of-duty disability pension because he had been suffering from panic attacks. The officer believed that these attacks stemmed from doing undercover work, having a heavy case load, and not having sufficient protection. Three examining doctors certified that he was permanently disabled because of duty-related incidents, so the pension board granted the line-of-duty pension. The Village of Stickney appealed, hoping to overturn the pension board's decision. On review, the appellate court upheld the pension board because the applicant's disability was caused by a "special risk" that only police officers would encounter.

Resulting Non-Duty Disability Benefits

3. ***Hammond v. Firefighters Pension Fund of the City of Naperville*, 369 Ill.App.3d 294 (2nd Dist. 2006)**

A firefighter/paramedic applied for disability benefits after several incidents raised concerns involving his fitness for duty, including losing his composure after an incident involving a fellow firefighter needing medical attention. Evidence showed he was suffering from -- among other things -- depression and anxiety. The board awarded a non-duty disability pension, instead of a line-of-duty disability pension, because it concluded that the firefighter/paramedic's "duties merely *triggered symptoms* of one or more disorders rooted in nonoccupational sources." On appeal, the court noted that there was evidence that the applicant's stress was caused by external sources wholly independent from his duties as a firefighter/paramedic. The court therefore affirmed the pension board's decision.

4. ***Graves v. Pontiac Firefighters' Pension Board*, 281 Ill.App.3d 508 (4th Dist. 1996)**

A firefighter filed for a line-of-duty disability pension citing anxiety caused by the fire department's increasing emphasis on cross training firefighters as EMTs. After an unsuccessful rescue attempt, the applicant stated he felt depressed, worthless, and lethargic, and was eventually admitted to a hospital psychiatric ward. Instead of the requested line-of-duty pension, the pension board awarded a non-duty disability pension because the injuries resulted from "job dissatisfaction not attributable to specific acts of service as a firefighter . . . ." The appellate court agreed with the pension board; even though the applicant was clearly psychologically disabled, "general job dissatisfaction or job stress arising from the inability to handle general duties does not give rise to a duty-related disability pension."

5. ***Olson v. Wheaton Police Pension Board*, 153 Ill.App.3d 595 (2nd Dist. 1987)**

A police officer suffered from intense, stress induced migraine headaches. These headaches became so bad that the officer's doctor suggested he leave the police force. The officer then sought a line-of-duty disability pension, which the pension board denied, but was awarded a non-duty disability pension. On review, the court found that the applicant was not disabled "while he was engaged in activities related to his duty as a police officer to protect and serve the public," as all employees "regularly suffer stress in their employment . . . ." Therefore, the court upheld the board's decision.

6. ***Batka v. Board of Trustees of the Village of Orland Park Police Pension Fund*, 186 Ill.App.3d 715 (1st Dist. 1989)**

A police officer submitted an application for line-of-duty benefits, citing work-induced stress, ulcers, headaches, fatigue, depression, sleeping disorders, and irritability. The pension board denied the officer's application for both line-of-duty and non-duty disability pensions, finding that he was not disabled. The appellate court reversed, finding that the applicant was clearly disabled and entitled to a non-duty disability pension. However, the court agreed with the pension board that the officer was not entitled to a line-of-duty pension because the officer's problems "were not unique to police officers."

7. ***Coyne v. Milan Police Pension Board*, 347 Ill.App.3d 713 (3rd Dist. 2004)**

A police officer requested either a line-of-duty or non-duty disability pension, claiming he had been psychologically disabled by traumatizing events at work. Outside the workplace, the officer was involved in a canoe accident that killed two people. He also experienced several suicides and witnessed a motorcycle crash. The officer was eventually diagnosed with post-traumatic stress disorder (PTSD) stemming from "a series of work-related stressors." The pension board denied the officer's application, finding that he failed to show he was incapable of performing police work or that such a disability was suffered in the line of duty. The appellate court remanded the case back to the pension board on the issue of whether the applicant was disabled and entitled to a non-duty disability pension. Yet, the court upheld the pension board's denial of a line-of-duty pension because "no specific act of his employment caused the disorder" and that the applicant "developed problems over time in response to stressful work-related situations."

8. ***Iwanski v. Streamwood Police Pension Board*, 232 Ill.App.3d 180 (1st Dist. 1992)**

A police officer suffered from "deep depression" that caused him to come close to attempting suicide. He also demonstrated anger and a sense that the police department was to blame for his problems. The officer then filed an application for disability benefits, which the pension board denied. The court, on review, noted that the applicant was entitled to a non-duty pension because all three independent medical examiners agreed that the applicant was disabled. However, the court agreed with the pension board that the applicant was not entitled to a line-of-duty pension because there was no evidence suggesting a link between an act of duty and the applicant's disability.

9. *Robbins v. Board of Trustees of the Carbondale Police Pension Fund*, 177 Ill.2d 533 (1997)

A police officer was assigned to patrol duty, which caused him to experience stress. This stress stemmed from criticism levied by his supervisor and anxiety that younger officers were better trained. On one occasion, the officer responded to a domestic violence call and witnessed a man commit suicide by "shooting himself in the face with a shotgun." A few weeks later, the officer was deemed mentally unfit for duty, so he applied for pension benefits. The pension board denied a line-of-duty disability pension, but granted a non-duty pension. The appellate court reversed the pension board and granted the officer a line-of-duty pension. However, the Illinois Supreme Court reversed the appellate court, agreeing with the pension board that the officer's stress was the result of his anxiety over his job performance and he did not suffer an injury derived from a "special risk not ordinarily assumed by a citizen in the ordinary walks of life." The court reinstated the pension board's award of a non-duty disability pension.

10. *Ryndak v. River Grove Police Pension Board*, 248 Ill.App.3d 486 (1st Dist. 1993)

A police officer applied for pension benefits after he was diagnosed with post-traumatic headache syndrome, stress, anxiety, and depression. These symptoms originated from two events: (1) the officer was named a defendant in a civil rights lawsuit; and (2) the officer had been beaten up so badly he required reconstructive surgery. After hearing reports by multiple psychologists and psychiatrists, the pension board denied a line-of-duty pension but granted a non-duty pension. On review, the court upheld the pension board's decision because the applicant failed to establish a causal connection between his symptoms and an act of police service.

11. *Trettenero v. Police Pension Fund of the City of Aurora*, 268 Ill.App.3d 58 (2nd Dist. 1994)

Trettenero, a police officer, witnessed another officer beat up a prisoner being held in lockup. She did not make a written report and was disciplined for being a "passive participant." Following the incident, both officers were sued. Trettenero started experiencing stress, depression, and anxiety, so she filed for an application for pension benefits. The pension board granted the officer a non-duty disability pension, but denied a line-of-duty pension. The appellate court upheld the pension board, as there was sufficient evidence for the board's decision.

Not Entitled to Disability Benefits

12. *Wall v. Police Pension Board of the Village of Schaumburg*, 178 Ill.App.3d 438 (1st Dist. 1988)

A police officer applied for a line-of-duty disability pension, citing stress and emotional strain. The pension board's examining doctors noted that the applicant's major stress originated from a divorce he was experiencing. The pension board concluded that the officer's stress was not caused by "the performance of an act of duty," and subsequently denied his application. On review, the court affirmed, concluding that the officer did not have a job-related disability because these symptoms were "common to any type of employment."

13. *Daily v. Board of Trustees of Police Pension Fund of Springfield, Illinois*, 251 Ill.App.3d 119 (4th Dist. 1993)

A police officer applied for disability pension benefits, citing stress. The pension board denied the officer's application after finding that he did not suffer from a mental disability that would preclude him from serving as a police officer. On review, the court noted that the medical evidence only showed that the applicant suffered from a personality disorder, which did not impair the performance of his duties. Also, even if this disorder did constitute a disability, then the officer still would not be entitled to a line-of-duty pension because there was no "act of duty" that caused the disorder. Therefore, the court upheld the pension board's denial of benefits.

14. ***Jagielnik v. Board of Trustees of the Police Pension Fund of the Village of Mundelein*, 271 Ill.App.3d 869 (2nd Dist. 1995)**

A police officer made repeated sexual advances to a female grocery clerk. He was eventually caught and pleaded guilty to misdemeanor battery. The officer then filed a petition for disability benefits, claiming that he was suffering from severe depression. The pension board agreed that the officer was mentally disabled and that the disability stemmed from the charges made against him. However, the pension board denied the pension on public policy grounds because his disability was caused by his own intentionally committed wrongful acts. On appeal, the court upheld the pension board's decision, as the officer "should not profit from his own wrongdoing."

15. ***Kramarski v. Board of Trustees of the Village of Orland Park Police Pension Fund*, 402 Ill.App.3d 1040 (1st Dist. 2010)**

A new police officer underwent police baton training, during which she was injured. As a result of the incident, the officer also claimed she experienced post-traumatic stress disorder (PTSD) and depression. The officer then applied for disability benefits. Two of three psychiatrists concluded that the applicant was not psychologically disabled. There was also medical evidence showing that the applicant was not physically disabled. The pension board denied the officer's application, and the court summarily affirmed the pension board's decision as supported by the evidence.

16. ***Marconi v. Chicago Heights Police Pension Board*, 225 Ill.2d 497 (2006)**

A police officer applied for disability benefits due to depression. The applicant's claim was supported by his psychiatrist, two independent psychiatrists, and a psychologist. However, another psychiatrist disagreed. The pension board denied the officer's application, relying on the report of the dissenting psychiatrist. On review by the Illinois Supreme Court, the pension board was upheld. The court noted that the record contained "sufficient evidence to support the Board's decision, and we cannot say that it is clearly evidence that the Board should have reached the opposite conclusion . . . ."

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Bill 7-8

Pension Reform Bill

Summary:

- **Applies consideration model to State of Illinois pension plans, downstate public safety plans and Chicago Teachers' Pension Fund**
- **Adopts Mayor Emanuel's pension bill, and adds downstate public safety while providing more local control over funding and benefits**
- **Provides Cook County a choice of their pension reform bill or a consideration model**
- **Grants local governments the right to restructure finances**

Changes Based on the Consideration Framework

- SERS
  - After removing certain subjects from collective bargaining, create a baseline independent of pension benefits:
    - Wages guaranteed not to decline for five years;
    - Vacation reset to two weeks (under 15 years of service) and three weeks (15+ years of service);
    - Adjusted vacancy/overtime rights; and
    - Overtime pay normalized to match federal law, kicking in at 40 hours, not 37.5
  - Create several optional packages to incentivize different groups of employees to transition into Tier 2 pension formula prospectively:
    - Salary package: $2000 transition bonus; one-time $3000 salary increase; OT at 37.5 hours; no additional vacation
    - Vacation package: $2000 transition bonus; one-time $2000 salary increase; OT at 37.5 hours; 2 additional weeks of vacation
    - Overtime/vacancy package: $2000 transition bonus; no salary increase; OT at 37.5 hours; 2 additional weeks of vacation; priority rights in work schedule, vacation, overtime, and "bumping"

- TRS, SURS, GARS, CTPF, and Downstate Police and Fire Tier 1 employees must choose between:

  A. COLA shifts from 3% compounded (Tier 1 COLA) to the lesser of 3% or ½ CPI non-compounded (Tier 2 COLA) OR

  B. All future salary increases are not included in pension benefit calculations

- Cook County must choose between:

  A. Pension plan as introduced by Cook County (except with collective bargaining changes discussed above) OR

  B. A consideration-based plan that prompts employees to choose between a reduced COLA benefit or agreeing that all future salary increases are not included in pension benefit calculations

Public Safety Changes

- Chicago Police and Fire funding schedule is changed from the current target of 90% by 2040 to 90% by 2055 including a 5 year period from FY16 – FY21 where mandatory payments are set in statute.

- Downstate Police and Fire funding schedules would be treated the same as Chicago Police and Fire, changing the current target of 90% funded by 2040 to 90% funded by 2055.
- 642 individual downstate police and fire funds are consolidated under IMRF for investment efficiency.
- Public Safety Employee Benefit Act definition of catastrophic injury is changed to clearly state that it would preclude the injured employee from performing gainful work.
- Tier 3 benefits are created for newly hired public safety employees. Tier 3 is a hybrid DB/DC with local control on DC benefits.
- Contains all aspects of Chicago's SB777 including allocating casino revenue to the pension funds.

Local Government Restructuring

- Local government restructuring is allowed by authorizing a local public entity to initiate a Chapter 9 filing after review from a neutral evaluation process or the declaration of a fiscal emergency.

Chicago Teachers' Pension Funding

- The State will pay the employer normal cost and the cost of defraying health insurance to CTPF contributions for FY16 and FY17.
- Requires CPS to end the practice of picking up the employee pension contribution.

Graystone Consulting℠

A business of Morgan Stanley

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Quarterly Performance Review

Prepared for:

CITY OF PARK RIDGE FIREFIGHTERS PENSION FUND

June 30, 2015

Investment Perspectives

From the Global Investment Committee

Capital Markets Overview: 2Q 2015

Introduction

As of 2Q 2015

- During the second quarter of 2015, the primary concerns among investors were the timing of Fed interest rate hikes along with economic woes in Greece, China and Puerto Rico. For the quarter, Japanese equities and diversified commodities were the top-performing asset classes, while MLPs and global REITs trailed the field. For the one-year period ended June 30, 2015, Japanese equities also were one of the strongest asset classes, in addition to US equities.

- The Dow Jones Industrial Average decreased 0.3% in the second quarter. The NASDAQ Composite Index advanced 2.1% for the quarter. The S&P 500 Index rose 0.3% for the quarter, its tenth consecutive quarterly increase.

- Five of the 10 sectors of the S&P 500 Index advanced in the second quarter. Health Care fared the best, with a 2.8% uptick. Consumer Discretionary rose 1.9% and Financials advanced 1.7%. The laggards were Utilities, which declined 5.8%, Industrials, which fell 2.2%, and Energy, which declined 1.9%.

- Morgan Stanley & Co. economists expect U.S. real GDP will be 2.5% in 2015 and 2.7% in 2016. They forecast global GDP growth to be 3.4% in 2015 and 3.9% 2016.

- Commodities were one of the top performing asset classes in the second quarter; the Bloomberg Commodity Index rose 4.7%. For the quarter, gold was down 1.1%.

- For the second quarter of 2015, global mergers and acquisitions (M&A) deal volume was $1 trillion, compared to $936 billion for the second quarter of 2014. Global M&A activity increased to $3.3 trillion in 2014 from $2.3 trillion in 2013.

Source: FactSet, Bloomberg, Morgan Stanley & Co. Research

Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

Capital Markets Overview: 2Q 2015

The US Economy

As of 2Q 2015

The Department of Commerce estimated that Gross Domestic Product decreased at an annual rate of 0.2% in the first quarter of 2015, in comparison to a 2.2% increase in the fourth quarter of 2014. Morgan Stanley & Co. economists forecast U.S. Real GDP will be 2.5% in 2015 and 2.7% in 2016.

The seasonally adjusted unemployment rate fell from 5.6% for March 2015 to 5.3% for June 2015. Job gains took place in professional and business services, health care, retail trade, financial activities, and in transportation and warehousing. The unemployment rate (5.3%) and the number of unemployed persons (8.3million) decreased in June. The number of long-term unemployed declined by 381,000 to 2.1 million in June 2015.

According to the most recent estimate from the Bureau of Economic Analysis, corporate profits fell 5.2% between the first quarter of 2015 and the fourth quarter of 2014, and decreased 4.5% between the first quarter of 2015 and the first quarter of 2014.

Inflation remained low in the U.S. According to the Bureau of Labor Statistics, the seasonally adjusted Consumer Price Index increased 0.1% in April and 0.4% in May. Morgan Stanley & Co. economists forecast a 1.6% inflation rate for 2014 and 0.1% for 2015.

The Census Bureau reported that private-sector housing starts in May 2015 were at a seasonally adjusted annual rate of 1,036,000—5.1% above May 2014 housing starts. The rise in housing starts over the past several years indicates that despite some intermittent setbacks, the housing market is rebounding.

The Census Bureau also reported that seasonally adjusted retail and food services sales increased 1.2% between April 2015 and May 2015, and increased 2.7% between May 2014 and May 2015.

In June, the Institute for Supply Management's Purchasing Managers' Index (PMI), a manufacturing sector index, was 53.5, up 0.7 from May, and up from April's 51.5. The latest PMI data indicates an expansion in the manufacturing sector for 26 consecutive months. Overall, PMI has been above 43 for 74 consecutive months. Generally speaking, a PMI or NMI (ISM Non-Manufacturing Index) over 50 indicates that the sector is expanding and a PMI below 50 but over 43 indicates that the sector is shrinking but the overall economy is expanding.

The NMI declined 2.1 points to 55.7 between April 2015 and May 2015, and rose 0.3 to 56.0 between May and June of 2015. The index has now been above 50 for 64 consecutive months.

Source: FactSet, Bloomberg, Morgan Stanley & Co. Research

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Capital Markets Overview: 2Q 2015

US Equity Markets

As of 2Q 2015

The Dow Jones Industrial Average decreased 0.3% in the second quarter. The NASDAQ Composite Index advanced 2.1% for the quarter. The S&P 500 Index rose 0.3% for the quarter, its tenth consecutive quarterly increase.

Five of the 10 sectors of the S&P 500 Index advanced in the second quarter. Health Care fared the best, with a 2.8% uptick. Consumer Discretionary rose 1.9% and Financials advanced 1.7%. The laggards were Utilities, which declined 5.8%, Industrials, which fell 2.2%, and Energy, which declined 1.9%.

Growth-style stocks of large-cap companies rose modestly during the second quarter. The large-cap Russell 1000 Growth Index advanced 0.1%. The Russell 1000 Index, a large-cap index, also rose 0.1% for the quarter.

The Russell 1000 Value Index, also a large-cap index, increased 0.1% for the quarter. The Russell Midcap Growth Index fell 1.1% for the quarter. The Russell Midcap Index decreased 1.5% for the quarter. The Russell Midcap Value Index decreased 2.0% for the quarter. The Russell 2000 Growth Index, a small-cap index, increased 2.0% for the quarter. The small-cap Russell 2000 Index rose 0.4% for the quarter. The Russell 2000 Value Index, also a small-cap index, declined 1.2% for the quarter.

Key US Stock Market Index Returns (%) for the Period Ending 6/30/2015

INDEX IN USD	Quarter	12 Months	5-Years (Annualized)	7-Years (Annualized
S&P 500	0.3%	7.4%	17.3%	9.4%
Dow Jones	-0.3%	7.2%	15.4%	9.4%
Russell 2000	0.4%	6.5%	17.1%	10.4%
Russell Midcap	-1.5%	6.6%	18.2%	10.5%
Russell 1000	0.1%	7.4%	17.6%	9.6%

Source: FactSet, Bloomberg

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Capital Markets Overview: 2Q 2015

Global Equity Markets

As of 2Q 2015

In the second quarter, emerging markets (EM) and global equities had positive results. The MSCI EAFE Index (a benchmark for developed markets) rose 0.8% for U.S.-currency investors and fell 1.6% for local-currency investors, as the U.S. dollar depreciated in relation to the currencies of many nations in the index. In the first quarter of 2015, the MSCI EAFE Index increased 5.0% in U.S. dollar terms and rose 11.0% in local currency terms.

For the second quarter, the MSCI Emerging Markets Index increased 0.8% for U.S.-currency investors and also rose 0.8% for local-currency investors, as the U.S. dollar maintained parity to emerging-market currencies. In the previous quarter, the MSCI Emerging Markets Index increased 2.3% for U.S.-dollar-based investors and rose 4.9% for local-currency investors.

The MSCI Europe Index increased 0.7% for U.S.-currency investors and fell 3.6% for local-currency investors during the second quarter of 2015. In the previous quarter, the MSCI Europe Index increased 3.6% for U.S.-dollar-based investors and decreased 11.7% for local-currency investors.

The S&P 500 Index rose 0.3% for the quarter, its tenth consecutive quarterly increase.

More specific emerging economy equity market indices were mixed in the second quarter. The MSCI BRIC (Brazil, Russia, India and China) Index rose 4.7% for the quarter in U.S. dollar terms and advanced 4.0% in terms of local currencies. In comparison, for the second quarter, the MSCI EM Asia Index was flat in U.S. dollar terms and rose 0.2% in local terms.

Key Global Equity Market Index Returns (%) for the Period Ending 6/30/2015

INDEX IN USD	Quarter	12 Months	5-Years (Annualized)	7-Years (Annualized)
MSCI EAFE	0.8%	-3.8%	10.0%	2.4%
MSCI EAFE Growth	1.2%	-1.0%	10.5%	2.6%
MSCI EAFE Value	0.5%	-6.6%	9.5%	2.3%
MSCI Europe	0.7%	-7.2%	10.7%	2.2%
MSCI Japan	3.1%	8.6%	9.0%	2.6%
S&P 500	0.3%	7.4%	17.3%	9.4%
MSCI Emerging Markets	0.8%	-4.8%	4.0%	1.2%

Source: FactSet, Bloomberg

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Capital Markets Overview: 2Q 2015

The US Bond Market

As of 2Q 2015

In the second quarter, bond market returns decreased—the Barclays U.S. Aggregate Bond Index, a general measure of the bond market, decreased 1.7% for the quarter. Interest rates increased during the second quarter, as the yield on the 10-Year U.S. Treasury note rose to a quarter-end 2.35% from 1.92% at the end of the first quarter of 2015.

Also in the second quarter, riskier parts of the bond market such as U.S. High Yield debt fell flat. The Barclays Capital High Yield Index, a measure of lower-rated corporate bonds, returned 0.0%.

Investors were negative on mortgage-backed securities in the second quarter. Consequently, the Barclays Capital Mortgage Backed Index fell 0.7% for the quarter. During the second quarter, the municipal bond market also declined modestly. As a result, the Barclays Capital Muni Index decreased 0.9% for the quarter.

Key US Bond Market Index Returns (%) for the Period Ending 6/30/2015

INDEX IN USD	Quarter	12 Months	5-Years (Annualized)	7-Years (Annualized)
Barclays Capital US Aggregate	-1.7%	1.9%	3.3%	4.6%
Barclays Capital High Yield	0.0%	-0.4%	8.6%	9.3%
Barclays Capital Government/Credit	-2.1%	1.7%	3.4%	4.6%
Barclays Capital Government	-1.6%	2.3%	2.7%	3.8%
Barclays Capital Intermediate Govt/Credit	-0.6%	1.7%	2.8%	3.9%
Barclays Capital Long Govt/Credit	-7.6%	1.9%	6.7%	7.9%
Barclays Capital Mortgage Backed Securities	-0.7%	2.3%	2.9%	4.5%
Barclays Capital Muni	-0.9%	3.0%	4.5%	5.1%

Source: FactSet, Bloomberg, Morgan Stanley & Co. Research

Past performance is no guarantee of future results. Estimates of future performance are based on assumptions that may not be realized. This material is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. Please refer to important information, disclosures and qualifications at the end of this material.

Asset Allocation Models & Insurance Products Disclosures

GLOBAL INVESTMENT COMMITTEE (GIC) ASSET ALLOCATION MODELS

The Asset Allocation Models are created by Morgan Stanley Wealth Management's GIC.

CLIENTS TO CONSIDER THEIR OWN INVESTMENT NEEDS

The GIC Asset Allocation Models are formulated based on general client characteristics such as investable assets and risk tolerance. This report is not intended to be a client-specific suitability analysis or recommendation, or offer to participate in any investment. Therefore, do not use this report as the sole basis for investment decisions.

Clients should consider all relevant information, including their existing portfolio, investment objectives, risk tolerance, liquidity needs and investment time horizon. Such a suitability determination may lead to asset allocation(s) results that are materially different from the asset allocation shown in this report. Clients should talk to their Financial Advisor about what would be a suitable asset allocation for them.

HYPOTHETICAL MODEL PERFORMANCE (GROSS)

Hypothetical model performance results do not reflect the investment or performance of an actual portfolio following a GIC Strategy, but simply reflect actual historical performance of selected indices on a real-time basis over the specified period of time representing the GIC's strategic and tactical allocations as of the date of this report. The past performance shown here is simulated performance based on benchmark indices, not investment results from an actual portfolio or actual trading. There can be large differences between hypothetical and actual performance results achieved by a particular asset allocation or trading strategy. Hypothetical performance results do not represent actual trading and are generally designed with the benefit of hindsight.

Actual performance results of accounts vary due to, for example, market factors (such as liquidity) and client-specific factors (such as investment vehicle selection, timing of contributions and withdrawals, restrictions and rebalancing schedules). Clients would not necessarily have obtained the performance results shown here if they had invested in accordance with any GIC Asset Allocation Model for the periods indicated.

Despite the limitations of hypothetical performance, these hypothetical performance results allow clients and Financial Advisors to obtain a sense of the risk/return trade-off of different asset allocation constructs. The hypothetical performance results in this report are calculated using the returns of benchmark indices for the asset classes, and not the returns of securities, fund or other investment products.

Performance of indices may be more or less volatile than any investment product. The risk of loss in value of a specific investment is not the same as the risk of loss in a broad market index. Therefore, the historical returns of an index will not be the same as the historical returns of a particular investment a client selects.

Models may contain allocations to Hedge Funds, Private Equity and Private Real Estate. The benchmark indices for these asset classes are not issued on a daily basis. When calculating model performance on a day for which no benchmark index data is issued, we have assumed straight line growth between the index levels issued before and after that date.

Fees reduce the performance of actual accounts None of the fees or other expenses (e.g. commissions, mark-ups, mark-downs, fees) associated with actual trading or accounts are reflected in the GIC Asset Allocation Models. The GIC Asset Allocation Models and any model performance included in this presentation are intended as educational materials. Were a client to use these models in connection with investing, any investment decisions made would be subject to transaction and other costs which, when compounded over a period of years, would decrease returns. Information regarding Morgan Stanley's standard advisory fees is available in the Form ADV Part 2, which is available at www.morganstanley.com/adv. The following hypothetical illustrates the compound effect fees have on investment returns: For example, if a portfolio's annual rate of return is 15% for 5 years and the account pays 50 basis points in fees per annum, the gross cumulative five-year return would be 101.1% and the five-year return net of fees would be 96.8%. Fees and/or expenses would apply to clients who invest in investments in an account based on these asset allocations, and would reduce clients' returns. The impact of fees and/or expenses can be material.

INSURANCE PRODUCTS AND ETF DISCLOSURES

Morgan Stanley Smith Barney LLC offers **insurance products** in conjunction with its licensed insurance agency affiliates.

An investment in an **exchange-traded fund** involves risks similar to those of investing in a broadly based portfolio of equity securities traded on an exchange in the relevant securities market, such as market fluctuations caused by such factors as economic and political developments, changes in interest rates and perceived trends in stock and bond prices.

Variable annuities, mutual funds and ETFs are sold by prospectus only. The prospectus contains the investment objectives, risks, fees, charges and expenses, and other information regarding the variable annuity contract and the underlying investments, or the ETF, which should be considered carefully before investing. Prospectuses for both the variable annuity contract and the underlying investments, or the ETF, are available from your Financial Advisor. Please read the prospectus carefully before you invest.

Variable annuities are long-term investments designed for retirement purposes and may be subject to market fluctuations, investment risk, and possible loss of principal. All guarantees, including optional benefits, are based on the financial strength and claims-paying ability of the issuing insurance company and do not apply to the underlying investment options.

Optional riders may not be able to be purchased in combination and are available at an additional cost. Some optional riders must be elected at time of purchase. Optional riders may be subject to specific limitations, restrictions, holding periods, costs, and expenses as specified by the insurance company in the annuity contract.

If you are investing in a **variable annuity** through a tax-advantaged retirement plan such as an IRA, you will get no additional tax advantage from the variable annuity. Under these circumstances, you should only consider buying a variable annuity because of its other features, such as lifetime income payments and death benefits protection.

Taxable distributions (and certain deemed distributions) are subject to ordinary income tax and, if taken prior to age 59½, may be subject to a 10% federal income tax penalty. Early withdrawals will reduce the death benefit and cash surrender value.

Asset Class Risk Considerations

For index definitions to the indices referenced in this report please visit the following: http://www.morganstanleyfa.com/public/projectfiles/id.pdf

Equity securities may fluctuate in response to news on companies, industries, market conditions and general economic environment.

Investing in foreign markets entails risks not typically associated with domestic markets, such as currency fluctuations and controls, restrictions on foreign investments, less governmental supervision and regulation, and the potential for political instability. These risks may be magnified in countries with **emerging markets and frontier markets**, since these countries may have relatively unstable governments and less established markets and economies.

Investing in small- to medium-sized companies entails special risks, such as limited product lines, markets and financial resources, and greater volatility than securities of larger, more established companies.

The value of **fixed income securities** will fluctuate and, upon a sale, may be worth more or less than their original cost or maturity value. Bonds are subject to interest rate risk, call risk, reinvestment risk, liquidity risk, and credit risk of the issuer.

High yield bonds (bonds rated below investment grade) may have speculative characteristics and present significant risks beyond those of other securities, including greater credit risk, price volatility, and limited liquidity in the secondary market. High yield bonds should comprise only a limited portion of a balanced portfolio.

Interest on **municipal bonds** is generally exempt from federal income tax; however, some bonds may be subject to the alternative minimum tax (AMT). Typically, state tax-exemption applies if securities are issued within one's state of residence and, if applicable, local tax-exemption applies if securities are issued within one's city of residence.

Treasury Inflation Protection Securities' (TIPS) coupon payments and underlying principal are automatically increased to compensate for inflation by tracking the consumer price index (CPI). While the real rate of return is guaranteed, TIPS tend to offer a low return. Because the return of TIPS is linked to inflation, TIPS may significantly underperform versus conventional U.S. Treasuries in times of low inflation.

Alternative investments may be either traditional alternative investment vehicles, such as hedge funds, fund of hedge funds, private equity, private real estate and managed futures or, non-traditional products such as mutual funds and exchange-traded funds that also seek alternative-like exposure but have significant differences from traditional alternative investments. The risks of traditional alternative investments may include: can be highly illiquid, speculative and not suitable for all investors, loss of all or a substantial portion of the investment due to leveraging, short-selling, or other speculative practices, volatility of returns, restrictions on transferring interests in a fund, potential lack of diversification and resulting higher risk due to concentration of trading authority when a single advisor is utilized, absence of information regarding valuations and pricing, complex tax structures and delays in tax reporting, less regulation and higher fees than open-end mutual funds, and risks associated with the operations, personnel and processes of the manager. Non-traditional alternative strategy products may employ various investment strategies and techniques for both hedging and more speculative purposes such as short-selling, leverage, derivatives and options, which can increase volatility and the risk of investment loss. **Master Limited Partnerships (MLPs)** Individual MLPs are publicly traded partnerships that have unique risks related to their structure. These include, but are not limited to, their reliance on the capital markets to fund growth, adverse ruling on the current tax treatment of distributions (typically mostly tax deferred), and commodity volume risk. The potential tax benefits from investing in MLPs depend on their being treated as partnerships for federal income tax purposes and, if the MLP is deemed to be a corporation, then its income would be subject to federal taxation at the entity level, reducing the amount of cash available for distribution to the fund which could result in a reduction of the fund's value. MLPs carry interest rate risk and may underperform in a rising interest rate environment. **Investing in commodities** entails significant risks. Commodity prices may be affected by a variety of factors at any time, including but not limited to, (i) changes in supply and demand relationships, (ii) governmental programs and policies, (iii) national and international political and economic events, war and terrorist events, (iv) changes in interest and exchange rates, (v) trading activities in commodities and related contracts, (vi) pestilence, technological change and weather, and (vii) the price volatility of a commodity. In addition, the commodities markets are subject to temporary distortions or other disruptions due to various factors, including lack of liquidity, participation of speculators and government intervention. **Physical precious metals** are non-regulated products. Precious metals are speculative investments, which may experience short-term and long term price volatility. The value of precious metals investments may fluctuate and may appreciate or decline, depending on market conditions. Unlike bonds and stocks, precious metals do not make interest or dividend payments. Therefore, precious metals may not be suitable for investors who require current income. Precious metals are commodities that should be safely stored, which may impose additional costs on the investor. **REITs** investing risks are similar to those associated with direct investments in real estate: property value fluctuations, lack of liquidity, limited diversification and sensitivity to economic factors such as interest rate changes and market recessions.

Risks of **private real estate** include: illiquidity; a long-term investment horizon with a limited or nonexistent secondary market; lack of transparency; volatility (risk of loss); and leverage.

Principal is returned on a monthly basis over the life of a **mortgage-backed security.** Principal prepayment can significantly affect the monthly income stream and the maturity of any type of MBS, including standard MBS, CMOs and Lottery Bonds.

Asset-backed securities generally decrease in value as a result of interest rate increases, but may benefit less than other fixed-income securities from declining interest rates, principally because of prepayments.

Floating-rate securities The initial interest rate on a floating-rate security may be lower than that of a fixed-rate security of the same maturity because investors expect to receive additional income due to future increases in the floating security's underlying reference rate. The reference rate could be an index or an interest rate. However, there can be no assurance that the reference rate will increase. Some floating-rate securities may be subject to call risk.

Asset Class Risk Considerations (cont'd)

Yields are subject to change with economic conditions. Yield is only one factor that should be considered when making an investment decision.

Credit ratings are subject to change.

Companies paying **dividends** can reduce or cut payouts at any time.

Asset allocation and diversification do not assure a profit or protect against loss in declining financial markets.

The **indices** are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment.

The **indices selected by Morgan Stanley Wealth Management** to measure performance are representative of broad asset classes. Morgan Stanley Wealth Management retains the right to change representative indices at any time.

Because of their narrow focus, **sector investments** tend to be more volatile than investments that diversify across many sectors and companies.

Growth investing does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations.

Value investing does not guarantee a profit or eliminate risk. Not all companies whose stocks are considered to be value stocks are able to turn their business around or successfully employ corrective strategies which would result in stock prices that do not rise as initially expected.

Rebalancing does not protect against a loss in declining financial markets. There may be a potential tax implication with a rebalancing strategy. Investors should consult with their tax advisor before implementing such a strategy.

Duration, the most commonly used measure of bond risk, quantifies the effect of changes in interest rates on the price of a bond or bond portfolio. The longer the duration, the more sensitive the bond or portfolio would be to changes in interest rates.

Besides the general risk of holding securities that may decline in value, **closed-end funds** may have additional risks related to declining market prices relative to net asset values (NAVs), active manager underperformance, and potential leverage. Some funds also invest in foreign securities, which may involve currency risk.

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The securities/instruments discussed in this material may not be suitable for all investors. The appropriateness of a particular investment or strategy will depend on an investor's individual circumstances and objectives. Morgan Stanley Wealth Management recommends that investors independently evaluate specific investments and strategies, and encourages investors to seek the advice of a financial advisor.

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This material should not be viewed as advice or recommendations with respect to asset allocation or any particular investment. This information is not intended to, and should not, form a primary basis for any investment decisions that you may make. Morgan Stanley Wealth Management is not acting as a fiduciary under either the Employee Retirement Income Security Act of 1974, as amended or under section 4975 of the Internal Revenue Code of 1986 as amended in providing this material.

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PARK RIDGE FIREFIGHTER PENSION FUND
QUARTERLY SUMMARY (NET)

As of June 30, 2015

Total Fund - Fiscal Year

Beginning Market Value	$41,456,804
Ending Market Value	$40,773,663
Cont/WDs	-$452,317

	Performance(%)
	Fiscal YTD
Total Fund - TWR	**-0.62**
Total Fund - DWR	***-0.61***

Total Fund - Calendar Year

Beginning Market Value	$41,620,582
Ending Market Value	$40,773,663
Cont/WDs	-$638,312

	Performance(%)	
	Quarter To Date	YTD
Total Fund - TWR	**-0.61**	**1.27**
Total Fund - DWR	***-0.60***	***1.29***

Total Equity

Beginning Market Value	$23,626,546
Ending Market Value	$23,636,636
Cont/WDs	-$34,338

	Performance(%)	
	Quarter To Date	YTD
Total Equity	**0.04**	**2.17**
Equity Index Blend**	0.29	2.75

Total Fixed

Beginning Market Value	$17,994,036
Ending Market Value	$17,137,028
Cont/WDs	-$603,974

	Performance(%)	
	Quarter To Date	YTD
Total Fixed	**-1.45**	**0.24**
BC Gov	-1.50	0.08

McDonnell - Interm Credit

Beginning Market Value	$4,628,376
Ending Market Value	$4,573,441
Cont/WDs	-$3,468

	Performance(%)	
	Quarter To Date	YTD
McDonnell - Interm Credit	**-1.19**	**0.61**
BC Cr Intm	-0.94	0.82

Internal Fixed Income

Beginning Market Value	$12,812,323
Ending Market Value	$12,545,747
Cont/WDs	-$65,000

	Performance(%)	
	Quarter To Date	YTD
Internal Fixed Income	**-1.57**	**0.13**
BC Gov	-1.50	0.08

**Equity Index: 62% S&P 500/ 15% Russell Mid Cap / 13% Russell 2000 Gr/ 7% MSCI EAFE (Net)/ 4% MSCI Emerging Markets (Net)

PARK RIDGE FIREFIGHTER PENSION FUND
QUARTERLY SUMMARY (NET)

As of June 30, 2015

Wells Fargo - All Cap Growth

Beginning Market Value	$1,742,302
Ending Market Value	$1,746,322
Cont/WDs	-$3,928

	Performance(%)	
	Quarter To Date	YTD
Wells Fargo - All Cap Growth	**0.23**	**3.11**
Russell 3000 Gr	0.27	4.33
Russell 1000 Gr	0.12	3.97

Fayez Sarofim - Large Core

Beginning Market Value	$1,571,210
Ending Market Value	$1,560,306
Cont/WDs	-$9,754

	Performance(%)	
	Quarter To Date	YTD
Fayez Sarofim - Large Core	**-0.30**	**-2.11**
S&P 500	0.28	1.24

Atalanta/Sosnoff - Large Core

Beginning Market Value	$2,013,605
Ending Market Value	$2,025,088
Cont/WDs	-$4,543

	Performance(%)	
	Quarter To Date	YTD
Atalanta/Sosnoff - Large Core	**0.57**	**0.95**
S&P 500	0.28	1.24

Cambiar - Large Value

Beginning Market Value	$2,485,976
Ending Market Value	$2,532,586
Cont/WDs	-$5,636

	Performance(%)	
	Quarter To Date	YTD
Cambiar - Large Value	**1.87**	**3.83**
Russell 1000 Vl	0.10	-0.62

Madison - Mid Cap Core

Beginning Market Value	$2,674,280
Ending Market Value	$2,587,392
Cont/WDs	-$5,863

	Performance(%)	
	Quarter To Date	YTD
Madison - Mid Cap Core	**-3.25**	**1.06**
Russell Mid Cap	-1.54	2.35

RBC Global - Small Growth

Beginning Market Value	$2,125,919
Ending Market Value	$2,122,801
Cont/WDs	-$4,614

	Performance(%)	
	Quarter To Date	YTD
RBC Global - Small Growth	**-0.15**	**4.53**
Russell 2000 Gr	1.97	8.73

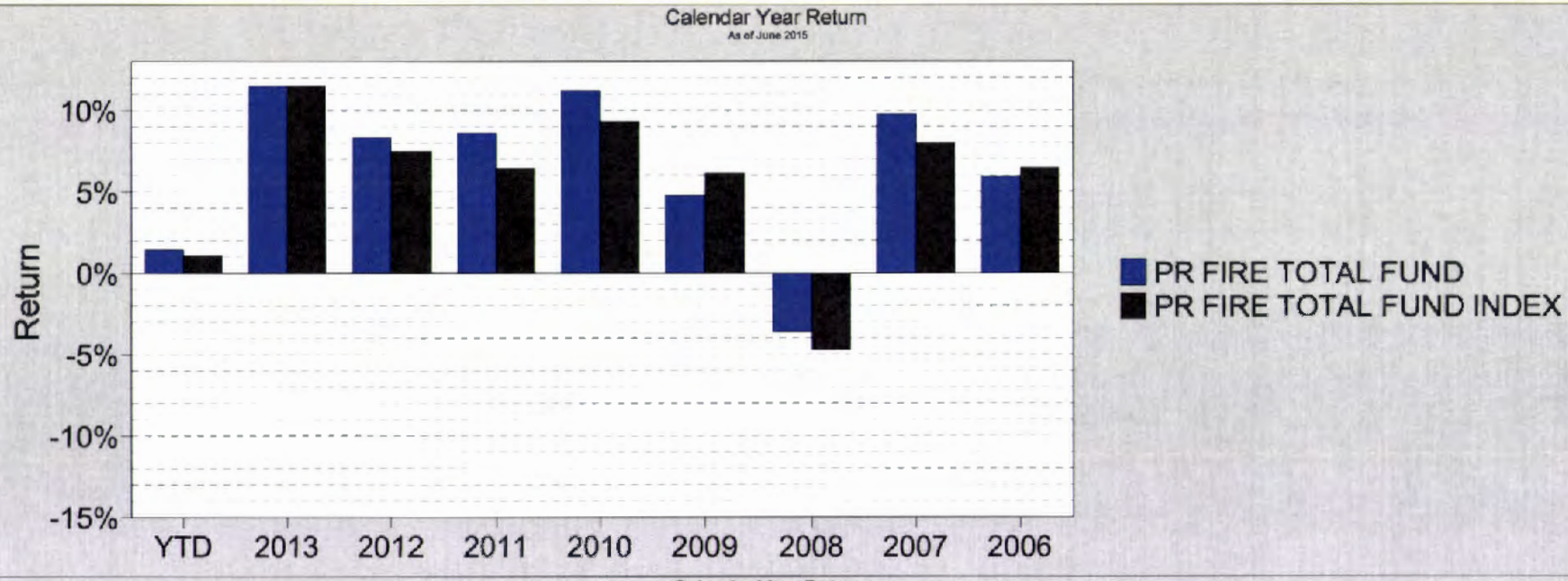
**Equity Index: 62% S&P 500/ 15% Russell Mid Cap / 13% Russell 2000 Gr/ 7% MSCI EAFE (Net)/ 4% MSCI Emerging Markets (Net)

PARK RIDGE FIREFIGHTER PENSION FUND
QUARTERLY SUMMARY

As of June 30, 2015

	Quarter To Date	YTD	1 Year	3 Years	5 Years	7 Years
Ivy International Core Equity (ICEIX)	***2.00***	***7.37***	***0.45***	***15.12***	***11.54***	***5.17***
MSCI EAFE Net	0.62	5.53	-4.21	11.98	9.54	1.98
IM International Large Cap Core Equity (MF) Median	0.91	6.31	-3.94	10.51	9.23	1.78
Lazard Emerging Markets (LZEMX)	***0.89***	***-1.05***	***-13.12***	***2.06***	***3.79***	***1.60***
MSCI EM Net	0.69	2.96	-5.13	3.71	3.68	0.86
IM Emerging Markets Equity (MF) Median	0.65	1.57	-6.82	3.13	3.58	0.16
Vanguard Total Stock Market Index (VITSX)	***0.09***	***1.90***	***7.21***	***17.69***	***17.57***	***9.81***
Russell 3000	0.14	1.94	7.30	17.74	17.54	9.66
IM U.S. Multi-Cap Core Equity (MF)	-0.12	1.90	5.59	17.58	16.24	8.59

PARK RIDGE FIREFIGHTERS PENSION FUND



Calendar Year Return
As of June 2015

	YTD	2014	2013	2012	2011	2010	2009	2008	2007	2006
PR FIRE TOTAL FUND	1.46%	6.50%	11.49%	8.33%	8.62%	11.23%	4.78%	-3.61%	9.81%	5.93%
PR FIRE TOTAL FUND INDEX	1.10%	8.42%	11.50%	7.50%	6.42%	9.34%	6.16%	-4.75%	8.00%	6.46%
PR FIRE TOTAL FUND INDXEX DEFINITION:	43% BC Gov 51% S&P 500 6% MSCI EAFE (Net)	47% BC Gov 47% S&P 500 6% MSCI EAFE (Net)	56% BC Gov 42% S&P 500 2% MSCI EAFE (Net)	62% BC Gov 36% S&P 500 2% MSCI EAFE(Net)	62% BC Gov 36% S&P 500 2% MSCI EAFE (Net)	63% BC Gov 34% S&P 500 3% MSCI EAFE (Net)	70% BC Gov 30% S&P 500	70% BC Gov 30% S&P 500	75% BC Gov 25% S&P 500	75% BC Gov 25% S&P 500

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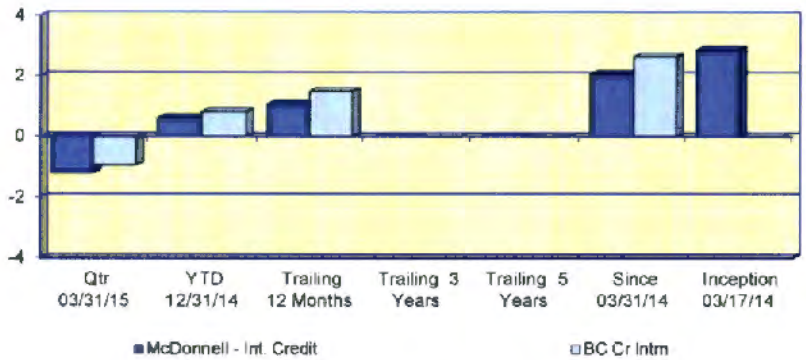
ACCOUNT - EXECUTIVE SUMMARY

City of Park Ridge Fire Pension Fund - McDonnell - Int. Credit (Net)

AS OF 06/30/2015

Portfolio Performance (%)

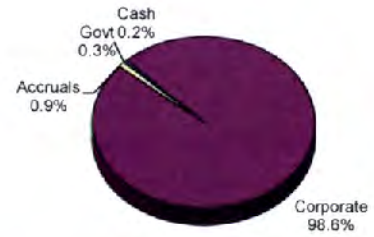


Investment Returns (%) Since:	Qtr 03/31/15	YTD 12/31/14	Trailing 12 Months	Trailing 3 Years	Trailing 5 Years	Since 03/31/14	Inception 03/17/14
McDonnell - Int. Credit	**-1.19**	**0.61**	**1.07**	N/A	N/A	**2.05**	**2.86**
BC Cr Intm	-0.94	0.82	1.50	N/A	N/A	2.64	N/A

Asset Growth ($000)							
Beginning Market Value	4,628	2,552	2,540	N/A	N/A	2,503	2,476
Net Contributions & Withdrawals	0	2,026	2,026	N/A	N/A	2,026	2,026
Gain/Loss + Income	-55	-5	7	N/A	N/A	44	71
Ending Market Value	4,573	4,573	4,573	N/A	N/A	4,573	4,573

Asset Allocation ($000)

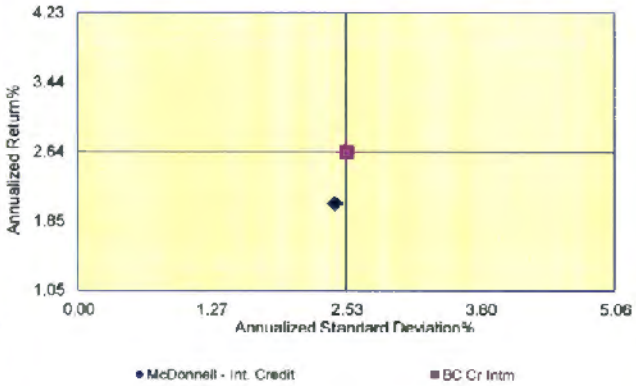
Govt	Corporate	Accruals	Cash	Total
15	4,507	40	11	4,573



Portfolio Characteristics

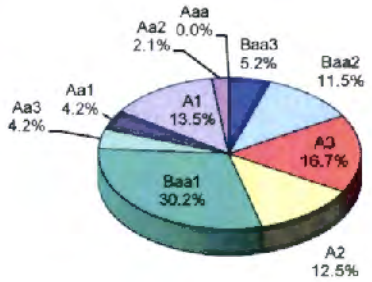
Current Yield	3.35%	Avg. Maturity	4.81 yrs
Yield to Mat.	2.44%	Duration	4.25 yrs
Avg. Coupon	3.45%	Avg. Yrs. to Call	4.76 yrs
# of Bonds	58		

Risk / Return Analysis Since 03/31/2014

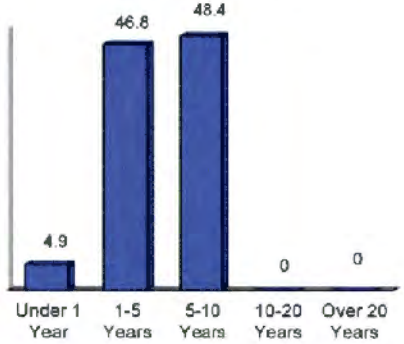


Annualized %	Return	Std. Dev.
McDonnell - Int. Credit	**2.05**	**2.43**
BC Cr Intm	2.64	2.53

Bond Quality



Bond Maturity Distribution



Report Created: 7/31/2015

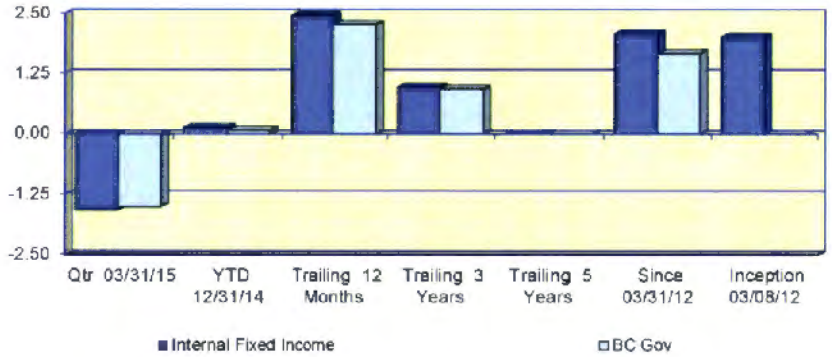
Please refer to the attached Disclosures for important information.

ACCOUNT - EXECUTIVE SUMMARY

City of Park Ridge Fire Pension Fund - Internal Fixed Income

AS OF 06/30/2015

Portfolio Performance (%)

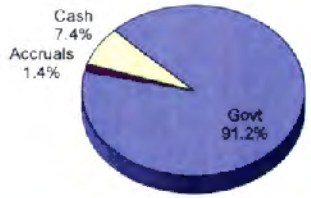


Investment Returns (%) Since:	Qtr 03/31/15	YTD 12/31/14	Trailing 12 Months	Trailing 3 Years	Trailing 5 Years	Since 03/31/12	Inception 03/08/12
Internal Fixed Income	***-1.57***	***0.13***	***2.46***	***0.97***	N/A	***2.08***	***2.01***
BC Gov	-1.50	0.08	2.27	0.93	N/A	1.67	N/A

Asset Growth ($000)							
Beginning Market Value	12,812	15,941	15,994	19,342	N/A	18,623	18,644
Net Contributions & Withdrawals	-65	-3,451	-3,874	-7,267	N/A	-7,267	-7,267
Gain/Loss + Income	-201	56	426	471	N/A	1,190	1,169
Ending Market Value	12,546	12,546	12,546	12,546	N/A	12,546	12,546

Asset Allocation ($000)

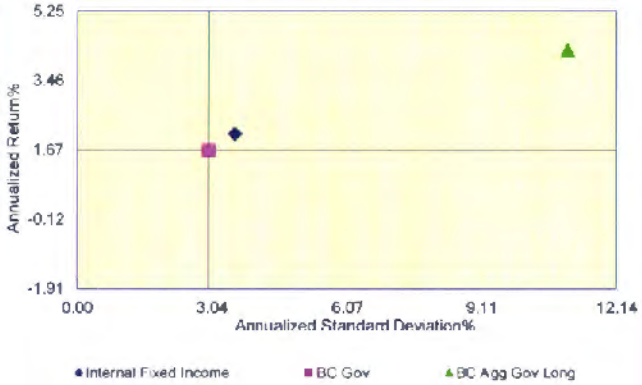
Govt	Accruals	Cash	Total
11,441	178	927	12,545



Portfolio Characteristics

Current Yield	4.90%	Avg. Maturity	7.28 yrs
Yield to Mat.	1.72%	Duration	5.69 yrs
Avg. Coupon	6.85%	Avg. Yrs. to Call	7.28 yrs
# of Bonds	9		

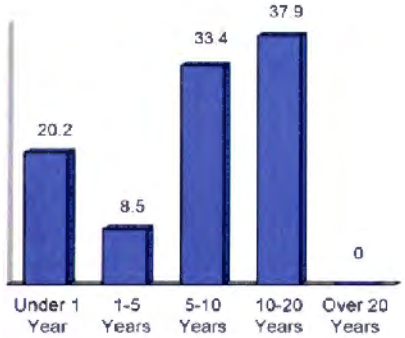
Risk / Return Analysis Since 03/31/2012



Annualized %	Return	Std. Dev.
Internal Fixed Income	***2.08***	***3.56***
BC Gov	1.67	2.96
BC Agg Gov Long	4.25	11.04

Bond Quality

Bond Maturity Distribution



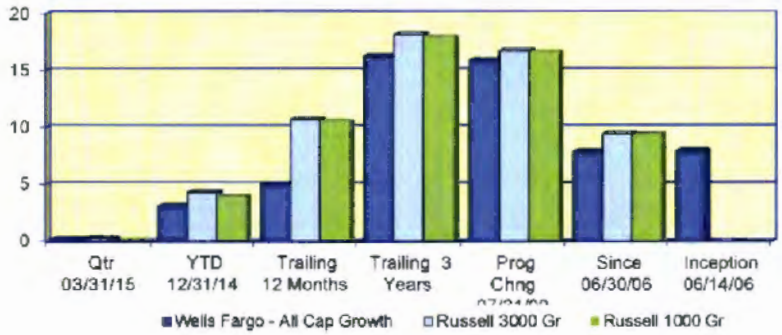
Report Created: 7/31/2015

Please refer to the attached Disclosures for important information.

ACCOUNT - EXECUTIVE SUMMARY

City of Park Ridge Fire Pension Fund - Wells Fargo - All Cap Growth (Net) AS OF 06/30/2015

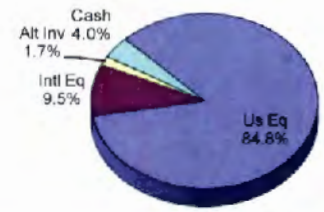
Portfolio Performance (%)



Investment Returns (%) Since:	Qtr 03/31/15	YTD 12/31/14	Trailing 12 Months	Trailing 3 Years	Prog Chng 07/31/09	Since 06/30/06	Inception 06/14/06
Wells Fargo - All Cap Growth	**0.23**	**3.11**	**4.99**	**16.28**	**15.90**	**7.88**	**7.95**
Russell 3000 Gr	0.27	4.33	10.70	18.16	16.75	9.43	N/A
Russell 1000 Gr	0.12	3.97	10.57	17.99	16.66	9.44	N/A
Asset Growth ($000)							
Beginning Market Value	1,742	1,694	1,663	807	471	505	500
Net Contributions & Withdrawals	0	0	0	323	413	483	483
Gain/Loss + Income	4	52	83	616	862	758	763
Ending Market Value	1,746	1,746	1,746	1,746	1,746	1,746	1,746

Asset Allocation ($000)

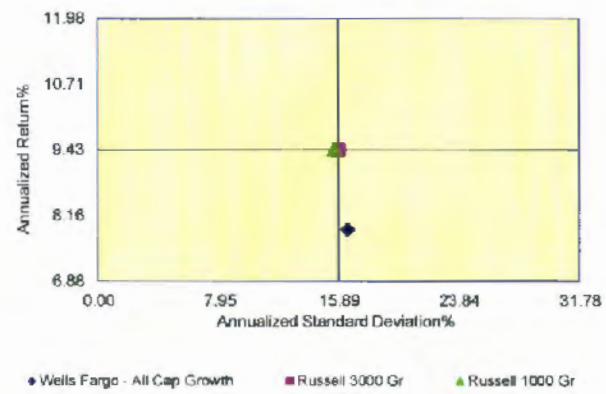
Us Eq	Intl Eq	Alt Inv	Cash	Total
1,481	166	29	70	1,746



Portfolio Characteristics

Yield	0.62%	Account Sharpe Ratio	0.42
Beta	0.99	Index Sharpe Ratio	0.53
Alpha	-1.24%	# Equity Positions	70
R^2	91%		

Risk / Return Analysis Since 06/30/2006



Annualized %	Return	Std. Dev.
Wells Fargo - All Cap Growth	**7.88**	**16.48**
Russell 3000 Gr	9.43	15.89
Russell 1000 Gr	9.44	15.62

Top Equity Holdings

Security	Sector	% Port
Apple Inc	Information Technolo	6.9
Amazon Com Inc	Consumer Discretiona	3.0
Facebook Inc Cl-a	Information Technolo	2.9
Visa Inc Cl A	Information Technolo	2.5
Home Depot Inc	Consumer Discretiona	2.2
Biogen Inc Com	Health Care	2.2
Servicemaster Global Hldgs Inc	Consumer Discretiona	2.2
Mcgraw Hill Financial Inc Com	Financials	2.2
Liberty Global Plc Cl C New	Consumer Discretiona	2.0
Sei Investments Co	Financials	2.0

Economic Sector Allocation

	% Port
Information Technolo	30.4
Consumer Discretiona	20.2
Health Care	19.0
Financials	10.8
Industrials	7.5
Other	4.0
Telecommunication Se	2.7
Materials	2.5
Consumer Staples	1.7
Energy	1.1

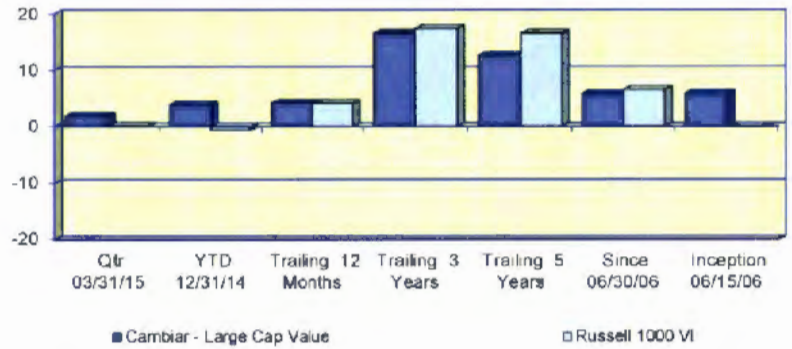
Report Created: 7/31/2015

Please refer to the attached Disclosures for important information.

ACCOUNT - EXECUTIVE SUMMARY

City of Park Ridge Fire Pension Fund - Cambiar Investors - Large Cap Value (Net) AS OF 06/30/2015

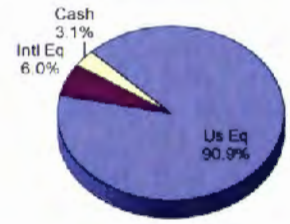
Portfolio Performance (%)



Investment Returns (%) Since:	Qtr 03/31/15	YTD 12/31/14	Trailing 12 Months	Trailing 3 Years	Trailing 5 Years	Since 06/30/06	Inception 06/15/06
Cambiar - Large Cap Value	**1.87**	**3.83**	**4.14**	**16.50**	**12.55**	**5.81**	**5.86**
Russell 1000 VI	0.10	-0.62	4.14	17.35	16.50	6.50	N/A
Asset Growth ($000)							
Beginning Market Value	2,486	2,439	2,432	1,006	620	604	600
Net Contributions & Withdrawals	0	0	0	623	958	1,038	1,038
Gain/Loss + Income	47	94	101	904	955	891	895
Ending Market Value	2,533	2,533	2,533	2,533	2,533	2,533	2,533

Asset Allocation ($000)

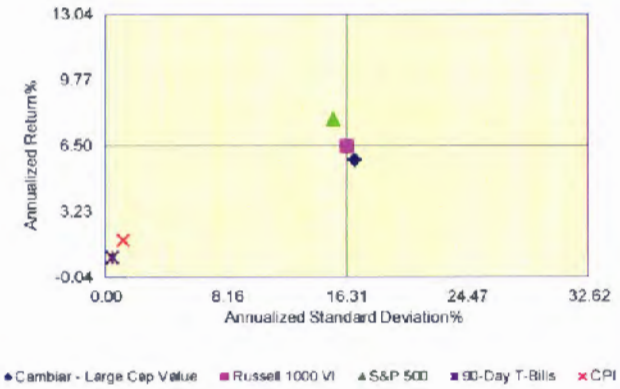
Us Eq	Intl Eq	Cash	Total
2,302	152	79	2,533



Portfolio Characteristics

Yield	1.84%	Account Sharpe Ratio	0.29
Beta	0.97	Index Sharpe Ratio	0.34
Alpha	-0.34%	# Equity Positions	38
R^2	88%		

Risk / Return Analysis Since 06/30/2006



Annualized %	Return	Std. Dev.
Cambiar - Large Cap Value	**5.81**	**16.86**
Russell 1000 VI	6.50	16.31
S&P 500	7.81	15.38
90-Day T-Bills	0.96	0.49
CPI	1.79	1.23

Top Equity Holdings

Security	Sector	% Port
Metlife Incorporated	Financials	3.3
Capital One Financial Corp	Financials	3.2
Google Inc-cl A	Information Technolo	3.2
Bb & T Corp	Financials	3.1
Citigroup Inc New	Financials	3.1
Ford Motor Co New	Consumer Discretiona	3.0
Comcast Corp (new) Class A	Consumer Discretiona	3.0
United Parcel Ser Inc Cl-b	Industrials	2.9
Abbvie Inc Com	Health Care	2.9
American Express Co	Financials	2.9

Economic Sector Allocation

	% Port
Financials	24.8
Health Care	16.4
Information Technolo	14.9
Consumer Discretiona	11.4
Industrials	8.8
Energy	7.6
Consumer Staples	5.5
Materials	4.5
Other	3.1
Telecommunication Se	2.8

Report Created: 7/31/2015

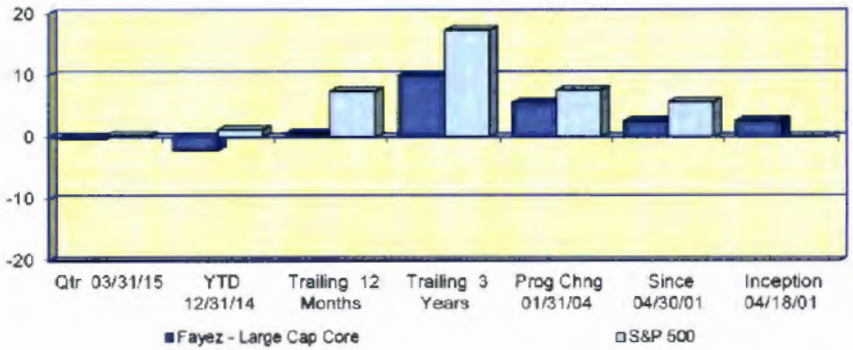
Please refer to the attached Disclosures for important information.

ACCOUNT - EXECUTIVE SUMMARY

City of Park Ridge Fire Pension Fund - Fayez Sarofim & Company - Large Cap Core (Net)

AS OF 06/30/2015

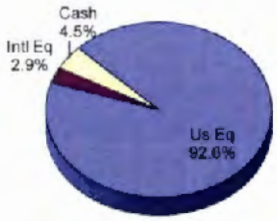
Portfolio Performance (%)



Investment Returns (%) Since:	Qtr 03/31/15	YTD 12/31/14	Trailing 12 Months	Trailing 3 Years	Prog Chng 01/31/04	Since 04/30/01	Inception 04/18/01
Fayez - Large Cap Core	**-0.31**	**-2.11**	**0.60**	**9.94**	**5.56**	**2.60**	**2.62**
S&P 500	0.28	1.24	7.43	17.31	7.61	5.68	N/A
Asset Growth ($000)							
Beginning Market Value	1,571	1,606	2,065	4,511	2,743	703	700
Net Contributions & Withdrawals	-6	-12	-524	-4,041	-3,475	-1,341	-1,341
Gain/Loss + Income	-5	-34	19	1,090	2,292	2,198	2,201
Ending Market Value	1,560	1,560	1,560	1,560	1,560	1,560	1,560

Asset Allocation ($000)

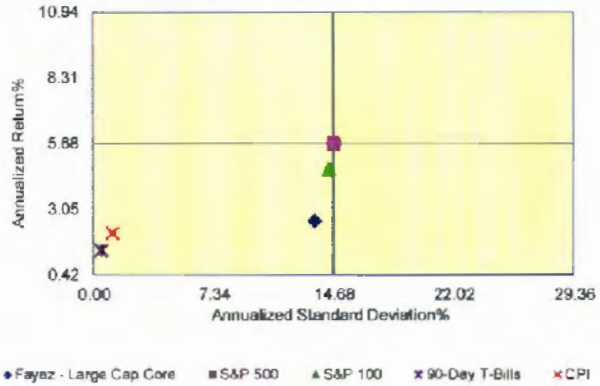
Us Eq	Intl Eq	Cash	Total
1,445	45	71	1,560



Portfolio Characteristics

Yield	2.57%	Account Sharpe Ratio	0.09
Beta	0.89	Index Sharpe Ratio	0.29
Alpha	-2.53%	# Equity Positions	48
R^2	94%		

Risk / Return Analysis Since 04/30/2001



Annualized %	Return	Std. Dev.
Fayez - Large Cap Core	**2.60**	**13.51**
S&P 500	5.68	14.68
S&P 100	4.69	14.43
90-Day T-Bills	1.42	0.48
CPI	2.10	1.15

Top Equity Holdings

Security	Sector	% Port
Exxon Mobil Corp	Energy	5.5
Philip Morris Intl Inc	Consumer Staples	5.1
Apple Inc	Information Technolo	4.2
Chevron Corp	Energy	3.7
Intl Business Machines Corp	Information Technolo	3.7
Coca Cola Co	Consumer Staples	3.4
Jpmorgan Chase & Co	Financials	3.1
Occidental Petroleum Corp De	Energy	2.6
United Technologies Corp	Industrials	2.6
Procter & Gamble	Consumer Staples	2.6

Economic Sector Allocation

	% Port
Consumer Staples	20.9
Information Technolo	16.8
Energy	15.5
Financials	13.5
Consumer Discretiona	10.1
Health Care	8.7
Industrials	6.5
Other	4.5
Materials	3.3

Report Created: 7/31/2015

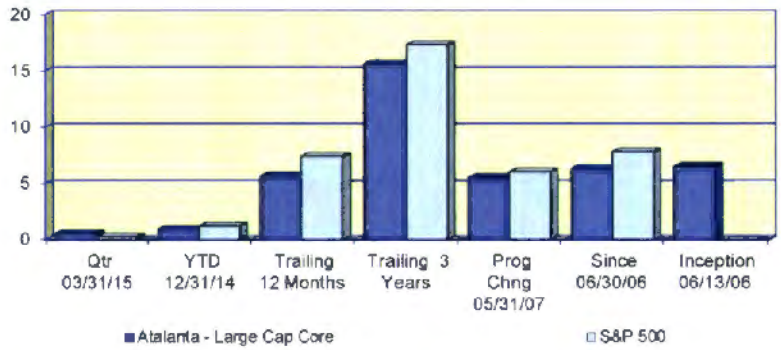
Please refer to the attached Disclosures for important information.

ACCOUNT - EXECUTIVE SUMMARY

City of Park Ridge Fire Pension Fund - Atalanta/Sosnoff Capital - Large Cap Core (Net)

AS OF 06/30/2015

Portfolio Performance (%)



Investment Returns (%)	Since:	Qtr 03/31/15	YTD 12/31/14	Trailing 12 Months	Trailing 3 Years	Prog Chng 05/31/07	Since 06/30/06	Inception 06/13/06
Atalanta - Large Cap Core		**0.57**	**0.95**	**5.67**	**15.60**	**5.51**	**6.33**	**6.49**
S&P 500		0.28	1.24	7.43	17.31	6.03	7.81	N/A

Asset Growth ($000)							
Beginning Market Value	2,014	2,985	2,852	2,977	1,275	1,017	1,000
Net Contributions & Withdrawals	0	-1,000	-1,000	-2,500	-855	-726	-726
Gain/Loss + Income	11	40	173	1,548	1,605	1,734	1,751
Ending Market Value	2,025	2,025	2,025	2,025	2,025	2,025	2,025

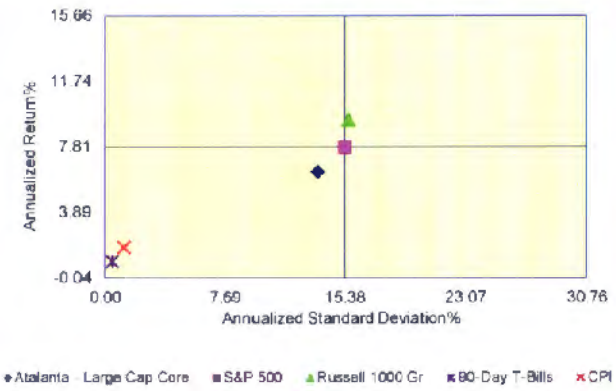
Asset Allocation ($000)

Us Eq	Intl Eq	Alt Inv	Cash	Total
1,655	276	43	51	2,025

Portfolio Characteristics

Yield	1.52%	Account Sharpe Ratio	0.39
Beta	0.83	Index Sharpe Ratio	0.45
Alpha	-0.37%	# Equity Positions	55
R^2	89%		

Risk / Return Analysis Since 06/30/2006



Annualized %	Return	Std. Dev.
Atalanta - Large Cap Core	**6.33**	**13.64**
S&P 500	7.81	15.38
Russell 1000 Gr	9.44	15.62
90-Day T-Bills	0.96	0.49
CPI	1.79	1.23

Top Equity Holdings

Security	Sector	% Port
Apple Inc	Information Technolo	4.7
Allergan Plc Shs	Health Care	4.0
Boeing Co	Industrials	3.7
Facebook Inc Cl-a	Information Technolo	3.3
Citigroup Inc New	Financials	3.2
Dow Chemical Co	Materials	3.1
Comcast Corp (new) Class A	Consumer Discretiona	3.1
Cvs Health Corp Com	Consumer Staples	3.0
Jpmorgan Chase & Co	Financials	3.0
Walt Disney Co Hldg Co	Consumer Discretiona	2.8

Economic Sector Allocation

	% Port
Information Technolo	21.0
Financials	18.9
Health Care	18.5
Consumer Discretiona	13.7
Industrials	9.6
Energy	6.8
Materials	4.1
Consumer Staples	3.0
Other	2.5
Telecommunication Se	1.9

Report Created: 7/31/2015

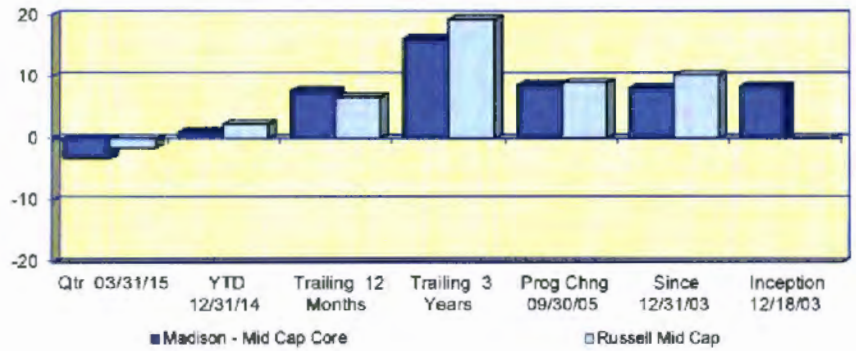
Please refer to the attached Disclosures for important information.

ACCOUNT - EXECUTIVE SUMMARY

City of Park Ridge Fire Pension Fund - Madison - Mid Cap Core (Net)

AS OF 06/30/2015

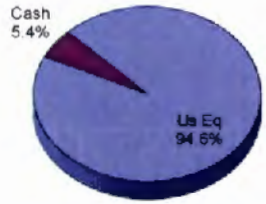
Portfolio Performance (%)



Investment Returns (%) Since:	Qtr 03/31/15	YTD 12/31/14	Trailing 12 Months	Trailing 3 Years	Prog Chng 09/30/05	Since 12/31/03	Inception 12/18/03
Madison - Mid Cap Core	**-3.25**	**1.06**	**7.71**	**16.14**	**8.67**	**8.19**	**8.46**
Russell Mid Cap	-1.55	2.35	6.63	19.26	9.00	10.24	N/A
Asset Growth ($000)							
Beginning Market Value	2,674	2,560	3,384	2,327	2,526	1,824	1,766
Net Contributions & Withdrawals	0	0	-1,000	-1,000	-1,870	-1,391	-1,391
Gain/Loss + Income	-87	27	203	1,260	1,931	2,154	2,212
Ending Market Value	2,587	2,587	2,587	2,587	2,587	2,587	2,587

Asset Allocation ($000)

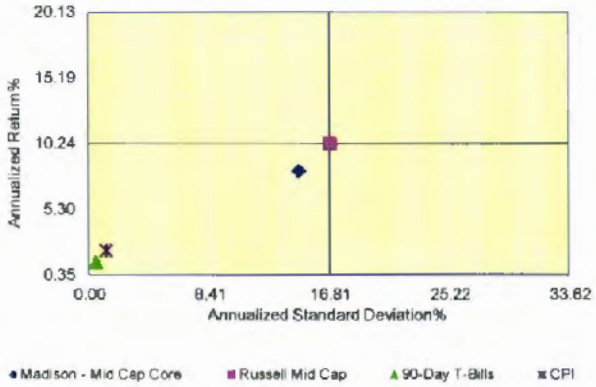
Us Eq	Cash	Total
2,447	141	2,587



Portfolio Characteristics

Yield	0.72%	Account Sharpe Ratio	0.47
Beta	0.83	Index Sharpe Ratio	0.53
Alpha	-0.56%	# Equity Positions	32
R^2	90%		

Risk / Return Analysis Since 12/31/2003



Annualized %	Return	Std. Dev.
Madison - Mid Cap Core	**8.19**	**14.65**
Russell Mid Cap	10.24	16.81
90-Day T-Bills	1.35	0.51
CPI	2.16	1.22

Top Equity Holdings

Security	Sector	% Port
Markel Corp (holding Co)	Financials	6.0
Brown & Brown Inc	Financials	5.2
Ross Stores Inc	Consumer Discretiona	5.1
Dollar Tree Inc	Consumer Discretiona	4.1
Crown Hldgs Inc (holding Co)	Materials	3.9
Copart Inc	Industrials	3.8
Laboratory Cp Amer Hldgs New	Health Care	3.8
Sally Beauty Hldgs Inc	Consumer Discretiona	3.7
Discovery Communications Ser C	Consumer Discretiona	3.5
Rli Corp	Financials	3.3

Economic Sector Allocation

	% Port
Consumer Discretiona	25.8
Financials	21.9
Industrials	19.0
Health Care	9.1
Information Technolo	7.9
Other	5.4
Energy	4.4
Materials	3.9
Consumer Staples	2.5

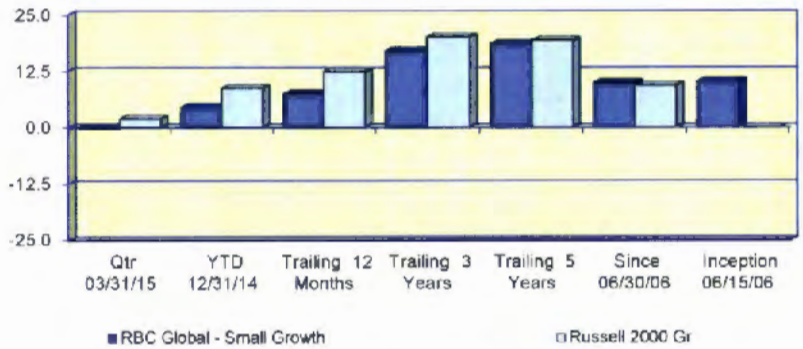
Report Created: 7/31/2015

Please refer to the attached Disclosures for important information.

ACCOUNT - EXECUTIVE SUMMARY

City of Park Ridge Fire Pension Fund - RBC Global Asset Mgmt - Small Growth (Net) AS OF 06/30/2015

Portfolio Performance (%)

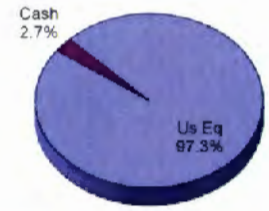


Investment Returns (%) Since:	Qtr 03/31/15	YTD 12/31/14	Trailing 12 Months	Trailing 3 Years	Trailing 5 Years	Since 06/30/06	Inception 06/15/06
RBC Global - Small Growth	**-0.15**	**4.53**	**7.42**	**16.97**	**18.59**	**9.86**	**10.17**
Russell 2000 Gr	1.97	8.73	12.34	20.11	19.33	9.34	N/A

Asset Growth ($000)							
Beginning Market Value	2,126	2,031	1,976	1,326	808	721	700
Net Contributions & Withdrawals	0	0	0	0	135	235	235
Gain/Loss + Income	-3	92	147	797	1,180	1,167	1,188
Ending Market Value	2,123	2,123	2,123	2,123	2,123	2,123	2,123

Asset Allocation ($000)

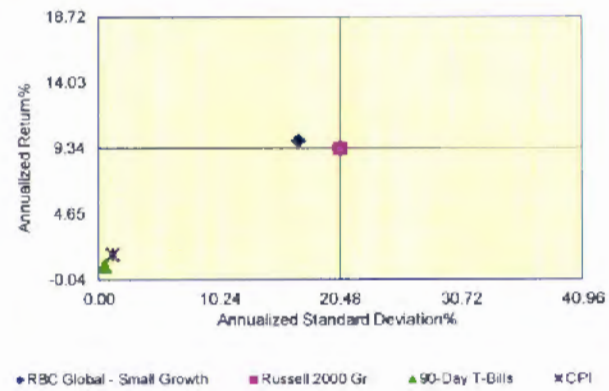
Us Eq	Cash	Total
2,066	57	2,123



Portfolio Characteristics

Yield	0.34%	Account Sharpe Ratio	0.52
Beta	0.80	Index Sharpe Ratio	0.41
Alpha	1.81%	# Equity Positions	74
R^2	94%		

Risk / Return Analysis Since 06/30/2006



Annualized %	Return	Std. Dev.
RBC Global - Small Growth	**9.86**	**16.97**
Russell 2000 Gr	9.34	20.48
90-Day T-Bills	0.96	0.49
CPI	1.79	1.23

Top Equity Holdings

Security	Sector	% Port
Cantel Medical Corp	Health Care	2.6
Parexel Intl Corp	Health Care	2.3
Zebra Tech Cl-a	Information Technolo	2.3
Abiomed Inc	Health Care	2.2
Teleflex Inc	Health Care	2.1
Manhattan Assoc Inc	Information Technolo	2.1
United Natural Foods Inc	Consumer Staples	2.0
Balchem Cp	Materials	2.0
Woodward Inc Com	Industrials	2.0
Treehouse Foods Inc	Consumer Staples	1.9

Economic Sector Allocation

	% Port
Health Care	24.7
Information Technolo	23.4
Industrials	20.0
Consumer Discretiona	10.5
Financials	7.8
Consumer Staples	6.1
Other	2.7
Energy	2.4
Materials	2.3

Report Created: 7/31/2015

Please refer to the attached Disclosures for important information.

Morgan Stanley

Bond Maturity Schedule - Detail

As of 06/29/2015

PARK RIDGE FIREFIGHTER PENSION
JOHN D BRUCHSALER-SECRETARY
901 DEVON AVENUE
PARK RIDGE IL 60068-4648

Prepared by Mary L Tomanek
Ph. +1 847 480-3605

Mature	Bond Description	CUSIP	Security	Total Par Value
90+ Days to 1 Year				
05/15/16	UNITED STATES TREASURY BOND DD 05/15/1986 R/MD 7.25 05/15/2016	912810DW5	0000808X9	$1,790,000
		Total 90+ Days to 1 Year		**$1,790,000**
1+ Year to 5 Years				
08/15/19	UNITED STATES TREASURY BOND R/MD 8.13 08/15/2019	912810ED6	000080225	750,000
		Total 1+ Year to 5 Years		**$750,000**
5+ Years to 10 Years				
02/15/23	UNITED STATES TREASURY BOND DD 02/15/1993 R/MD 7.13 02/15/2023	912810EP9	0000TRB03	1,800,000
08/15/23	UNITED STATES TREASURY BOND R/MD 6.25 08/15/2023	912810EQ7	0000TRB51	1,150,000
		Total 5+ Years to 10 Years		**$2,950,000**
10+ Years to 20 Years				
08/15/25	UNITED STATES TREASURY BOND R/MD 6.88 08/15/2025	912810EV6	0000TRD83	910,000
02/15/26	UNITED STATES TREASURY BOND DD 02/15/1996 R/MD 6.00 02/15/2026	912810EW4	0000TRE14	1,100,000
08/15/26	UNITED STATES TREASURY BOND DD 08/15/1996 R/MD 6.75 08/15/2026	912810EX2	0000TRC02	340,000
11/15/26	UNITED STATES TREASURY BOND DD 11/15/1996 R/MD 6.50 11/15/2026	912810EY0	0000TRE87	500,000

Morgan Stanley

Bond Maturity Schedule - Detail

As of 06/29/2015

PARK RIDGE FIREFIGHTER PENSION
JOHN D BRUCHSALER-SECRETARY
901 DEVON AVENUE
PARK RIDGE IL 60068-4648

Prepared by Mary L Tomanek
Ph. +1 847 480-3605

Mature	Bond Description	CUSIP	Security	Total Par Value
11/15/27	UNITED STATES TREASURY BOND DD 11/15/1997 R/MD 6.13 11/15/2027	912810FB9	0000TRB68	$500,000
		Total 10+ Years to 20 Years		**$3,350,000**
		Total		**$8,840,000**

The above summary/prices/quotes/statistics have been obtained from sources believed reliable but are not necessarily complete and cannot be guaranteed. The information contained in client monthly account statements and confirmations reflects all transactions, and as such supersedes all other reports for financial and tax purposes. This report does not supersede or replace your monthly Client Statement. If we do not hold the securities in a Morgan Stanley Wealth Management account, the report reflects securities which we believe you own, based upon your communications with our Financial Advisor. © 2015 Morgan Stanley Smith Barney LLC. Member SIPC.

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Information Disclosures

Please notify your Financial Advisor if there have been any changes in your financial situation or investment objectives, or if you wish to impose any reasonable restrictions on the management of your Investment Advisory accounts, or to reasonably modify existing restrictions.

For a copy of the applicable Form ADV Disclosure Document for Morgan Stanley Smith Barney LLC, or for any Investment Adviser with whom we contract to manage your investment advisory account, please contact your Financial Advisor. These Disclosure Documents contain important information about advisory programs.

Sources and Intent

This investment evaluation is directed only to the client for whom the evaluation was performed. The underlying data has been obtained from sources the Firm believes to be reliable but we do not guarantee their accuracy, and any such information may be incomplete or condensed. This evaluation is for informational purposes only and is not intended to be an offer, solicitation, or recommendation with respect to the purchase or sale of any security or a recommendation of the services supplied by any money management organization. Past performance is not a guarantee of future results. Performance for periods greater than one year is annualized. The information contained herein was prepared by your Financial Advisor and does not represent an official statement of your account at the Firm (or other outside custodians, if applicable.) Please refer to your monthly statement for a complete record of your transactions, holdings and balances.

This Performance Report may show the consolidated performance of some, but not necessarily all, of your Morgan Stanley accounts. In addition, it may show the full performance history of your accounts or just the performance of your accounts since inception in their current Morgan Stanley programs. In some cases, it may show the combined performance of brokerage accounts and advisory accounts. It is important that you understand the combination of accounts and account histories that are included in this Performance Report. Upon your request, performance information can be obtained for other accounts you may have with us, but which are not shown here.

Accounts included in this Performance Report may have had different investment objectives, been subject to different rules and restrictions, and incurred different types of fees, mark-ups, commissions, and other charges. Accordingly, the performance results for this portfolio may blend the performance of assets and strategies that may not have been available in all of your accounts at all times during the reporting period. Please consult your Financial Advisor for more information about the fees and expenses applicable to the accounts included in this Performance Report.

Net Rates of Return

The investment returns in this report for your account as a whole are your net returns after deducting investment management fees and any Select Retirement fees. For more details on fees, please see your client contract, the applicable Morgan Stanley ADV brochure and any applicable Select Retirement prospectus. Returns in excess of one year are annualized. **Select UMA accounts:** If this report is for a Select UMA account, the investment returns shown for the individual investment managers are your gross returns for each manager before deducting investment management fees and any Select Retirement fees. The returns for each manager would be lower if these fees were deducted.

Advisory Notice

The Fiduciary Services-Affiliated Program and the Fiduciary Services-Unaffiliated Manager Program are separate and distinct advisory programs. Absent your written authorization, assets may only be transferred among managers within the particular program.

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Composite Index Definition
The Composite account's benchmark comprises the BC Cr Intm, S&P 500, Russell Mid Cap, Russell 3000 Gr, Russell 1000 Vl, S&P 500, Russell 2000 Gr, MSCI EAFE Net, BC Gov, 90-Day T-Bills, indices in the same asset mix as your portfolio. The mix is adjusted monthly based on changes in your portfolio.

International History:
Until 4th quarter 1997, International equities were included within the Domestic equity category for performance presentation. For asset allocation purposes, they are reflected beginning Jan.1, 1998.

Bond Average
Please note that all averages calculated are weighted averages meaning that the calculation takes into account the par value of each position. CMO's and Asset Backed securities are excluded from the calculation. Any bonds that are non-rated by both Moody's and S&P are excluded from the average rating calculation.

International and Small Capitalization Securities
To the extent the investments depicted herein represent international securities, you should be aware that there may be additional risks associated with international investing involving foreign, economic, political, and/or legal factors. International investing may not be for everyone. In addition, small capitalization securities may be more volatile than those of larger companies, but these companies may present greater growth potential.

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Additional Information about your Floating Rate Notes
For floating rate securities, the estimated accrued interest and estimated annual income are based on the current floating coupon rate and may not reflect historic rates within the accrual period.

Daily Performance
Beginning January 1, 2005 (former Smith Barney accounts) and July 1, 2011 (former Morgan Stanley accounts), portfolio performance is calculated using a daily valuation methodology, with contributions and withdrawals to the portfolio reflected as of days they were actually made. Portfolio performance for earlier periods reflects various methodologies. Different calculation methods may result in portfolio performance figures that vary from those shown above.

Alpha

Alpha is the value added by active management of the portfolio's assets, given the risk of that portfolio. In other words, alpha is equal to the incremental return earned by the manager when the market is flat or stationary. An alpha of zero indicates that the manager earned the exact return dictated by the level of market risk (i.e., beta) of the portfolio. A positive alpha indicates that the manager has earned, on average, more than the portfolio's level of market risk would have dictated. A negative alpha indicates that the manager has earned, on average, less than the portfolio's level of market risk would have dictated. Alpha is the Y-intercept of the least squares regression line.

Beta

Beta is the systematic risk of the portfolio. Measured by the slope of the least squares regression, beta is the measure of portfolio risk which cannot be removed through diversification. Beta is also known as market risk. Beta is a statistical estimate of the average change in the portfolio's performance with a corresponding 1.0 percent change in the risk index. A beta of 1.0 indicates that the portfolio moves, on average, lock step with the risk index. A beta in excess of 1.0 indicates that the portfolio is highly sensitive to movements in the risk index. A beta of 1.5, for example, indicates that the portfolio tends to move 1.5 percent with every 1.0 percent movement in the risk index. A beta of less than 1.0 indicates that the portfolio is not as sensitive to movements in the risk index. A beta of 0.5, for example, indicates that the portfolio moves only 0.5 percent for every 1.0 percent movement in the risk index.

R-Squared

R-squared, or the coefficient of determination, measures the strength of the least squares regression relationship between the portfolio (the dependent variable) and the risk index (the independent variable). The statistic reveals the extent to which the variability in the dependent variable is due to the variability in the independent variable. As such, R-squared measures how well the portfolio returns move in tandem with the returns of the risk benchmark. Though it is true that the higher the R-squared the better, an R-squared of less than 0.9 (i.e., 90 percent), indicates that the total fund does not track closely with the risk benchmark. The strength of the R-squared statistic will reflect on the strength of alpha and beta. A weak R-squared, for example, would indicate that alpha and beta cannot be strictly interpreted.

Brokerage Account

In a brokerage relationship, your Financial Advisor will work with you to facilitate the execution of securities transactions on your behalf. Your Financial Advisor also provides investor education and professional, personalized information about financial products and services in connection with these brokerage services. You can choose how you want to pay for these services and you will receive the same services regardless of which pricing option you choose. There are important differences in your relationship with your Financial Advisor and Morgan Stanley in brokerage accounts and in advisory accounts.

Asset classifications and performance calculation methodologies can differ among the various supplemental performance reports available through us. For example, some reports calculate Time Weighted performance using a weighted or Modified Dietz approach while others use a daily approach. In addition, some reports may display Dollar Weighted Returns. These differences can generate meaningful dispersions in the performance numbers displayed on different reports.

INVESTMENT PRODUCTS: NOT FDIC INSURED - NO BANK GUARANTEE - MAY LOSE VALUE

Additional Disclosures for Blend Reports

The performance data designated as "Custom Manager Blend" below [and on the following pages] is provided at your specific request, and represents what the return of a portfolio would have been had you been invested in the investment products recommended in this Proposal, in the percentages recommended, over the time periods shown. While this data does not represent the actual performance of any specific portfolio, it has been derived from the actual performance of each investment product as set forth in publicly available disclosure documents prepared by the fund companies or the performance information provided by any investment sub-managers included in this Proposal. This performance is presented for illustrative purposes only. With respect to separately managed accounts, the performance information is based on other accounts of the investment sub-manager that operated with substantially similar investment objectives and policies during the time periods indicated. The data designed as "Custom Index Blend" is derived from the stated benchmark of each investment product included in the weightings set forth in our recommendation. Past performance does not guarantee or predict future results.

It is important to note that the performance set forth below does not take into account the fees that would be charged to the account. As illustrated in the Performance Disclosures at the end of this Proposal, if an account had been in existence for the time periods shown, its performance would be lower than that shown by an amount that is directly proportionate to the fee charged. Please see the fee schedule for an illustration of the impact of fees on account performance.

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ZEPHYR STYLE ADVISOR DISCLAIMER

The following analysis is directed only to the client for whom the evaluation was prepared and is based on published investment manager rate of return data, capital market indices, custom (benchmarks, indices and universes), as well as software developed by Zephyr Associates. Investment manager rate of return data includes: Informa Plan Sponsor Network, Morgan Stanley (MSSB) Fiduciary Services, Morgan Stanley Global Investment Solutions, Collective Trust Funds and Consulting Group Capital Market Funds Databases. Capital markets index data includes: Capital market indices (supplied by Zephyr), Canadian indices (supplied by Zephyr), Salomon Brothers Fixed Income indices, Morgan Stanley Capital International indices, and Dow Jones Global indices.

Zephyr StyleADVISOR uses principles of William Sharpe's theory of returns-based style analysis. Returns-based style analysis assists in identifying investment style without examining the individual security holdings of a portfolio. StyleADVISOR regresses the historical returns of the individual manager(s) against different style indices to identify the pattern of returns that the fund is most closely correlated to. MSSB does not recommend the use of returns-based style analysis without the supporting fundamental research of the fund (research attribution reports)

The underlying data is believed to be reliable but accuracy and completeness cannot be assured. While the historical rates of return described in this report are believed to accurately reflect the overall nature of the portfolio, the constituent securities have not been reviewed. This evaluation is for informational purposes only and is not intended to be an offer, solicitation or recommendation with respect to the purchase or sale of any security or a recommendation of the services provided by any money management organization. Past results are not necessarily indicative of future performance.

Gross Rates of Return

The investment results depicted herein represent historical Gross performance before the deduction of investment management fees and are based on settlement date accounting methods. Annual, cumulative and annualized total returns are calculated assuming reinvestment of dividends and income plus capital appreciation. The client is referred applicable Morgan Stanley ADV brochures, available at www.smithbarney.com/adv or from your Financial Advisor. Actual returns will be reduced by expenses that may include management fees and cost of transactions. As fees are deducted quarterly, the compounding effect will be to increase the impact of the fees by an amount directly related to the gross account performance. For example, on an account with a 2% fee, if the gross performance is 10%, the compounding effect of the fees will result in a net performance of approximately 7.81%. This Report is for one-on-one client presentations only.

International and Small Capitalization Securities

To the extent the investments depicted herein represent international securities, you should be aware that there may be additional risks associated with international investing involving foreign, economic, political, and/or legal factors. International investing may not be for everyone. In addition, small capitalization securities may be more volatile than those of larger companies, but these companies may present greater growth potential.

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This document has been prepared at your request for your personal use in order to assist you in evaluating asset allocation strategies, investment objectives and disciplines and various available investment products. It is not a recommendation of a particular program, portfolio, investment manager, fund or other investment product. It is not tax or legal advice. If you have asked us to do so, we have included one or more investment managers or funds that are not available in Morgan Stanley 's investment advisory programs. Morgan Stanley does not recommend any such manager or fund and takes no responsibility for the accuracy of any information provided by such manager or fund. You should contact such managers or the sponsors of such funds directly for performance and other information. You should not use the document as the sole basis for investment decisions. Moreover, you should not use investment performance alone to make any investment decision. You should consider other factors such as the experience and investment style of an investment manager as compared to your individual investment objectives, risk tolerance and time horizons.

Performance Information

The investment results depicted herein represent historical Gross performance with no deduction for investment management fees or transaction costs. Such figures reflect the reinvestment of dividends. Actual returns will be reduced by such expenses. You should refer to Morgan Stanley 's ADV brochure for full disclosure of Morgan Stanley 's fees. As fees are deducted from an account on a quarterly basis, the compounding effect will be to increase the impact of the fees by an amount directly related to the gross account performance. For example, on an account with a 2% fee, if the gross performance is 10%, the compounding effect of the fees will result in a net performance of approximately 7.81%.

You would not necessarily have obtained the performance results shown in the document if you had been invested with these managers or funds over the time periods illustrated. Actual performance of individual accounts will vary due to factors such as the timing of contributions and withdrawals, individual client restrictions, rebalancing schedules and fees.

Moreover, the illustrations set forth in the document benefit from the availability of actual historical returns. Manager or funds that have not performed as well as those illustrated may not have been considered for inclusion in the document. Such hindsight is obviously not available to an investment adviser such as Morgan Stanley when making "real time" investment recommendations.

SOURCE OF PERFORMANCE INFORMATION FOR FUNDS: For any fund shown in this report, the performance data is obtained from databases maintained by parties outside Morgan Stanley . This data has been included for your information, and has not been verified by Morgan Stanley in any way. See "Sources of Information" below.

NET PERFORMANCE

See the attached Morningstar profiles for each fund in the report for standardized fund performance (i.e. returns net of any maximum sales charges that apply if you purchase the fund outside of our investment advisory programs) and also returns net of the maximum annual investment advisory fees that apply if you purchase the fund in one of our investment advisory programs. You should carefully read the manager/fund profiles, which may contain more up-to-date performance information than in this report.

Investment Options May be Managed by or Affiliated with Morgan Stanley

This report may include investment options that are managed by or affiliated with Morgan Stanley . Morgan Stanley may have incentive to recommend such investment options to you because we may earn more compensation if you invest in these investment options than if you invest in other investment options.

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Alpha: Alpha is a risk (beta adjusted) measurement. Officially, alpha measures the difference between a portfolio's actual returns and what it might be expected to deliver based on its level of risk. Higher risk generally means higher reward. A positive alpha means the fund has beaten expectations. A negative alpha means that the manager failed to match performance with risk. If two managers had the same return but one had a lower beta, that manager would have a higher alpha. StyleADVISOR uses the standard intercept calculation.

Beta: Beta represents the systematic risk of a portfolio and measures its sensitivity to a benchmark. A portfolio with a beta of one is considered as risky as the benchmark and would therefore provide expected returns equal to those of the market during both up and down periods. A portfolio with a beta of two would move approximately twice as much as the benchmark.
Excess Return - The difference between the returns of two portfolios. Usually excess return is the difference between a manager's return and the return of a benchmark for that manager. In the context of a beta benchmark, excess return refers to the difference between a manager or market benchmark and Tbills.

Down Capture Ratio: the ratio of the manager's overall performance to the benchmark's overall performance, considering only periods that are negative in the benchmark.

Excess Returns: represent the average quarterly total returns of the manager relative to its benchmark. A manager with a positive Excess Return has on average outperformed its benchmark on a quarterly basis. This statistic is obtained by subtracting the benchmark return from the manager's return.

Manager Style Graph: an attempt to depict how the manager's historical returns (not actual portfolio holdings) "track" a group of benchmarks. For example, Domestic Equity products will be presented versus Large and Small, Growth and Value benchmarks. If the R2 of the Style Benchmark is lower than 80%, then the attempt to measure the manager's style was problematic (this will often happen with non- diversified portfolios, or eclectic investment disciplines.)

Moving Window: multiple data calculations can be done within a single span of time. For example, in a 5 year period you can display five 1-year values with non-overlapping data, or you can display nine 3-year values by moving each 3-year "moving window" one quarter at a time. Each discrete time period, either overlapping or not, is referred to as a "moving window."

Return: A compounded and annualized rate of return.

R-Squared: (Correlation Squared) - A measure of how well two portfolios track each other. R-squared ranges between zero and 100%. An R-squared of 100% indicates perfect tracking, while an R-squared of zero indicates no tracking at all. R-squared is used in style analysis to determine how much information about a return series the style benchmark has been able to capture. The higher the R-squared, the better the benchmark.

Sharpe Ratio: The Sharpe Ratio, developed by Professor William F. Sharpe, is a measure of reward per unit of risk -- the higher the Sharpe Ratio, the better. It is a portfolio's excess return over the risk-free rate divided by the portfolio's standard deviation. The portfolio's excess return is its geometric mean return minus the geometric mean return of the risk-free instrument (by default, t-bills).

Standard Deviation: quantifies the volatility associated with a given product. The statistic measures the quarterly variation in returns around the mean return.

Style Benchmark: the blended benchmark that best matches the manager's returns (lowest tracking error.)

Tracking Error: represents the Standard Deviation of the Excess Return and provides a historical measure of the variability of the manager's returns relative to its benchmark. **Up Capture Ratio:** measures the manager's overall performance to the benchmark's overall performance, considering only periods that are positive in the benchmark. **Universe:** a peer group of managed investment products with reasonably similar characteristics.

MarquetteAssociates

Park Ridge Firefighters'
Pension Fund

Systems Review

August 18, 2015

The Park Ridge Firefighters' Pension Fund ("the Fund") has retained Marquette Associates, Inc. ("Marquette") to conduct, among other things, an Investment Systems Review.

The goals of the Investment Systems Review are to perform a comprehensive evaluation of The Fund's investment program and its investment practices, and to attempt to improve The Fund's ability to achieve its goals more effectively and efficiently.

This report can be broken into two distinct parts: the observations and recommendations. The observations are intended to provide The Fund's fiduciaries with an overview of the strengths and weaknesses of the current investment structure and practices. The recommendations have been formulated by Marquette based upon the risk/return objectives of The Fund, the observations, and Marquette's understanding of the capital markets.

The data collected for this report came from a variety of sources including, but not limited to: questionnaires created by Marquette, the custodian's statements, the investment policy guidelines, the investment manager contracts/agreements/ prospectuses, and annual audits.

In the creation of this Investment Systems Review, Marquette may have used data from industry databases, which include:

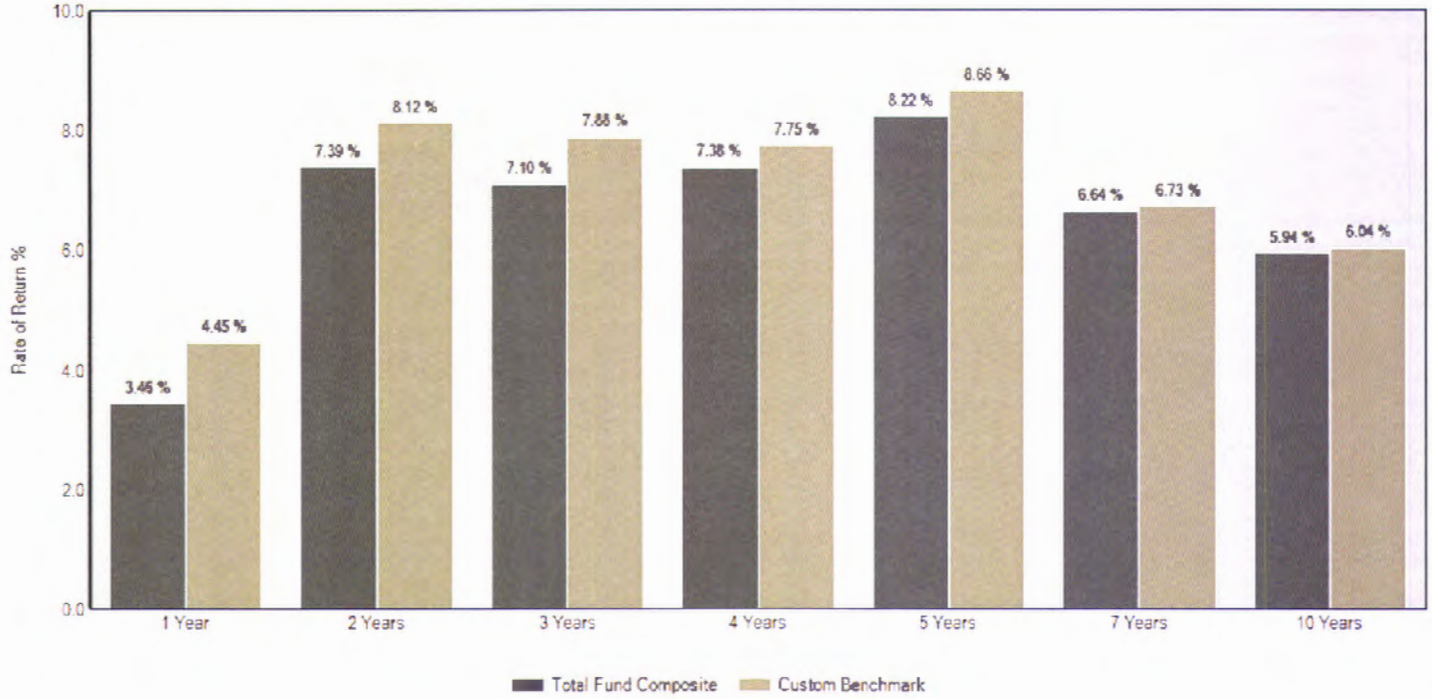
- Morningstar
- eVestment Alliance
- InvestorForce
- Bloomberg
- Proprietary Databases

Park Ridge Firefighters' Pension

Performance Summary (Net of Fees)

As of June 30, 2015

Annualized Performance vs. Custom Benchmark



As of June 30, 2015	1 Yr	2 Yr	3 Yr	4 Yr	5 Yr	7 Yr	10 Yr
Total Fund Composite	3.46%	7.39%	7.10%	7.38%	8.22%	6.64%	5.94%
Custom Benchmark*	*4.45%*	*8.12%*	*7.88%*	*7.75%*	*8.66%*	*6.73%*	*6.04%*

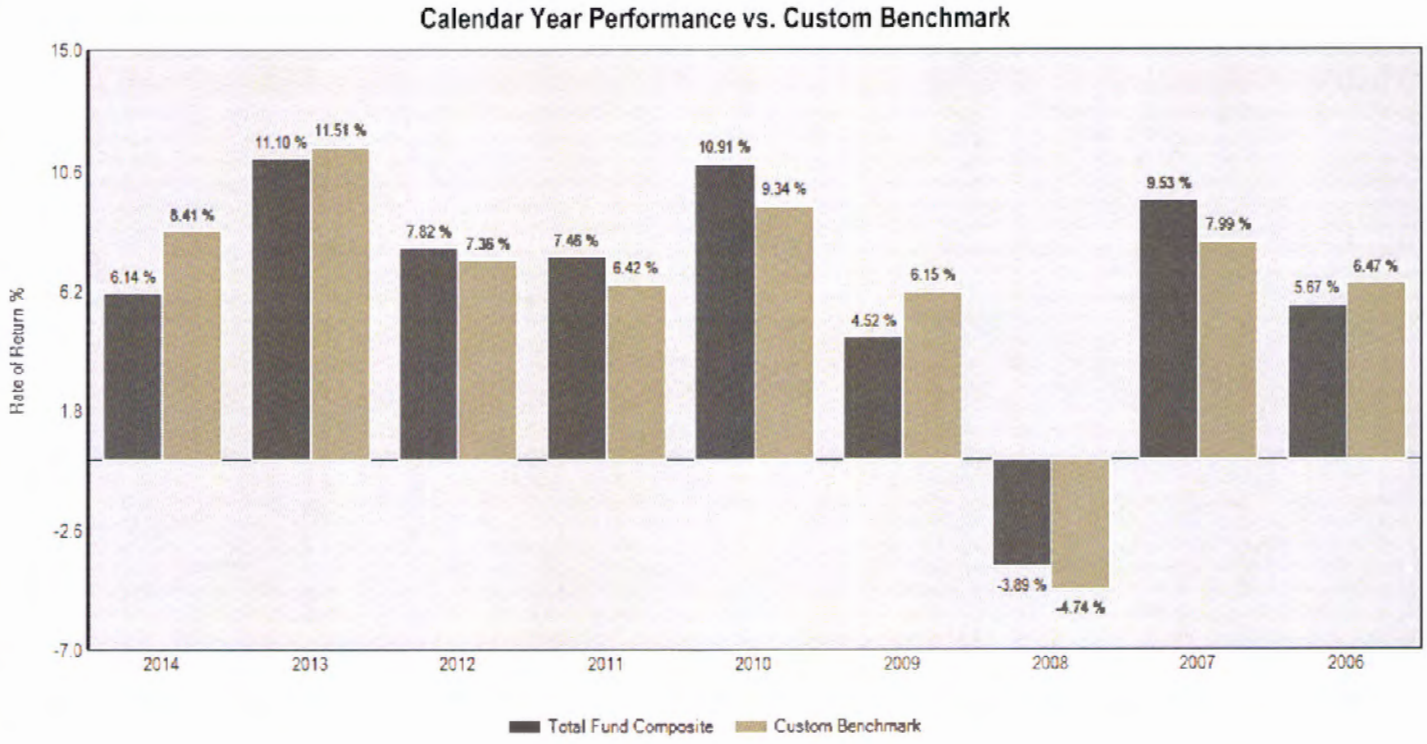
*Custom Benchmark History

1/1/2015	Present	43% Barclays Government / 51% S&P 500 / 6% MSCI EAFE
1/1/2014	12/31/2014	47% Barclays Government / 47% S&P 500 / 6% MSCI EAFE
1/1/2013	12/31/2013	56% Barclays Government / 42% S&P 500 / 2% MSCI EAFE
1/1/2011	12/31/2012	62% Barclays Government / 36% S&P 500 / 2% MSCI EAFE
1/1/2010	12/31/2010	63% Barclays Government / 34% S&P 500 / 3% MSCI EAFE
1/1/2008	12/31/2009	70% Barclays Government / 30% S&P 500
1/1/2004	12/31/2007	75% Barclays Government / 25% S&P 500

Park Ridge Firefighters' Pension

Performance Summary (Net of Fees)

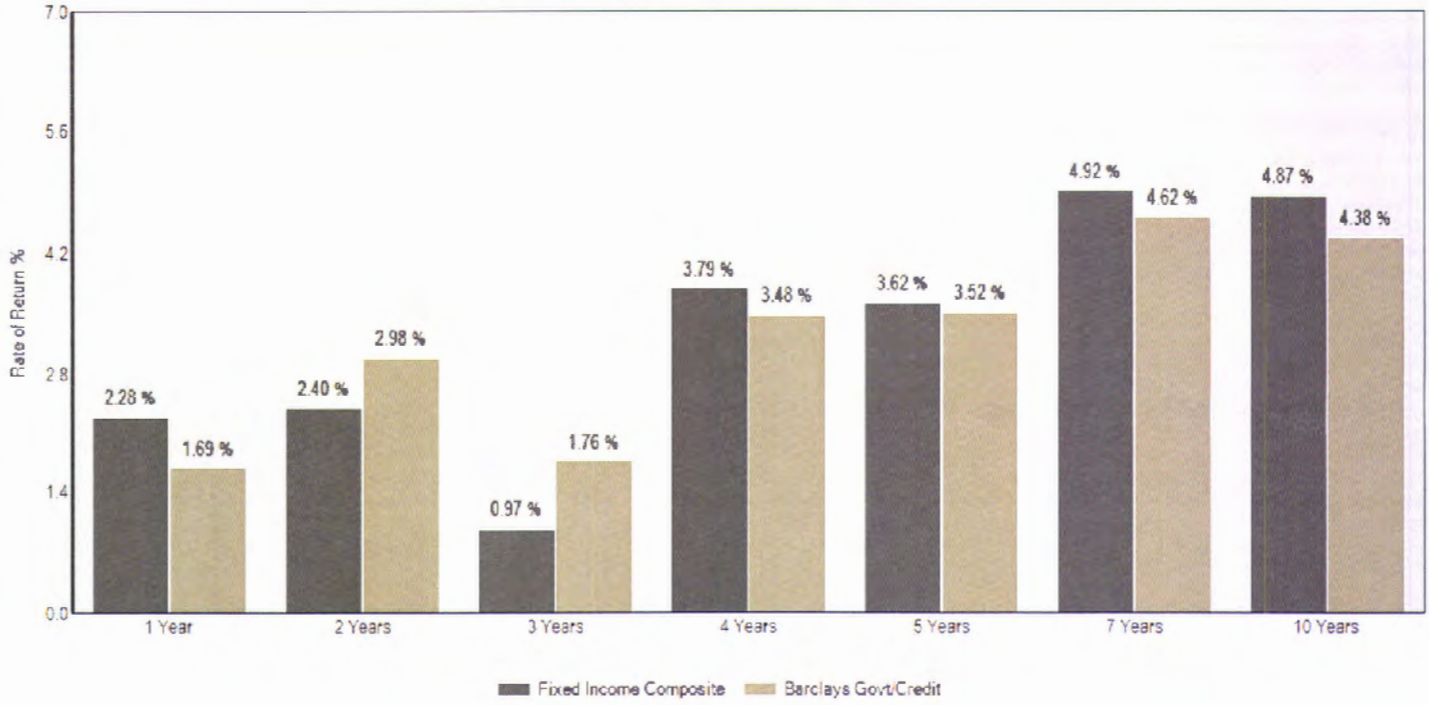
As of June 30, 2015



As of June 30, 2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Total Fund	6.14%	11.10%	7.82%	7.46%	10.91%	4.52%	-3.89%	9.53%	5.67%
Custom Benchmark*	*8.41%*	*11.51%*	*7.36%*	*6.42%*	*9.34%*	*6.15%*	*-4.74%*	*7.99%*	*6.47%*

Observations - The Pension Fund has underperformed it's custom benchmark for all annualized trailing time periods as of June 30, 2015. This has been primarily due to underperformance by the active equity managers. On a calendar year basis, the Pension Fund has underperformed it's custom benchmark in four of the nine most recent calendar years. In calendar

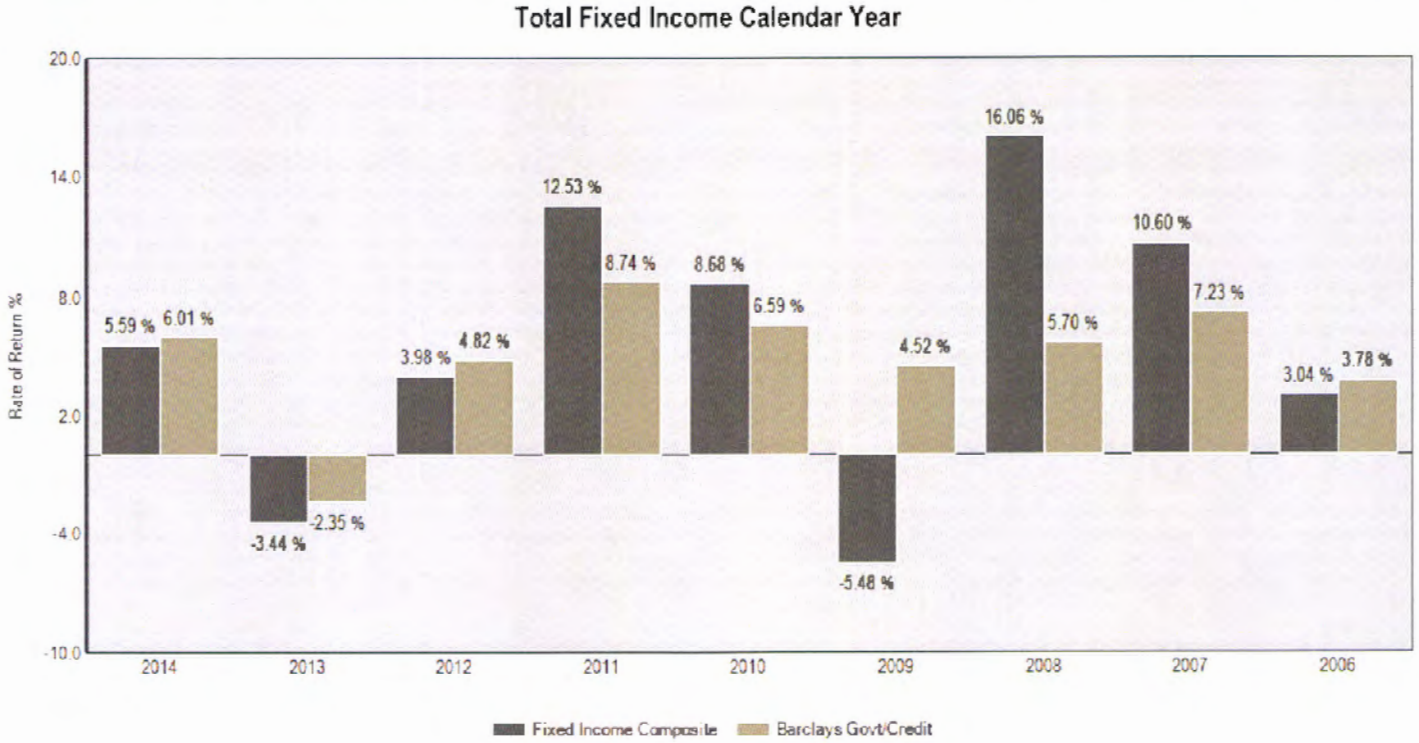
Total Fixed Income Annualized Performance



As of June 30, 2015	1 Yr	2 Yr	3 Yr	4 Yr	5 Yr	7 Yr	10 Yr
Fixed Income Composite	2.28%	2.40%	0.97%	3.79%	3.62%	4.92%	4.87%
Barclays Govt/Credit	*1.69%*	*2.98%*	*1.76%*	*3.48%*	*3.52%*	*4.62%*	*4.38%*

Park Ridge Firefighters' Pension

Fixed Income Portfolio

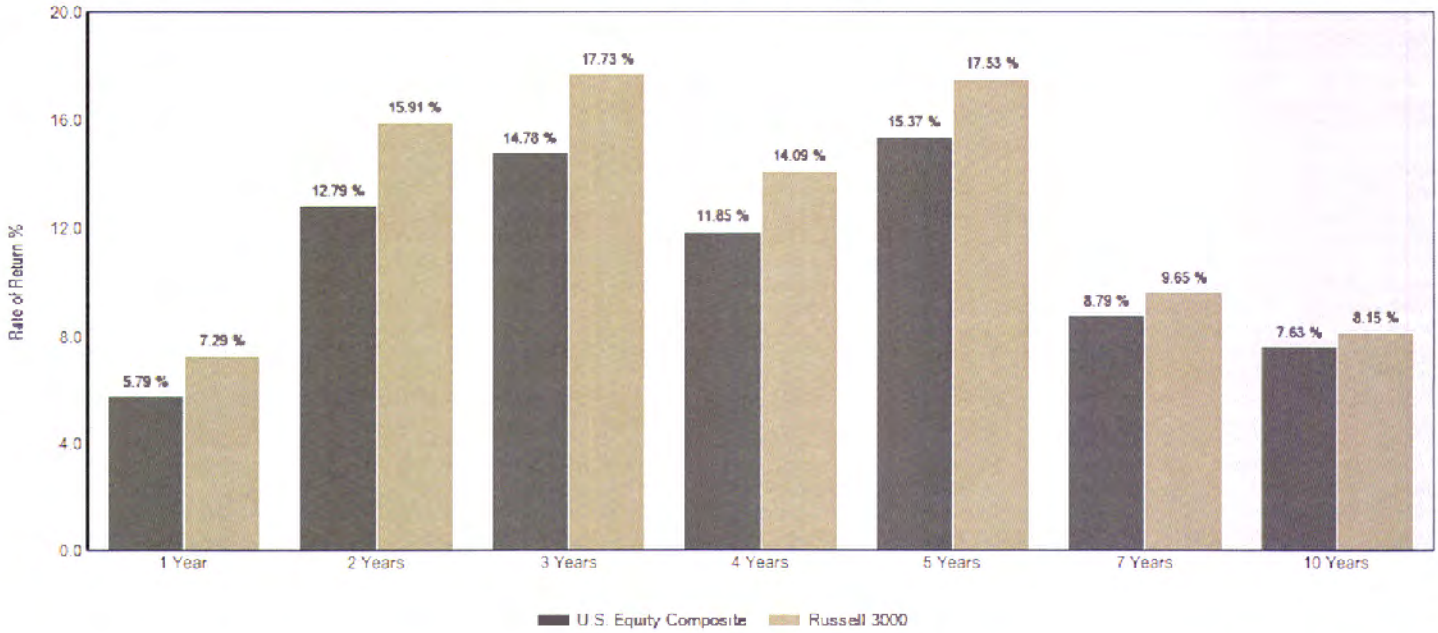


As of June 30, 2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Fixed Income Composite	5.59%	-3.44%	3.98%	12.53%	8.68%	-5.48%	16.06%	10.60%	3.04%
Barclays Govt/Credit	*6.01%*	*-2.35%*	*4.82%*	*8.74%*	*6.59%*	*4.52%*	*5.70%*	*7.23%*	*3.78%*

Observations - The Pension Fund's fixed income portfolio has historically performed well against the Barclays Govt/Credit index on an annualized basis. On a calendar year basis the fixed income portfolio has underperformed it's benchmark in five of the previous nine calendar years, including the three most recent calendar years. The fixed income assets are primarily being internally managed with a portion of the assets (36% of the fixed income portfolio) being managed in a corporate bond mandate with McDonnell Investment Management.

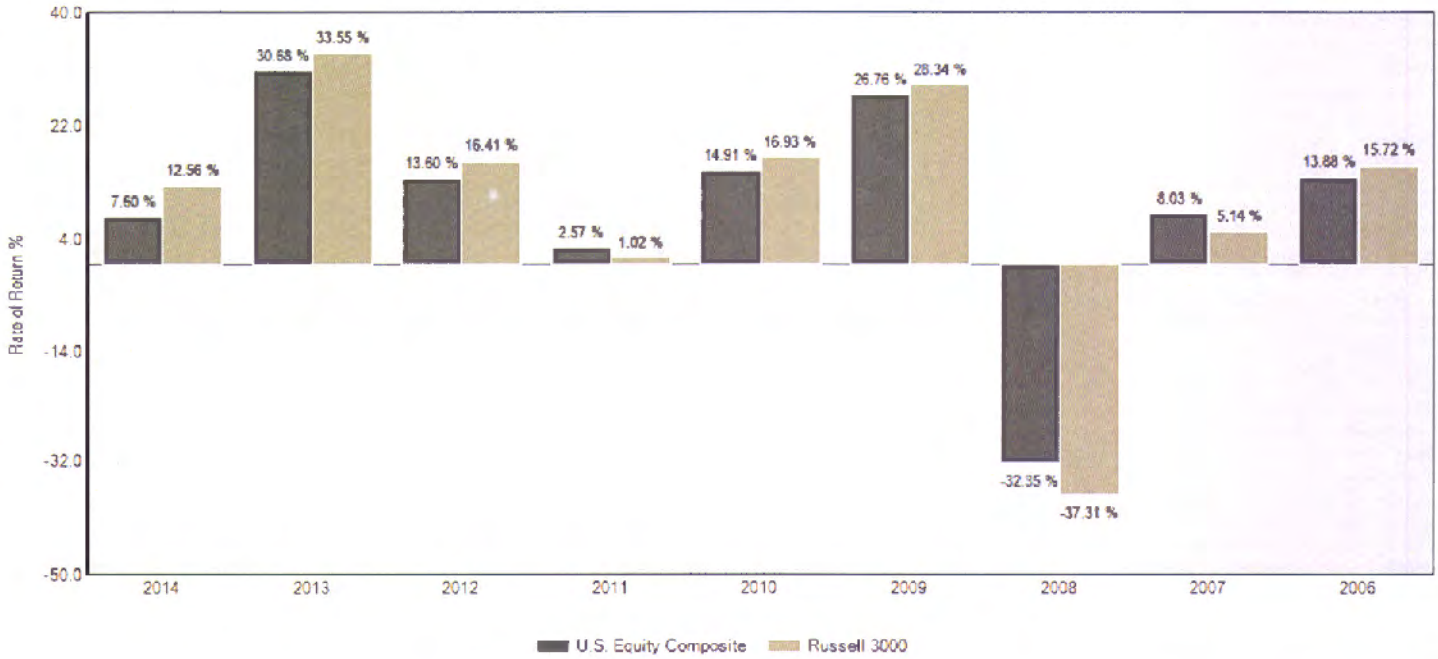
Recommendations - We recommend reducing the overall fixed income allocation of the Pension Fund to 35% (42% currently). Additionally, we recommend conducting an investment manager search for a intermediate government/credit manager to oversee all fixed income assets including the internally managed portfolio.

U.S. Equity Annualized Performance



	1 Yr	2 Yr	3 Yr	4 Yr	5 Yr	7 Yr	10 Yr
U.S. Equity Composite	5.79%	12.79%	14.78%	11.85%	15.37%	8.79%	7.63%
Russell 3000	*7.29%*	*15.91%*	*17.73%*	*14.09%*	*17.53%*	*9.65%*	*8.15%*

U.S. Equity Calendar Year Performance



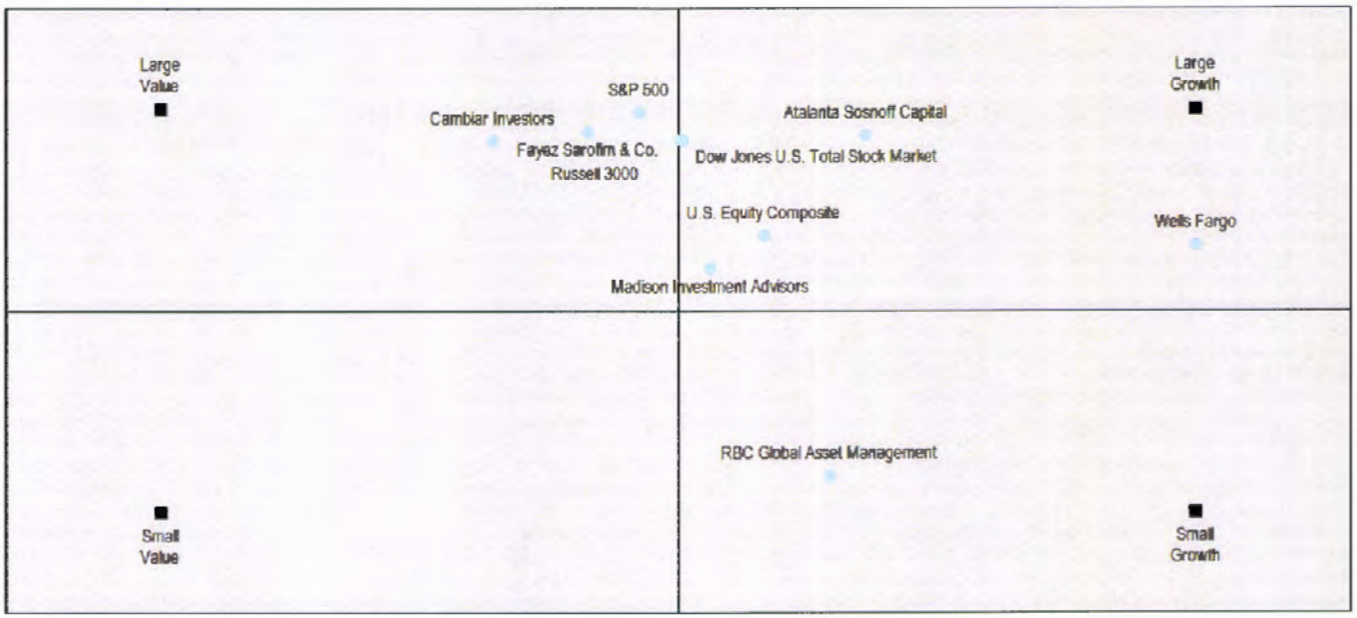
	2014	2013	2012	2011	2010	2009	2008	2007	2006
U.S. Equity Composite	7.60%	30.68%	13.60%	2.57%	14.91%	26.76%	-38.51%	7.42%	13.88%
Russell 3000	*12.56%*	*33.55%*	*16.41%*	*1.02%*	*16.93%*	*28.34%*	*-37.31%*	*5.14%*	*15.72%*

Park Ridge Firefighters' Pension

US Equity Portfolio

As of June 30, 2015

Style Map



Common Holdings Matrix

	Vanguard Total Stock Index Fund		Wells Fargo		Cambiar Investors		Fayez Sarofim & Co.		Atalanta Sosnoff Capital		Madison Investment Advisors		RBC Global Asset Management	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Vanguard Total Stock Index Fund	--	--	66	92	36	91	45	90	50	88	30	88	74	97
Wells Fargo	66	13	--	--	1	3	7	13	14	25	0	0	1	1
Cambiar Investors	36	11	1	2	--	--	9	15	9	19	0	0	0	0
Fayez Sarofim & Co	45	24	7	18	9	24	--	--	14	30	0	0	0	0
Atalanta Sosnoff Capital	50	25	14	30	9	23	14	31	--	--	0	0	0	0
Madison Investment Advisors	30	1	0	0	0	0	0	0	0	0	--	--	1	2
RBC Global Asset Management	74	1	1	1	0	0	0	0	0	0	1	3	--	--

<u>Observations</u> - The Pension Fund's U.S. equity composite has significantly underperformed the broad equity benchmark (Russell 3000) for all trailing periods as of June 30, 2015, as well as 7 of the previous 9 calendar years. There is significant overlap of underlying holdings between the existing investment managers on the Graystone Fiduciary Services platform..

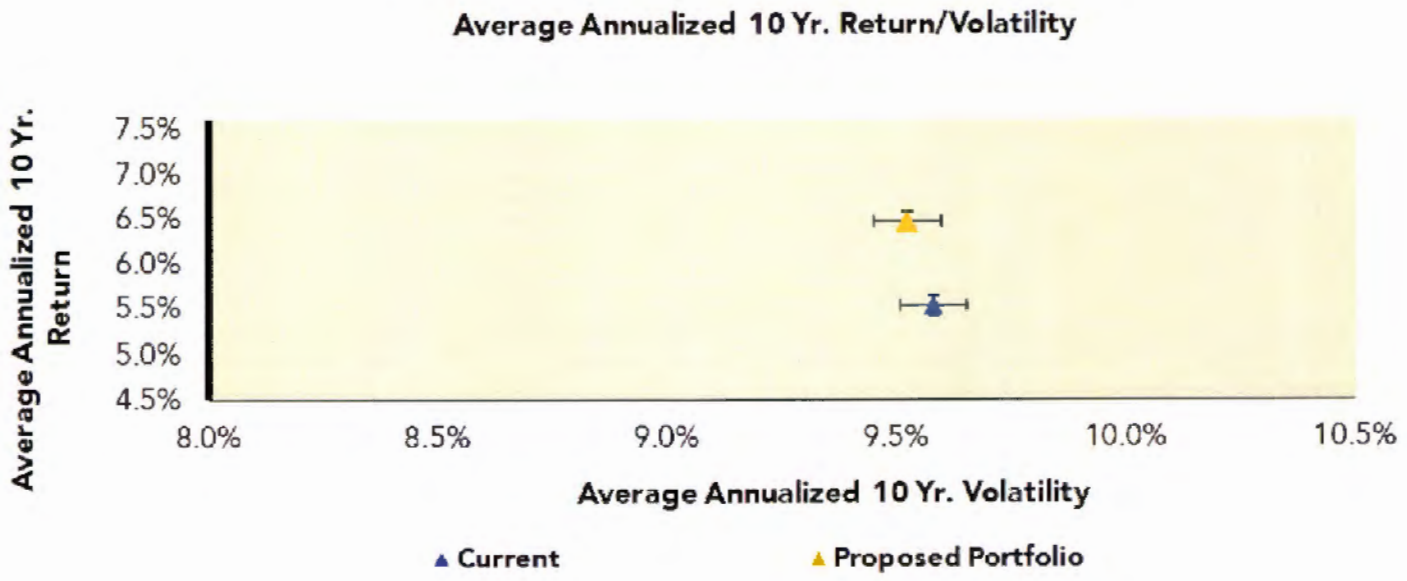
<u>Recommendations</u> - We recommend reducing the overall U.S. equity allocation of the Pension Fund to 35% (52% currently). We recommend simplifying the US. equity portfolio by consolidating all U.S. Equity investments into passive management strategies with Vanguard (Vanguard Institutional Index, Vanguard Value Index, Vanguard Mid-Cap Index, and Vanguard Small-Cap Index. The consolidation will significantly reduce expenses, while also reducing holdings overlap within the U.S. equity portfolio. We also recommend conducting a investment manager search for an active investment manager in the small-cap U.S. equity asset class.

ASSET CLASS	CURRENT PORTFOLIO[2]	PROPOSED PORTFOLIO
Govt/Credit	0.0%	0.0%
Intermediate Govt/Credit	0.0%	35.0%
Credit	6.0%	0.0%
Govt	38.0%	0.0%
91 Day T-Bills	3.0%	0.0%
Total Fixed Income	**47.0%**	**35.0%**
US Equity All-Cap Core	19.0%	0.0%
US Large-Cap Core	11.0%	10.0%
US Large-Cap Value	6.0%	10.0%
US Mid-Cap Core	6.0%	7.5%
US Small-Cap Value	0.0%	7.5%
US Small-Cap Growth	5.0%	0.0%
Total US Equity	**47.0%**	**35.0%**
Non-US Large-Cap	4.0%	10.0%
Non-US Small-Cap	0.0%	3.8%
Non-US Emerging Market	2.0%	3.8%
Total International Assets	**6.0%**	**17.5%**
Global Tactical	0.0%	2.5%
Total Global Tactical	**0.0%**	**2.5%**
Real Estate - Core	0.0%	10.0%
Total Real Estate	**0.0%**	**10.0%**
TOTAL FUND	100.0%	100.0%

SUMMARY OF PORTFOLIO CHARACTERISTICS

Projected Average Return (annualized over 10 yrs)	5.53%	**6.47%**
Projected Average Volatility (annualized over 10 yrs)	9.58%	9.52%
Downside Probability[1] (Return < 6.75%)	64.80%	54.90%
Downside Risk (Return < 6.75%)	3.98%	3.47%
Avg. Downside Dev (Return < 6.75%)	3.19%	2.71%

[1] Downside Probability represents the percent chance that the portfolio return will fall short its target of 6.75%
[2] Current Portfolio based on 1/1/15 asset allocation



Observations - The Pension Fund's current portfolio has a future projected average 10 year return of 5.53% and a projected average volatility of 9.58%. The current portfolio has a 65% chance of not achieving the target rate of return over this time period. The Pension Fund currently has limited exposure to non-U.S. equity investments and no exposure to alternative investments including global tactical and real estate.

Recommendations - We recommend a new asset allocation policy for the Pension Fund that will increase the overall projected return, while keeping the volatility in line with the current policy. The new asset allocation policy will include new allocations to non-U.S. small-cap equity, global tactical, and core real estate. The new policy will reduce the overall fixed income and U.S. equity allocations and will increase the overall non-U.S. equity and alternative allocations. These recommendations along with additional rebalancing will increase the Pension Fund's projected average return to 6.47% (currently 5.53%) while also keeping the volatility in line with the current policy.

Park Ridge Firefighters' Pension

Current Portfolio

As of June 30, 2015

Asset Class	Investment Manager	Market Value	% of Portfolio
Int. Fixed Income	McDonnell Investment Management	$4,573,440	11.2%
Core Govt. Fixed Income	Internal Fixed Income	$12,546,602	30.8%
Total Fixed Income		**$17,120,042**	**42.0%**
All-Cap Core	Vanguard Total Stock Index Fund	$8,469,079	20.8%
All-Cap Growth	Wells Fargo	$1,746,163	4.3%
Large-Cap Value	Cambiar Investors	$2,528,443	6.2%
Large-Cap Core	Fayez Sarofim & Co.	$1,557,269	3.8%
Large-Cap Core	Atalanta Sosnoff Capital	$2,023,186	5.0%
Mid-Cap Core	Madison Investment Advisors	$2,585,933	6.3%
Small-Cap Growth	RBC Global Asset Management	$2,122,549	5.2%
Total U.S. Equity		**$21,032,622**	**51.6%**
Non-U.S. Large-Cap Core	Ivy Int'l Core Equity Fund	$1,733,172	4.3%
Emerging Markets	Lazard Emerging Markets Equity Fund	$859,777	2.1%
Total Non-U.S. Equity		**$2,592,949**	**6.4%**
Cash Short-Term	Cash & Equivalents	$17,840	0.0%
Total Cash Equivalents		**$0**	**0.0%**
TOTAL PORTFOLIO		**$40,763,454**	**100.0%**

Park Ridge Firefighters' Pension

Current Portfolio – Fee Schedule

Asset Class	Investment Manager	Fee Schedule	Estimated Annual Fee [1]	Average [2]
Int. Fixed Income	McDonnell Investment Management	0.20% on the Balance	0.20% $9,147	0.30%
Core Govt. Fixed Income	Internal Fixed Income	0.00% on the Balance	0.00% $0	0.27%
All-Cap Core	Vanguard Total Stock Index Fund	0.04% on the Balance	0.04% $3,388	0.12%
All-Cap Growth	Wells Fargo	0.88% on the Balance	0.88% $15,366	0.77%
Large-Cap Value	Cambiar Investors	0.88% on the Balance	0.88% $22,250	0.63%
Large-Cap Core	Fayez Sarofim & Co.	0.88% on the Balance	0.88% $13,704	0.60%
Large-Cap Core	Atalanta Sosnoff Capital	0.88% on the Balance	0.88% $17,804	0.60%
Mid-Cap Core	Madison Investment Advisors	0.88% on the Balance	0.88% $22,756	0.73%
Small-Cap Growth	RBC Global Asset Management	0.88% on the Balance	0.88% $18,678	0.97%
Non-U.S. Large-Cap Core	Ivy Int'l Core Equity Fund	1.02% on the Balance	1.02% $17,678	0.97%
Emerging Markets	Lazard Emerging Markets Equity Fund	1.09% on the Balance	1.09% $9,372	1.27%
Total Investment Management Fees			**0.37%** **$150,144**	**0.43%**
Investment Consultant	Graystone Consulting	0.10% Fixed Income consulting fee (excludes Internal Account)	$4,573	
		0.30% SB Advisors mutual fund fee	$33,186	
		0.88% Fiduciary Services equity accounts (custody, manager, transactions, consulting)	$110,559	
Total Graystone Consulting Minus Fiduciary Services			$37,760	
Total Fund			**0.46%** **$187,904**	

[1] Expense Ratio & Estimated Annual Fee are Based on Market Value at Quarter End.

[2] Source: Marquette Associates Investment Management Fee Study.

Asset Class	Investment Manager	Proposed Market Value	Proposed Allocation
Int. Fixed Income	Active Manager - TBD	$14,267,209	35.0%
Total Fixed Income		**$14,267,209**	**35.0%**
Large-Cap Core	Vanguard Institutional Index Fund - Passive	$4,076,345	10.0%
Large-Cap Value	Vanguard Value Index Fund - Passive	$4,076,345	10.0%
Mid-Cap Core	Vanguard Mid-Cap Index Fund - Passive	$3,057,259	7.5%
Small-Cap Core	Vanguard Small-Cap Index Fund - Passive	$3,057,259	7.5%
Total U.S. Equity		**$14,267,209**	**35.0%**
Non-U.S. Large-Cap Core	Vanguard Total Intl Stock Index Fund - Passive	$4,173,196	10.0%
Non-U.S. Small Cap	Vanguard Intl Small-Cap Index Fund - Passive	$1,549,011	3.8%
Emerging Markets	Vanguard Emerging Markets Index Fund - Passive	$1,549,011	3.8%
Total Non-U.S. Equity		**$7,271,219**	**17.5%**
Core Real Estate	Principal U.S. Property Fund	$4,076,345	10.0%
Total Real Estate		**$4,076,345**	**10.0%**
Global Tactical	Active Manager - TBD	$1,019,086	2.5%
Total Global Tactical		**$1,019,086**	**2.5%**
Cash Short-Term	Cash & Equivalents	$0	0.0%
Total Cash Equivalents		**$0**	**0.0%**
TOTAL PORTFOLIO		**$40,763,454**	**100.0%**

Park Ridge Firefighters' Pension — Proposed Portfolio — Fee Schedule

Asset Class	Investment Manager	Fee Schedule	Expense Ratio & Estimated Annual Fee [1]	Industry Average [2]
Int. Fixed Income	Active Manager - TBD	0.20% on the Balance	0.20% $28,534	0.30%
Large-Cap Core	Vanguard Institutional Index Fund - Passive	0.04% on the Balance	0.04% $1,631	0.12%
Large-Cap Value	Vanguard Value Index Fund - Passive	0.09% on the Balance	0.09% $3,669	0.12%
Mid-Cap Core	Vanguard Mid-Cap Index Fund - Passive	0.09% on the Balance	0.09% $2,752	0.12%
Small-Cap Core	Vanguard Small-Cap Index Fund - Passive	0.09% on the Balance	0.09% $2,752	0.12%
Non-U.S. Large-Cap Core	Vanguard Total Intl Stock Index Fund - Passive	0.14% on the Balance	0.14% $5,842	0.18%
Non-U.S. Small Cap	Vanguard Intl Small-Cap Index Fund - Passive	0.37% on the Balance	0.37% $5,731	0.21%
Emerging Markets	Vanguard Emerging Markets Index Fund - Passive	0.15% on the Balance	0.15% $2,324	0.21%
Core Real Estate	Principal U.S. Property Fund	1.10% on the Balance	1.10% $44,840	1.01%
Global Tactical	Active Manager - TBD	0.87% on the Balance	0.87% $8,866	0.80%
Total Investment Management Fees			**0.26%** **$106,940**	**0.30%**
Custodian	US Bank	0.025% on the Balance	0.03% $10,191	
Investment Consultant	Marquette Associates	0.15% on the Balance	0.15% $61,145	
Total Fund			**0.44%** **$178,276**	

[1] Expense Ratio & Estimated Annual Fee are Based on Market Value at Quarter End.

[2] Source: Marquette Associates Investment Management Fee Study

MarquetteAssociates

Pension Fund

Park Ridge Firefighters

Pension Fund

Executive Summary

June 30, 2015

Manager Status

Market Value: $40.8 Million and 100.0% of Fund

Investment Manager	Asset Class	Status	Reason
McDonnell Investment Management	Int. Fixed Income	In Compliance	---
Internal Fixed Income	Core Govt. Fixed Income	In Compliance	---
Vanguard Total Stock Index Fund	All-Cap Core	In Compliance	---
Wells Fargo	All-Cap Growth	In Compliance	---
Cambiar Investors	Large-Cap Value	In Compliance	---
Fayez Sarofim & Co.	Large-Cap Core	In Compliance	---
Atalanta Sosnoff Capital	Large-Cap Core	In Compliance	---
Madison Investment Advisors	Mid-Cap Core	In Compliance	---
RBC Global Asset Management	Small-Cap Growth	In Compliance	---
Ivy Int'l Core Equity Fund	Non-U.S. Large-Cap Core	In Compliance	---
Lazard Emerging Markets Equity Fund	Emerging Markets	In Compliance	---

Open-End Investment Manager Evaluation Terminology

The following terminology has been developed by Marquette Associates to facilitate efficient communication among the Investment Manager, Investment Consultant, and the Plan Sponsor. Each term signifies a particular status with the Fund and any conditions that may require improvement. In each case, communication is made only after consultation with the Trustees and/or the Investment Committee of the Plan.

In Compliance – The investment manager states it is acting in accordance with the Investment Policy Guidelines.

Alert – The investment manager is notified of a problem in performance (usually related to a benchmark or volatility measure), a change in investment characteristics, an alteration in management style or key investment professionals, and/or any other irregularities.

On Notice – The investment manager is notified of continued concern with one or more Alert issues. Failure to improve upon stated issues within a specific time frame justifies termination.

Termination – The Trustees have decided to terminate the investment manager. The investment manager is notified and transition plans are in place.

Total Fund Composite

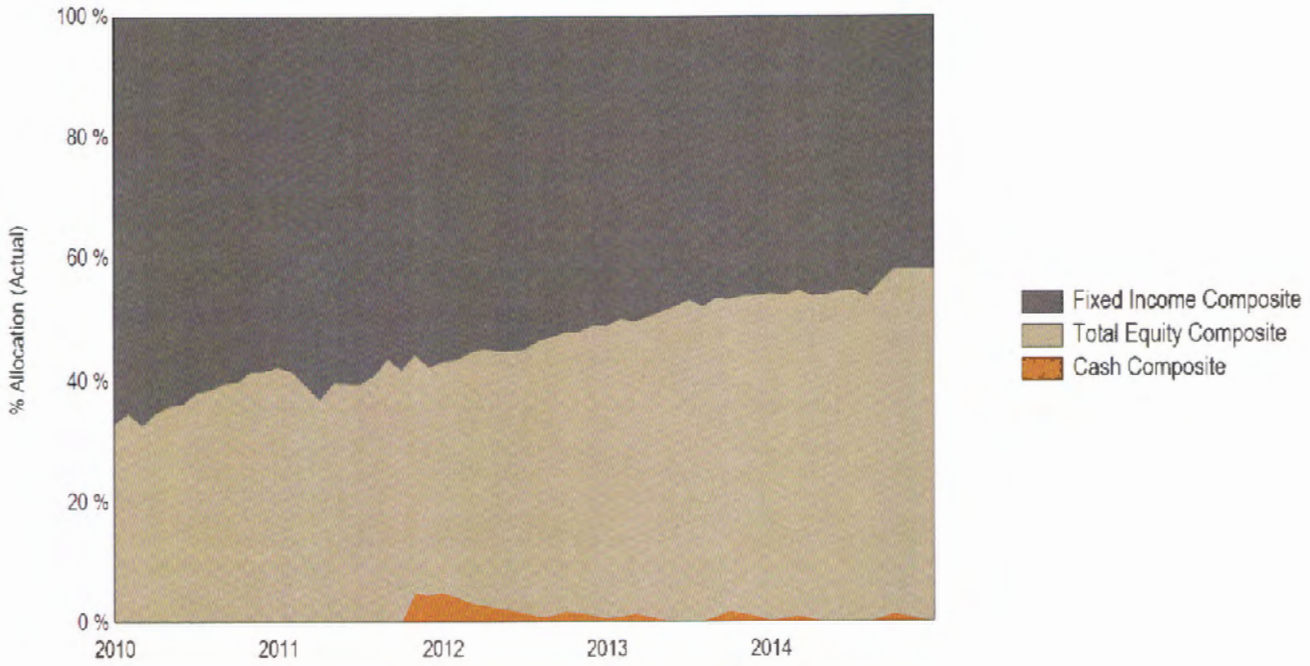
Market Value: $40.8 Million and 100.0% of Fund

Ending June 30, 2015

	Asset Class	Market Value ($)	3 Mo Net Cash Flows ($)	% of Portfolio	Policy %	Policy Difference ($)
Total Fund Composite		**40,763,454**	**-638,312**	**100.0**	**100.0**	**0**
Fixed Income Composite		**17,120,042**	**-448,356**	**42.0**	**43.0**	**-408,243**
McDonnell Investment Management	Int. Fixed Income	4,573,440	-3,468	11.2		
Internal Fixed Income	Core Govt. Fixed Income	12,546,602	-55,000	30.8		
Total Equity Composite		**23,625,571**	**-34,338**	**58.0**	**57.0**	**390,403**
U.S. Equity Composite		**21,032,622**	**-34,338**	**51.6**	**51.0**	**243,261**
Vanguard Total Stock Index Fund	All-Cap Core	8,469,079	0	20.8		
Wells Fargo	All-Cap Growth	1,746,163	-3,928	4.3		
Cambiar Investors	Large-Cap Value	2,528,443	-5,636	6.2		
Fayez Sarofim & Co	Large-Cap Core	1,557,269	-9,754	3.8		
Atalanta Sosnoff Capital	Large-Cap Core	2,023,186	-4,543	5.0		
Madison Investment Advisors	Mid-Cap Core	2,585,933	-5,863	6.3		
RBC Global Asset Management	Small-Cap Growth	2,122,549	-4,614	5.2		
Non- U.S. Equity Composite		**2,592,949**	**0**	**6.4**	**6.0**	**147,142**
Ivy Int'l Core Equity Fund	Non-U.S. Large-Cap Core	1,733,172	0	4.3		
Lazard Emerging Markets Equity Fund	Emerging Markets	859,777	0	2.1		
Cash Composite		**17,840**	**-535,506**	**0.0**	**0.0**	**17,840**
Morgan Stanley Investment Management	Cash & Equivalents	17,840	-535,506	0.0		

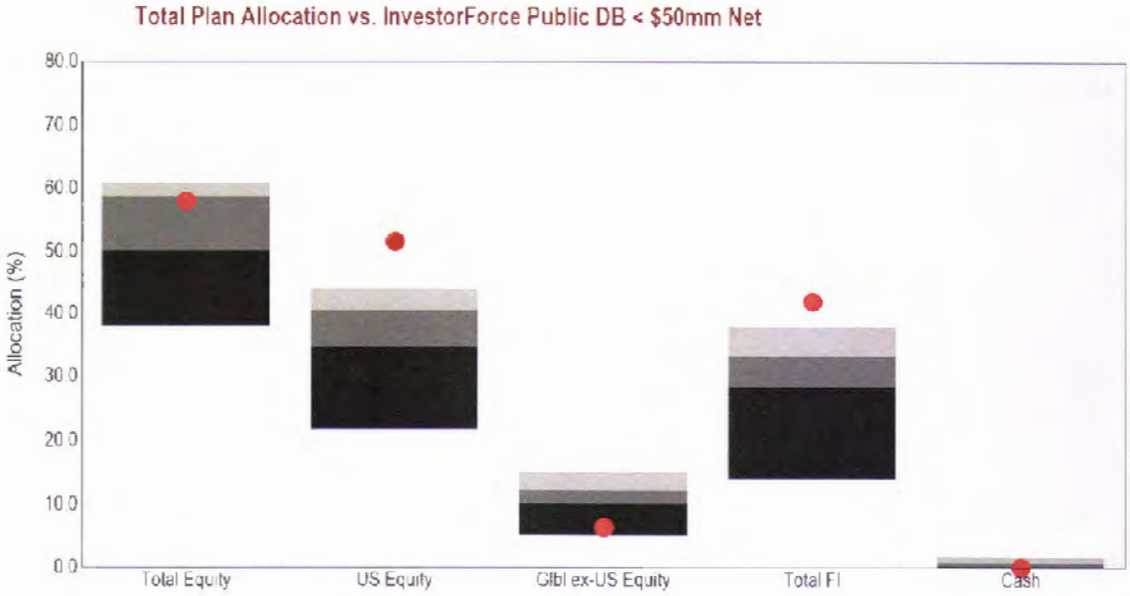
Market Value: $40.8 Million and 100.0% of Fund

Historic Asset Allocation



	Current	Policy	Difference	%
Fixed Income	$17,120,042	$17,528,285	-$408,243	-1.0%
U.S. Equity	$21,032,622	$20,789,361	$243,261	0.6%
Non-U.S. Equity	$2,592,949	$2,445,807	$147,142	0.4%
Other	$17,840	$0	$17,840	0.0%
Total	**$40,763,454**	**$40,763,454**		

Market Value: $40.8 Million and 100.0% of Fund

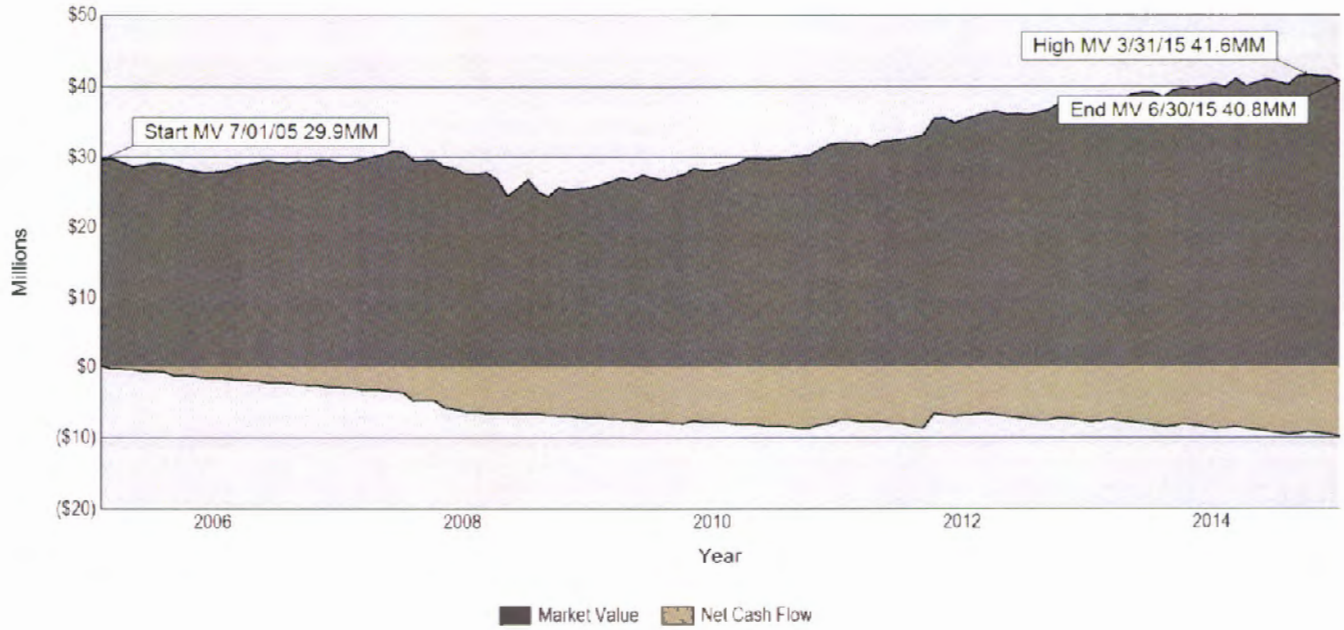


	Allocation (Rank)									
5th Percentile	69.8		48.6		21.6		51.5		5.9	
25th Percentile	61.0		44.0		15.2		37.9		1.7	
Median	58.6		40.6		12.2		33.3		0.8	
75th Percentile	50.1		34.7		10.1		28.4		0.2	
95th Percentile	38.0		21.8		5.0		14.0		0.0	
# of Portfolios	74		70		64		74		66	
● Total Fund Composite	58.0	(52)	51.6	(3)	6.4	(92)	42.0	(12)	0.0	(83)

Total Fund Composite

Market Value History

Market Value: $40.8 Million and 100.0% of Fund



Summary of Cash Flows

Sources of Portfolio Growth	Second Quarter	Year-To-Date	One Year	Three Years	Five Years
Beginning Market Value	**$41,620,470.73**	**$40,681,992.59**	**$40,350,194.06**	**$35,425,057.59**	**$28,190,151.78**
Net Additions/Withdrawals	-$638,312.18	-$503,820.86	-$1,108,373.53	-$2,980,956.81	-$1,974,913.34
Investment Earnings	-$218,705.04	$585,281.78	$1,521,632.98	$8,319,352.73	$14,548,215.07
Ending Market Value	**$40,763,453.51**	**$40,763,453.51**	**$40,763,453.51**	**$40,763,453.51**	**$40,763,453.51**

Total Fund Composite

Annualized Performance (Gross of Fees)

Market Value: $40.8 Million and 100.0% of Fund

Ending June 30, 2015

	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund Composite	**-0.5**	**1.4**	**3.8**	**7.8**	**7.5**	**7.8**	**8.6**	**7.0**	**6.3**
Policy Benchmark	*-0.5*	*1.1*	*4.4*	*8.1*	*7.9*	*7.7*	*8.7*	*6.7*	*6.0*
Actuarial Rate	*1.6*	*3.3*	*6.8*	*6.6*	*6.6*	*6.6*	*6.6*	*6.5*	*6.5*
Fixed Income Composite	**-1.4**	**0.3**	**2.3**	**2.4**	**1.0**	**3.8**	**3.6**	**4.9**	**4.9**
Barclays Govt/Credit	*-2.1*	*-0.3*	*1.7*	*3.0*	*1.8*	*3.5*	*3.5*	*4.6*	*4.4*
Total Equity Composite	**0.1**	**2.4**	**5.0**	**13.0**	**14.9**	**11.7**	**15.2**	**8.8**	**7.8**
MSCI ACWI	*0.3*	*2.7*	*0.7*	*11.3*	*13.0*	*7.8*	*11.9*	*4.8*	*6.4*
U.S. Equity Composite	**0.0**	**2.1**	**6.4**	**13.6**	**15.6**	**12.6**	**16.0**	**9.4**	**8.2**
S&P 500	*0.3*	*1.2*	*7.4*	*15.7*	*17.3*	*14.2*	*17.3*	*9.4*	*7.9*
Non- U.S. Equity Composite	**1.6**	**4.4**	**-4.5**	**8.6**	**--**	**--**	**--**	**--**	**--**
MSCI EAFE	*0.6*	*5.5*	*-4.2*	*8.8*	*12.0*	*4.9*	*9.5*	*2.0*	*5.1*

Total Fund Composite

Calendar Performance (Gross of Fees)

Market Value: $40.8 Million and 100.0% of Fund

	Calendar Year										
	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Total Fund Composite	**6.5**	**11.5**	**8.2**	**7.8**	**11.2**	**4.8**	**-3.6**	**9.8**	**5.9**	--	--
Policy Benchmark	*8.4*	*11.5*	*7.4*	*6.4*	*9.3*	*6.1*	*-4.7*	*8.0*	*6.5*	*3.3*	*5.3*
Actuarial Rate	*6.7*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*
Fixed Income Composite	**5.6**	**-3.4**	**4.0**	**12.5**	**8.7**	**-5.5**	**16.1**	**10.6**	**3.0**	--	--
Barclays Govt/Credit	*6.0*	*-2.4*	*4.8*	*8.7*	*6.6*	*4.5*	*5.7*	*7.2*	*3.8*	*2.4*	*4.2*
Total Equity Composite	**7.2**	**29.8**	**14.2**	**1.8**	**15.3**	**29.9**	**-33.5**	**8.2**	**14.8**	--	--
MSCI ACWI	*4.2*	*22.8*	*16.1*	*-7.3*	*12.7*	*34.6*	*-42.2*	*11.7*	*21.0*	*10.9*	*15.3*
U.S. Equity Composite	**8.4**	**31.8**	**14.4**	**2.9**	**15.3**	**27.4**	**-32.0**	**8.5**	**14.3**	--	--
S&P 500	*13.7*	*32.4*	*16.0*	*2.1*	*15.1*	*26.5*	*-37.0*	*5.5*	*15.8*	*4.9*	*10.9*
Non- U.S. Equity Composite	**-0.6**	**10.7**	--	--	--	--	--	--	--	--	--
MSCI EAFE	*-4.9*	*22.8*	*17.3*	*-12.1*	*7.8*	*31.8*	*-43.4*	*11.2*	*26.3*	*13.6*	*20.2*

Total Fund Composite

Calendar Performance (Gross of Fees)

Market Value: $40.8 Million and 100.0% of Fund

	Fiscal YTD	Fiscal 2015	Fiscal 2014	Fiscal 2013	Fiscal 2012	Fiscal 2011	Fiscal 2010	Fiscal 2009	Fiscal 2008	Fiscal 2007	Fiscal 2006	Fiscal 2005
	Fiscal Year (May 1)											
Total Fund Composite	-0.6	7.6	6.9	8.2	9.9	11.2	13.7	-8.2	7.2	10.3	0.5	--
Policy Benchmark	*-1.0*	*8.2*	*7.7*	*8.7*	*6.9*	*9.6*	*12.4*	*-7.0*	*5.5*	*8.9*	*3.9*	*5.3*
Actuarial Rate	*1.1*	*6.8*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*
Fixed Income Composite	-1.1	4.5	-2.0	3.3	14.6	6.5	3.1	5.8	11.1	8.8	-2.5	--
Barclays Govt/Credit	*-1.6*	*4.4*	*-0.7*	*4.4*	*8.6*	*5.4*	*8.6*	*2.6*	*7.1*	*7.3*	*0.2*	*5.1*
Total Equity Composite	-0.2	10.4	16.7	14.2	3.2	18.6	37.3	-29.3	-1.6	14.4	10.4	--
MSCI ACWI	*-2.5*	*7.5*	*14.4*	*15.0*	*-5.7*	*18.5*	*39.3*	*-39.7*	*-0.1*	*17.1*	*26.5*	*11.0*
U.S. Equity Composite	0.1	11.2	17.4	14.8	4.2	18.9	35.8	-28.3	-1.6	14.0	10.4	--
S&P 500	*-0.7*	*13.0*	*20.4*	*16.9*	*4.8*	*17.2*	*38.8*	*-35.3*	*-4.7*	*15.2*	*15.4*	*6.3*
Non- U.S. Equity Composite	-2.9	4.7	8.8	--	--	--	--	--	--	--	--	--
MSCI EAFE	*-3.3*	*1.7*	*13.4*	*19.4*	*-12.8*	*19.2*	*34.4*	*-42.8*	*-1.8*	*19.8*	*33.5*	*15.0*

Investment Manager

Annualized Performance (Gross of Fees)

Market Value: $40.8 Million and 100.0% of Fund

Ending June 30, 2015

	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund Composite	**-0.5**	**1.4**	**3.8**	**7.8**	**7.5**	**7.8**	**8.6**	**7.0**	**6.3**
Policy Benchmark	*-0.5*	*1.1*	*4.4*	*8.1*	*7.9*	*7.7*	*8.7*	*6.7*	*6.0*
Actuarial Rate	*1.6*	*3.3*	*6.8*	*6.6*	*6.6*	*6.6*	*6.6*	*6.5*	*6.5*
Fixed Income Composite	**-1.4**	**0.3**	**2.3**	**2.4**	**1.0**	**3.8**	**3.6**	**4.9**	**4.9**
Barclays Govt/Credit	*-2.1*	*-0.3*	*1.7*	*3.0*	*1.8*	*3.5*	*3.5*	*4.6*	*4.4*
McDonnell Investment Management	-1.1	0.7	1.4	--	--	--	--	--	--
Barclays Int Credit	*-0.9*	*0.8*	*1.5*	*3.3*	*2.9*	*3.7*	*4.2*	*5.4*	*4.8*
Internal Fixed Income	-1.6	0.1	2.5	2.4	1.0	--	--	--	--
Barclays Government	*-1.5*	*0.1*	*2.3*	*2.2*	*0.9*	*2.7*	*2.6*	*3.7*	*4.0*
Barclays Int Govt/Credit	*-0.6*	*0.8*	*1.7*	*2.3*	*1.6*	*2.5*	*2.8*	*3.9*	*4.0*
Total Equity Composite	**0.1**	**2.4**	**5.0**	**13.0**	**14.9**	**11.7**	**15.2**	**8.8**	**7.8**
MSCI ACWI	*0.3*	*2.7*	*0.7*	*11.3*	*13.0*	*7.8*	*11.9*	*4.8*	*6.4*
U.S. Equity Composite	**0.0**	**2.1**	**6.4**	**13.6**	**15.6**	**12.6**	**16.0**	**9.4**	**8.2**
S&P 500	*0.3*	*1.2*	*7.4*	*15.7*	*17.3*	*14.2*	*17.3*	*9.4*	*7.9*
Vanguard Total Stock Index Fund	0.1	1.9	7.1	--	--	--	--	--	--
Russell 3000	*0.1*	*1.9*	*7.3*	*15.9*	*17.7*	*14.1*	*17.5*	*9.7*	*8.2*
Wells Fargo	0.4	3.6	5.9	16.3	17.3	13.3	18.2	10.7	--
Russell 3000 Growth	*0.3*	*4.3*	*10.7*	*18.4*	*18.2*	*14.7*	*18.6*	*10.6*	*9.2*
Cambiar Investors	1.9	4.1	4.9	13.3	17.5	9.2	13.5	6.9	--
Russell 1000 Value	*0.1*	*-0.6*	*4.1*	*13.5*	*17.3*	*13.6*	*16.5*	*8.6*	*7.0*
Fayez Sarofim & Co.	-0.3	-1.9	1.3	10.0	10.8	10.6	14.7	7.4	7.1
S&P 500	*0.3*	*1.2*	*7.4*	*15.7*	*17.3*	*14.2*	*17.3*	*9.4*	*7.9*
Atalanta Sosnoff Capital	0.7	1.3	6.4	13.6	16.5	12.2	13.4	8.6	--
S&P 500	*0.3*	*1.2*	*7.4*	*15.7*	*17.3*	*14.2*	*17.3*	*9.4*	*7.9*
Madison Investment Advisors	-3.1	1.5	8.6	14.3	17.1	13.9	18.6	11.4	9.6
Russell MidCap	*-1.5*	*2.4*	*6.6*	*16.3*	*19.3*	*13.7*	*18.2*	*10.5*	*9.4*
RBC Global Asset Management	0.1	5.0	8.4	13.8	18.0	14.8	19.6	13.5	--
Russell 2000 Growth	*2.0*	*8.7*	*12.3*	*18.4*	*20.1*	*13.9*	*19.3*	*11.5*	*9.9*
Non- U.S. Equity Composite	**1.6**	**4.4**	**-4.5**	**8.6**	**--**	**--**	**--**	**--**	**--**
MSCI EAFE	*0.6*	*5.5*	*-4.2*	*8.8*	*12.0*	*4.9*	*9.5*	*2.0*	*5.1*
Ivy Int'l Core Equity Fund	2.0	7.4	0.5	13.8	15.1	--	--	--	--
MSCI EAFE	*0.6*	*5.5*	*-4.2*	*8.8*	*12.0*	*4.9*	*9.5*	*2.0*	*5.1*
Lazard Emerging Markets Equity Fund	0.9	-1.0	-13.1	1.4	2.1	-1.3	3.8	1.6	--
MSCI Emerging Markets	*0.7*	*2.9*	*-5.1*	*4.1*	*3.7*	*-1.6*	*3.7*	*0.9*	*8.1*

Calendar Performance (Gross of Fees)

Market Value: $40.8 Million and 100.0% of Fund

	Calendar Year								
	2014	2013	2012	2011	2010	2009	2008	2007	2006
Total Fund Composite	**6.5**	**11.5**	**8.2**	**7.8**	**11.2**	**4.8**	**-3.6**	**9.8**	**5.9**
Policy Benchmark	*8.4*	*11.5*	*7.4*	*6.4*	*9.3*	*6.1*	*-4.7*	*8.0*	*6.5*
Actuarial Rate	*6.7*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*
Fixed Income Composite	**5.6**	**-3.4**	**4.0**	**12.5**	**8.7**	**-5.5**	**16.1**	**10.6**	**3.0**
Barclays Govt/Credit	*6.0*	*-2.4*	*4.8*	*8.7*	*6.6*	*4.5*	*5.7*	*7.2*	*3.8*
McDonnell Investment Management	--	--	--	--	--	--	--	--	--
Barclays Int Credit	*4.2*	*-0.2*	*8.1*	*5.4*	*7.8*	*15.9*	*-2.8*	*5.6*	*4.5*
Internal Fixed Income	5.7	-3.5	--	--	--	--	--	--	--
Barclays Government	*4.9*	*-2.6*	*2.0*	*9.0*	*5.5*	*-2.2*	*12.4*	*8.7*	*3.5*
Barclays Int Govt/Credit	*3.1*	*-0.9*	*3.9*	*5.8*	*5.9*	*5.2*	*5.1*	*7.4*	*4.1*
Total Equity Composite	**7.2**	**29.8**	**14.2**	**1.8**	**15.3**	**29.9**	**-33.5**	**8.2**	**14.8**
MSCI ACWI	*4.2*	*22.8*	*16.1*	*-7.3*	*12.7*	*34.6*	*-42.2*	*11.7*	*21.0*
U.S. Equity Composite	**8.4**	**31.8**	**14.4**	**2.9**	**15.3**	**27.4**	**-32.0**	**8.5**	**14.3**
S&P 500	*13.7*	*32.4*	*16.0*	*2.1*	*15.1*	*26.5*	*-37.0*	*5.5*	*15.8*
Vanguard Total Stock Index Fund	12.4	--	--	--	--	--	--	--	--
Russell 3000	*12.6*	*33.6*	*16.4*	*1.0*	*16.9*	*28.3*	*-37.3*	*5.1*	*15.7*
Wells Fargo	5.1	39.0	20.8	-3.4	27.7	28.0	-37.2	11.7	--
Russell 3000 Growth	*12.4*	*34.2*	*15.2*	*2.2*	*17.6*	*37.0*	*-38.4*	*11.4*	*9.5*
Cambiar Investors	8.8	31.7	7.9	-7.2	16.6	34.9	-34.4	3.4	--
Russell 1000 Value	*13.5*	*32.5*	*17.5*	*0.4*	*15.5*	*19.7*	*-36.8*	*-0.2*	*22.2*
Fayez Sarofim & Co.	9.6	23.4	10.5	10.0	14.7	22.6	-32.2	7.0	16.3
S&P 500	*13.7*	*32.4*	*16.0*	*2.1*	*15.1*	*26.5*	*-37.0*	*5.5*	*15.8*
Atalanta Sosnoff Capital	8.2	34.8	16.0	-6.2	6.8	31.2	-29.7	11.0	--
S&P 500	*13.7*	*32.4*	*16.0*	*2.1*	*15.1*	*26.5*	*-37.0*	*5.5*	*15.8*
Madison Investment Advisors	11.2	32.1	16.2	8.1	23.4	24.1	-35.1	11.6	17.9
Russell MidCap	*13.2*	*34.8*	*17.3*	*-1.5*	*25.5*	*40.5*	*-41.5*	*5.6*	*15.3*
RBC Global Asset Management	0.4	43.5	21.5	4.8	27.4	33.7	-30.0	7.4	--
Russell 2000 Growth	*5.6*	*43.3*	*14.6*	*-2.9*	*29.1*	*34.5*	*-38.5*	*7.0*	*13.3*
Non- U.S. Equity Composite	**-0.6**	**10.7**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MSCI EAFE	*-4.9*	*22.8*	*17.3*	*-12.1*	*7.8*	*31.8*	*-43.4*	*11.2*	*26.3*
Ivy Int'l Core Equity Fund	1.4	24.9	14.0	--	--	--	--	--	--
MSCI EAFE	*-4.9*	*22.8*	*17.3*	*-12.1*	*7.8*	*31.8*	*-43.4*	*11.2*	*26.3*
Lazard Emerging Markets Equity Fund	-4.2	-0.8	22.4	-17.8	22.8	69.8	--	--	--
MSCI Emerging Markets	*-2.2*	*-2.6*	*18.2*	*-18.4*	*18.9*	*78.5*	*-53.3*	*39.4*	*32.2*

Total Fund Composite

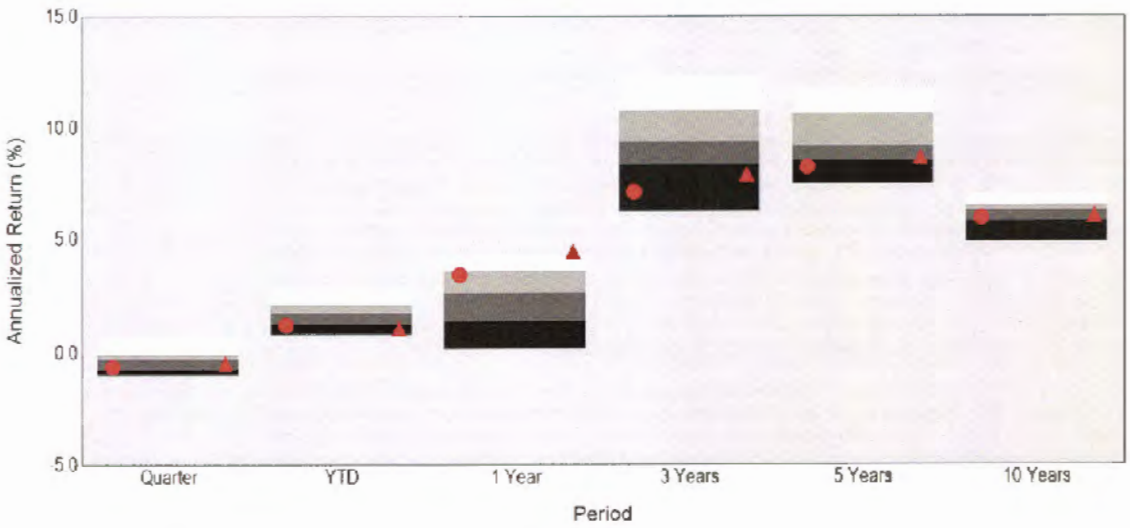
Annualized Performance (Net of Fees)

Market Value: $40.8 Million and 100.0% of Fund

Ending June 30, 2015

	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund Composite	**-0.6**	**1.3**	**3.5**	**7.4**	**7.1**	**7.4**	**8.2**	**6.6**	**5.9**
Policy Benchmark	*-0.5*	*1.1*	*4.4*	*8.1*	*7.9*	*7.7*	*8.7*	*6.7*	*6.0*
Actuarial Rate	*1.6*	*3.3*	*6.8*	*6.6*	*6.6*	*6.6*	*6.6*	*6.5*	*6.5*
InvestorForce Public DB < $50mm Net Rank	*66*	*75*	*30*	*74*	*88*	*52*	*84*	*26*	*66*
Fixed Income Composite	**-1.5**	**0.2**	**2.3**	**2.4**	**1.0**	**3.8**	**3.6**	**4.9**	**4.9**
Barclays Govt/Credit	*-2.1*	*-0.3*	*1.7*	*3.0*	*1.8*	*3.5*	*3.5*	*4.6*	*4.4*
InvestorForce Public DB US Fix Inc Net Rank	*79*	*69*	*10*	*74*	*95*	*53*	*62*	*54*	*50*
Total Equity Composite	**0.0**	**2.2**	**4.4**	**12.3**	**14.1**	**10.9**	**14.4**	**8.0**	**6.9**
MSCI ACWI	*0.3*	*2.7*	*0.7*	*11.3*	*13.0*	*7.8*	*11.9*	*4.8*	*6.4*
InvestorForce Public DB Total Eq Net Rank	*68*	*80*	*39*	*48*	*68*	*18*	*27*	*19*	*47*
U.S. Equity Composite	**-0.1**	**1.9**	**5.8**	**12.8**	**14.8**	**11.8**	**15.4**	**8.8**	**7.6**
S&P 500	*0.3*	*1.2*	*7.4*	*15.7*	*17.3*	*14.2*	*17.3*	*9.4*	*7.9*
InvestorForce Public DB US Eq Net Rank	*74*	*67*	*77*	*94*	*97*	*90*	*94*	*78*	*77*
Non- U.S. Equity Composite	**1.6**	**4.4**	**-4.5**	**8.6**	**--**	**--**	**--**	**--**	**--**
MSCI EAFE	*0.6*	*5.5*	*-4.2*	*8.8*	*12.0*	*4.9*	*9.5*	*2.0*	*5.1*
InvestorForce Public DB ex-US Eq Net Rank	*30*	*67*	*70*	*32*	*--*	*--*	*--*	*--*	*--*

InvestorForce Public DB < $50mm Net Accounts



	Return					
5th Percentile	0.7	2.8	4.2	12.2	11.6	7.0
25th Percentile	-0.1	2.1	3.6	10.8	10.6	6.5
Median	-0.3	1.8	2.7	9.3	9.1	6.3
75th Percentile	-0.7	1.3	1.4	8.3	8.5	5.8
95th Percentile	-1.0	0.8	0.2	6.2	7.4	4.9
# of Portfolios	78	73	67	49	35	24
● **Total Fund Composite**	-0.6	1.3	3.5	7.1	8.2	5.9
▲ **Policy Benchmark**	-0.5	1.1	4.4	7.9	8.7	6.0

Total Fund Composite

Calendar Performance (Net of Fees)

Market Value: $40.8 Million and 100.0% of Fund

	Calendar Year										
	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Total Fund Composite	**6.1**	**11.1**	**7.8**	**7.5**	**10.9**	**4.5**	**-3.9**	**9.5**	**5.7**	--	--
Policy Benchmark	*8.4*	*11.5*	*7.4*	*6.4*	*9.3*	*6.1*	*-4.7*	*8.0*	*6.5*	*3.3*	*5.3*
Actuarial Rate	*6.7*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*
InvestorForce Public DB < $50mm Net Rank	*32*	*89*	*96*	*1*	*62*	*99*	*1*	*28*	*98*	--	--
Fixed Income Composite	**5.6**	**-3.4**	**4.0**	**12.5**	**8.7**	**-5.5**	**16.1**	**10.6**	**3.0**	--	--
Barclays Govt/Credit	*6.0*	*-2.4*	*4.8*	*8.7*	*6.6*	*4.5*	*5.7*	*7.2*	*3.8*	*2.4*	*4.2*
InvestorForce Public DB US Fix Inc Net Rank	*30*	*95*	*75*	*3*	*35*	*99*	*1*	*1*	*95*	--	--
Total Equity Composite	**6.6**	**28.9**	**13.3**	**0.9**	**14.4**	**28.8**	**-34.1**	**7.3**	**13.8**	--	--
MSCI ACWI	*4.2*	*22.8*	*16.1*	*-7.3*	*12.7*	*34.6*	*-42.2*	*11.7*	*21.0*	*10.9*	*15.3*
InvestorForce Public DB Total Eq Net Rank	*46*	*53*	*96*	*11*	*81*	*71*	*6*	*83*	*77*	--	--
U.S. Equity Composite	**7.6**	**30.7**	**13.6**	**2.6**	**14.9**	**26.8**	**-32.4**	**8.0**	**13.9**	--	--
S&P 500	*13.7*	*32.4*	*16.0*	*2.1*	*15.1*	*26.5*	*-37.0*	*5.5*	*15.8*	*4.9*	*10.9*
InvestorForce Public DB US Eq Net Rank	*90*	*99*	*89*	*11*	*92*	*75*	*6*	*8*	*56*	--	--
Non- U.S. Equity Composite	**-0.6**	**10.7**	--	--	--	--	--	--	--	--	--
MSCI EAFE	*-4.9*	*22.8*	*17.3*	*-12.1*	*7.8*	*31.8*	*-43.4*	*11.2*	*26.3*	*13.6*	*20.2*
InvestorForce Public DB ex-US Eq Net Rank	*9*	*90*	--	--	--	--	--	--	--	--	--

Total Fund Composite

Calendar Performance (Net of Fees)

Market Value: $40.8 Million and 100.0% of Fund

	Fiscal Year (May 1)											
	Fiscal YTD	Fiscal 2015	Fiscal 2014	Fiscal 2013	Fiscal 2012	Fiscal 2011	Fiscal 2010	Fiscal 2009	Fiscal 2008	Fiscal 2007	Fiscal 2006	Fiscal 2005
Total Fund Composite	**-0.6**	**7.2**	**6.5**	**7.8**	**9.5**	**10.8**	**13.4**	**-8.4**	**6.9**	**10.1**	**0.3**	--
Policy Benchmark	*-1.0*	*8.2*	*7.7*	*8.7*	*6.9*	*9.6*	*12.4*	*-7.0*	*5.5*	*8.9*	*3.9*	*5.3*
Actuarial Rate	*1.1*	*6.8*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*	*6.5*
InvestorForce Public DB < $50mm Net Rank	*13*	--	--	--	--	--	--	--	--	--	--	--
Fixed Income Composite	**-1.1**	**4.4**	**-2.0**	**3.3**	**14.6**	**6.5**	**3.1**	**5.8**	**11.1**	**8.8**	**-2.5**	--
Barclays Govt/Credit	*-1.6*	*4.4*	*-0.7*	*4.4*	*8.6*	*5.4*	*8.6*	*2.6*	*7.1*	*7.3*	*0.2*	*5.1*
InvestorForce Public DB US Fix Inc Net Rank	*53*	--	--	--	--	--	--	--	--	--	--	--
Total Equity Composite	**-0.3**	**9.7**	**15.9**	**13.3**	**2.3**	**17.6**	**36.2**	**-29.9**	**-2.4**	**13.4**	**9.4**	--
MSCI ACWI	*-2.5*	*7.5*	*14.4*	*15.0*	*-5.7*	*18.5*	*39.3*	*-39.7*	*-0.1*	*17.1*	*26.5*	*11.0*
InvestorForce Public DB Total Eq Net Rank	*8*	--	--	--	--	--	--	--	--	--	--	--
U.S. Equity Composite	**0.0**	**10.5**	**16.4**	**13.8**	**3.8**	**18.5**	**35.1**	**-28.6**	**-2.0**	**13.6**	**10.1**	--
S&P 500	*-0.7*	*13.0*	*20.4*	*16.9*	*4.8*	*17.2*	*38.8*	*-35.3*	*-4.7*	*15.2*	*15.4*	*6.3*
InvestorForce Public DB US Eq Net Rank	*40*	--	--	--	--	--	--	--	--	--	--	--
Non- U.S. Equity Composite	**-2.9**	**4.7**	**8.8**	--	--	--	--	--	--	--	--	--
MSCI EAFE	*-3.3*	*1.7*	*13.4*	*19.4*	*-12.8*	*19.2*	*34.4*	*-42.8*	*-1.8*	*19.8*	*33.5*	*15.0*
InvestorForce Public DB ex-US Eq Net Rank	*35*	--	--	--	--	--	--	--	--	--	--	--

Annualized Performance (Net of Fees)

Market Value: $40.8 Million and 100.0% of Fund

Ending June 30, 2015

	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund Composite	**-0.6**	**1.3**	**3.5**	**7.4**	**7.1**	**7.4**	**8.2**	**6.8**	**5.9**
Policy Benchmark	*-0.5*	*1.1*	*4.4*	*8.1*	*7.9*	*7.7*	*8.7*	*6.7*	*6.0*
Actuarial Rate	*1.6*	*3.3*	*6.8*	*6.6*	*6.6*	*6.6*	*6.6*	*6.5*	*6.5*
InvestorForce Public DB < $50mm Net Rank	*66*	*75*	*30*	*74*	*88*	*52*	*84*	*26*	*66*
Fixed Income Composite	**-1.5**	**0.2**	**2.3**	**2.4**	**1.0**	**3.8**	**3.6**	**4.9**	**4.9**
Barclays Govt/Credit	*-2.1*	*-0.3*	*1.7*	*3.0*	*1.8*	*3.5*	*3.5*	*4.6*	*4.4*
InvestorForce Public DB US Fix Inc Net Rank	*79*	*69*	*10*	*74*	*95*	*53*	*62*	*54*	*50*
McDonnell Investment Management	-1.2	0.6	1.1	--	--	--	--	--	--
Barclays Int Credit	*-0.9*	*0.8*	*1.5*	*3.3*	*2.9*	*3.7*	*4.2*	*5.4*	*4.8*
eA US Interm Duration Fixed Inc Net Rank	*98*	*70*	*88*	--	--	--	--	--	--
Internal Fixed Income	-1.6	0.1	2.5	2.4	1.0	--	--	--	--
Barclays Government	*-1.5*	*0.1*	*2.3*	*2.2*	*0.9*	*2.7*	*2.6*	*3.7*	*4.0*
Barclays Int Govt/Credit	*-0.6*	*0.8*	*1.7*	*2.3*	*1.6*	*2.5*	*2.8*	*3.9*	*4.0*
eA US Government Fixed Inc Net Rank	*82*	*68*	*15*	*39*	*55*	--	--	--	--
Total Equity Composite	**0.0**	**2.2**	**4.4**	**12.3**	**14.1**	**10.9**	**14.4**	**8.0**	**6.9**
MSCI ACWI	*0.3*	*2.7*	*0.7*	*11.3*	*13.0*	*7.8*	*11.9*	*4.8*	*6.4*
InvestorForce Public DB Total Eq Net Rank	*68*	*80*	*39*	*48*	*68*	*18*	*27*	*19*	*47*
U.S. Equity Composite	**-0.1**	**1.9**	**5.8**	**12.8**	**14.8**	**11.8**	**15.4**	**8.8**	**7.6**
S&P 500	*0.3*	*1.2*	*7.4*	*15.7*	*17.3*	*14.2*	*17.3*	*9.4*	*7.9*
InvestorForce Public DB US Eq Net Rank	*74*	*67*	*77*	*94*	*97*	*90*	*94*	*78*	*77*
Vanguard Total Stock Index Fund	0.1	1.9	7.1	--	--	--	--	--	--
Russell 3000	*0.1*	*1.9*	*7.3*	*15.9*	*17.7*	*14.1*	*17.5*	*9.7*	*8.2*
All Cap MStar MF Rank	*55*	*62*	*43*	--	--	--	--	--	--
Wells Fargo	0.4	3.3	5.1	15.4	16.3	12.4	17.2	9.8	--
Russell 3000 Growth	*0.3*	*4.3*	*10.7*	*18.4*	*18.2*	*14.7*	*18.6*	*10.6*	*9.2*
eA US All Cap Growth Equity Net Rank	*63*	*73*	*76*	*65*	*57*	*65*	*55*	*49*	--
Cambiar Investors	1.9	3.8	4.1	12.4	16.5	8.3	12.5	6.0	--
Russell 1000 Value	*0.1*	*-0.6*	*4.1*	*13.5*	*17.3*	*13.6*	*16.5*	*8.6*	*7.0*
eA US Large Cap Value Equity Net Rank	*8*	*5*	*55*	*71*	*58*	*98*	*95*	*94*	--
Fayez Sarofim & Co.	-0.6	-2.4	0.3	9.1	9.8	9.6	13.7	6.5	6.1
S&P 500	*0.3*	*1.2*	*7.4*	*15.7*	*17.3*	*14.2*	*17.3*	*9.4*	*7.9*
eA US Large Cap Core Equity Net Rank	*68*	*98*	*98*	*97*	*98*	*95*	*95*	*96*	*98*
Atalanta Sosnoff Capital	0.6	1.0	5.7	12.8	15.6	11.3	12.4	7.7	--
S&P 500	*0.3*	*1.2*	*7.4*	*15.7*	*17.3*	*14.2*	*17.3*	*9.4*	*7.9*
eA US Large Cap Core Equity Net Rank	*25*	*71*	*75*	*88*	*76*	*89*	*97*	*87*	--
Madison Investment Advisors	-3.4	0.9	7.6	13.3	16.1	12.9	17.5	10.4	8.7
Russell MidCap	*-1.5*	*2.4*	*6.6*	*16.3*	*19.3*	*13.7*	*18.2*	*10.5*	*9.4*
eA US Mid Cap Core Equity Net Rank	*99*	*99*	*54*	*91*	*94*	*67*	*67*	*50*	*82*

Investment Manager

Annualized Performance (Net of Fees)

Market Value: $40.8 Million and 100.0% of Fund

Ending June 30, 2015

	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
RBC Global Asset Management	0.0	4.7	7.6	12.9	17.0	13.8	18.6	12.5	–
Russell 2000 Growth	*2.0*	*8.7*	*12.3*	*18.4*	*20.1*	*13.9*	*19.3*	*11.5*	*9.9*
eA US Small Cap Growth Equity Net Rank	*85*	*86*	*76*	*81*	*78*	*46*	*65*	*30*	–
Non- U.S. Equity Composite	**1.6**	**4.4**	**-4.5**	**8.6**	**–**	**–**	**–**	**–**	**–**
MSCI EAFE	*0.6*	*5.5*	*-4.2*	*8.8*	*12.0*	*4.9*	*9.5*	*2.0*	*5.1*
InvestorForce Public DB ex-US Eq Net Rank	*30*	*67*	*70*	*32*	–	–	–	–	–
Ivy Int'l Core Equity Fund	2.0	7.4	0.5	13.8	15.1	–	–	–	–
MSCI EAFE	*0.6*	*5.5*	*-4.2*	*8.8*	*12.0*	*4.9*	*9.5*	*2.0*	*5.1*
Foreign Large Blend MStar MF Rank	*19*	*18*	*11*	*2*	*5*	–	–	–	–
Lazard Emerging Markets Equity Fund	0.9	-1.0	-13.1	1.4	2.1	-1.3	3.8	1.6	–
MSCI Emerging Markets	*0.7*	*2.9*	*-5.1*	*4.1*	*3.7*	*-1.6*	*3.7*	*0.9*	*8.1*
Diversified Emerging Mkts MStar MF Rank	*46*	*86*	*95*	*78*	*76*	*47*	*57*	*28*	–

Calendar Performance (Net of Fees)

Market Value: $40.8 Million and 100.0% of Fund

	Calendar Year										
	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Total Fund Composite	**6.1**	**11.1**	**7.8**	**7.5**	**10.9**	**4.5**	**-3.9**	**9.5**	**5.7**	--	--
Policy Benchmark	8.4	11.5	7.4	6.4	9.3	6.1	-4.7	8.0	6.5	3.3	5.3
Actuarial Rate	6.7	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
InvestorForce Public DB < $50mm Net Rank	32	89	96	1	62	99	1	28	98	--	--
Fixed Income Composite	**5.6**	**-3.4**	**4.0**	**12.5**	**8.7**	**-5.5**	**16.1**	**10.6**	**3.0**	--	--
Barclays Govt/Credit	6.0	-2.4	4.8	8.7	6.6	4.5	5.7	7.2	3.8	2.4	4.2
InvestorForce Public DB US Fix Inc Net Rank	30	95	75	3	35	99	1	1	95	--	--
McDonnell Investment Management	--	--	--	--	--	--	--	--	--	--	--
Barclays Int Credit	4.2	-0.2	8.1	5.4	7.8	15.9	-2.8	5.6	4.5	1.4	4.1
eA US Interm Duration Fixed Inc Net Rank	--	--	--	--	--	--	--	--	--	--	--
Internal Fixed Income	5.7	-3.5	--	--	--	--	--	--	--	--	--
Barclays Government	4.9	-2.6	2.0	9.0	5.5	-2.2	12.4	8.7	3.5	2.7	3.5
Barclays Int Govt/Credit	3.1	-0.9	3.9	5.8	5.9	5.2	5.1	7.4	4.1	1.6	3.0
eA US Government Fixed Inc Net Rank	11	99	--	--	--	--	--	--	--	--	--
Total Equity Composite	**6.6**	**28.9**	**13.3**	**0.9**	**14.4**	**28.8**	**-34.1**	**7.3**	**13.8**	--	--
MSCI ACWI	4.2	22.8	16.1	-7.3	12.7	34.6	-42.2	11.7	21.0	10.9	15.3
InvestorForce Public DB Total Eq Net Rank	46	53	96	11	81	71	6	83	77	--	--
U.S. Equity Composite	**7.6**	**30.7**	**13.6**	**2.6**	**14.9**	**26.8**	**-32.4**	**8.0**	**13.9**	--	--
S&P 500	13.7	32.4	16.0	2.1	15.1	26.5	-37.0	5.5	15.8	4.9	10.9
InvestorForce Public DB US Eq Net Rank	90	99	89	11	92	75	6	8	56	--	--
Vanguard Total Stock Index Fund	12.4	--	--	--	--	--	--	--	--	--	--
Russell 3000	12.6	33.6	16.4	1.0	16.9	28.3	-37.3	5.1	15.7	6.1	11.9
All Cap MStar MF Rank	22	--	--	--	--	--	--	--	--	--	--
Wells Fargo	4.1	37.8	19.7	-4.3	26.6	26.9	-37.7	10.8	--	--	--
Russell 3000 Growth	12.4	34.2	15.2	2.2	17.6	37.0	-38.4	11.4	9.5	5.2	6.9
eA US All Cap Growth Equity Net Rank	70	40	13	44	33	73	24	83	--	--	--
Cambiar Investors	7.8	30.5	7.0	-8.0	15.6	33.7	-34.9	2.5	--	--	--
Russell 1000 Value	13.5	32.5	17.5	0.4	15.5	19.7	-36.8	-0.2	22.2	7.0	16.5
eA US Large Cap Value Equity Net Rank	87	72	98	94	29	18	46	68	--	--	--
Fayez Sarofim & Co.	8.7	22.4	9.5	9.1	13.7	21.5	-32.8	6.0	15.3	1.9	4.7
S&P 500	13.7	32.4	16.0	2.1	15.1	26.5	-37.0	5.5	15.8	4.9	10.9
eA US Large Cap Core Equity Net Rank	92	96	96	2	44	70	31	62	33	91	97

Investment Manager

Calendar Performance (Net of Fees)

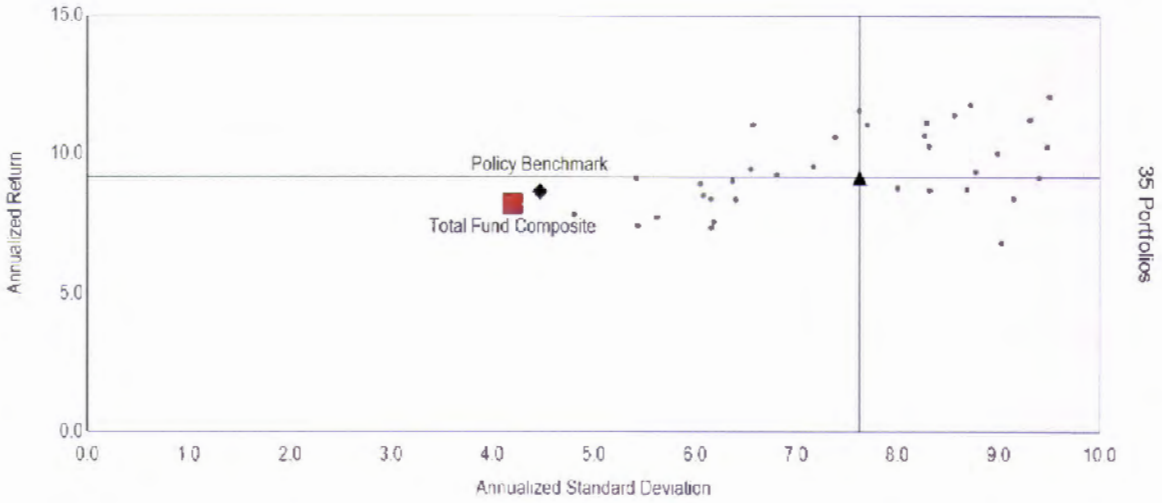
Market Value: $40.8 Million and 100.0% of Fund

	Calendar Year										
	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Atalanta Sosnoff Capital	7.3	33.6	15.0	-7.0	5.9	30.0	-30.3	10.0	--	--	--
S&P 500	*13.7*	*32.4*	*16.0*	*2.1*	*15.1*	*26.5*	*-37.0*	*5.5*	*15.8*	*4.9*	*10.9*
eA US Large Cap Core Equity Net Rank	*96*	*31*	*47*	*96*	*96*	*25*	*18*	*37*	--	--	--
Madison Investment Advisors	10.2	30.9	15.1	7.1	22.4	23.1	-35.7	10.7	16.9	-3.1	--
Russell MidCap	*13.2*	*34.8*	*17.3*	*-1.5*	*25.5*	*40.5*	*-41.5*	*5.6*	*15.3*	*12.6*	*20.2*
eA US Mid Cap Core Equity Net Rank	*36*	*77*	*41*	*5*	*59*	*99*	*28*	*34*	*8*	*99*	--
RBC Global Asset Management	-0.5	42.3	20.5	3.8	26.4	32.6	-30.6	6.5	--	--	--
Russell 2000 Growth	*5.6*	*43.3*	*14.6*	*-2.9*	*29.1*	*34.5*	*-38.5*	*7.0*	*13.3*	*4.1*	*14.3*
eA US Small Cap Growth Equity Net Rank	*72*	*76*	*10*	*13*	*62*	*60*	*5*	*62*	--	--	--
Non- U.S. Equity Composite	**-0.6**	**10.7**	--	--	--	--	--	--	--	--	--
MSCI EAFE	*-4.9*	*22.8*	*17.3*	*-12.1*	*7.8*	*31.8*	*-43.4*	*11.2*	*26.3*	*13.6*	*20.2*
InvestorForce Public DB ex-US Eq Net Rank	*9*	*90*	--	--	--	--	--	--	--	--	--
Ivy Int'l Core Equity Fund	1.4	24.9	14.0	--	--	--	--	--	--	--	--
MSCI EAFE	*-4.9*	*22.8*	*17.3*	*-12.1*	*7.8*	*31.8*	*-43.4*	*11.2*	*26.3*	*13.6*	*20.2*
Foreign Large Blend MStar MF Rank	*5*	*13*	*94*	--	--	--	--	--	--	--	--
Lazard Emerging Markets Equity Fund	-4.2	-0.8	22.4	-17.8	22.8	69.8	--	--	--	--	--
MSCI Emerging Markets	*-2.2*	*-2.6*	*18.2*	*-18.4*	*18.9*	*78.5*	*-53.3*	*39.4*	*32.2*	*34.0*	*25.6*
Diversified Emerging Mkts MStar MF Rank	*71*	*45*	*20*	*29*	*27*	*66*	--	--	--	--	--

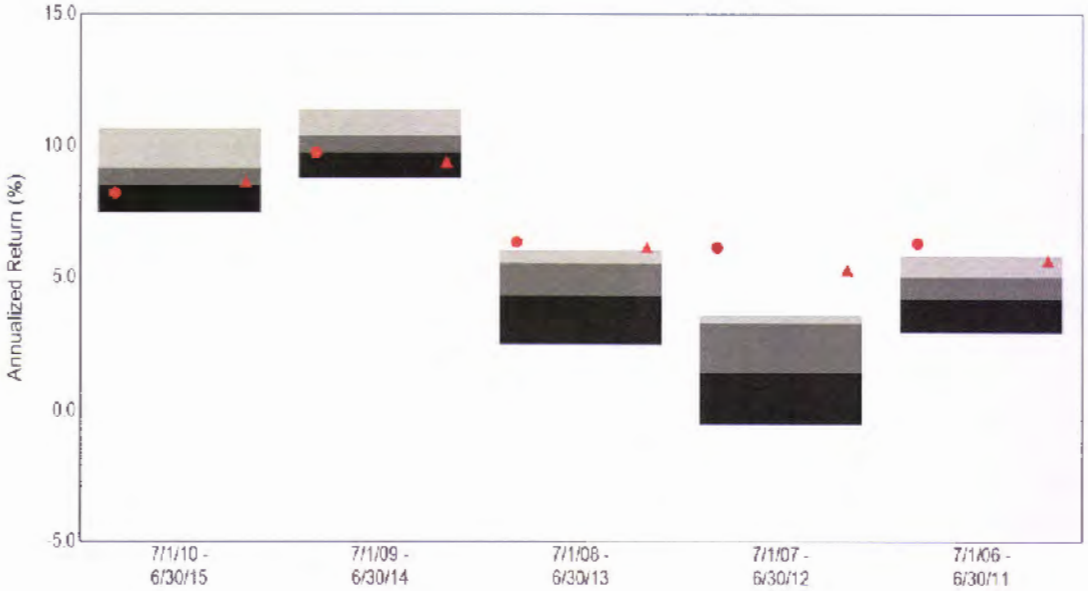
Total Fund vs. Peer Universe

Market Value: $40.8 Million and 100.0% of Fund

Annualized Return vs. Annualized Standard Deviation
5 Years Ending June 30, 2015



Rolling 5 Year Returns



	Return (Rank)									
5th Percentile	11.6		13.2		6.4		4.2		6.3	
25th Percentile	10.6		11.4		6.0		3.6		5.8	
Median	9.1		10.3		5.5		3.3		5.0	
75th Percentile	8.5		9.7		4.3		1.5		4.2	
95th Percentile	7.4		8.8		2.5		0.5		2.9	
# of Portfolios	35		27		32		33		32	
● Total Fund Composite	8.2	(84)	9.7	(74)	6.3	(10)	6.2	(1)	6.3	(5)
▲ Policy Benchmark	8.7	(72)	9.4	(88)	6.2	(22)	5.3	(1)	5.7	(33)

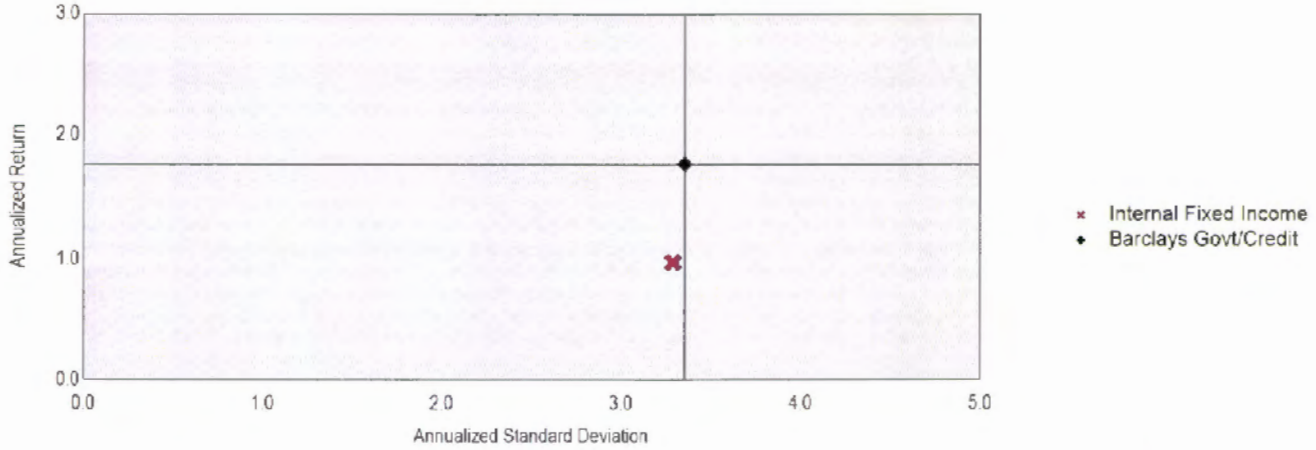
Fixed Income Composite

As of June 30, 2015

Characteristics

Market Value: $17.1 Million and 42.0% of Fund

Risk / Return - 3 Years



Characteristics

	Portfolio Q2-15	Index Q2-15
Yield to Maturity	2.0%	2.2%
Avg. Eff. Maturity	6.8 yrs.	8.3 yrs.
Avg. Duration	5.4 yrs.	6.1 yrs.
Avg. Quality	AA	--

Region	Number Of Assets
United States	66
Other	0
Total	**66**

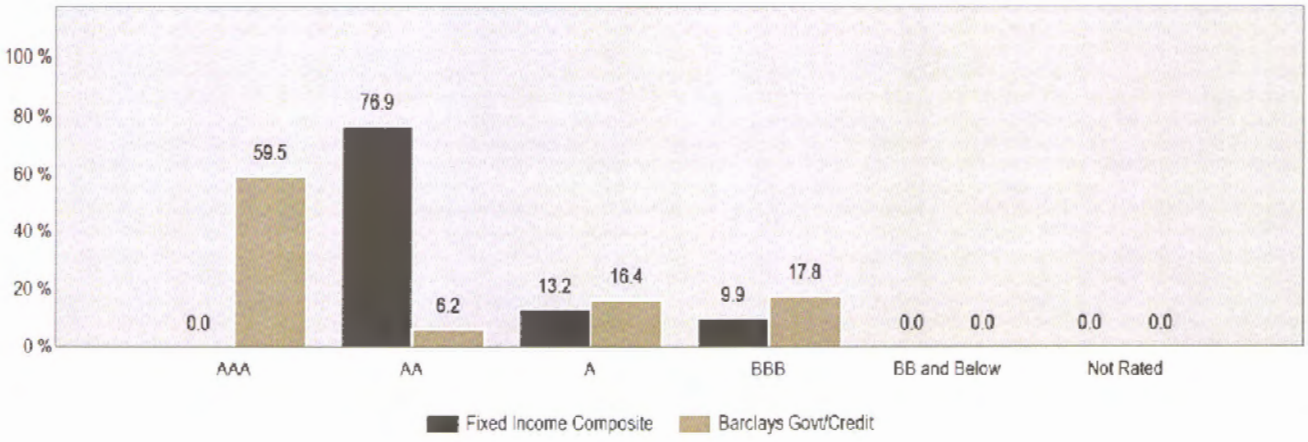
Sector

	Portfolio Q2-15	Index Q2-15
UST/Agency	71.7%	65.8%
Corporate	28.1%	34.2%
MBS	--	--
ABS	--	--
Foreign	--	--
Muni	0.1%	--
Other	0.1%	--

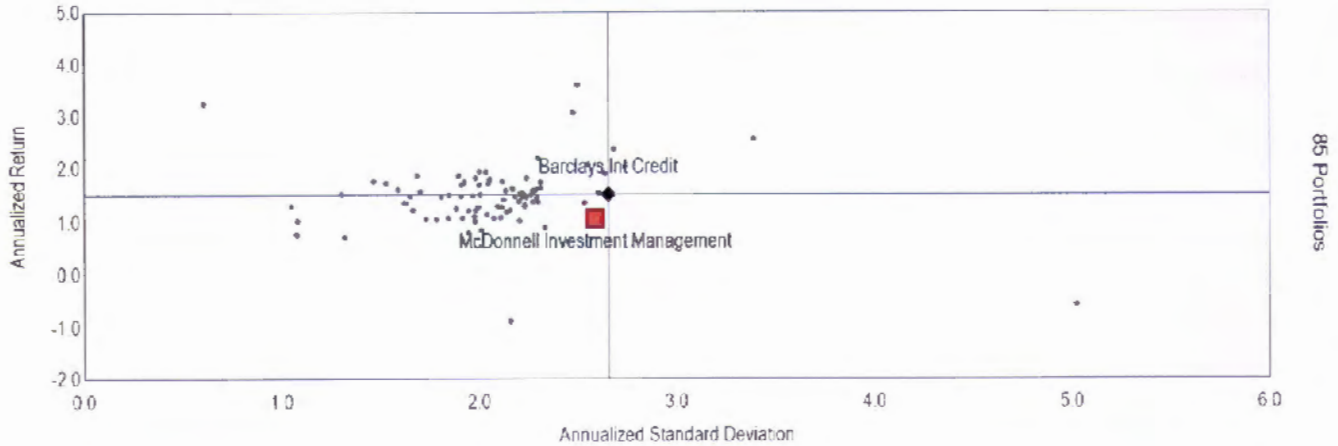
Maturity

	Q2-15
<1 Year	13.5%
1-3 Years	7.8%
3-5 Years	13.2%
5-7 Years	4.8%
7-10 Years	31.2%
10-15 Years	29.5%
15-20 Years	0.0%
>20 Years	0.0%
Not Rated/Cash	0.0%

Quality Distribution



Risk / Return - 1 Year



Characteristics

	Portfolio Q2-15	Index Q2-15
Yield to Maturity	2.3%	2.6%
Avg. Eff. Maturity	4.5 yrs.	4.8 yrs.
Avg. Duration	4.0 yrs.	4.3 yrs.
Avg. Quality	A	--

Region	Number Of Assets
United States	57
Other	0
Total	**57**

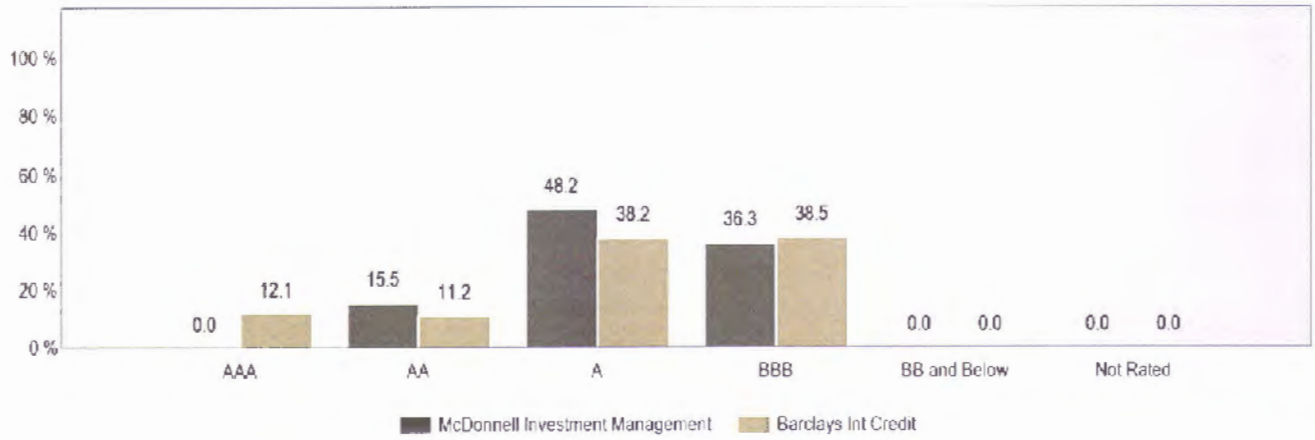
Sector

	Portfolio Q2-15	Index Q2-15
UST/Agency	--	20.8%
Corporate	99.4%	79.2%
MBS	--	--
ABS	--	--
Foreign	--	--
Muni	0.3%	--
Other	0.3%	--

Maturity

	Q2-15
<1 Year	5.2%
1-3 Years	28.4%
3-5 Years	26.2%
5-7 Years	17.7%
7-10 Years	22.5%
10-15 Years	0.0%
15-20 Years	0.0%
>20 Years	0.0%
Not Rated/Cash	0.0%

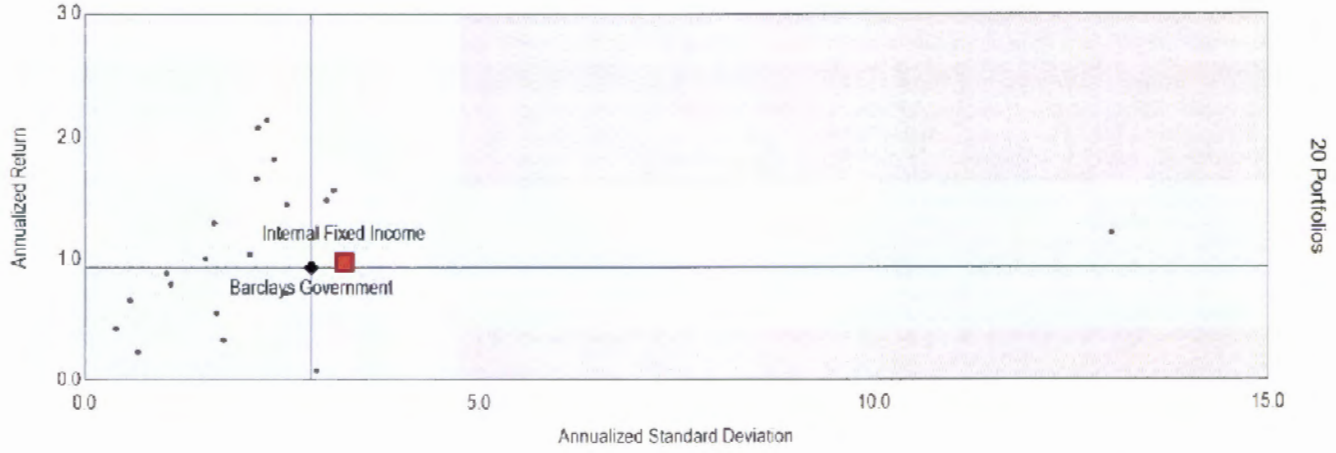
Quality Distribution



As of June 30, 2015

Market Value: $12.5 Million and 30.8% of Fund

Risk / Return - 3 Years



Characteristics

	Portfolio Q2-15	Index Q2-15
Yield to Maturity	1.8%	1.5%
Avg. Eff. Maturity	7.6 yrs.	6.7 yrs.
Avg. Duration	6.0 yrs.	5.4 yrs.
Avg. Quality	AA	--

Region	Number Of Assets
United States	9
Other	0
Total	**9**

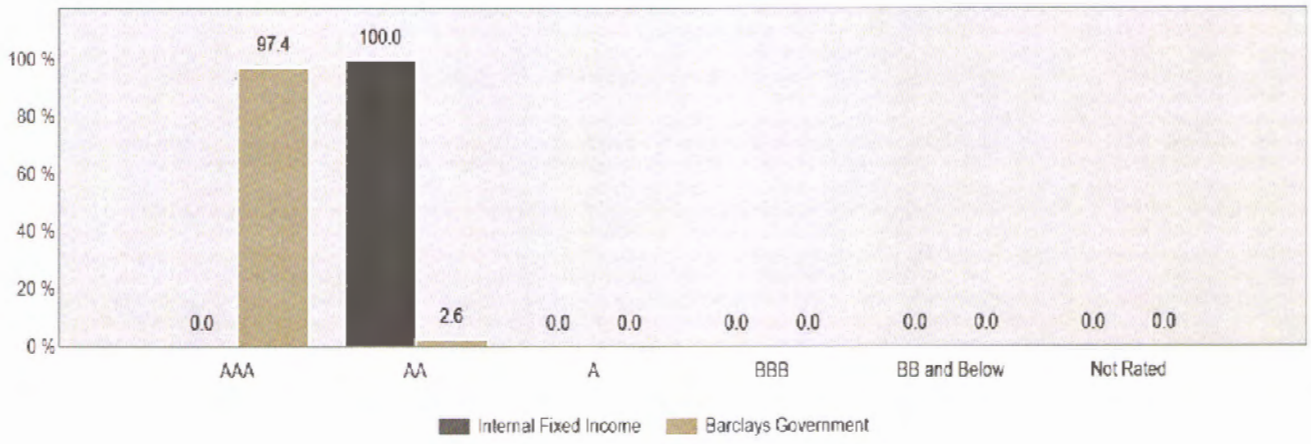
Sector

	Portfolio Q2-15	Index Q2-15
UST/Agency	100.0%	100.0%
Corporate	--	--
MBS	--	--
ABS	--	--
Foreign	--	--
Muni	--	--
Other	--	--

Maturity

	Q2-15
<1 Year	16.6%
1-3 Years	0.0%
3-5 Years	8.3%
5-7 Years	0.0%
7-10 Years	34.5%
10-15 Years	40.6%
15-20 Years	0.0%
>20 Years	0.0%
Not Rated/Cash	0.0%

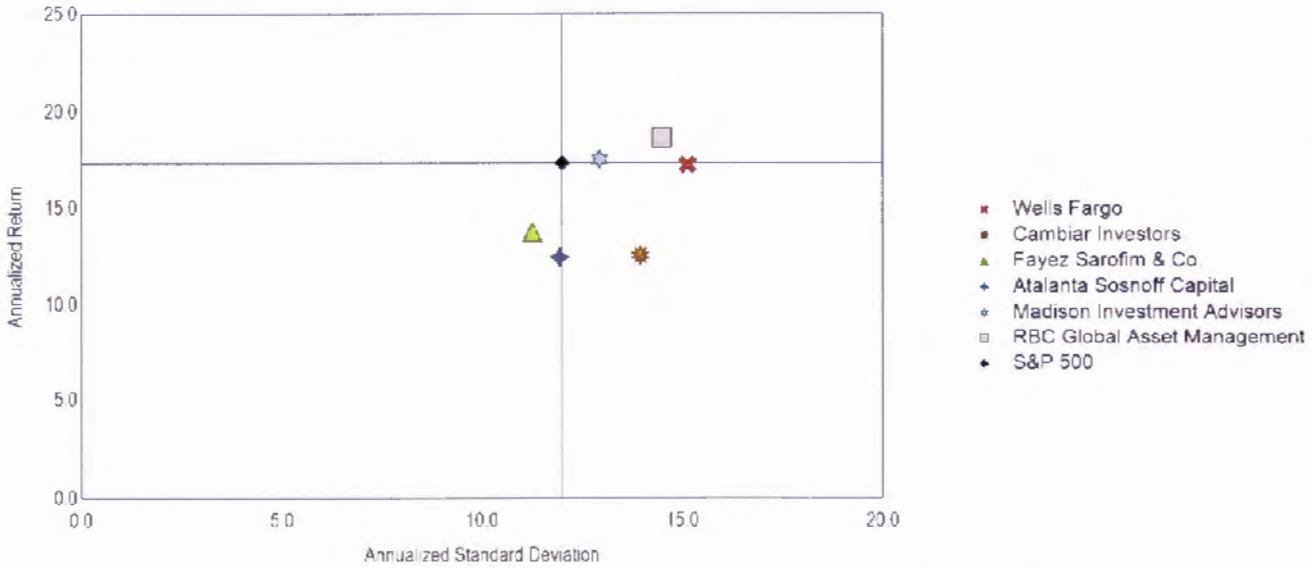
Quality Distribution



As of June 30, 2015

Market Value: $21.0 Million and 51.6% of Fund

Risk / Return - 5 Years



Characteristics

	Portfolio	S&P 500
Number of Holdings	3,803	502
Weighted Avg. Market Cap. ($B)	85.8	127.9
Median Market Cap. ($B)	1.1	17.9
Price To Earnings	25.1	21.9
Price To Book	4.7	4.4
Price To Sales	3.4	3.0
Return on Equity (%)	19.1	19.4
Yield (%)	1.6	2.1
Beta	1.0	1.0
R-Squared	0.9	1.0

Largest Holdings

	End Weight	Return
APPLE	2.6	1.2
MORGAN STANLEY US GOVERNMENT MONEY MARKET	1.4	0.0
COMCAST 'A'	1.0	6.9
EXXON MOBIL	1.0	-1.3
JP MORGAN CHASE & CO	1.0	12.6

Top Contributors

	Beg Wgt	Return	Contribution
GILEAD SCIENCES	0.7	19.9	0.1
JP MORGAN CHASE & CO.	0.8	12.6	0.1
ABBVIE	0.5	15.7	0.1
COMCAST 'A'	1.1	6.9	0.1
AETNA	0.3	19.9	0.1

Characteristics

	Portfolio	S&P 500
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	6.5	7.9
Materials	3.5	3.1
Industrials	11.8	10.1
Consumer Discretionary	14.7	12.8
Consumer Staples	6.7	9.4
Health Care	15.7	15.4
Financials	17.4	16.6
Information Technology	18.6	19.6
Telecommunications	1.6	2.3
Utilities	1.2	2.8
Unclassified	2.4	0.0

Bottom Contributors

	Beg Wgt	Return	Contribution
WORLD FUEL SVS.	0.5	-16.5	-0.1
UNION PACIFIC	0.6	-11.5	-0.1
WHOLE FOODS MARKET	0.3	-23.8	-0.1
QUALCOMM	0.7	-9.1	-0.1
WAL MART STORES	0.4	-13.2	-0.1

Market Capitalization

	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
U.S. Equity Composite	12.5%	13.8%	18.2%	24.6%	30.8%
S&P 500	0.0%	2.8%	18.4%	33.2%	45.6%
Weight Over/Under	*12.4%*	*11.0%*	*-0.2%*	*-8.6%*	*-14.7%*

U.S. Equity Style Map

Common Holdings Matrix

	Vanguard Total Stock Index Fund		Wells Fargo		Cambiar Investors		Fayez Sarofim & Co.		Atalanta Sosnoff Capital		Madison Investment Advisors		RBC Global Asset Management	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Vanguard Total Stock Index Fund	--	--	67	93	37	95	46	93	51	89	31	95	74	97
Wells Fargo	67	13	--	--	1	3	7	13	14	25	0	0	1	1
Cambiar Investors	37	11	1	2	--	--	9	15	9	19	0	0	0	0
Fayez Sarofim & Co	46	24	7	18	9	24	--	--	14	30	0	0	0	0
Atalanta Sosnoff Capital	51	25	14	30	9	23	14	31	--	--	0	0	0	0
Madison Investment Advisors	31	2	0	0	0	0	0	0	0	0	--	--	1	2
RBC Global Asset Management	74	1	1	1	0	0	0	0	0	0	1	3	--	--

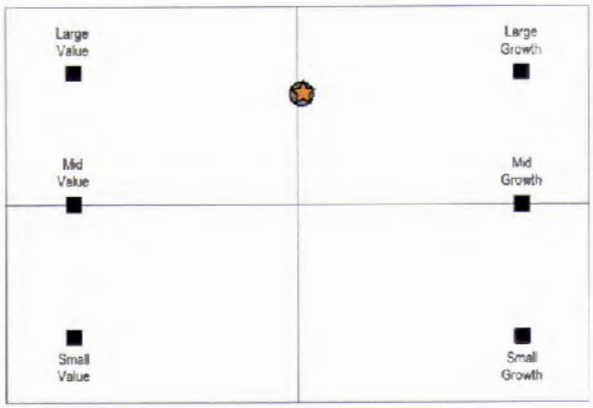
Vanguard Total Stock Index Fund

As of June 30, 2015

Characteristics

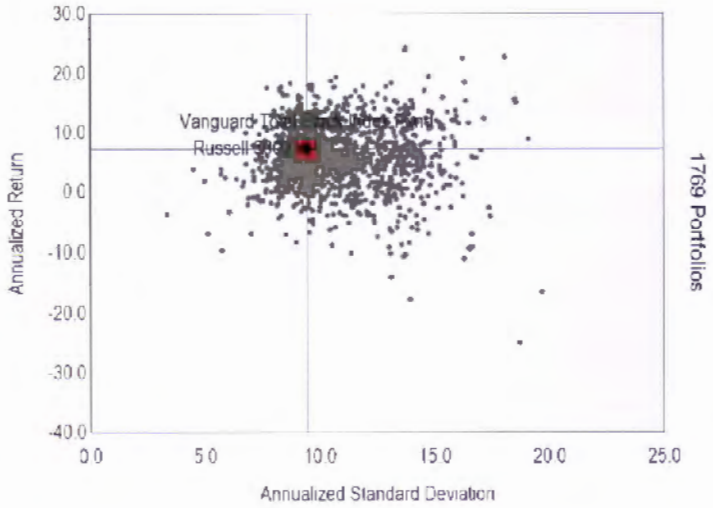
Market Value: $8.5 Million and 20.8% of Fund

Style Drift - 1 Year



Vanguard Total Stock Index Fund ★ Russell 3000

Risk / Return - 1 Year



Characteristics

	Portfolio	Russell 3000
Number of Holdings	3,795	3,005
Weighted Avg. Market Cap. ($B)	103.4	103.2
Median Market Cap. ($B)	0.9	1.6
Price To Earnings	23.8	22.8
Price To Book	4.6	3.9
Price To Sales	3.5	3.0
Return on Equity (%)	18.7	17.2
Yield (%)	2.0	1.9
Beta		1.0
R-Squared		1.0

Largest Holdings

	End Weight	Return
APPLE	3.2	1.2
EXXON MOBIL	1.5	-1.3
MICROSOFT	1.4	9.3
JOHNSON & JOHNSON	1.2	-2.4
GENERAL ELECTRIC	1.2	8.0

Top Contributors

	Beg Wgt	Return	Contribution
GILEAD SCIENCES	0.6	19.9	0.1
JP MORGAN CHASE & CO.	1.0	12.6	0.1
MICROSOFT	1.3	9.3	0.1
AMAZON.COM	0.6	16.7	0.1
GENERAL ELECTRIC	1.1	8.0	0.1

Characteristics

	Portfolio	Russell 3000
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	7.2	7.2
Materials	3.5	3.5
Industrials	10.7	10.8
Consumer Discretionary	13.1	13.4
Consumer Staples	8.1	8.1
Health Care	15.2	15.2
Financials	17.8	17.9
Information Technology	19.0	18.9
Telecommunications	2.0	2.0
Utilities	2.9	2.9
Unclassified	0.5	0.0

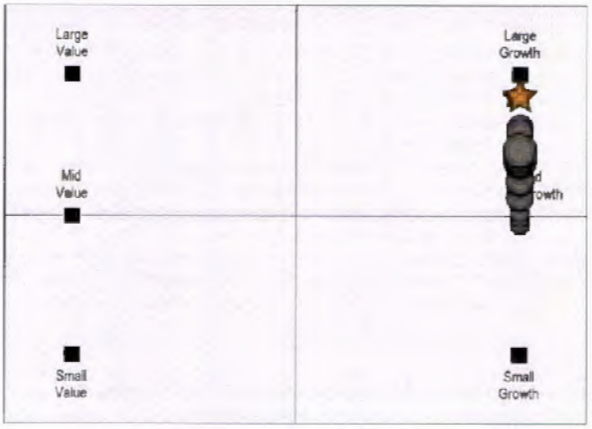
Bottom Contributors

	Beg Wgt	Return	Contribution
WAL MART STORES	0.6	-13.2	-0.1
BERKSHIRE HATHAWAY 'B'	1.1	-5.7	-0.1
CHEVRON	0.9	-7.2	-0.1
UNION PACIFIC	0.4	-11.5	0.0
QUALCOMM	0.5	-9.1	0.0

Market Capitalization

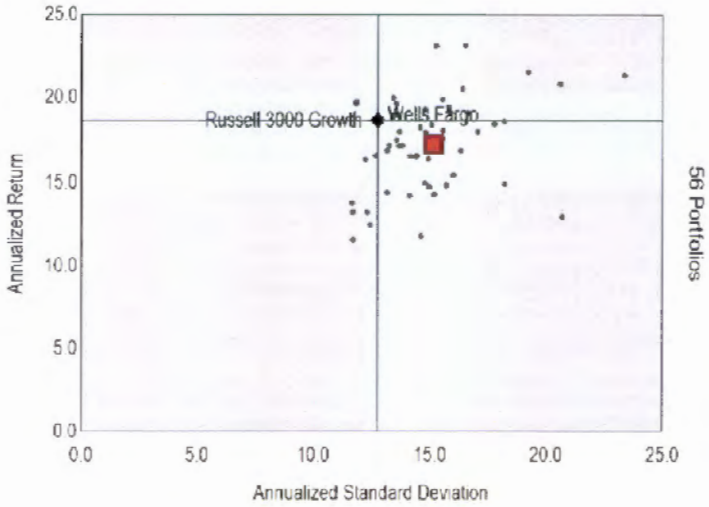
	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
Vanguard Total Stock Index Fund	8.5%	10.6%	17.8%	27.0%	36.2%
Russell 3000	8.3%	10.5%	17.4%	27.0%	36.8%
Weight Over/Under	*0.1%*	*0.1%*	*0.4%*	*0.0%*	*-0.6%*

Style Drift - 5 Years



Wells Fargo ★ Russell 3000 Growth

Risk / Return - 5 Years



Characteristics

	Portfolio	Russell 3000 Growth
Number of Holdings	72	1,807
Weighted Avg. Market Cap. ($B)	97.6	112.3
Median Market Cap. ($B)	14.7	1.8
Price To Earnings	33.8	26.3
Price To Book	7.8	6.7
Price To Sales	5.4	3.6
Return on Equity (%)	21.1	24.6
Yield (%)	0.6	1.4
Beta	1.1	1.0
R-Squared	0.9	1.0

Largest Holdings

	End Weight	Return
APPLE	6.9	1.2
MORGAN STANLEY US GOVERNMENT MONEY MARKET	3.9	0.0
AMAZON.COM	3.0	16.7
FACEBOOK CLASS A	2.9	4.3
VISA 'A'	2.5	2.8

Top Contributors

	Beg Wgt	Return	Contribution
AMAZON.COM	1.7	16.7	0.3
COMMUNITY HEALTH SYSTEMS	1.3	20.4	0.3
AXALTA COATING SYSTEMS	1.3	19.8	0.3
GILEAD SCIENCES	1.2	19.9	0.2
PALO ALTO NETWORKS	1.1	19.6	0.2

Characteristics

	Portfolio	Russell 3000 Growth
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	1.1	1.0
Materials	2.5	3.9
Industrials	7.5	11.3
Consumer Discretionary	20.2	20.8
Consumer Staples	1.7	9.9
Health Care	19.0	19.1
Financials	10.8	5.5
Information Technology	30.4	26.8
Telecommunications	2.7	1.7
Utilities	0.0	0.0
Unclassified	4.0	0.0

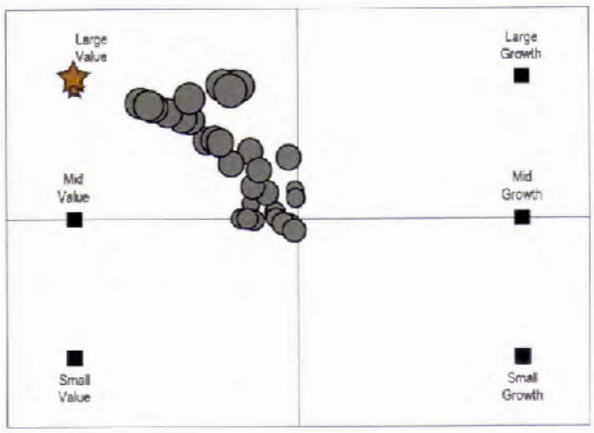
Bottom Contributors

	Beg Wgt	Return	Contribution
PIONEER NTRL.RES.	1.8	-15.2	-0.3
UNION PACIFIC	2.0	-11.5	-0.2
OLD DOMINION FGT.LINES	1.6	-11.2	-0.2
ENDO INTERNATIONAL	1.5	-11.2	-0.2
WESTERN DIGITAL	1.2	-13.3	-0.2

Market Capitalization

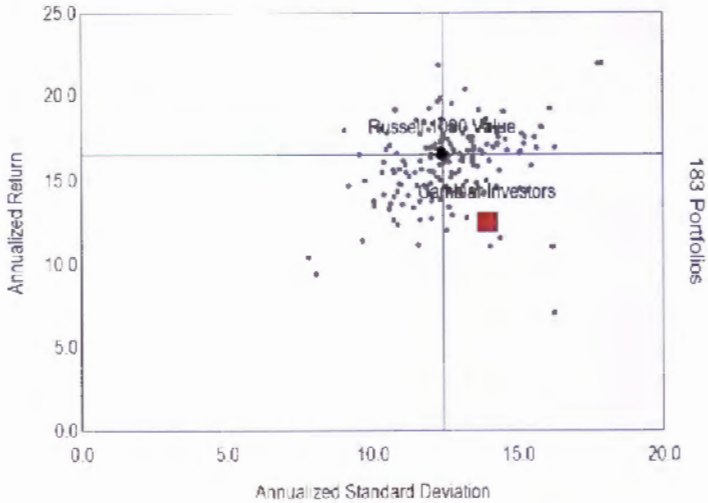
	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
Wells Fargo	1.6%	25.9%	27.6%	18.3%	26.6%
Russell 3000 Growth	7.3%	9.9%	17.4%	27.9%	37.5%
Weight Over/Under	*-5.8%*	*16.0%*	*10.2%*	*-9.6%*	*-10.9%*

Style Drift - 5 Years



Cambiar Investors ★ Russell 1000 Value

Risk / Return - 5 Years



Characteristics

	Portfolio	Russell 1000 Value
Number of Holdings	39	684
Weighted Avg. Market Cap. ($B)	70.4	102.3
Median Market Cap. ($B)	50.6	7.9
Price To Earnings	22.2	19.2
Price To Book	3.3	2.2
Price To Sales	2.5	2.5
Return on Equity (%)	17.6	12.2
Yield (%)	2.0	2.5
Beta	0.8	1.0
R-Squared	0.9	1.0

Largest Holdings

	End Weight	Return
METLIFE	3.3	11.6
CAPITAL ONE FINL.	3.2	12.2
GOOGLE 'A'	3.2	-2.6
MORGAN STANLEY US GOVERNMENT MONEY MARKET	3.1	0.0
BB&T	3.1	4.1

Top Contributors

	Beg Wgt	Return	Contribution
AETNA	2.3	19.9	0.5
UNIVERSAL HEALTH SVS.'B'	2.1	20.8	0.4
CAPITAL ONE FINL.	2.9	12.2	0.4
METLIFE	3.0	11.6	0.3
CITIZENS FINANCIAL GROUP	2.5	13.6	0.3

Characteristics

	Portfolio	Russell 1000 Value
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	7.6	14.2
Materials	4.5	3.0
Industrials	8.8	10.2
Consumer Discretionary	11.5	5.4
Consumer Staples	5.5	6.7
Health Care	16.4	11.8
Financials	24.8	29.6
Information Technology	14.9	11.0
Telecommunications	2.8	2.5
Utilities	0.0	5.7
Unclassified	3.1	0.0

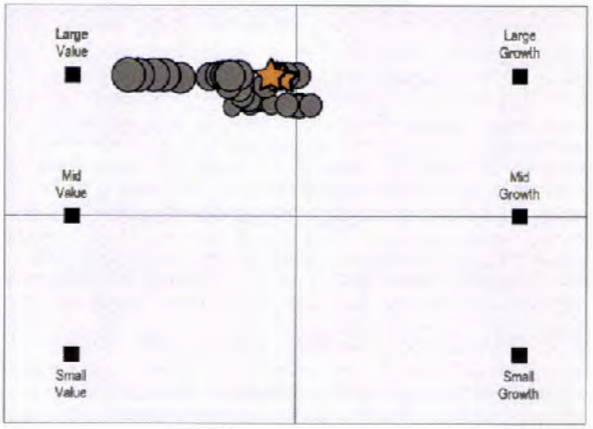
Bottom Contributors

	Beg Wgt	Return	Contribution
MGM RESORTS INTL.	3.0	-13.2	-0.4
QUALCOMM	3.1	-9.1	-0.3
FORD MOTOR	3.3	-6.1	-0.2
ACE	2.4	-8.2	-0.2
AGILENT TECHS.	2.4	-6.9	-0.2

Market Capitalization

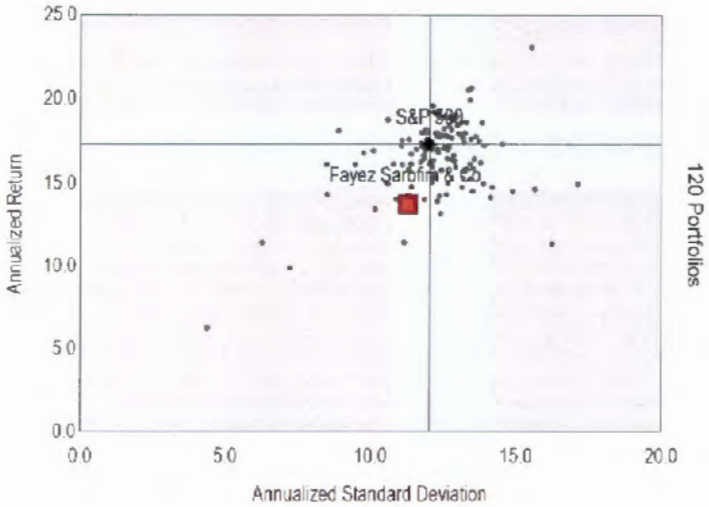
	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
Cambiar Investors	0.0%	6.4%	17.1%	48.6%	28.0%
Russell 1000 Value	1.9%	11.3%	19.0%	28.4%	39.3%
Weight Over/Under	*-1.9%*	*-5.0%*	*-2.0%*	*20.2%*	*-11.3%*

Style Drift - 5 Years



Fayez Sarofim & Co. ★ S&P 500

Risk / Return - 5 Years



Characteristics

	Portfolio	S&P 500
Number of Holdings	50	502
Weighted Avg. Market Cap. ($B)	156.8	127.9
Median Market Cap. ($B)	91.9	17.9
Price To Earnings	20.0	21.9
Price To Book	3.9	4.4
Price To Sales	3.5	3.0
Return on Equity (%)	21.5	19.4
Yield (%)	2.7	2.1
Beta	1.1	1.0
R-Squared	0.9	1.0

Largest Holdings

	End Weight	Return
EXXON MOBIL	5.5	-1.3
PHILIP MORRIS INTL.	5.1	7.7
MORGAN STANLEY US GOVERNMENT MONEY MARKET	4.5	0.0
APPLE	4.2	1.2
CHEVRON	3.7	-7.2

Top Contributors

	Beg Wgt	Return	Contribution
PHILIP MORRIS INTL.	4.8	7.7	0.4
GILEAD SCIENCES	1.8	19.9	0.4
JP MORGAN CHASE & CO.	2.8	12.6	0.4
ABBVIE	1.5	15.7	0.2
OCCIDENTAL PTL.	2.4	7.6	0.2

Characteristics

	Portfolio	S&P 500
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	15.5	7.9
Materials	3.3	3.1
Industrials	6.5	10.1
Consumer Discretionary	10.1	12.8
Consumer Staples	21.0	9.4
Health Care	8.8	15.4
Financials	13.5	16.6
Information Technology	16.9	19.6
Telecommunications	0.0	2.3
Utilities	0.0	2.8
Unclassified	4.5	0.0

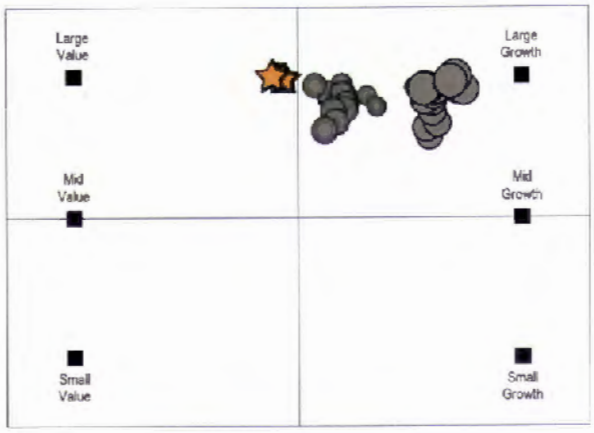
Bottom Contributors

	Beg Wgt	Return	Contribution
WAL MART STORES	2.8	-13.2	-0.4
CHEVRON	4.0	-7.2	-0.3
TEXAS INSTRUMENTS	2.4	-9.4	-0.2
UNION PACIFIC	1.8	-11.5	-0.2
CANADIAN PACIFIC RY.	1.4	-12.3	-0.2

Market Capitalization

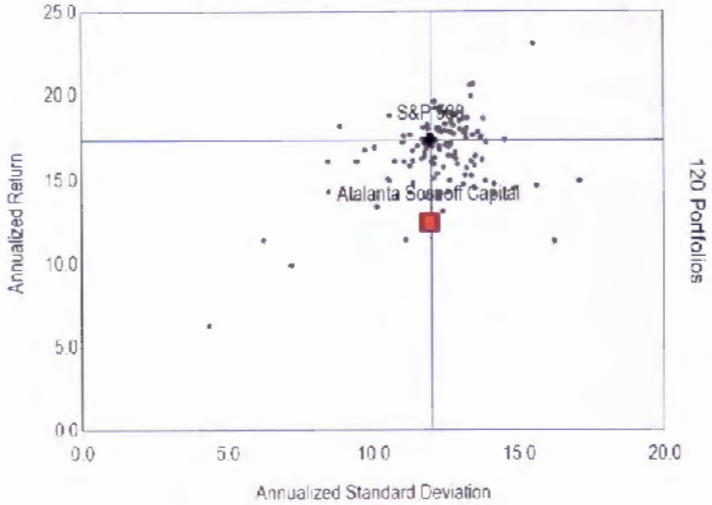
	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
Fayez Sarofim & Co.	0.0%	0.0%	3.5%	36.8%	59.8%
S&P 500	0.0%	2.8%	18.4%	33.2%	45.6%
Weight Over/Under	*0.0%*	*-2.8%*	*-14.9%*	*3.6%*	*14.2%*

Style Drift - 5 Years



● Atalanta Sosnoff Capital ★ S&P 500

Risk / Return - 5 Years



Characteristics

	Portfolio	S&P 500
Number of Holdings	57	502
Weighted Avg. Market Cap. ($B)	145.2	127.9
Median Market Cap. ($B)	95.0	17.9
Price To Earnings	26.6	21.9
Price To Book	5.3	4.4
Price To Sales	3.7	3.0
Return on Equity (%)	21.4	19.4
Yield (%)	1.5	2.1
Beta	1.0	1.0
R-Squared	0.9	1.0

Largest Holdings

	End Weight	Return
APPLE	4.7	1.2
ALLERGAN	4.0	2.0
BOEING	3.7	-7.0
FACEBOOK CLASS A	3.3	4.3
CITIGROUP	3.2	7.3

Top Contributors

	Beg Wgt	Return	Contribution
GILEAD SCIENCES	1.7	19.9	0.3
BANK OF AMERICA	2.5	10.9	0.3
COMCAST 'A'	3.8	6.9	0.3
JP MORGAN CHASE & CO.	2.0	12.6	0.3
WALT DISNEY	2.6	8.8	0.2

Characteristics

	Portfolio	S&P 500
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	6.8	7.9
Materials	4.1	3.1
Industrials	9.6	10.1
Consumer Discretionary	13.7	12.8
Consumer Staples	3.0	9.4
Health Care	18.6	15.4
Financials	18.9	16.6
Information Technology	21.0	19.6
Telecommunications	1.9	2.3
Utilities	0.0	2.8
Unclassified	2.5	0.0

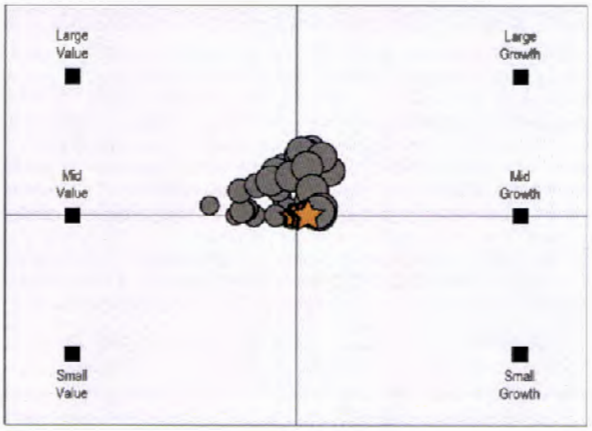
Bottom Contributors

	Beg Wgt	Return	Contribution
MICRON TECHNOLOGY	1.0	-30.6	-0.3
BOEING	4.0	-7.0	-0.3
CANADIAN PACIFIC RY.	2.2	-12.3	-0.3
ALLSTATE	2.5	-8.4	-0.2
UNION PACIFIC	1.6	-11.5	-0.2

Market Capitalization

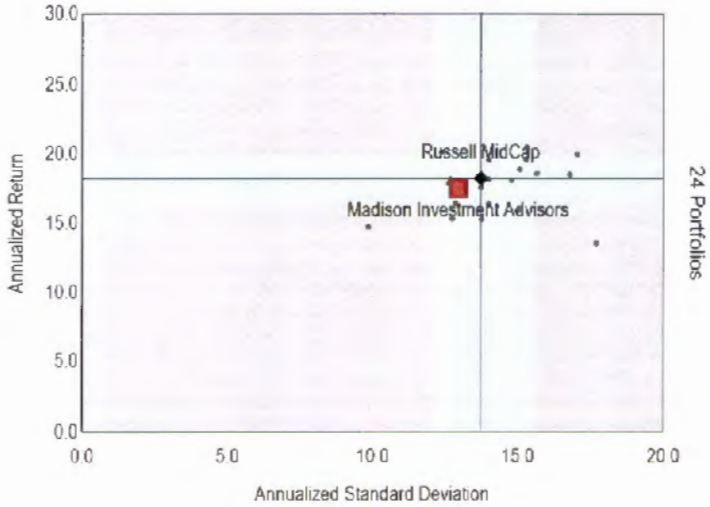
	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
Atalanta Sosnoff Capital	0.0%	0.0%	2.8%	33.7%	63.5%
S&P 500	0.0%	2.8%	18.4%	33.2%	45.6%
Weight Over/Under	*0.0%*	*-2.8%*	*-15.6%*	*0.5%*	*18.0%*

Style Drift - 5 Years



● Madison Investment Advisors ★ Russell MidCap

Risk / Return - 5 Years



Characteristics

	Portfolio	Russell MidCap
Number of Holdings	32	829
Weighted Avg. Market Cap. ($B)	11.2	11.9
Median Market Cap. ($B)	8.8	6.3
Price To Earnings	24.3	24.7
Price To Book	3.5	4.0
Price To Sales	2.2	3.1
Return on Equity (%)	20.9	15.7
Yield (%)	0.7	1.6
Beta	1.0	1.0
R-Squared	0.8	1.0

Largest Holdings

	End Weight	Return
MARKEL	6.0	4.1
BROWN & BROWN	5.2	-0.4
ROSS STORES	5.2	-7.5
DOLLAR TREE	4.1	-2.7
CROWN HDG.	4.0	-2.1

Top Contributors

	Beg Wgt	Return	Contribution
GLACIER BANCORP	1.9	17.8	0.3
IHS 'A'	2.1	13.1	0.3
MARKEL	5.6	4.1	0.2
DISCOVERY COMMS.'C'	3.3	5.4	0.2
ADV.AUTO PARTS	2.4	6.5	0.2

Characteristics

	Portfolio	Russell MidCap
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	4.4	5.7
Materials	4.0	6.1
Industrials	19.2	12.9
Consumer Discretionary	26.0	16.5
Consumer Staples	1.6	5.5
Health Care	9.2	10.6
Financials	22.1	21.7
Information Technology	8.0	14.6
Telecommunications	0.0	1.0
Utilities	0.0	5.4
Unclassified	5.5	0.0

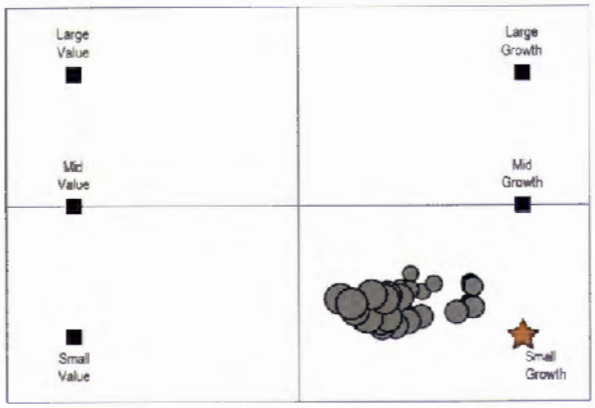
Bottom Contributors

	Beg Wgt	Return	Contribution
WORLD FUEL SVS.	3.6	-16.5	-0.6
WHOLE FOODS MARKET	2.0	-23.8	-0.5
ROSS STORES	5.4	-7.5	-0.4
GENERAC HOLDINGS	1.9	-18.4	-0.4
SALLY BEAUTY HOLDINGS	4.0	-8.1	-0.3

Market Capitalization

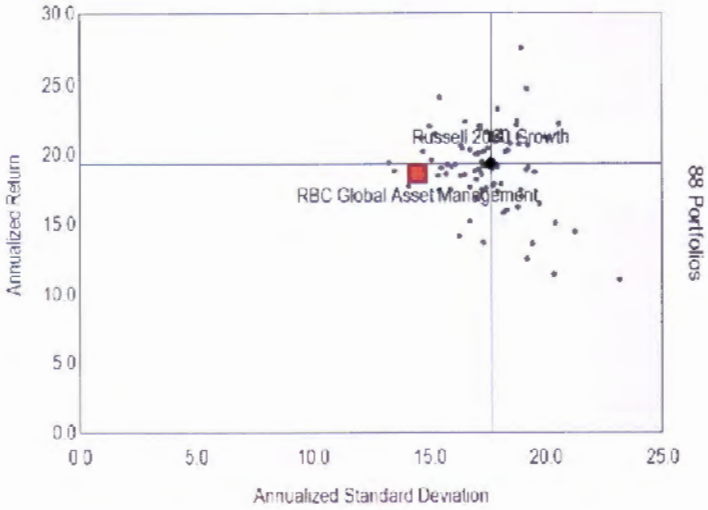
	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
Madison Investment Advisors	7.7%	38.0%	51.7%	2.6%	0.0%
Russell MidCap	4.0%	33.6%	59.0%	3.5%	0.0%
Weight Over/Under	*3.8%*	*4.4%*	*-7.3%*	*-0.9%*	*0.0%*

Style Drift - 5 Years



RBC Global Asset Management
Russell 2000 Growth

Risk / Return - 5 Years



Characteristics

	Portfolio	Russell 2000 Growth
Number of Holdings	75	1,163
Weighted Avg. Market Cap. ($B)	2.3	2.1
Median Market Cap. ($B)	1.8	0.9
Price To Earnings	31.8	31.4
Price To Book	4.6	5.7
Price To Sales	3.0	3.3
Return on Equity (%)	14.9	16.0
Yield (%)	0.3	0.5
Beta	1.0	1.0
R-Squared	0.9	1.0

Largest Holdings

	End Weight	Return
MORGAN STANLEY US GOVERNMENT MONEY MARKET	2.7	0.0
CANTEL MED.	2.6	13.0
PAREXEL INTL	2.3	-6.8
ZEBRA TECHNOLOGIES 'A'	2.3	22.4
ABIOMED	2.2	-8.2

Top Contributors

	Beg Wgt	Return	Contribution
ZEBRA TECHNOLOGIES 'A'	1.8	22.4	0.4
MANHATTAN ASSOCS.	1.8	17.9	0.3
CANTEL MED.	2.3	13.0	0.3
HCC INSURANCE HDG.	0.8	36.1	0.3
PRA GROUP	1.6	14.7	0.2

Characteristics

	Portfolio	Russell 2000 Growth
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	2.4	1.5
Materials	2.3	4.2
Industrials	20.0	13.2
Consumer Discretionary	10.5	18.3
Consumer Staples	6.1	3.1
Health Care	24.7	27.7
Financials	7.8	7.1
Information Technology	23.4	23.9
Telecommunications	0.0	0.8
Utilities	0.0	0.1
Unclassified	2.7	0.0

Bottom Contributors

	Beg Wgt	Return	Contribution
UNITED NATURAL FOODS	2.4	-17.3	-0.4
ABAXIS	1.7	-19.5	-0.3
VINCE HOLDING	0.8	-35.4	-0.3
KNIGHT TRANSPORTATION	1.5	-16.9	-0.3
ABIOMED	2.4	-8.2	-0.2

Market Capitalization

	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
RBC Global Asset Management	78.9%	21.1%	0.0%	0.0%	0.0%
Russell 2000 Growth	83.1%	16.9%	0.0%	0.0%	0.0%
Weight Over/Under	*-4.2%*	*4.2%*	*0.0%*	*0.0%*	*0.0%*

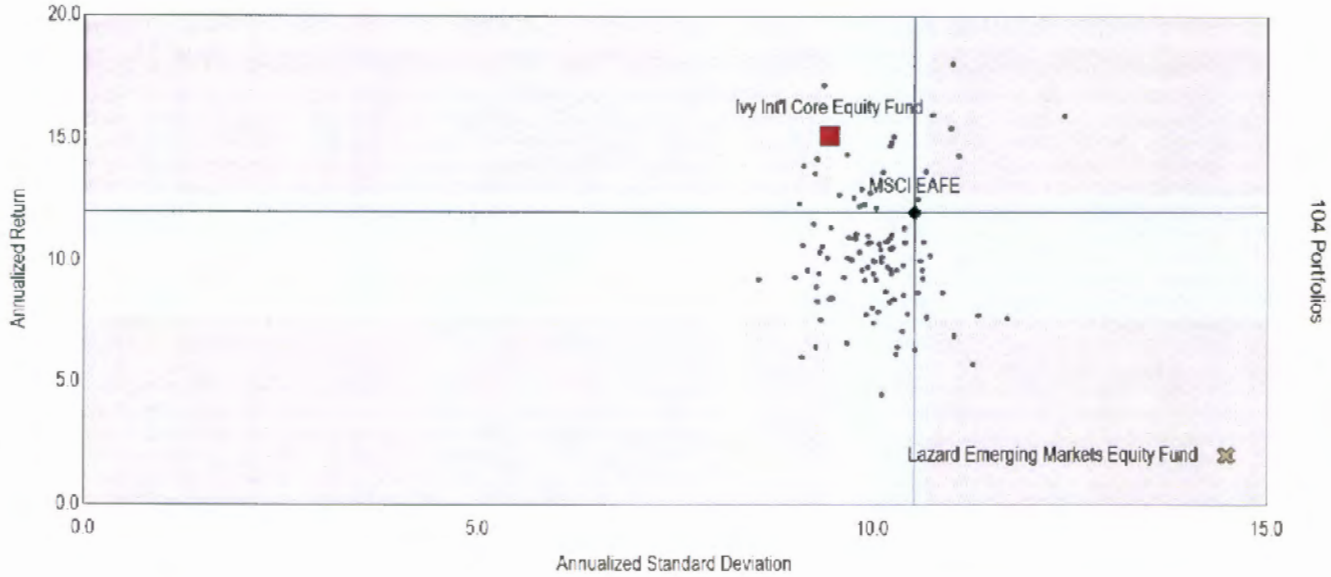
Non- U.S. Equity Composite

As of June 30, 2015

Characteristics

Market Value: $2.6 Million and 6.4% of Fund

Risk / Return - 3 Years



Characteristics

	Portfolio	MSCI EAFE
Number of Holdings	157	911
Weighted Avg. Market Cap. ($B)	43.3	57.6
Median Market Cap. ($B)	18.9	9.1
Price To Earnings	19.9	20.5
Price To Book	3.2	2.5
Price To Sales	2.2	2.1
Return on Equity (%)	17.4	14.5
Yield (%)	2.8	3.0
Beta		1.0
R-Squared		1.0

Region	% of Total	% of Bench
North America ex U.S.	0.0%	0.0%
United States	2.6%	0.0%
Europe Ex U.K.	24.3%	44.5%
United Kingdom	18.6%	20.3%
Pacific Basin Ex Japan	6.8%	11.7%
Japan	11.3%	22.9%
Emerging Markets	33.8%	0.0%
Other	2.6%	0.6%
Total	**100.0%**	**100.0%**

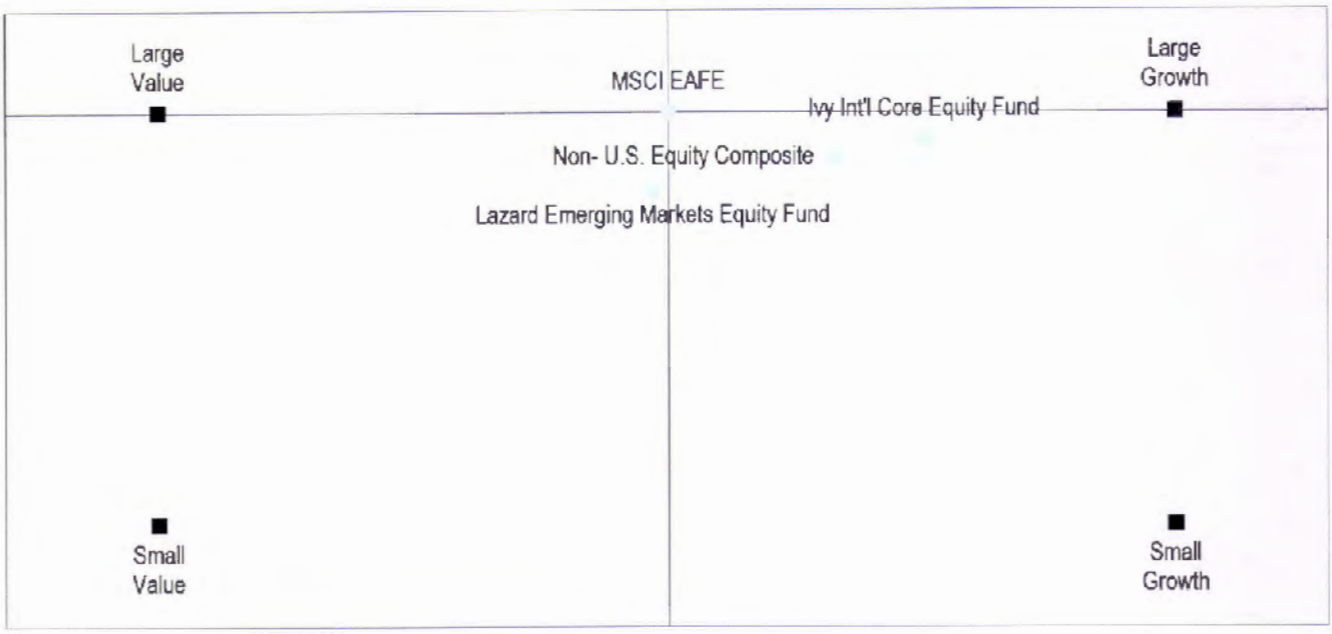
Characteristics

	Portfolio	MSCI EAFE
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	5.1	5.2
Materials	8.3	7.4
Industrials	10.7	12.6
Consumer Discretionary	11.5	13.2
Consumer Staples	11.7	10.9
Health Care	9.9	11.2
Financials	24.1	26.2
Information Technology	10.5	4.7
Telecommunications	5.7	4.9
Utilities	1.3	3.6
Unclassified	1.2	0.0

Market Capitalization

	Small Cap	Mid Cap	Large Cap
Non- U.S. Equity Composite	6.0%	21.0%	73.0%
MSCI EAFE	5.3%	19.8%	74.9%
Weight Over/Under	*0.7%*	*1.2%*	*-1.9%*

Equity Style Map



Common Holdings Matrix

	Ivy Int'l Core Equity Fund		Lazard Emerging Markets Equity Fund	
	#	%	#	%
Ivy Int'l Core Equity Fund	--	--	2	4
Lazard Emerging Markets Equity Fund	2	2	--	--

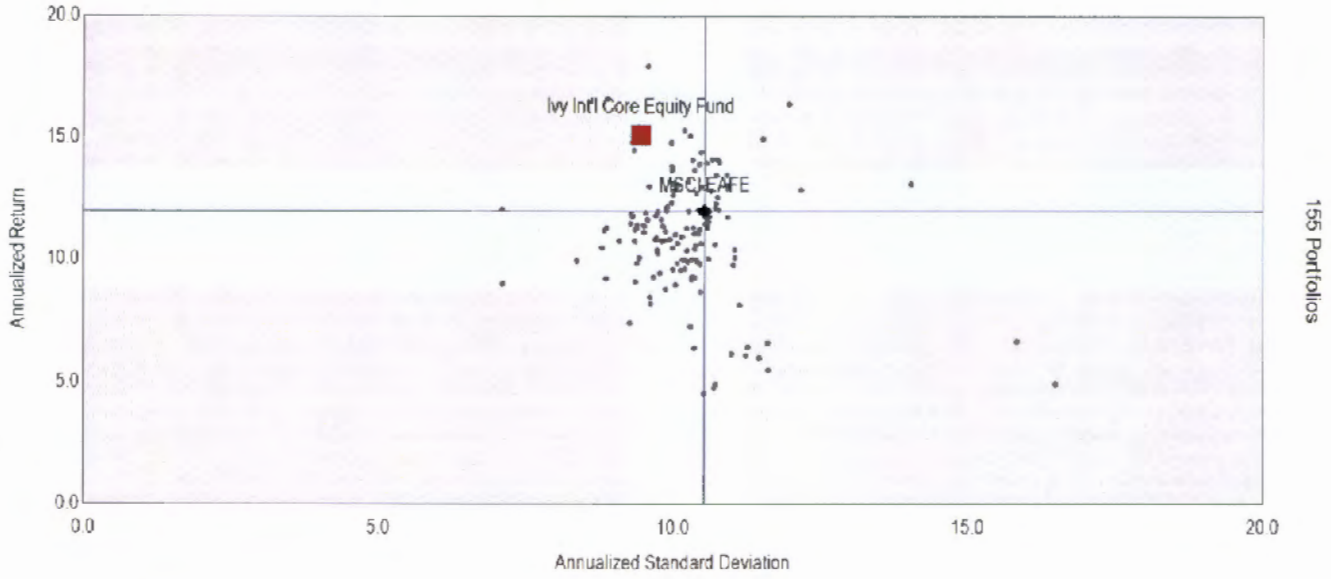
Ivy Int'l Core Equity Fund

As of June 30, 2015

Characteristics

Market Value: $1.7 Million and 4.3% of Fund

Risk / Return - 3 Years



Characteristics

	Portfolio	MSCI EAFE
Number of Holdings	75	911
Weighted Avg. Market Cap. ($B)	41.5	57.6
Median Market Cap. ($B)	26.7	9.1
Price To Earnings	21.8	20.5
Price To Book	3.0	2.5
Price To Sales	2.0	2.1
Return on Equity (%)	15.4	14.5
Yield (%)	2.5	3.0
Beta	0.8	1.0
R-Squared	0.9	1.0

Region	% of Total	% of Bench
North America ex U.S.	0.0%	0.0%
United States	3.8%	0.0%
Europe Ex U.K.	35.6%	44.5%
United Kingdom	27.2%	20.3%
Pacific Basin Ex Japan	7.5%	11.7%
Japan	16.6%	22.9%
Emerging Markets	7.2%	0.0%
Other	2.0%	0.6%
Total	**100.0%**	**100.0%**

Characteristics

	Portfolio	MSCI EAFE
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	3.5	5.2
Materials	10.3	7.4
Industrials	13.0	12.6
Consumer Discretionary	13.1	13.2
Consumer Staples	12.3	10.9
Health Care	14.7	11.2
Financials	22.0	26.2
Information Technology	6.3	4.7
Telecommunications	3.1	4.9
Utilities	1.6	3.6
Unclassified	0.0	0.0

Market Capitalization

	Small Cap	Mid Cap	Large Cap
Ivy Int'l Core Equity Fund	4.2%	15.9%	79.9%
MSCI EAFE	5.3%	19.8%	74.9%
Weight Over/Under	*-1.1%*	*-3.9%*	*5.0%*

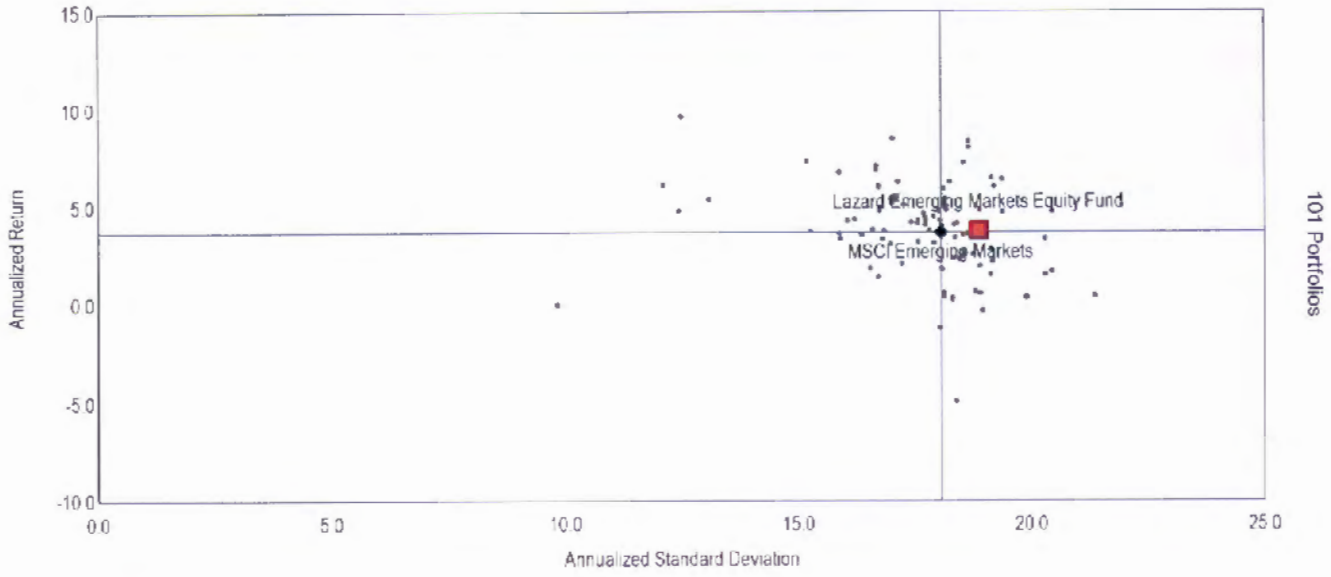
Lazard Emerging Markets Equity Fund

As of June 30, 2015

Characteristics

Market Value: $0.9 Million and 2.1% of Fund

Risk / Return - 5 Years



Characteristics

	Portfolio	MSCI Emerging Markets
Number of Holdings	84	838
Weighted Avg. Market Cap. ($B)	47.5	39.7
Median Market Cap. ($B)	11.6	5.0
Price To Earnings	15.3	18.8
Price To Book	3.5	2.6
Price To Sales	2.5	2.6
Return on Equity (%)	22.1	17.3
Yield (%)	3.6	2.5
Beta	1.1	1.0
R-Squared	0.9	1.0

Region	% of Total	% of Bench
EM Asia	51.8%	68.6%
EM Latin America	16.6%	14.2%
EM Europe & Middle East	11.6%	7.1%
EM Africa	10.9%	8.1%
Other	9.1%	2.0%
Total	**100.0%**	**100.0%**

Characteristics

	Portfolio	MSCI Emerging Markets
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	8.3	8.4
Materials	4.3	6.9
Industrials	5.8	6.9
Consumer Discretionary	8.1	9.0
Consumer Staples	10.4	8.1
Health Care	0.0	2.5
Financials	28.3	29.8
Information Technology	19.3	17.9
Telecommunications	11.1	7.3
Utilities	0.6	3.3
Unclassified	3.7	0.0

Market Capitalization

	Small Cap	Mid Cap	Large Cap
Lazard Emerging Markets Equity Fund	3.8%	13.6%	82.7%
MSCI Emerging Markets	5.7%	21.6%	72.7%
Weight Over/Under	***-2.0%***	***-8.0%***	***10.0%***

Total Fund Composite

Fee Schedule

Market Value: $40.8 Million and 100.0% of Fund

Asset Class	Investment Manager	Fee Schedule	Expense Ratio & Estimated Annual Fee [1]	Industry Average [2]
Int. Fixed Income	McDonnell Investment Management	0.20% on the Balance	0.20% $9,147	0.30%
Core Govt. Fixed Income	Internal Fixed Income	0.00% on the Balance	0.00% $0	0.27%
All-Cap Core	Vanguard Total Stock Index Fund	0.04% on the Balance	0.04% $3,388	0.12%
All-Cap Growth	Wells Fargo	0.88% on the Balance	0.88% $15,366	0.77%
Large-Cap Value	Cambiar Investors	0.88% on the Balance	0.88% $22,250	0.63%
Large-Cap Core	Fayez Sarofim & Co.	0.88% on the Balance	0.88% $13,704	0.60%
Large-Cap Core	Atalanta Sosnoff Capital	0.88% on the Balance	0.88% $17,804	0.60%
Mid-Cap Core	Madison Investment Advisors	0.88% on the Balance	0.88% $22,756	0.73%
Small-Cap Growth	RBC Global Asset Management	0.88% on the Balance	0.88% $18,678	0.97%
Non-U.S. Large-Cap Core	Ivy Int'l Core Equity Fund	1.02% on the Balance	1.02% $17,678	0.97%
Emerging Markets	Lazard Emerging Markets Equity Fund	1.09% on the Balance	1.09% $9,372	1.27%
Total Investment Management Fees			**0.37%** **$150,144**	**0.43%**
Investment Consultant	Graystone Consulting	0.10% Fixed Income consulting fee (excludes Internal Account) 0.30% Advisors mutual fund fee 0.88% Fiduciary Services equity accounts (custody, manager, transactions, consulting)	$4,573 $33,186 $110,559	
Total Graystone Consulting Minus Fiduciary Services			$37,760	
Total Fund			**0.46%** **$187,903**	

[1] Expense Ratio & Estimated Annual Fee are Based on Market Value at Quarter End.
[2] Source: Marquette Associates Investment Management Fee Study.

MarquetteAssociates

Park Ridge Firefighters' Pension Fund

Park Ridge Firefighters

Pension Fund

Flash Report

July 31, 2015

Total Fund Composite

Market Value: $41.3 Million and 100.0% of Fund

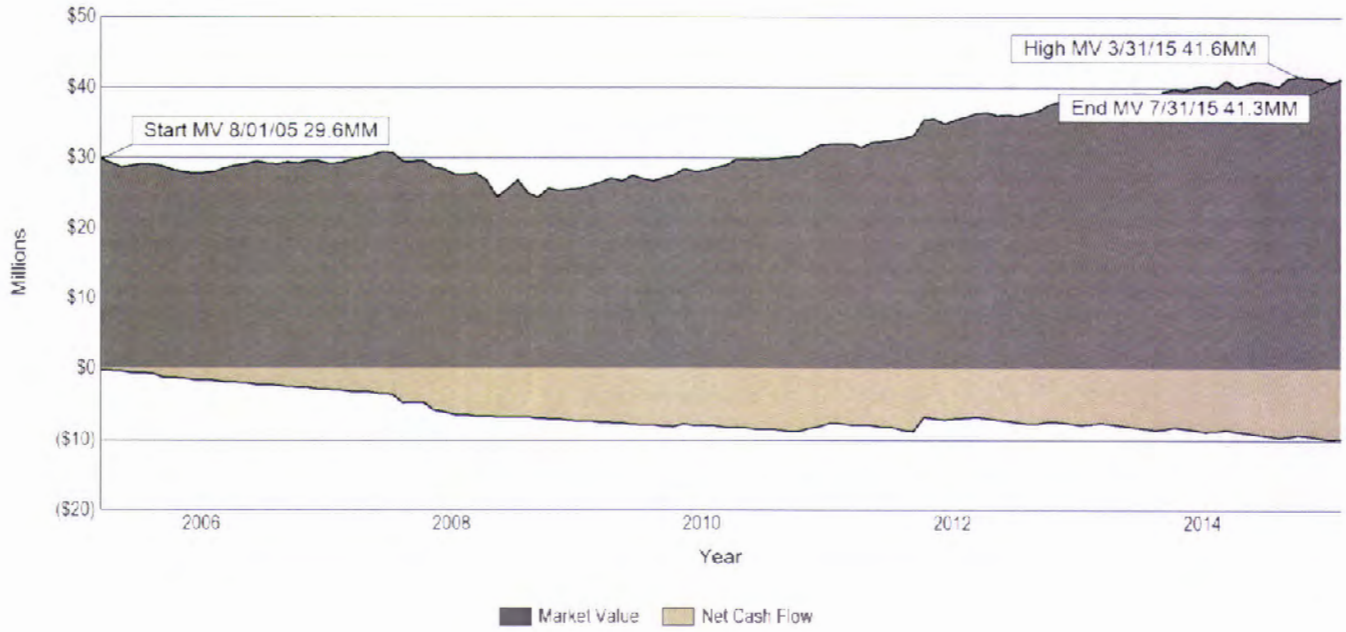
Ending July 31, 2015

	Asset Class	Market Value ($)	1 Mo Net Cash Flows ($)	% of Portfolio	Policy %	Policy Difference ($)
Total Fund Composite		**41,264,152**	**98,572**	**100.0**	**100.0**	**0**
Fixed Income Composite		**17,144,906**	**-100,153**	**41.5**	**43.0**	**-598,679**
McDonnell Investment Management	Int. Fixed Income	4,587,600	-1,153	11.1		
Internal Fixed Income	Core Govt. Fixed Income	12,557,306	-99,000	30.4		
Total Equity Composite		**23,887,091**	**-15,590**	**57.9**	**57.0**	**366,524**
U.S. Equity Composite		**21,350,022**	**-15,590**	**51.7**	**51.0**	**305,304**
Vanguard Total Stock Index Fund	All-Cap Core	8,608,849	0	20.9		
Wells Fargo	All-Cap Growth	1,796,634	0	4.4		
Cambiar Investors	Large-Cap Value	2,570,176	0	6.2		
Fayez Sarofim & Co.	Large-Cap Core	1,553,008	-9,864	3.8		
Atalanta Sosnoff Capital	Large-Cap Core	2,068,777	0	5.0		
Madison Investment Advisors	Mid-Cap Core	2,606,136	-5,726	6.3		
RBC Global Asset Management	Small-Cap Growth	2,146,442	0	5.2		
Non- U.S. Equity Composite		**2,537,069**	**0**	**6.1**	**6.0**	**61,219**
Ivy Int'l Core Equity Fund	Non-U.S. Large-Cap Core	1,722,782	0	4.2		
Lazard Emerging Markets Equity Fund	Emerging Markets	814,286	0	2.0		
Cash Composite		**232,156**	**214,315**	**0.6**	**0.0**	**232,156**
Morgan Stanley Investment Management	Cash & Equivalents	232,156	214,315	0.6		

Total Fund Composite

Market Value History

Market Value: $41.3 Million and 100.0% of Fund



Summary of Cash Flows

Sources of Portfolio Growth	Last Month	Last Three Months	Year-To-Date	One Year	Three Years
Beginning Market Value	**$40,763,453.51**	**$41,445,788.99**	**$40,681,992.59**	**$39,968,348.00**	**$35,859,385.28**
Net Additions/Withdrawals	$98,571.95	-$353,744.72	-$405,248.91	-$1,079,558.85	-$2,966,205.86
Investment Earnings	$402,127.02	$172,108.21	$987,408.80	$2,375,363.33	$8,370,973.06
Ending Market Value	**$41,264,152.48**	**$41,264,152.48**	**$41,264,152.48**	**$41,264,152.48**	**$41,264,152.48**

Total Fund Composite

Annualized Performance (Net of Fees)

Market Value: $41.3 Million and 100.0% of Fund

Ending July 31, 2015

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund Composite	**1.0**	**0.3**	**2.2**	**5.7**	**6.8**	**7.1**	**7.6**	**8.1**	**6.8**	**6.2**
Policy Benchmark	*1.5*	*0.5*	*2.7*	*7.0*	*7.8*	*8.0*	*8.1*	*8.3*	*7.0*	*6.2*
Actuarial Rate	*0.5*	*1.6*	*3.9*	*6.8*	*6.7*	*6.6*	*6.6*	*6.6*	*6.5*	*6.5*
Fixed Income Composite	**0.7**	**-0.3**	**0.9**	**3.2**	**2.9**	**0.8**	**3.7**	**3.9**	**5.0**	**5.2**
Barclays Govt/Credit	*0.7*	*-0.9*	*0.4*	*2.5*	*3.2*	*1.5*	*3.2*	*3.4*	*4.7*	*4.6*
Total Equity Composite	**1.1**	**0.8**	**3.3**	**7.8**	**10.5**	**14.3**	**11.7**	**13.2**	**8.3**	**6.8**
MSCI ACWI	*0.9*	*-1.6*	*3.6*	*2.8*	*9.2*	*12.8*	*8.5*	*10.4*	*5.3*	*6.1*
U.S. Equity Composite	**1.5**	**1.6**	**3.5**	**9.9**	**11.0**	**15.1**	**12.8**	**14.3**	**9.2**	**7.5**
S&P 500	*2.1*	*1.4*	*3.4*	*11.2*	*14.0*	*17.6*	*15.4*	*16.2*	*9.9*	*7.7*
Non- U.S. Equity Composite	**-2.2**	**-4.9**	**2.2**	**-5.8**	**5.7**	**--**	**--**	**--**	**--**	**--**
MSCI EAFE	*2.1*	*-1.3*	*7.7*	*-0.3*	*7.1*	*12.3*	*5.8*	*8.0*	*2.8*	*5.0*

Total Fund Composite

Calendar Performance (Net of Fees)

Market Value: $41.3 Million and 100.0% of Fund

	Calendar Year										
	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Total Fund Composite	6.1	11.1	7.8	7.5	10.9	4.5	-3.9	9.5	5.7	--	--
Policy Benchmark	8.4	11.5	7.4	6.4	9.3	6.1	-4.7	8.0	6.5	3.3	5.3
Actuarial Rate	6.7	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Fixed Income Composite	5.6	-3.4	4.0	12.5	8.7	-5.5	16.1	10.6	3.0	--	--
Barclays Govt/Credit	6.0	-2.4	4.8	8.7	6.6	4.5	5.7	7.2	3.8	2.4	4.2
Total Equity Composite	6.6	28.9	13.3	0.9	14.4	28.8	-34.1	7.3	13.8	--	--
MSCI ACWI	4.2	22.8	16.1	-7.3	12.7	34.6	-42.2	11.7	21.0	10.8	15.2
U.S. Equity Composite	7.6	30.7	13.6	2.6	14.9	26.8	-32.4	8.0	13.9	--	--
S&P 500	13.7	32.4	16.0	2.1	15.1	26.5	-37.0	5.5	15.8	4.9	10.9
Non- U.S. Equity Composite	-0.6	10.7	--	--	--	--	--	--	--	--	--
MSCI EAFE	-4.9	22.8	17.3	-12.1	7.8	31.8	-43.4	11.2	26.3	13.5	20.2

Investment Manager

Annualized Performance (Net of Fees)

Market Value: $41.3 Million and 100.0% of Fund

Ending July 31, 2015

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund Composite	**1.0**	**0.3**	**2.2**	**5.7**	**6.8**	**7.1**	**7.6**	**8.1**	**6.8**	**6.2**
Policy Benchmark	*1.5*	*0.5*	*2.7*	*7.0*	*7.8*	*8.0*	*8.1*	*8.3*	*7.0*	*6.2*
Actuarial Rate	*0.5*	*1.6*	*3.9*	*6.8*	*6.7*	*6.6*	*6.6*	*6.6*	*6.5*	*6.5*
Fixed Income Composite	**0.7**	**-0.3**	**0.9**	**3.2**	**2.9**	**0.8**	**3.7**	**3.9**	**5.0**	**5.2**
Barclays Govt/Credit	*0.7*	*-0.9*	*0.4*	*2.5*	*3.2*	*1.5*	*3.2*	*3.4*	*4.7*	*4.6*
McDonnell Investment Management	0.3	-0.8	0.9	1.6	--	--	--	--	--	--
Barclays Int Credit	*0.3*	*-0.7*	*1.1*	*2.0*	*3.2*	*2.4*	*3.4*	*3.9*	*5.5*	*4.9*
Internal Fixed Income	0.9	-0.2	1.0	3.5	3.0	0.9	--	--	--	--
Barclays Government	*0.8*	*-0.2*	*0.9*	*3.3*	*2.6*	*0.9*	*2.5*	*2.7*	*3.8*	*4.2*
Barclays Int Govt/Credit	*0.4*	*-0.2*	*1.2*	*2.3*	*2.3*	*1.4*	*2.3*	*2.6*	*3.9*	*4.1*
Total Equity Composite	**1.1**	**0.8**	**3.3**	**7.8**	**10.5**	**14.3**	**11.7**	**13.2**	**8.3**	**6.8**
MSCI ACWI	*0.9*	*-1.6*	*3.6*	*2.8*	*9.2*	*12.8*	*8.5*	*10.4*	*5.3*	*6.1*
U.S. Equity Composite	**1.5**	**1.6**	**3.5**	**9.9**	**11.0**	**15.1**	**12.8**	**14.3**	**9.2**	**7.5**
S&P 500	*2.1*	*1.4*	*3.4*	*11.2*	*14.0*	*17.6*	*15.4*	*16.2*	*9.9*	*7.7*
Vanguard Total Stock Index Fund	1.7	1.3	3.5	11.1	--	--	--	--	--	--
Russell 3000	*1.7*	*1.4*	*3.6*	*11.3*	*13.8*	*18.0*	*15.2*	*16.4*	*10.0*	*7.9*
Wells Fargo	2.8	3.4	6.2	10.5	13.8	17.6	13.9	16.3	10.2	--
Russell 3000 Growth	*3.1*	*3.2*	*7.6*	*16.4*	*17.1*	*18.9*	*16.0*	*17.8*	*11.3*	*9.0*
Cambiar Investors	1.6	1.7	5.4	6.6	10.6	16.3	9.7	11.6	6.5	--
Russell 1000 Value	*0.4*	*-0.4*	*-0.2*	*6.4*	*10.8*	*17.1*	*14.7*	*15.1*	*8.7*	*6.8*
Fayez Sarofim & Co.	0.3	-1.6	-2.1	2.9	7.1	9.2	9.9	12.2	6.8	6.0
S&P 500	*2.1*	*1.4*	*3.4*	*11.2*	*14.0*	*17.6*	*15.4*	*16.2*	*9.9*	*7.7*
Atalanta Sosnoff Capital	2.2	2.6	3.2	9.4	11.2	16.2	12.3	11.7	8.0	--
S&P 500	*2.1*	*1.4*	*3.4*	*11.2*	*14.0*	*17.6*	*15.4*	*16.2*	*9.9*	*7.7*
Madison Investment Advisors	0.9	0.5	1.9	11.6	11.6	16.6	14.2	16.7	10.9	8.4
Russell MidCap	*0.7*	*0.1*	*3.1*	*10.7*	*13.5*	*19.5*	*14.9*	*16.8*	*11.0*	*8.9*
RBC Global Asset Management	1.1	3.9	5.8	14.3	9.7	18.6	14.6	17.6	12.6	--
Russell 2000 Growth	*0.4*	*5.5*	*9.2*	*20.1*	*14.4*	*21.0*	*15.2*	*17.9*	*11.2*	*9.2*
Non- U.S. Equity Composite	**-2.2**	**-4.9**	**2.2**	**-5.8**	**5.7**	**--**	**--**	**--**	**--**	**--**
MSCI EAFE	*2.1*	*-1.3*	*7.7*	*-0.3*	*7.1*	*12.3*	*5.8*	*8.0*	*2.8*	*5.0*
Ivy Int'l Core Equity Fund	-0.6	-2.0	6.7	1.8	10.7	14.1	7.0	--	--	--
MSCI EAFE	*2.1*	*-1.3*	*7.7*	*-0.3*	*7.1*	*12.3*	*5.8*	*8.0*	*2.8*	*5.0*
Lazard Emerging Markets Equity Fund	-5.3	-10.6	-6.3	-18.6	-2.2	-0.3	-2.6	0.5	0.6	--
MSCI Emerging Markets	*-6.9*	*-13.0*	*-4.2*	*-13.4*	*-0.1*	*0.6*	*-3.2*	*0.6*	*0.4*	*6.6*

Park Ridge Firefighters Pension Fund

Asset Allocation Analysis

July 13, 2015

Summary of Study Assumptions and Data Inputs

Number of Runs Evaluated	1,000
Holding Period	120
Most Recent Data Inputs	December 31, 2014
Monte Carlo Type	75% 10 Yr. Treasury & 25% BBB Spread
Market Value ($000,000)	$41.4
Client Type	Public
Fund Type	Defined Benefit
Target Rate of Return	6.75%
Re-Balancing Rules	Monthly Rebalance
Cash Flow Rules	Liquid Pro Rata
Illiquid Asset Classes:	No Illiquid Asset Classes were Used
Illiquid Asset Class Funding Rules	No Illiquid Asset Classes were Used

Portfolio Options

The chart below outlines the allocation of the current portfolio and the proposed portfolio options.

Asset Class	Current	Portfolio A	Portfolio B	Portfolio C	Portfolio D	Portfolio E
Int Govt/Credit	0.0%	0.0%	0.0%	35.0%	35.0%	35.0%
Credit	6.0%	10.0%	9.0%	0.0%	0.0%	0.0%
Govt	38.0%	30.0%	26.0%	0.0%	0.0%	0.0%
91 Day T-Bills	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Fixed Income	**47.0%**	**40.0%**	**35.0%**	**35.0%**	**35.0%**	**35.0%**
Broad U.S. Equity	19.0%	0.0%	0.0%	0.0%	0.0%	0.0%
U.S. Large-Cap Core	11.0%	15.0%	15.0%	12.5%	10.0%	10.0%
U.S. Large-Cap Value	6.0%	15.0%	15.0%	12.5%	10.0%	10.0%
U.S. Mid-Cap Core	6.0%	7.5%	7.5%	7.5%	7.5%	7.5%
U.S. Small-Cap Value	0.0%	7.5%	7.5%	7.5%	7.5%	7.5%
U.S. Small-Cap Growth	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total U.S. Equity	**47.0%**	**45.0%**	**45.0%**	**40.0%**	**35.0%**	**35.0%**
Developed Large-Cap	0.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Developed Large-Cap Growth	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Non-U.S. Small-Cap	0.0%	0.0%	5.0%	5.0%	5.0%	3.8%
Emerging Market	2.0%	5.0%	5.0%	5.0%	5.0%	3.8%
Total Non-U.S. Equity	**6.0%**	**15.0%**	**20.0%**	**20.0%**	**20.0%**	**17.5%**
GTAA	0.0%	0.0%	0.0%	0.0%	2.5%	2.5%
Total GTAA	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**2.5%**	**2.5%**
Real Estate - Core	0.0%	0.0%	0.0%	5.0%	7.5%	10.0%
Total Real Estate	**0.0%**	**0.0%**	**0.0%**	**5.0%**	**7.5%**	**10.0%**
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Summary of Portfolio Characteristics

	Current	Portfolio A	Portfolio B	Portfolio C	Portfolio D	Portfolio E
Avg. Annualized 10 Yr. Return	5.53%	6.22%	6.59%	6.53%	6.51%	6.47%
Avg. Annualized 10 Yr. Volatility	9.58%	11.46%	11.62%	10.66%	9.65%	9.52%
Downside Probability (Return < 6.75%)	64.80%	57.10%	52.30%	53.90%	54.50%	54.90%
Downside Risk (Return < 6.75%)	3.98%	4.28%	4.23%	3.85%	3.48%	3.47%
% of Portfolio in Illiquid Assets	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Risk Scorecard

The following Risk Scorecard quantitatively ranks the Current Portfolio and proposed portfolios on various risk factors between 0 and 10. Then, the scorecard calculates and proposes a "Risk Optimal" portfolio based on the following weighting: 20% Volatility, 40% Downside Risk, 5% Peer Risk, 5% Interest Rate Risk, 5% Credit Quality Risk, 5% Equity Style Risk, 5% Valuation Risk, and 5% Liquidity Risk. The higher score indicates either more attractive risk/return characteristics or lower risk.

	Current	Portfolio A	Portfolio B	Portfolio C	Portfolio D	Portfolio E
Volatility-Related Score	2.89	2.71	2.83	3.06	3.37	3.40
Downside Risk-Related Score	2.78	2.91	3.11	3.39	3.74	3.72
Peer Risk-Related Score	7.36	8.26	8.76	9.26	9.76	9.76
Interest Rate-Related Score	1.13	1.04	1.04	2.18	2.18	2.18
Credit Quality-Related Score	3.70	4.31	4.34	2.13	2.13	2.13
Equity Style-Related Score	8.13	5.99	5.99	5.45	4.70	4.70
Equity Valuation-Related Score	3.87	3.59	3.59	3.52	3.43	3.43
Liquidity-Related Score	10.00	10.00	10.00	9.50	9.00	8.75
Total Score	3.69	3.64	3.78	3.88	4.07	4.05

The Risk Scorecard recommends Portfolio D.

Risk Factors

Eight risk factors are evaluated in the decision process when analyzing different portfolios. Each of the following eight risk factors are quantitatively ranked on a scale between 0 and 10 where 0 represents the greatest amount of risk and 10 represents the least amount of risk. The risk factors are aggregated into a proprietary Risk Scorecard using a multi-factor approach to determine the most appropriate portfolio for achieving the fund's goals.

Volatility-Related Score: A measure of possible risk-adjusted returns where risk is assessed as portfolio volatility. The score is based on the ratio of average simulated annualized 10 year return over the average simulated 10 year volatility of each portfolio option. The higher the Volatility-Related Score the better potential risk-adjusted returns.

	Current	Portfolio A	Portfolio B	Portfolio C	Portfolio D	Portfolio E
Avg. Return/Avg. Volatility	0.58	0.54	0.57	0.61	0.67	0.68
Volatility-Related Score	2.89	2.71	2.83	3.06	3.37	3.40

Downside Risk-Related Score: A measure of possible risk-adjusted returns where risk is assessed as portfolio downside risk. The score is based on the ratio of average simulated annualized 10 year return over the simulated downside risk of each portfolio option. The higher the Downside Risk-Related Score the better potential risk-adjusted returns.

	Current	Portfolio A	Portfolio B	Portfolio C	Portfolio D	Portfolio E
Avg. Return/Downside Risk	1.39	1.45	1.56	1.69	1.87	1.86
Downside Risk-Related Score	2.78	2.91	3.11	3.39	3.74	3.72

Peer Risk-Related Score: A measure of variance of the target allocation of each portfolio option from an industry average. The score is based on the variance of the fixed income and domestic equity allocations from the industry averages according to the following formula:

$$\text{Peer Variance} = 1 - ABS(E_T - E_I) - ABS(F_T - F_I)$$

where E_T is the domestic equity target allocation of the portfolio option
E_I is the industry average allocation to domestic equity
F_T is the fixed income target allocation of the portfolio option
F_I is the industry average allocation to fixed income

The lower the Peer Risk-Related Score the greater the variance of the target allocation from the industry average.

	Current	Portfolio A	Portfolio B	Portfolio C	Portfolio D	Portfolio E
Peer Variance	0.74	0.83	0.88	0.93	0.98	0.98
Peer Risk-Related Score	7.36	8.26	8.76	9.26	9.76	9.76

Interest Rate-Related Score: A measure of risk-adjusted yield-to-worst ("YTW") of the fixed income portion of each portfolio option where risk is assessed as duration. The score is based on the ratio of YTW over duration of each portfolio option. The higher the Interest Rate-Related Score the better the risk-adjusted YTW.

	Current	Portfolio A	Portfolio B	Portfolio C	Portfolio D	Portfolio E
YTW/Duration	0.23	0.21	0.21	0.44	0.44	0.44
Interest Rate-Related Score	1.13	1.04	1.04	2.18	2.18	2.18

Credit Quality-Related Score: A measure of risk-adjusted yield-to-worst ("YTW") of the fixed income portion of each portfolio option where risk is assessed as credit score. The score is based on the ratio of YTW over the credit score of each portfolio option. The higher the Credit Quality-Related Score the better the risk-adjusted YTW.

	Current	Portfolio A	Portfolio B	Portfolio C	Portfolio D	Portfolio E
YTW/Credit Score	0.74	0.86	0.87	0.43	0.43	0.43
Credit Quality-Related Score	3.70	4.31	4.34	2.13	2.13	2.13

Equity Style-Related Score: A measure of size and style variance of the domestic equity portion of each portfolio option relative to the Wilshire 5000. The score is based on the variance of the Wilshire Style Metrics for size and style. The higher the Equity Style-Related Score the more similar the domestic equity portfolio to the broad market

$$(\text{Style Variance})^2 = (S_1 - S_5)^2 - (C_1 - C_5)^2$$

where S_1 is the Wilshire Style Metric for the equity portion of the portfolio option

S_5 is the Wilshire Style Metric for the Wilshire 5000

C_1 is the Wilshire Size Metric for the equity portion of the portfolio option

C_5 is the Wilshire Size Metric for the Wilshire 5000

The lower the Equity Style-Related Score the greater the variance of the style relative to the Wilshire 5000

	Current	Portfolio A	Portfolio B	Portfolio C	Portfolio D	Portfolio E
Style Variance	18.74	40.07	40.07	45.48	52.99	52.99
Equity Style-Related Score	8.13	5.99	5.99	5.45	4.70	4.70

Equity Valuation-Related Score: A measure of valuation-adjusted 5 years earnings growth of the domestic equity portion of each portfolio option where valuation is assessed as the price-to-earnings ratio ("P/E"). The higher the Equity Valuation-Related Score the better the valuation-adjusted 5 years earnings growth

	Current	Portfolio A	Portfolio B	Portfolio C	Portfolio D	Portfolio E
(5 Yr. Earnings Growth)/(P/E)	0.39	0.36	0.36	0.35	0.34	0.34
Equity Valuation-Related Score	3.87	3.59	3.59	3.52	3.43	3.43

Liquidity-Related Score: A measure of liquidity of each portfolio. The score is based on the target allocation of each portfolio option to illiquid asset classes (i.e. infrastructure, real estate - opportunistic, real estate - mezzanine, timber, private equity - mezzanine, private equity - venture capital, private equity - LBO, private equity - special situation, and private equity fund-of-funds). The lower the Liquidity-Related Score the greater exposure to illiquid asset classes.

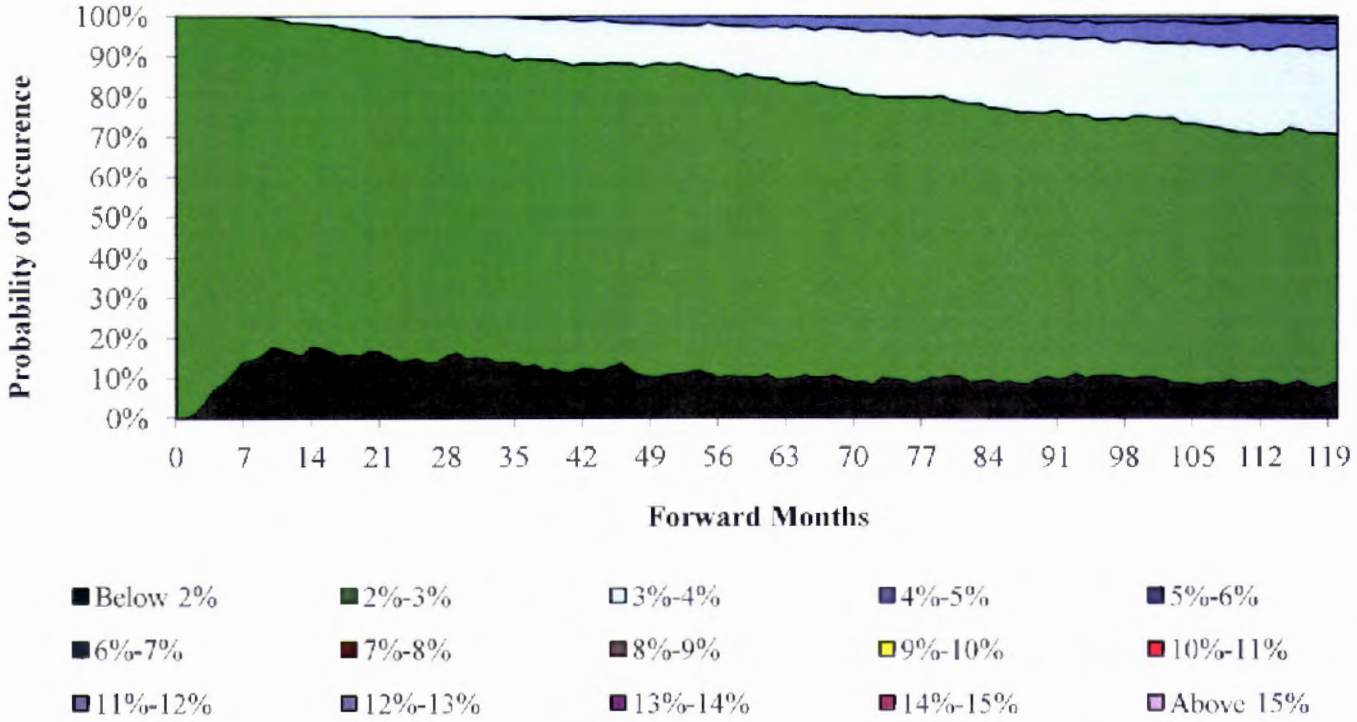
	Current	Portfolio A	Portfolio B	Portfolio C	Portfolio D	Portfolio E
% of Target that is Liquid	1.00	1.00	1.00	0.95	0.90	0.88
Liquidity-Related Score	10.00	10.00	10.00	9.50	9.00	8.75

Simulated 10 Year Treasury Movement

As of December 31, 2014, the yield of the 10 Yr. Treasury was 2.2%. The Monte Carlo begins by simulating the possible monthly movements of the 10 Yr. Treasury yield over the course of the designated time period.

State of the 10 Yr. Treasury	Probability of the State of the 10 Yr. Treasury Yield in 10 Yrs.
Below 2%	8.9%
2 - 3%	61.6%
3 - 4%	21.5%
4 - 5%	6.0%
5 - 6%	1.3%
6 - 7%	0.7%
7 - 8%	0.0%
8 - 9%	0.0%
9 - 10%	0.0%
10 - 11%	0.0%
11 - 12%	0.0%
12 - 13%	0.0%
13 - 14%	0.0%
14 - 15%	0.0%
Above 15%	0.0%

Average Simulated Variation of 10 Yr Treasury

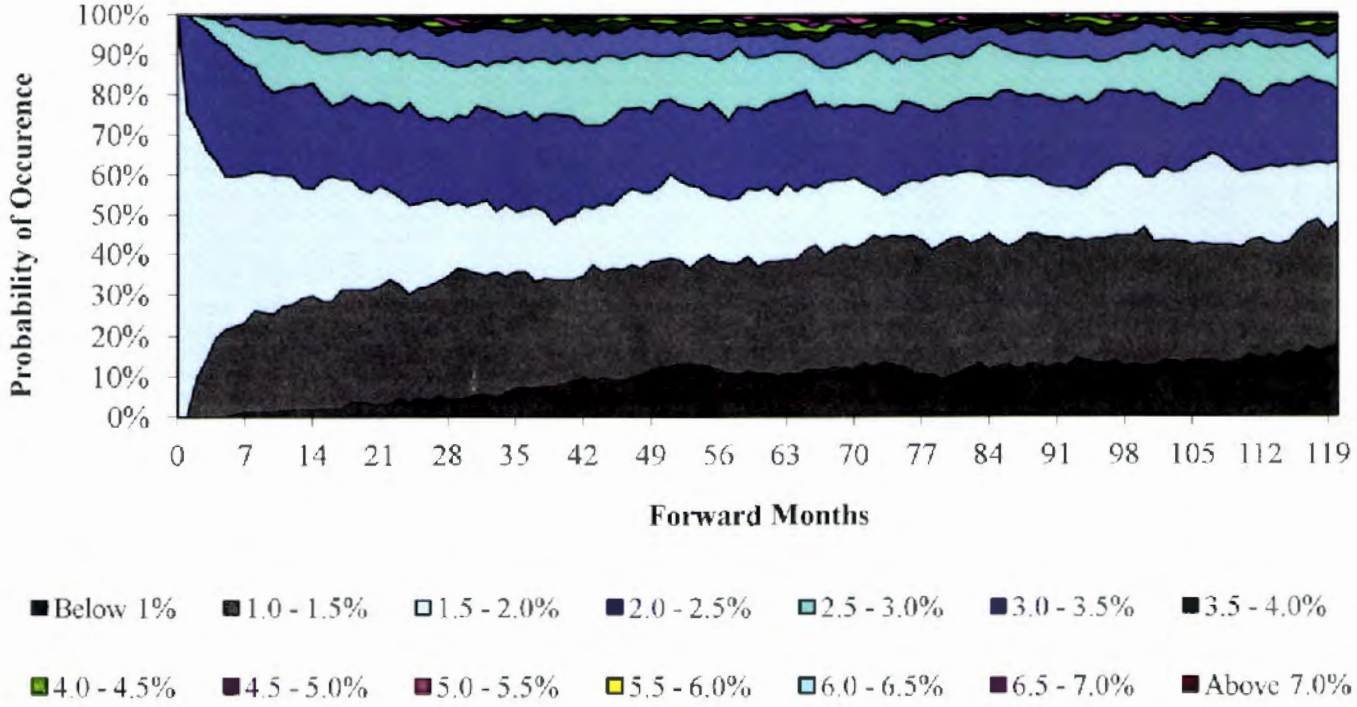


Simulated BBB Spread Movement

As of December 31, 2014, the BBB spread over Treasuries was 1.7%. The Monte Carlo begins by simulating the possible monthly movements of the BBB spread over Treasuries over the course of the designated time period.

State of the BBB Spread	Probability of the State of the BBB Spread
Below 1%	18.0%
1.0 - 1.5%	29.6%
1.5 - 2.0%	15.6%
2.0 - 2.5%	17.6%
2.5 - 3.0%	9.6%
3.0 - 3.5%	5.2%
3.5 - 4.0%	1.6%
4.0 - 4.5%	0.8%
4.5 - 5.0%	0.8%
5.0 - 5.5%	0.0%
5.5 - 6.0%	0.4%
6.0 - 6.5%	0.4%
6.5 - 7.0%	0.0%
Above 7.0%	0.4%

Average Simulated Variation of BBB Spread

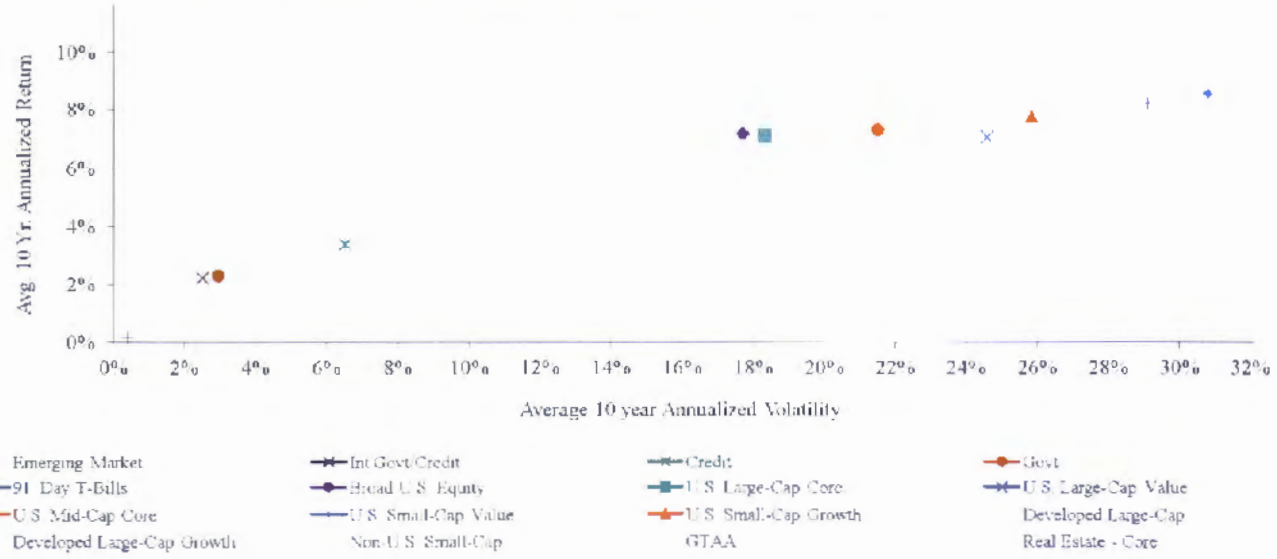


Simulated Asset Class Characteristics

The results of the simulated capital market returns are shown below. It is important to note the data below represents output from the simulations generated by the software, and not deterministic views of future capital market performance. The first column is the average annualized 10 year return of all the simulations. The second column is the average annualized 10 year volatility of all the simulations. Note that this is not the same as the standard deviation of the distribution of the possible annualized 10 year returns. The last three columns indicate the annualized 10 year return for the 25th, 50th, and 75th percentile; the higher the percentile, the better the performance.

Asset Class	Modern Proxy	Avg. 10 Year Ann. Return	Avg. 10 Year Ann. Volatility	25th Percentile 10 Year Ann. Return	50th Percentile 10 Year Ann. Return	75th Percentile 10 Year Ann. Return
Int Govt/Credit	BarCap Int Govt Credit	2.2%	2.5%	1.1%	1.7%	2.8%
Credit	Simulated	3.4%	6.5%	1.5%	3.1%	4.8%
Govt	BarCap Govt	2.3%	2.9%	1.2%	1.9%	2.9%
91 Day T-Bills	91 Day T-Bills	0.2%	0.4%	0.1%	0.3%	0.6%
Broad U.S. Equity	Wilshire 5000	7.2%	17.7%	3.1%	7.3%	11.8%
U.S. Large-Cap Core	S&P 500	7.1%	18.3%	2.7%	7.1%	11.9%
U.S. Large-Cap Value	Russell 1000 Value	7.0%	24.6%	1.0%	6.6%	13.1%
U.S. Mid-Cap Core	Russell MC	7.3%	21.5%	2.2%	7.3%	12.6%
U.S. Small-Cap Value	Russell 2000 Value	8.2%	29.1%	1.6%	7.7%	14.7%
U.S. Small-Cap Growth	Russell 2000 Growth	7.8%	25.8%	1.4%	7.8%	13.9%
Developed Large-Cap	MSCI EAFE	7.8%	24.0%	2.5%	7.8%	11.2%
Developed Large-Cap Growth	MSCI EAFE Growth	7.8%	27.3%	2.4%	7.8%	11.8%
Non-U.S. Small-Cap	Intl Small-Cap	8.6%	28.1%	2.1%	8.6%	12.6%
Emerging Market	MSCI Emerging Market	8.5%	30.8%	2.0%	8.6%	13.7%
GTAA	HFR Global Macro	5.4%	7.0%	3.8%	5.4%	6.9%
Real Estate - Core	NCREIF	8.3%	5.5%	4.1%	8.4%	12.8%

Average 10 Yr Annualized Risk/Return for Asset Classes



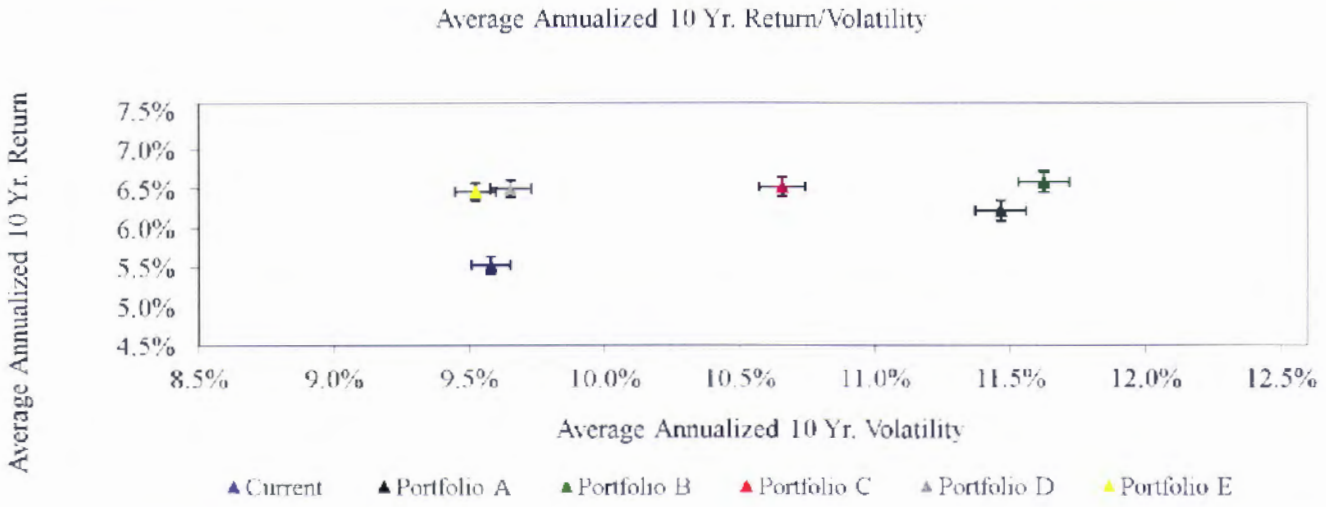
Proposed Portfolio Options

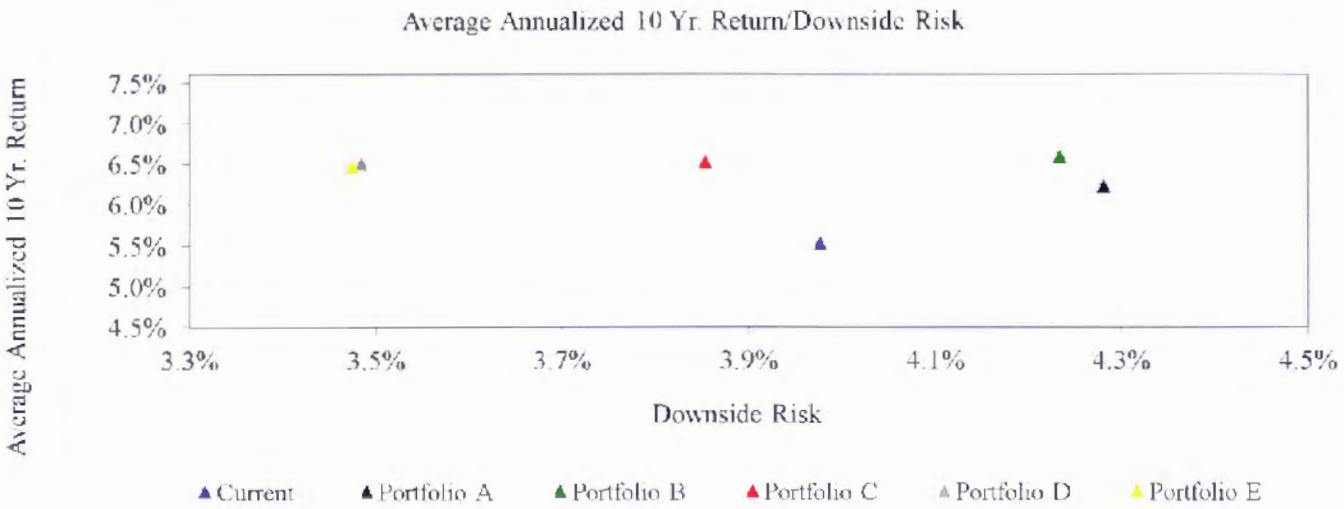
The chart below outlines the allocation of the current portfolio and the proposed portfolio options.

Asset Class	Current	Portfolio A	Portfolio B	Portfolio C	Portfolio D	Portfolio E
Int Govt/Credit	0.0%	0.0%	0.0%	35.0%	35.0%	35.0%
Credit	6.0%	10.0%	9.0%	0.0%	0.0%	0.0%
Govt	38.0%	30.0%	26.0%	0.0%	0.0%	0.0%
91 Day T-Bills	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Fixed Income	47.0%	40.0%	35.0%	35.0%	35.0%	35.0%
Broad U.S. Equity	19.0%	0.0%	0.0%	0.0%	0.0%	0.0%
U.S. Large-Cap Core	11.0%	15.0%	15.0%	12.5%	10.0%	10.0%
U.S. Large-Cap Value	6.0%	15.0%	15.0%	12.5%	10.0%	10.0%
U.S. Mid-Cap Core	6.0%	7.5%	7.5%	7.5%	7.5%	7.5%
U.S. Small-Cap Value	0.0%	7.5%	7.5%	7.5%	7.5%	7.5%
U.S. Small-Cap Growth	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total U.S. Equity	47.0%	45.0%	45.0%	40.0%	35.0%	35.0%
Developed Large-Cap	0.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Developed Large-Cap Growth	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Non-U.S. Small-Cap	0.0%	0.0%	5.0%	5.0%	5.0%	3.8%
Emerging Market	2.0%	5.0%	5.0%	5.0%	5.0%	3.8%
Total Non-U.S. Equity	6.0%	15.0%	20.0%	20.0%	20.0%	17.5%
GTAA	0.0%	0.0%	0.0%	0.0%	2.5%	2.5%
Total GTAA	0.0%	0.0%	0.0%	0.0%	2.5%	2.5%
Real Estate - Core	0.0%	0.0%	0.0%	5.0%	7.5%	10.0%
Total Real Estate	0.0%	0.0%	0.0%	5.0%	7.5%	10.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Proposed Portfolio Options

	Current	Portfolio A	Portfolio B	Portfolio C	Portfolio D	Portfolio E
Average Annualized 10 Yr. Return	5.53%	6.22%	6.59%	6.53%	6.51%	6.47%
Average Annualized 10 Yr. Volatility	9.58%	11.46%	11.62%	10.66%	9.65%	9.52%
Average Return/Average Volatility	0.58	0.54	0.57	0.61	0.67	0.68
25th Percentile Ann. 10 Yr. Return	3.31%	3.49%	3.80%	3.94%	4.21%	4.20%
50th Percentile Ann. 10 Yr. Return	5.48%	6.06%	6.50%	6.40%	6.40%	6.39%
75th Percentile Ann. 10 Yr. Return	7.81%	8.92%	9.35%	9.03%	8.77%	8.69%
Downside Probability (Return < 6.75%)	64.80%	57.10%	52.30%	53.90%	54.50%	54.90%
Downside Risk (Return < 6.75%)	3.98%	4.28%	4.23%	3.85%	3.48%	3.47%
Avg. Downside Dev. (Return < 6.75%)	3.19%	3.35%	3.31%	3.00%	2.72%	2.71%
Downside Probability (Return < 0.0%)	4.80%	5.90%	5.30%	3.80%	2.90%	3.00%
Downside Risk (Return < 0.0%)	2.75%	3.15%	3.12%	2.88%	2.43%	2.39%
Avg. Downside Dev. (Return < 0.0%)	2.09%	2.25%	2.23%	2.23%	1.87%	1.80%





Investment Stewardship Guidance

MARQUETTEUpdate

3Q 2015

3Q Firm Updates

- Hosted third annual Big Brothers Big Sisters golf outing 6/15; raised over $300,000
- Dave Smith to speak at 529 conference 9/28
- Nat Kellogg featured in FundFire's mid year consultant review 6/23
- Kelli Schrade spoke at NASP 26th Annual Pension and Financial Services Conference 6/17
- Kweku Obed spoke at Toigo 2015 Alumni Conference 6/12
- Olu Rosanwo spoke at Opal's Emerging Managers Summit 6/9

About Marquette

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261 clients

$127 billion AUA

64 employees

Data as of March 31, 2015

New Clients this Quarter

- Kansas Construction Trades
- Metropolitan Transit Authority of Harris County
- Roland Park Place
- Service Employees International Union (SEIU)

Creating Social Impact Through Responsible Investing

Register today for our upcoming webinar on Tuesday, August 18th 1:00 - 1:45 pm CT

Viewers briefed on:

- The history of responsible investing
- Different approaches to responsible investing
- Implementation of an impact investing program
- First steps for new impact investors

Nichole Roman-Bhatty, CIMA®
Managing Partner

David Hernandez
Senior Research Analyst

Charts of the Week

- Is Home Ownership a Thing of the Past?
- Still Waiting for Wage Growth
- Which Equity Sectors are Most Sensitive to Rising Interest Rates?

Newsletters

- The State of Real Estate: Is the Run Over? (April)
- Creating Social Impact Through Responsible Investing (July)

Webinars & Videos

- 2015 Halftime Market Briefing (July 16)
- Impact Investing (Aug 18)
- Defined Contribution Plan Stewardship: History & Opportunities

White Papers

- Positioning Fixed Income Portfolios for a Rate Hike (August)
- Defined Contribution Plans: A Look at the Past, Present and Future

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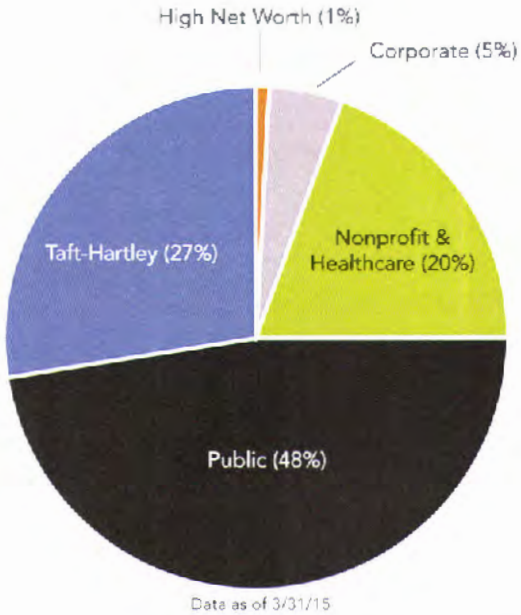
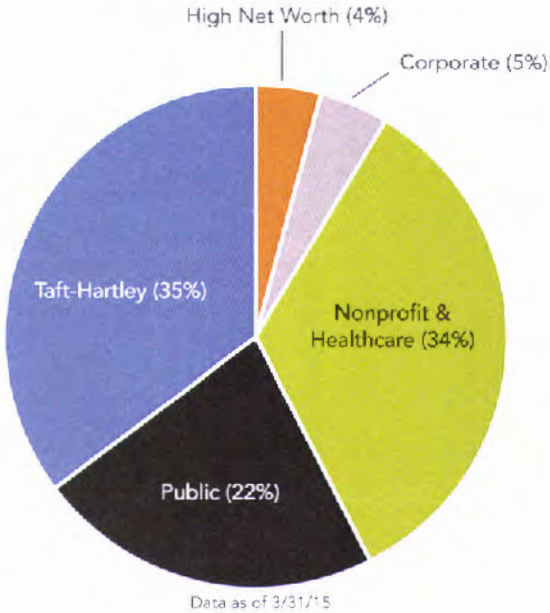
Our Clients

Client Breakdown by Assets



Data as of 3/31/15

Client Breakdown by Quantity



Data as of 3/31/15

2015 Anniversaries Over 10 Years

Brian Wrubel	26 Years	Rita Cirullo	17 Years	Tim Hamann	12 Years
Tim Fallon	19 Years	Brett Christenson	15 Years	Doug Oest	12 Years
Nichole Roman-Bhatty	17 Years	Tim Burdick	15 Years	Dave Wernecke	12 Years

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CONFIRMED KEYNOTE SPEAKERS

Brian D. Singer, CFA
Partner, Head of Dynamic Allocation Strategies
William Blair & Company

Frank Abagnale
World-Renowned Fraud Prevention Expert
Acclaimed Subject of *Catch Me If You Can*

Market Environment

2Q 2015

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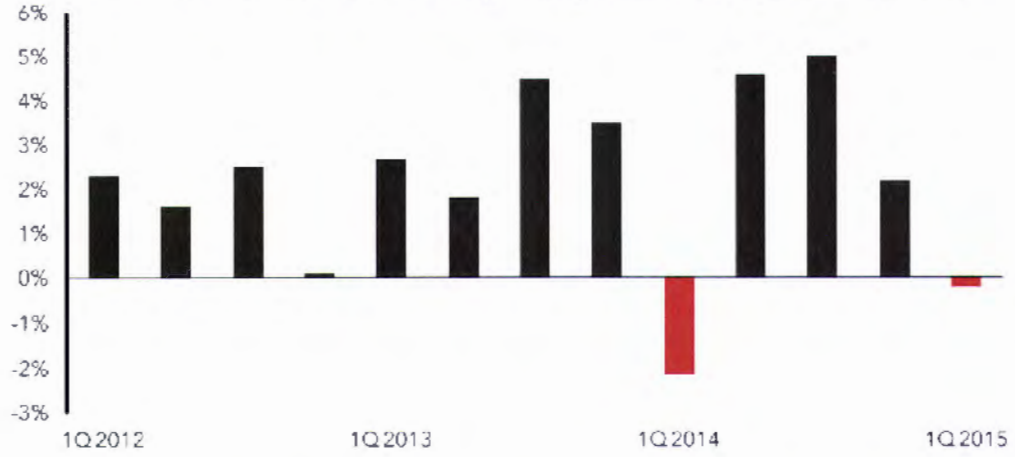
Private Equity 14

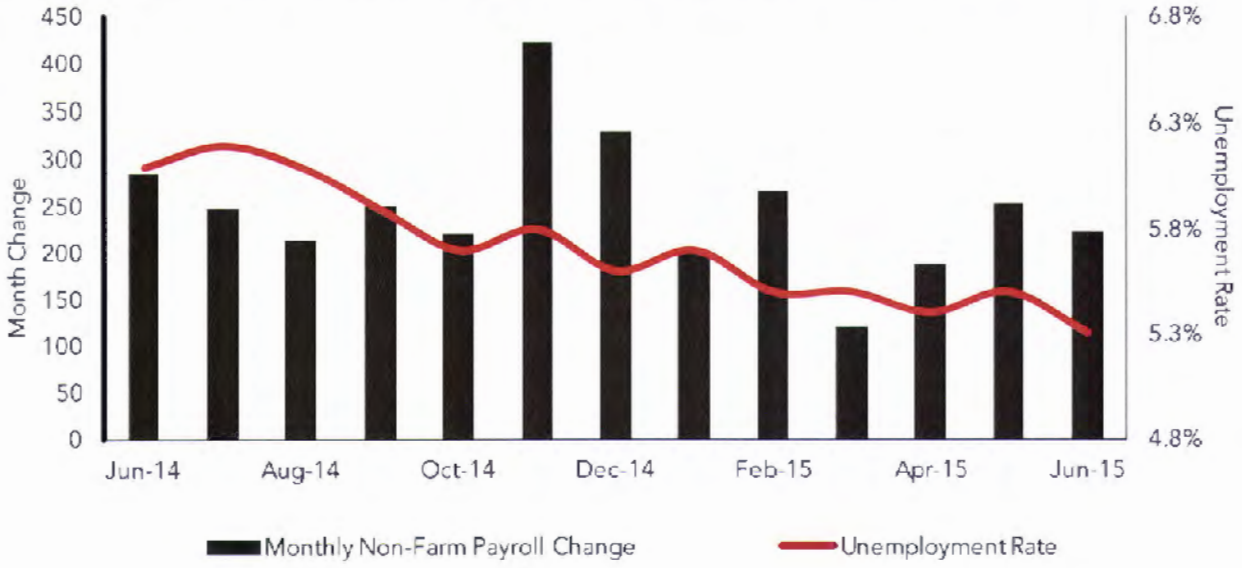
U.S. Economy

The third estimate for the first quarter GDP was released showing a decline of .2%, an improvement from the previous first quarter estimate of a .7% decrease. Compared to the prior estimate, exports decreased less while personal consumption and imports increased more. Major contributors to first quarter GDP included private domestic investments (adding .4%) and personal consumption expenditures (adding 1.4%), while growth was held back by net exports (subtracting 1.9%) and government consumptions (subtracting .1%). In June, the unemployment rate fell to 5.3% from 5.5% in May. In the last twelve months the number of unemployed and long-term unemployed decreased by 1.2M and 955K, respectively. In June, the labor force participation rate decreased to 62.6% and the employment-population ratio was unchanged at 59.3%. The average duration of unemployment in June lasted 28.1 weeks and broad unemployment (U6) decreased by .3% to 10.5%. Non-farm payroll gained 223K jobs in June and averaged 245K per month over the last twelve months. Non-farm payroll was revised for April and May for a net decrease of 60K jobs.

Gross Domestic Product: Real GDP Quarterly Percentage Change (seasonally adjusted annual rates)



Unemployment Data: Unemployment Rate % & Non-Farm Payroll (000's) Net Jobs Created

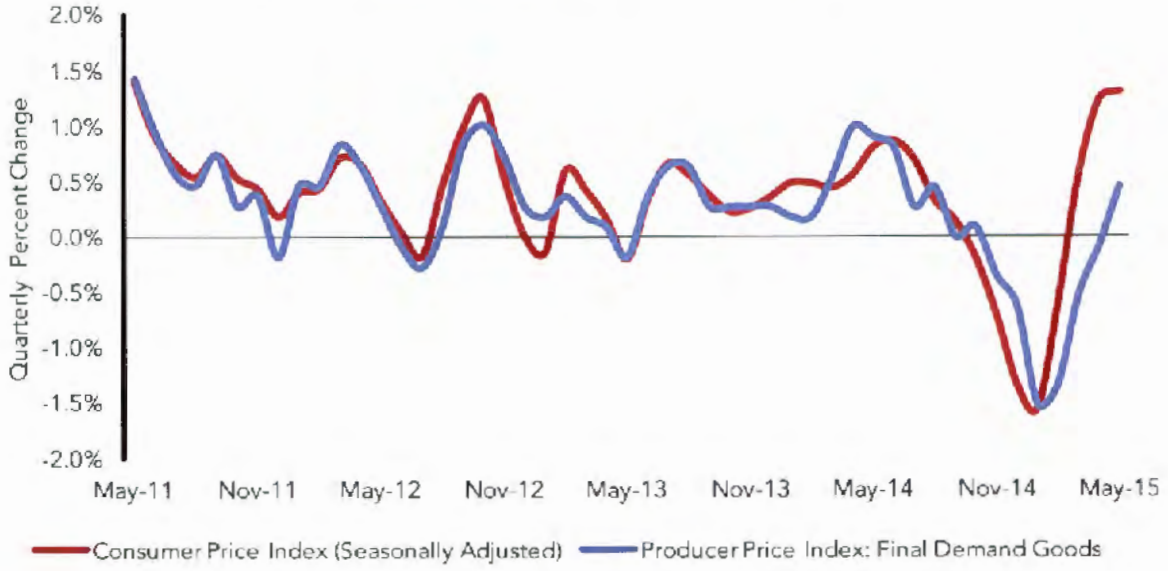


Sources: Bureau of Economic Analysis, Bureau of Labor Statistics

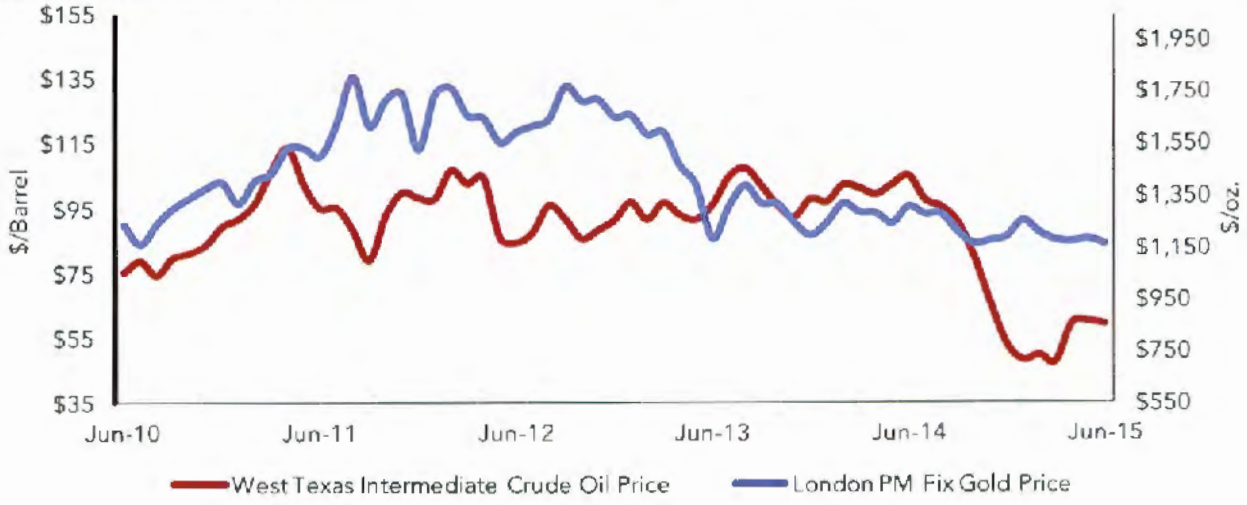
U.S. Economy

The Consumer Price Index (CPI-U) increased by .5% in May. Within CPI-U, energy increased by 4.3% while food was unchanged. In the last twelve months, the CPI-U has had no net change, with food increasing 1.6% and energy declining by 16.3%. Core CPI rose by .1% in May and increased by 1.7% over the last twelve months. The Producer Price Index for final demand increased .5% in May and declined by 1.1 % over the last twelve months. Within total final demand, final demand goods increased 1.3% and final demand services was unchanged. WTI crude oil prices finished the quarter at $59.47 per barrel, a monthly decrease of 1.4%. Gold ended June at $1171/oz, a monthly decline of 1.7%. Year-over-year crude oil decreased by 43.6% while gold decreased by 11.0%.

U.S. Inflation Data: Consumer Price Index & Producer Price Index (Year over Year)



Commodities: Gold and Oil



Sources: St. Louis Federal Reserve, Union Pacific, Kitco

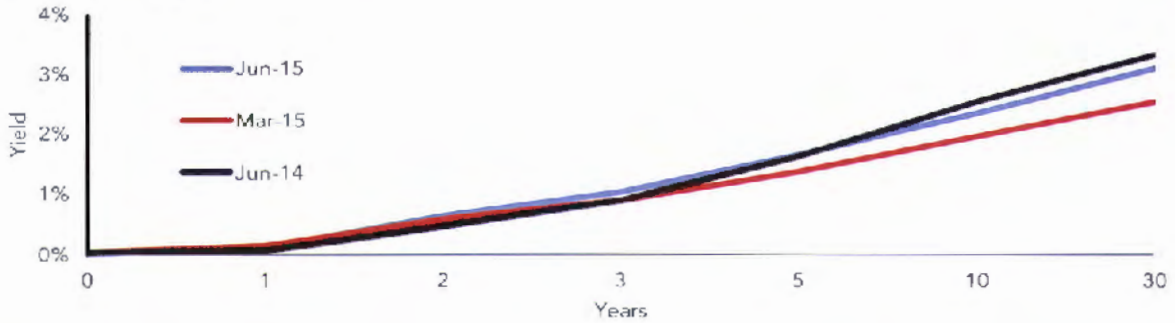
Fixed Income

The quarter saw further stabilization of oil, deterioration of Greece negotiations, Puerto Rico's distress and volatility in China's markets. The market reacted with a safe haven selloff as it assessed the latter three situations to be relatively contained. The long gov., long gov./credit and long credit indices declined 8.1%, 7.6% and 7.3% for the quarter, respectively. Risk assets have been relatively stable, with the high yield and bank loan indices at breakeven and up 0.8%, respectively; recovering from the energy dislocation at the end of 2014, they have returned 2.5% and 2.9%, respectively, for the year. The yield curve rose and steepened, with the 10-year rising 41bp to 2.35% and the 30-year rising 57bp to 3.11%.

Benchmark Performance: Select Fixed Income Indices

	Month	Qtr	YTD	1 Yr	3 Yr Ann	5 Yr Ann	10 Yr Ann
Broad Market Indices							
BarCap Aggregate	-1.1%	-1.7%	-0.1%	1.9%	1.8%	3.3%	4.4%
BarCap Gov./Credit	-1.2%	-2.1%	-0.3%	1.7%	1.8%	3.5%	4.4%
BarCap Long Gov./Credit	-3.7%	-7.6%	-4.5%	1.9%	2.5%	6.7%	6.1%
Intermediate Indices							
BarCap Int. Gov./Credit	-0.6%	-0.6%	0.8%	1.7%	1.6%	2.8%	4.0%
Government Bond Indices							
BarCap Gov.	-0.8%	-1.5%	0.1%	2.3%	0.9%	2.6%	4.0%
BarCap Long Gov.	-3.8%	-8.1%	-4.5%	6.2%	1.2%	6.2%	6.1%
BarCap Int. Gov.	-0.4%	-0.4%	0.8%	1.8%	0.9%	2.1%	3.7%
BarCap 1-3 Year Gov.	0.0%	0.1%	0.7%	0.9%	0.7%	0.9%	2.6%
BarCap 91 Day T-Bill	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	1.5%
BarCap U.S. TIPS	-1.0%	-1.1%	0.3%	-1.7%	-0.8%	3.3%	4.1%
Corporate Bond Indices							
BarCap U.S. Credit	-1.7%	-2.9%	-0.8%	0.9%	3.0%	4.9%	5.1%
BarCap U.S. Long Credit	-3.6%	-7.3%	-4.4%	-0.4%	3.4%	7.0%	6.0%
BarCap High Yield	-1.5%	0.0%	2.5%	-0.4%	6.8%	8.6%	7.9%
CS Leveraged Loan Index	-0.3%	0.8%	2.9%	2.2%	5.3%	5.8%	4.7%
Securitized Bond Indices							
BarCap MBS	-0.8%	-0.7%	0.3%	2.3%	1.9%	2.9%	4.6%
BarCap ABS	-0.1%	0.2%	1.1%	1.6%	1.4%	2.5%	3.3%
BarCap CMBS	-1.0%	-1.1%	0.7%	1.9%	3.3%	5.5%	5.1%
Non-U.S. Indices							
BarCap Global Aggregate Ex-U.S.	0.1%	-0.8%	-5.4%	-13.2%	-2.8%	1.1%	2.8%
JPM EMBI Global Diversified	-1.6%	-0.3%	1.7%	0.5%	4.3%	6.8%	7.4%

Yield Curve: Change Over Time



Source: Barclays

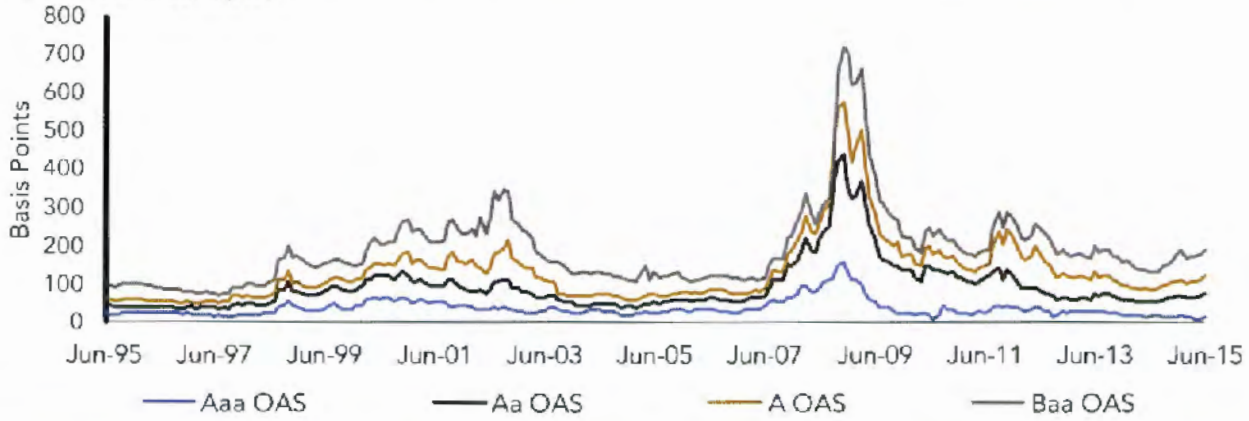
Fixed Income

Lower quality corporate bonds generally outperformed higher quality corporate bonds in the quarter as investors gained more confidence with the stabilization of oil and the minimal contagion levels from Greece, Puerto Rico, and China. CCCs, the lowest-rated high yield bonds, returned 0.5% for the quarter, while AAAs, the highest-rated investment grade bonds, decreased 4.5%. Spreads for all qualities of the investment grade corporate sector widened throughout the quarter, with generally more widening the lower the quality. The Agg provided an income return of 0.6% for the quarter and a price return of -2.3% given the safe haven selloff.

Corporate Quality Indices: Performance

	Month	Qtr.	YTD	1 Year	3 Year	5 Year	10 Year
BarCap Corporate AAA	-2.1%	-4.5%	-2.4%	1.2%	1.1%	3.6%	3.9%
BarCap Corporate AA	-1.4%	-2.4%	-0.5%	1.7%	1.9%	3.7%	4.3%
BarCap Corporate A	-1.7%	-3.0%	-0.8%	1.4%	2.9%	4.8%	4.7%
BarCap Corporate BBB	-2.1%	-3.5%	-1.1%	-0.1%	3.9%	5.9%	5.9%
BarCap Corporate BB	-1.5%	-0.4%	2.3%	1.8%	6.7%	8.6%	8.0%
BarCap Corporate B	-1.4%	0.4%	3.0%	-0.5%	6.6%	8.5%	6.8%
BarCap Corporate CCC	-1.6%	0.5%	2.5%	-4.2%	7.7%	9.1%	7.4%

Credit: OAS Credit Spread



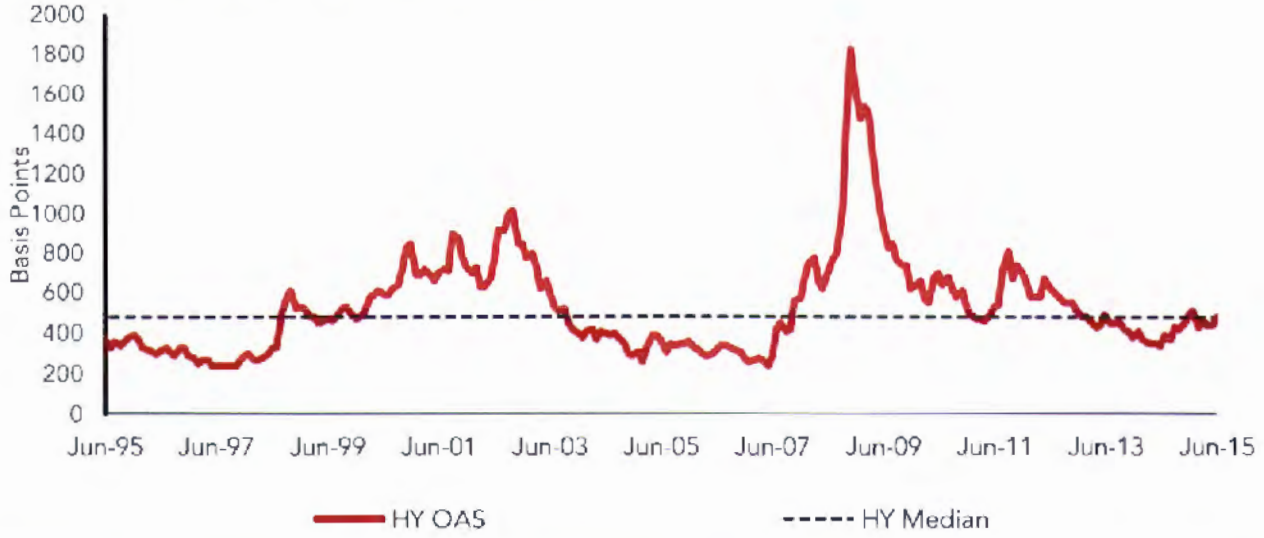
Credit: BarCap Aggregate Components of Total Return

Source: Barclays

Below Investment Grade

Spreads for leveraged finance tightened in April and May as oil stabilized, but widened in June due to concerns over Greece, Puerto Rico and China, resulting in an overall widening from 518bp to 524bp for the bank loan three-year discount margin and from 466bp to 476bp for the high yield option adjusted spread.

OAS: High Yield OAS and Long-Term Median



Three-Year Discount Margin: Credit Suisse Leveraged Loan Index and Long-Term Median

Sources: Barclays, Credit Suisse

U.S. Equity

U.S. equity market performance during June was largely negative amid macro concerns such as the Greek debt crisis and a stock market selloff in China. Small-cap stocks, with their larger domestic focus, were the relative winner during June with a return of 0.8% for the Russell 2000 versus a return of -1.9% for the S&P 500. As of month-end, the S&P 500 is currently 3.2% below its prior closing high on May 21st. June was the first month since January 2015 that the S&P 500 index failed to post a new closing high. Year-to-date, growth indices are outperforming value indices across all market cap segments led by an 8.7% return for the Russell 2000 Growth index.

Equity Returns: Select Index Performance

	Month	Qtr.	YTD	1 Year	3 Year	5 Year	10 Year
Broad Market Indices							
Dow Jones (17,619.51)	-2.1%	-0.3%	0.0%	7.2%	13.8%	15.4%	8.3%
Wilshire 5000	-1.8%	0.1%	1.7%	7.1%	17.5%	17.3%	8.2%
Russell 3000	-1.7%	0.1%	1.9%	7.3%	17.7%	17.5%	8.2%
Large-Cap Market Indices							
S&P 500 (2,063.11)	-1.9%	0.3%	1.2%	7.4%	17.3%	17.3%	7.9%
Russell 1000	-1.9%	0.1%	1.7%	7.4%	17.7%	17.6%	8.1%
Russell 1000 Value	-2.0%	0.1%	-0.6%	4.1%	17.3%	16.5%	7.1%
Russell 1000 Growth	-1.8%	0.1%	4.0%	10.6%	18.0%	18.6%	9.1%
Mid-Cap Market Indices							
Russell MidCap	-2.1%	-1.5%	2.4%	6.6%	19.3%	18.2%	9.4%
Russell MidCap Value	-2.6%	-2.0%	0.4%	3.7%	19.1%	17.7%	8.9%
Russell MidCap Growth	-1.6%	-1.1%	4.2%	9.5%	19.2%	18.7%	9.7%
Small-Cap Market Indices							
Russell 2000	0.8%	0.4%	4.8%	6.5%	17.8%	17.1%	8.4%
Russell 2000 Value	0.1%	-1.2%	0.8%	0.8%	15.5%	14.8%	6.9%
Russell 2000 Growth	1.3%	2.0%	8.7%	12.3%	20.1%	19.3%	9.9%

Operating Earnings Ratio: S&P 500

Sources: Encorr, Standard & Poors

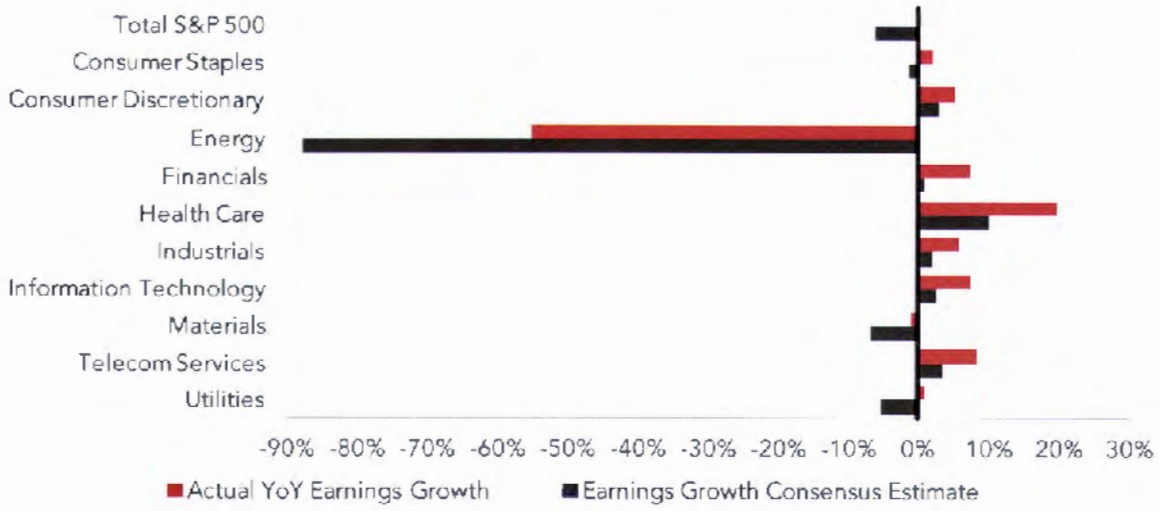
U.S. Equity

Nine out of ten S&P 500 sectors had negative returns in June with Consumer Discretionary (+0.6%) posting the only positive monthly return. Year-to-date, Health Care (+9.6%) is the best performing sector followed by Consumer Discretionary (+6.8%). Utilities (-10.7%) is the worst performing sector year-to-date followed by Energy (-4.7%) and Industrials (-3.1%). Second quarter S&P 500 EPS growth estimates are expected to have declined by 4.3% year-over-year with the fall largely attributable to the energy sector (-63.1%) as well as an increase in the U.S. dollar. Excluding the decline in energy, second quarter year-over-year EPS growth is estimated to be +3.8%.

S&P 500 Sector Performance: Historic Returns

	Month	Qtr.	YTD	1 Year	3 Year	5 Year	10 Year
Consumer Staples	-1.8%	-1.7%	-0.8%	9.4%	14.0%	16.6%	10.6%
Consumer Discretionary	0.6%	1.9%	6.8%	16.5%	22.5%	23.4%	10.6%
Energy	-3.4%	-1.9%	-4.7%	-22.2%	5.6%	10.6%	7.0%
Financials	-0.3%	1.7%	-0.4%	9.3%	20.8%	14.1%	0.3%
Health Care	-0.3%	2.8%	9.6%	24.2%	27.3%	23.8%	11.3%
Industrials	-2.5%	-2.2%	-3.1%	2.4%	17.2%	17.0%	8.0%
Information Technology	-4.3%	0.2%	0.8%	11.1%	16.3%	17.6%	9.6%
Materials	-3.9%	-0.5%	0.5%	-1.1%	13.4%	14.5%	8.6%
Telecommunications	-2.3%	1.6%	3.2%	1.9%	6.3%	14.1%	7.3%
Utilities	-6.0%	-5.8%	-10.7%	-2.9%	8.0%	12.5%	6.9%

Quarterly Earnings: Analyst Expectations vs. Actual, Breakdown by Sector

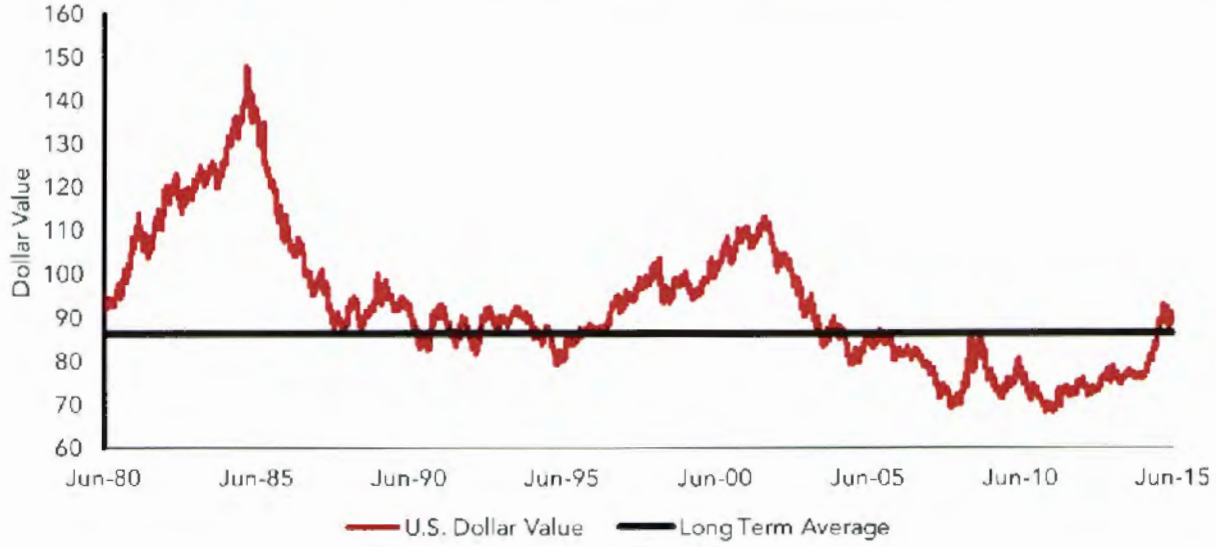


Sources: Encorr, Bloomberg

Global Economy

The Federal Reserve tracks a trade-weighted exchange index between the U.S. dollar and other major widely circulated currencies. The index decreased 1.1% in June but increased 18.5% in the last twelve months. The index is currently 4.1% above its long-term average. The International Monetary Fund (IMF) in its most recent World Economic Outlook is projecting global growth of 3.3% in 2015 and 3.8% in 2016. Advanced economies are projected to expand 2.1% in 2015 and 2.4% in 2016. Emerging market and developing economies are expected to grow 4.2% and 4.7% in 2015 and 2016, respectively.

Currency: Weighted U.S. Dollar vs. Major Currencies



Economic Indicators: For Select Countries

Consumer Prices (Inflation)		*as of*	GDP		*as of*	Unemployment Rate		*as of*
Britain	0.1%	May-15	Britain	1.5%	1Q	Britain	5.5%	Mar-15
Canada	0.9%	May-15	Canada	-0.6%	1Q	Canada	6.8%	May-15
China	1.4%	Jun-15	China	5.3%	1Q	China	4.1%	1Q
France	0.3%	May-15	France	2.5%	1Q	France	10.3%	May-15
Germany	0.3%	Jun-15	Germany	1.1%	1Q	Germany	6.4%	Jun-15
India	5.0%	May-15	India	11.0%	1Q	India	4.9%	2013
Italy	0.1%	Jun-15	Italy	1.2%	1Q	Italy	12.4%	May-15
Japan	0.5%	May-15	Japan	3.9%	1Q	Japan	3.3%	May-15
United States	0.0%	May-15	United States	-0.2%	1Q	United States	5.3%	Jun-15

Sources: St. Louis Federal Reserve, Economist, Bloomberg

Non-U.S. Equity

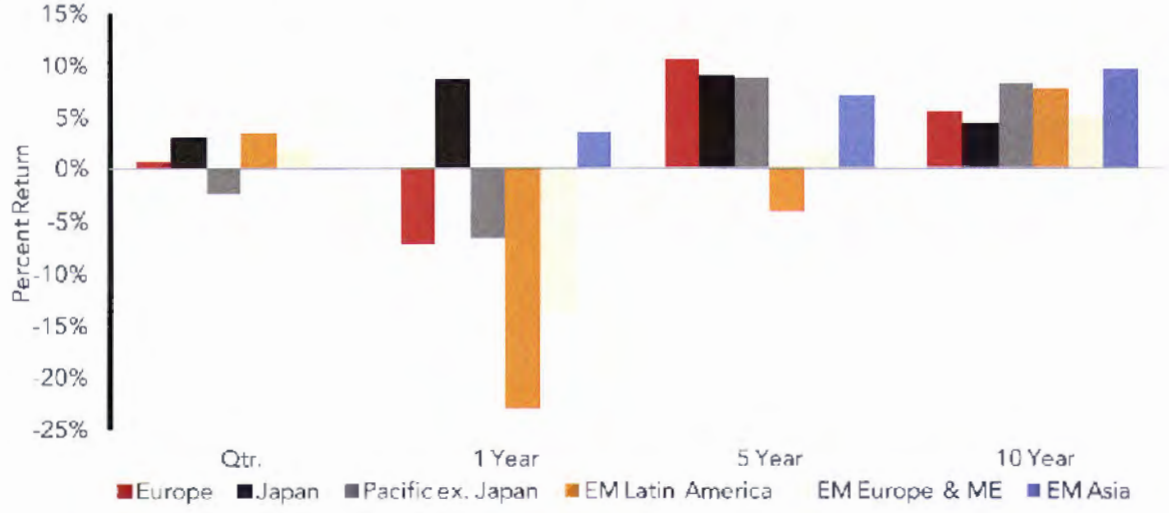
Investor concerns over a possible Greece exit from the Eurozone and a dramatic fall in Chinese equities led to increased market volatility. In June, international equities pulled back with the MSCI EAFE and MSCI EM indices losing 2.8% and 2.5%, respectively. However, both benchmarks produced positive returns for the quarter (0.8%) and on a year-to-date basis with developed markets (5.9%) besting emerging markets (3.1%). After a tremendous run, the locally traded Chinese A-share market lost 27% over four weeks from its mid-June peak while the foreign traded H-share market lost 14%. Year-to-date returns are still positive at 18.7% and 2.7%, respectively. Market involvement by speculative retail investors and a heavy reliance on margin financing contributed to the large run up and ensuing downturn.

In developed markets, Greece has dominated headlines as deadlines have come and gone with no agreed upon resolution. Though just 2% of Euro-area GDP, investors fear a Greek exit will have spillover effects to other EU countries as evident in the rise of sovereign bond yields in the region. Looking past the headlines, economic conditions continue to improve in the Eurozone and positive earnings revisions in the region outpace the United States. In Japan, equities gained 3.1% in the quarter as local wage growth improved and 1Q GDP beat market expectations.

Non U.S. Equity Performance: Select Indices

	Month	Qtr.	YTD	1 Year	3 Year	5 Year	10 Year
MSCI ACWI ex U.S. IMI	-2.7%	1.2%	4.9%	-4.6%	10.3%	8.5%	6.2%
MSCI ACWI ex U.S.	-2.8%	0.7%	4.4%	-4.9%	9.9%	8.2%	6.0%
MSCI EAFE (U.S. dollar)	-2.8%	0.8%	5.9%	-3.8%	12.5%	10.0%	5.6%
MSCI EAFE (Local)	-4.4%	-1.6%	9.2%	12.3%	18.6%	11.8%	5.9%
MSCI EAFE Value	-3.1%	0.5%	4.5%	-6.6%	12.4%	9.5%	5.0%
MSCI EAFE Growth	-2.6%	1.2%	7.2%	-1.0%	12.5%	10.5%	6.2%
S&P Global ex U.S. Small Cap	-2.0%	4.6%	8.4%	-2.3%	13.3%	10.5%	7.8%
S&P Developed ex U.S. Small Cap	-1.4%	4.6%	9.3%	-1.6%	14.9%	12.0%	7.5%
MSCI Emerging Markets	-2.5%	0.8%	3.1%	-4.8%	4.1%	4.0%	8.5%
MSCI Frontier Markets	-0.1%	0.1%	-2.8%	-13.6%	13.4%	7.7%	0.6%

Regional Performance: Equity Market Performance by Region

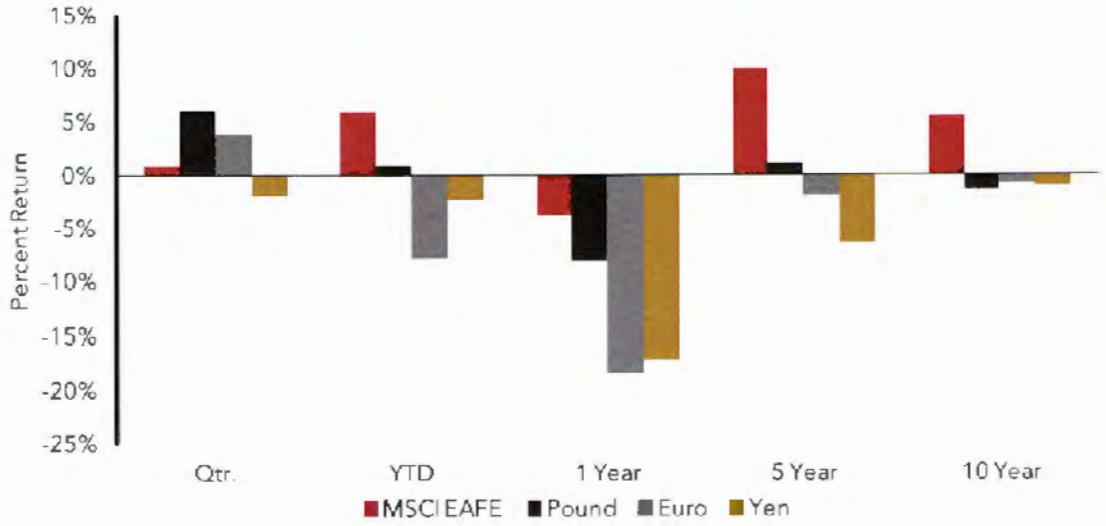


Source: Encorr

Non-U.S. Equity

During the second quarter, equity dividend yields increased, while P/E ratios decreased. As of 6/30/2015, the MSCI ACWI ex. U.S. had a dividend yield and P/E ratio of 2.9% and 16.9, respectively. After a negative May, the MSCI EAFE currency return in June was positive (1.6%) for U.S. based investors due in large part to Euro (1.5%), Yen (1.3%) and Pound (2.8%) strength. Year-to-date, currencies have subtracted roughly 3.3% from developed equity returns. The MSCI EM currency return was -0.3% for the month bringing the year-to-date loss to 2.7%.

Currency Returns: Select Major Currencies



Valuation: Trailing PE and Dividend Yield

Source: Encorr, Bloomberg

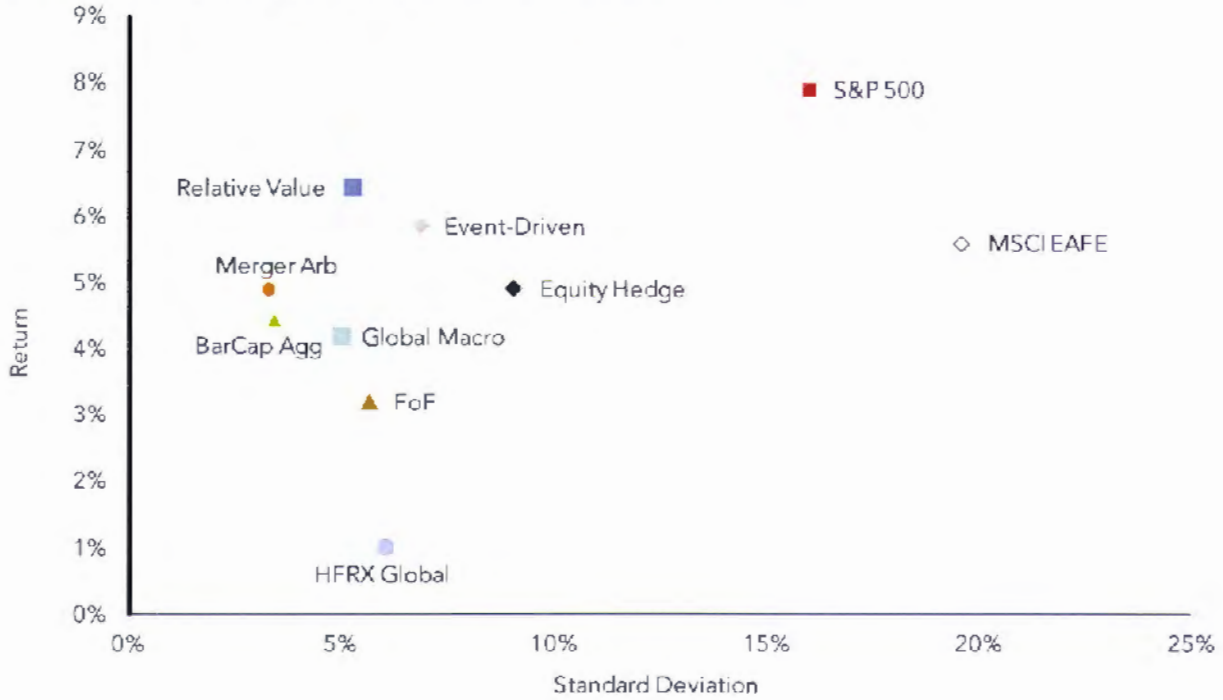
Hedge Fund

June was a challenging month for hedge fund strategies with negative performance across the board as the uncertainty from Greece and concerns over the run-up in China's equity market caused a spike in volatility across the globe and in the U.S. Despite being down in June, however, most hedge fund strategies finished positive for the second quarter with hedged equity leading the way up 2.0%. On the other end of the spectrum, global macro, which was the leader in the first quarter, ended the second quarter with the worst performance down 3.6% due to the reversal in the U.S. Dollar and weak European equity markets in June bringing the YTD performance to -0.4%.

Hedge Fund Performance: HFR Strategy Index Returns

	Month	Qtr.	YTD	1 Year	3 Year	5 Year	10 Year
HFRX Global	-1.2%	-0.8%	1.3%	-1.1%	3.2%	1.5%	1.0%
HFRX Hedged Equity	-0.8%	0.2%	2.4%	2.5%	6.1%	2.0%	0.7%
HFRI Composite	-1.3%	0.2%	2.4%	2.3%	6.4%	5.1%	5.2%
HFRI Fund of Funds	-1.2%	0.1%	2.6%	3.9%	6.2%	4.1%	3.2%
HFRI Convertible Arbitrage	-0.7%	1.4%	3.5%	1.7%	5.9%	5.3%	5.6%
HFRI Equity Hedge	-0.8%	2.0%	4.0%	2.6%	8.4%	6.1%	4.9%
HFRI Event-Driven	-0.8%	1.3%	3.1%	-0.1%	7.7%	6.2%	5.9%
HFRI Macro	-2.4%	-3.6%	-0.4%	4.1%	1.8%	1.8%	4.2%
HFRI Merger Arbitrage	-0.4%	1.2%	3.3%	3.1%	3.8%	3.6%	4.9%
HFRI Relative Value	-1.0%	0.4%	2.3%	1.5%	6.5%	6.3%	6.4%

Ten Year Risk Return: Hedge Fund Returns vs. Public Markets



Source: HFR, Bloomberg

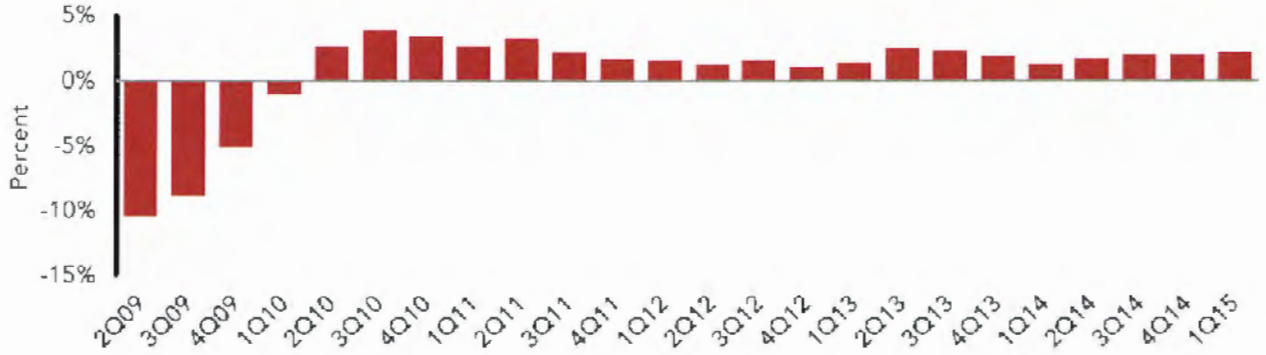
Commercial Real Estate

The NPI started 2015 on a strong foot with a 3.6% return in the first quarter. The total return was comprised of 1.2% income and 2.3% appreciation. The NFI-ODCE delivered a 3.4% return in the first quarter, comprised of 1.2% income and 2.2% appreciation. NFI leverage declined to 21.7% in the first quarter of 2015, and investor interest remained strong, as $3.7 billion was contributed to NFI-ODCE funds during the quarter. Distributions remained fairly steady at $1.9 billion. From a sector standpoint, Retail and Industrial properties delivered the strongest gains in the first quarter, with returns of 4.9% and 3.5%, respectively. Properties in the Southern region led the way and advanced 4.2%. The Western region also experienced strong results in the first quarter with a return of 3.8%.

Real Estate Performance: Select Indices

Indices	1Q15	YTD	1 Year	3 Year	5 Year	10 Year	10 Yr Risk
NPI	**3.6%**	**3.6%**	**12.7%**	**11.5%**	**12.8%**	**8.4%**	**6.7%**
Income	1.2%	1.2%	5.3%	5.5%	5.7%	5.8%	0.3%
Appreciation	2.3%	2.3%	7.1%	5.8%	6.7%	2.4%	6.4%
NFI-ODCE	**3.4%**	**3.4%**	**13.4%**	**12.7%**	**14.5%**	**7.0%**	**9.4%**
Income	1.2%	1.2%	5.0%	5.2%	5.4%	5.6%	0.3%
Appreciation	2.2%	2.2%	8.1%	7.2%	8.7%	1.3%	9.0%
FTSE NAREIT All Eq. REITs	**4.0%**	**4.0%**	**22.7%**	**14.0%**	**15.6%**	**9.5%**	**28.6%**
NPI Apartment	2.9%	2.9%	11.0%	10.7%	13.6%	8.1%	7.0%
NPI Office	3.3%	3.3%	12.7%	10.6%	11.8%	8.2%	7.4%
NPI Industrial	3.5%	3.5%	14.2%	12.4%	12.7%	8.3%	6.8%
NPI Retail	4.9%	4.9%	13.8%	13.3%	13.6%	9.2%	5.4%
NPI Hotel	2.5%	2.5%	13.0%	9.4%	10.2%	7.1%	8.0%
NPI East	3.0%	3.0%	10.4%	9.5%	11.9%	7.9%	7.2%
NPI Midwest	3.4%	3.4%	12.3%	10.9%	11.4%	7.2%	5.3%
NPI South	4.2%	4.2%	14.1%	12.8%	13.1%	8.7%	5.9%
NPI West	3.8%	3.8%	14.4%	12.7%	13.8%	9.1%	7.3%

Commercial Real Estate Market: NFI-ODCE Property Appreciation

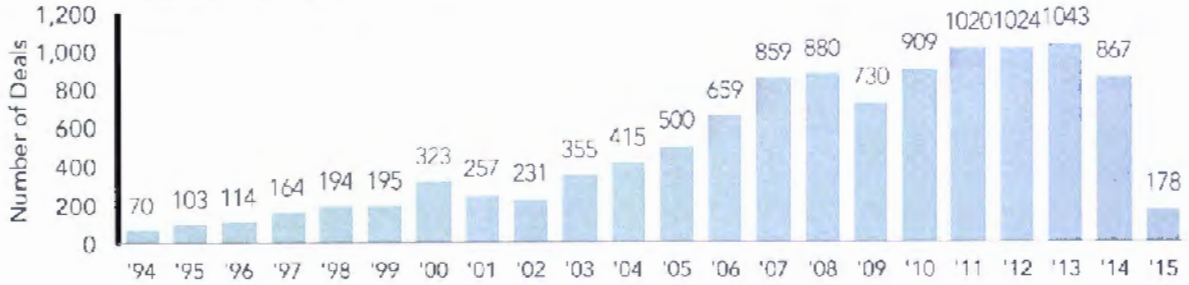


Sources: Encorr, NCREIF

Infrastructure

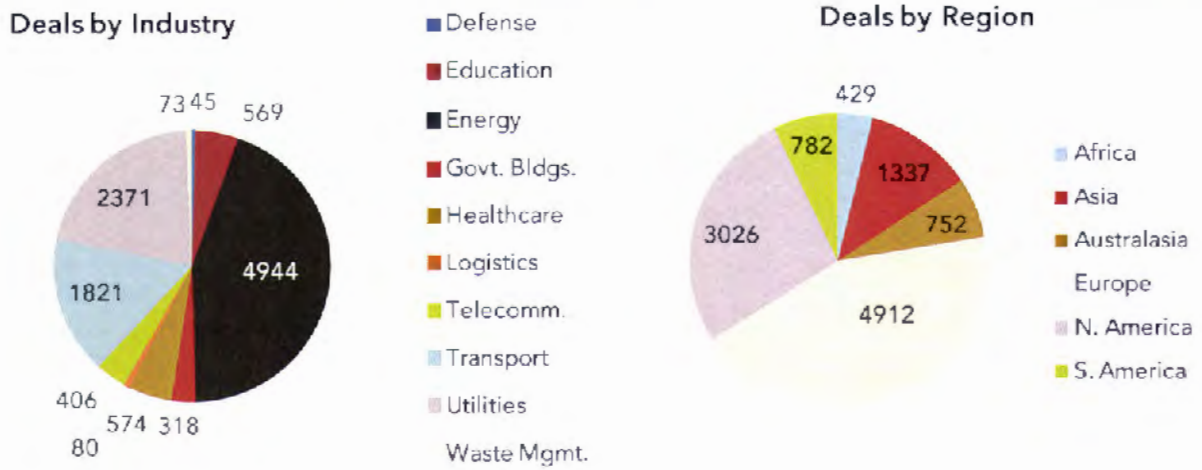
So far this year, 178 infrastructure deals have closed, with Europe seeing the majority of activity and the average deal size representing $555M. Energy and transportation were the most popular sectors for deal activity in the opening months of 2015, representing 44% and 23% of deals, respectively. Utilities represented 9% of deal activity so far this year. Dry powder has risen this year to $112B from $94B at the end of 2014. Recent transactions of note include: IFM's acquisition of the Indiana Toll Road for over $5.5B; Hermes' acquisition of Associate British Ports for $2.4B; and VINCI Park's acquisition of Empark for $1B.

Number of Deals: Deals by Year



Dry Powder: Capital Available for Investment

Deal Breakdown: By Industry (left) and by Region (right)

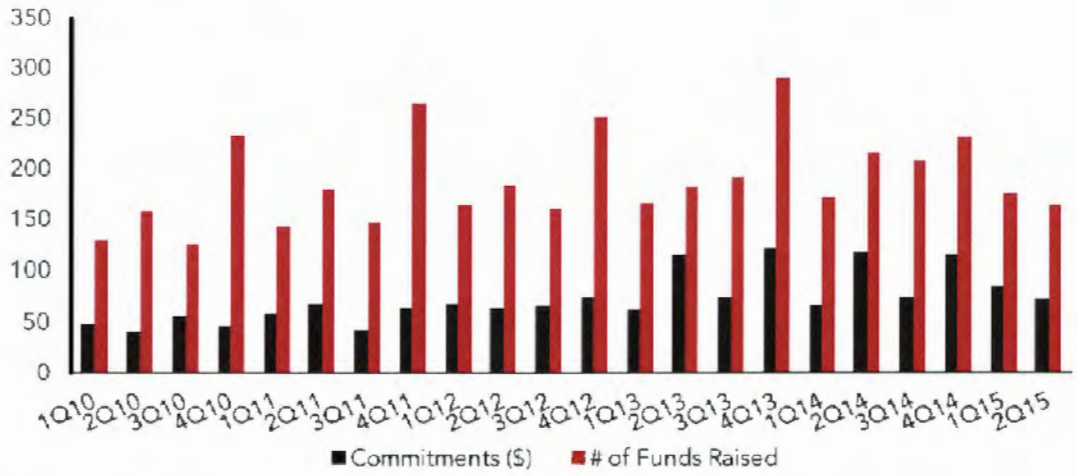


Source: Preqin Infrastructure as of 11/9/2014
Note: Information for prior time periods may change due to daily updates by Preqin

Private Equity

Private equity fundraising, which has been very robust over the last few years, cooled a little in the second quarter. Global fundraising was $70.9 billion in the second quarter which was down almost 40% from a year ago. Given that fundraising can be lumpy, a more telling number is trailing twelve months fundraising, which dropped a more modest 8.8% from a year ago to $343 billion. Exit activity continues to be very robust with first quarter exits of $113.7 billion, but that was down 21% from a record-breaking quarter a year ago. Buyout deal activity was $96.1 billion in the second quarter, up 15.5% year-on-year. Venture funding continues to be very robust with $33.7 billion invested in venture deals in the second quarter, which is up 39.4% from a year ago and represents a new post-crisis high. One area of concern is the recent jump in valuations for buyout deals, with the average purchase price multiple on buyout deals in 2015 exceeding 10x EV/EBITDA on average, a new high that exceeds the prior peak in 2007.

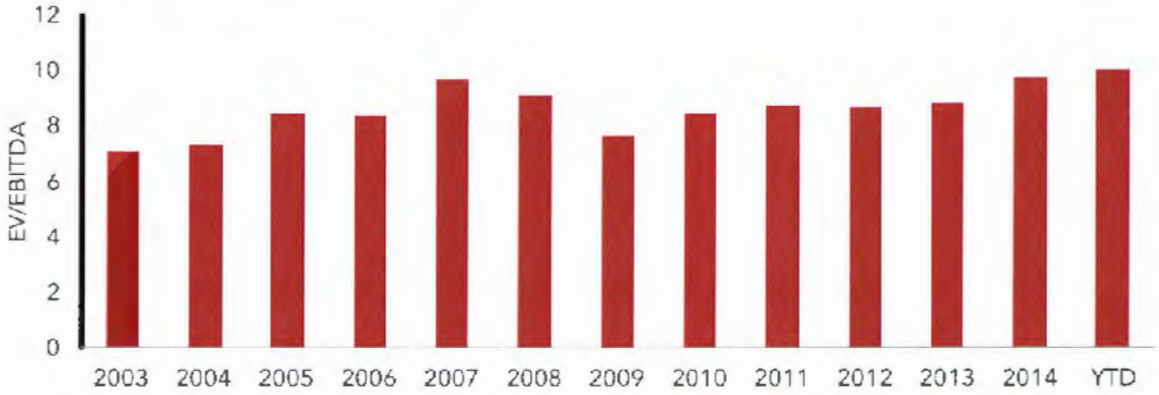
Fundraising: Buyout and Venture



Annualized Performance: Select Benchmarks as of September 30, 2014

	Qtr	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
Cambridge Private Equity Index	2.3%	10.9%	10.9%	14.7%	14.2%	12.9%	9.5%
Wilshire 5000 Index	5.3%	12.7%	12.7%	20.3%	15.5%	8.0%	4.7%
Russell 2000 Index	9.7%	4.9%	4.9%	19.2%	15.5%	7.8%	7.4%

Purchase Price Multiples: EV/EBITDA



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Sources: Venture Economics, Preqin Ltd., Standard & Poors, Bloomberg