Police and Fire Retirement Plan Dashboard

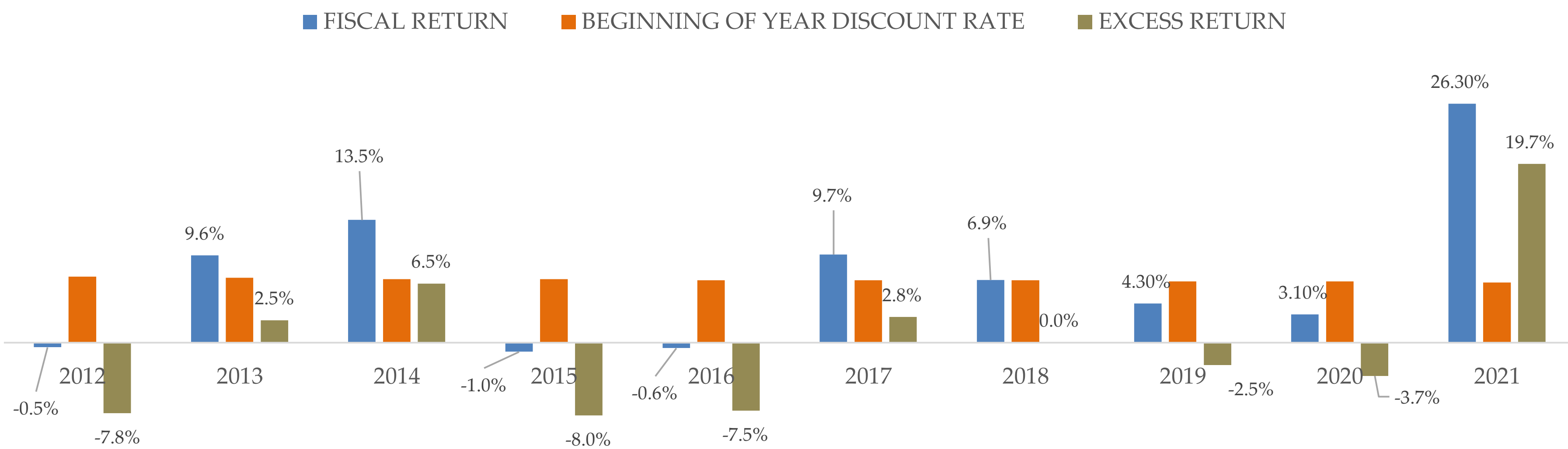
"OUR MISSION IS TO ENSURE PROMPT DELIVERY OF SERVICES AND BENEFITS TO OUR MEMBERS, AND TO COLLECT, INVEST, AND EXPEND SYSTEM ASSETS IN A PRUDENT, FAIR, AND TIMELY MANNER".

Contents

Police and Fire Discount Rate History

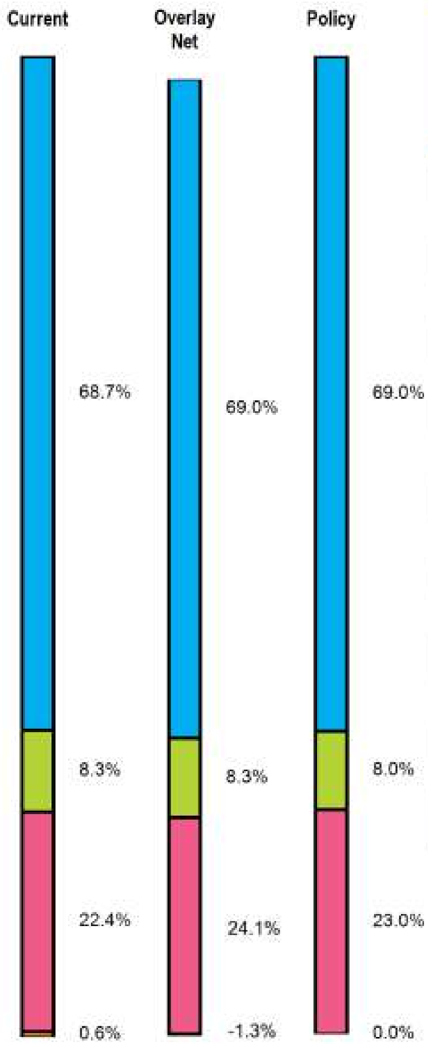
YEARS	FISCAL YEAR	10 YEAR US TREASURY RATE	DISCOUNT RATE	FISCAL YEAR RETURN*	EXCESS TO DISCOUNT RATE
	1997	6.51%	8.00%		
1	2012	1.67%	7.25%	-0.5%	-7.8%
2	2013	2.52%	7.125%	9.6%	2.5%
3	2014	2.53%	7.00%	13.5%	6.5%
4	2015	2.35%	7.00%	-1.0%	-8.0%
5	2016	1.49%	6.875%	-0.6%	-7.5%
6	2017	2.31%	6.875%	9.7%	2.8%
7	2018	2.85%	6.875%	6.9%	0.0%
8	2019	2.01%	6.75%	4.3%	-2.5%
9	2020	0.66%	6.75%	3.1%	**-3.7%**
10	2021	1.47%	6.63%	26.3%	19.7%
	** Fiscal Year Ends 6/30. Returns are net of fund management fees.*				

Plan Return versus Discount Rate



Source: Meketa. Annually updated.

INVESTMENT METRICS



Total Fund | As of June 30, 2021

Allocation vs. Targets and Policy

	Current Balance	Current Allocation	Russell Overlay Net Position	Policy
Growth	**$3,211,287,129**	**68.7%**	**69.0%**	**69.0%**
Public Equity	$2,184,636,166	46.7%	47.0%	46.0%
Private Markets	$843,600,927	18.0%	18.0%	19.0%
Emerging Markets Debt	$93,747,944	2.0%	2.0%	2.0%
High Yield Bonds	$89,302,093	1.9%	1.9%	2.0%
Low Beta	**$388,438,101**	**8.3%**	**8.3%**	**8.0%**
Market Neutral Strategies	$143,761,161	3.1%	3.1%	3.0%
Immunized Cash Flows	$182,193,402	3.9%	3.9%	5.0%
Cash	$62,483,537	1.3%	1.3%	0.0%
Other	**$1,049,001,540**	**22.4%**	**24.1%**	**23.0%**
Core Real Estate	$206,970,910	4.4%	4.4%	5.0%
Commodities	$93,693,732	2.0%	2.0%	2.0%
TIPS	$88,627,691	1.9%	1.9%	2.0%
Investment Grade Bonds	$524,734,472	11.2%	12.5%	11.0%
Long Term Govt Bonds	$134,974,735	2.9%	3.2%	3.0%
Overlay	**$27,858,976**	**0.6%**	**-1.3%**	**0.0%**
Total	**$4,676,585,746**	**100.0%**	**100.0%**	**100.0%**

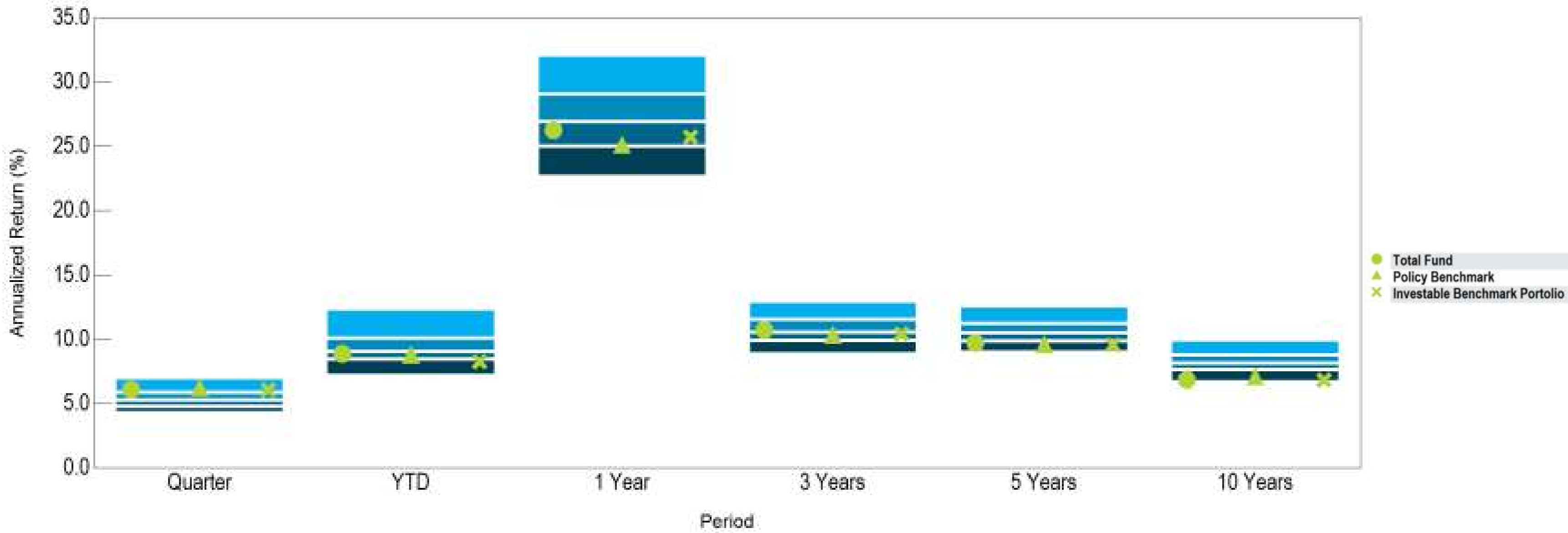
[1] Data in the column titled "Russel Overlay Net Position" is based on physical exposures, adjusted for synthetic positions provided by Russell Investments.

[2] Policy Targets represent approved asset allocation from the Special Board Meeting on March 18th, 2020.

Source: Meketa. Quarterly updated.

INVESTMENT METRICS

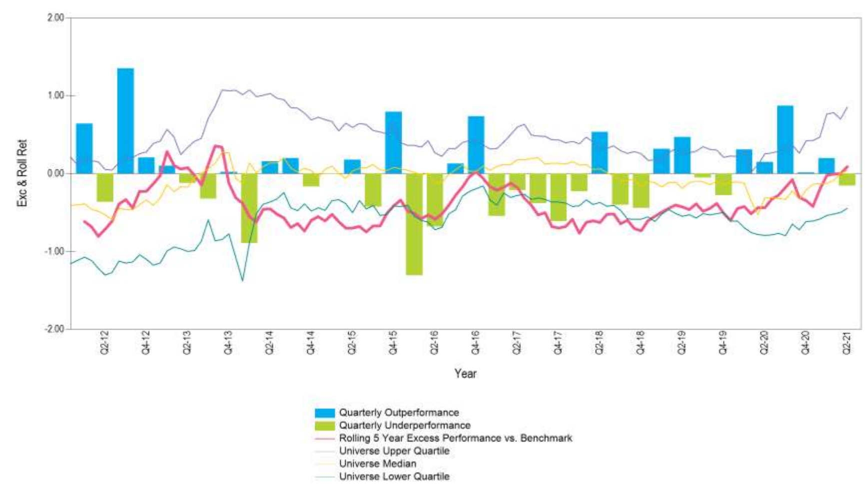
Performance vs. InvestorForce Public DB > $1B Net (Annualized Return)



Performance vs. InvestorForce Public DB > $1B Net (Ranking)

	Quarter	YTD	1 Year	3 Years	5 Years	10 Years
			Period			
Return (Rank)						
5th Percentile	7.0	12.4	32.1	13.0	12.6	10.0
25th Percentile	5.9	10.1	29.1	11.6	11.3	8.8
Median	5.3	9.1	27.0	10.6	10.5	8.2
75th Percentile	4.8	8.5	25.1	10.0	9.9	7.7
95th Percentile	4.3	7.2	22.7	8.9	9.0	6.7
# of Portfolios	77	77	77	77	77	72

Quarterly Cumulative Excess Performance

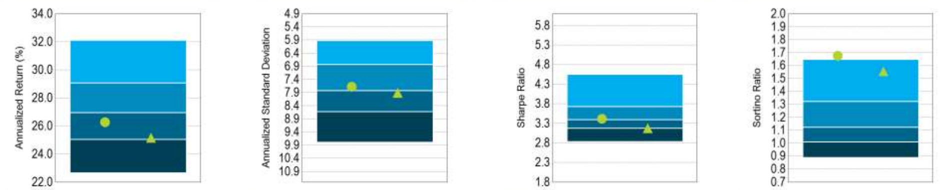


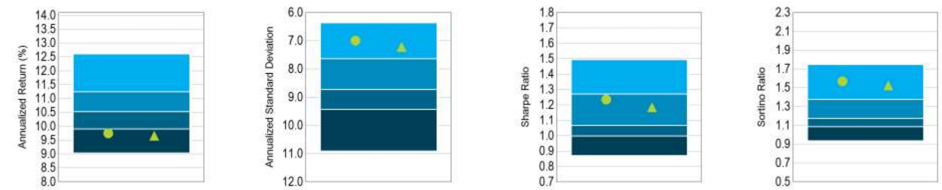
Source: Meketa. Quarterly updated.

INVESTMENT METRICS

Risk Adjusted Performance – 1 Year

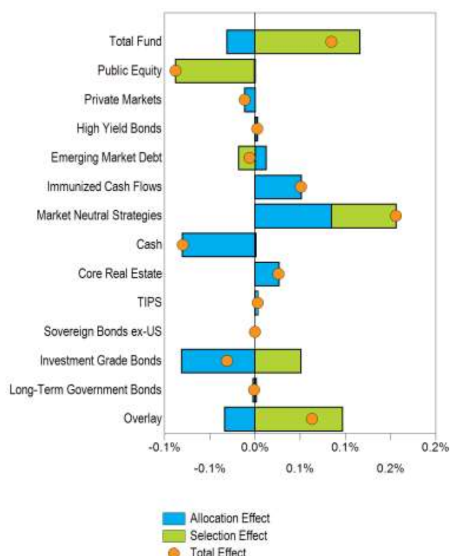
Risk Adjusted Performance – 5 Years



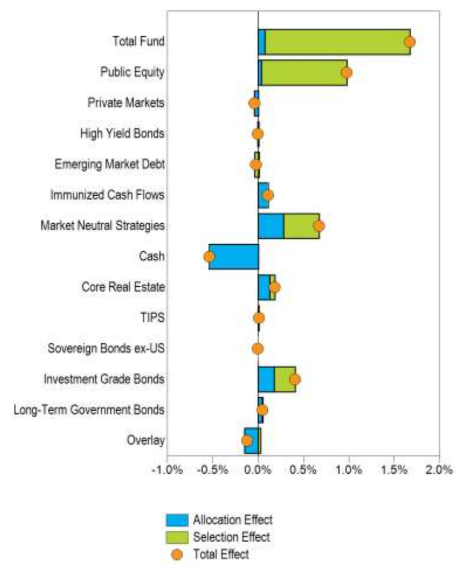


	1 Year: Annualized Return (%) vs. InvMetrics Public DB > $1B Net	1 Year: Annualized Standard Deviation vs. InvMetrics Public DB > $1B Net	1 Year: Sharpe Ratio vs. InvMetrics Public DB > $1B Net	1 Year: Sortino Ratio vs. InvMetrics Public DB > $1B Net	5 Years: Annualized Return (%) vs. InvMetrics Public DB > $1B Net	5 Years: Annualized Standard Deviation vs. InvMetrics Public DB > $1B Net	5 Years: Sharpe Ratio vs. InvMetrics Public DB > $1B Net	5 Years: Sortino Ratio vs. InvMetrics Public DB > $1B Net
Total Fund								
Value	26.3	7.7	3.4	1.7	9.7	7.0	1.2	1.6
Rank	58	47	50	4	82	16	28	16
Policy Benchmark								
Value	25.2	7.9	3.2	1.6	9.7	7.2	1.2	1.5
Rank	73	52	76	9	83	21	30	17
Universe								
5th %tile	32.1	5.9	4.6	1.6	12.6	6.4	1.5	1.7
25th %tile	29.1	6.8	3.7	1.3	11.3	7.6	1.3	1.4
Median	27.0	7.8	3.4	1.1	10.5	8.7	1.1	1.2
75th %tile	25.1	8.6	3.2	1.0	9.9	9.4	1.0	1.1
95th %tile	22.7	9.8	2.8	0.9	9.0	10.9	0.9	0.9

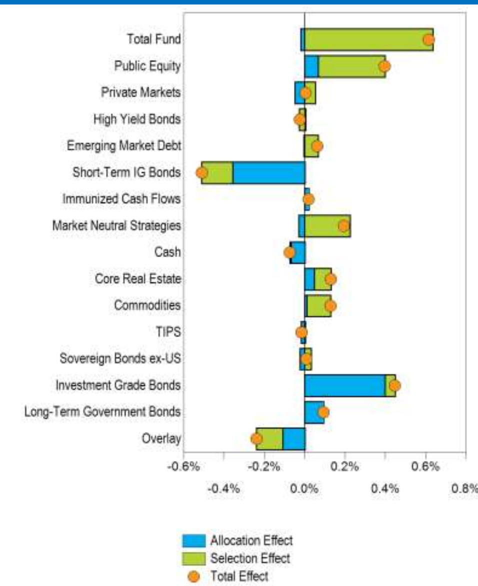
Attribution Effects – 3 Months



Attribution Effects – 1 Year



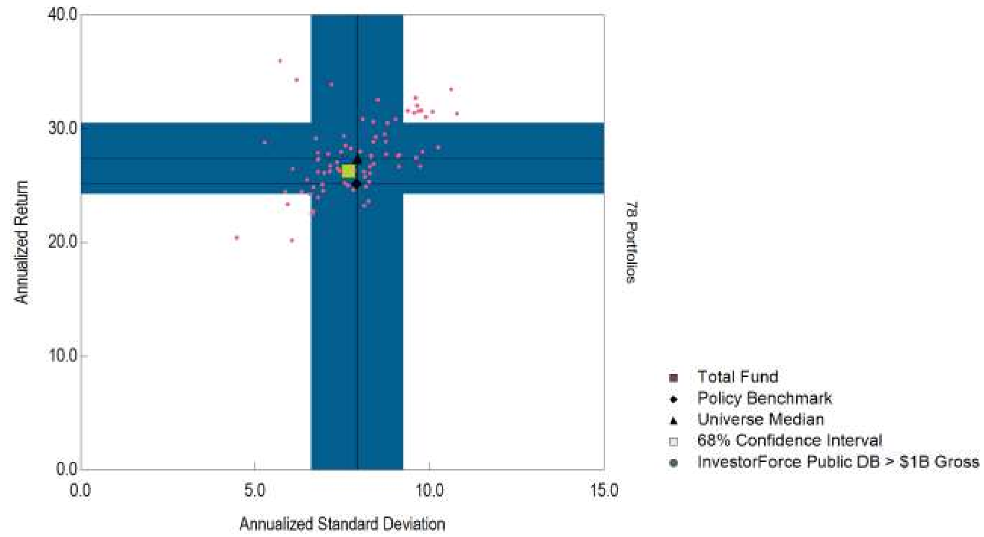
Attribution Effects – 3 Years



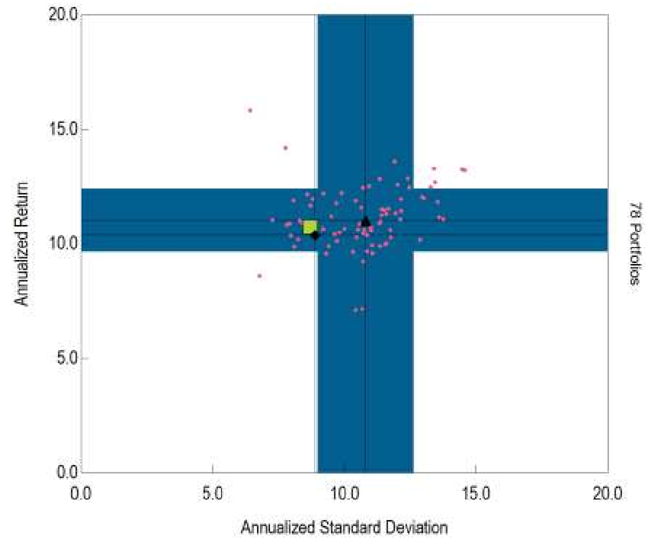
Source: Meketa. Quarterly updated.

INVESTMENT METRICS

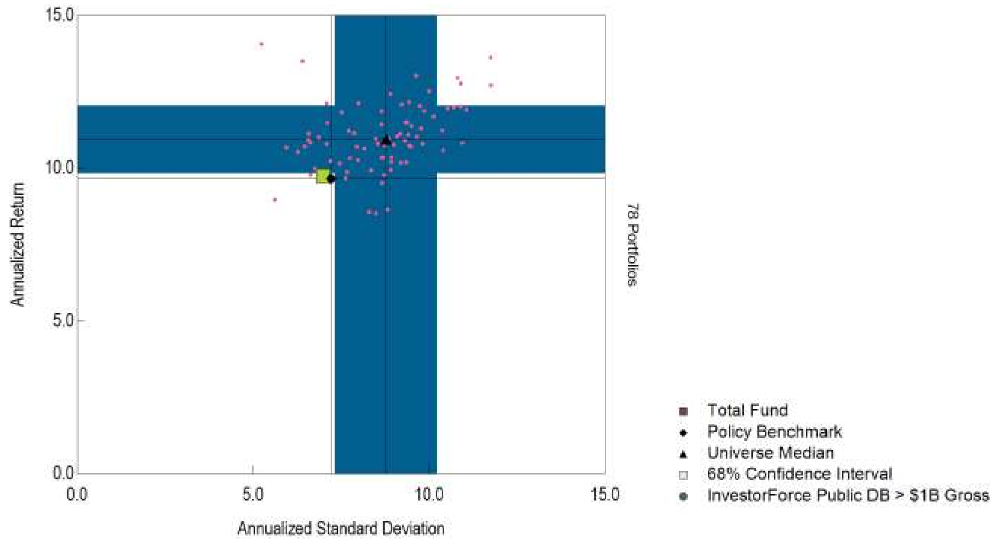
Plan Risk vs. Return – 1 Year



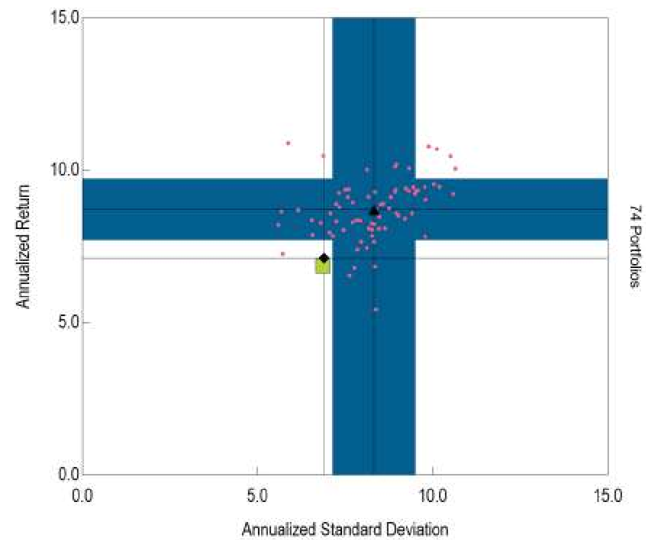
Plan Risk vs. Return – 3 Years



Plan Risk vs. Return – 5 Years



Plan Risk vs. Return – 10 Years

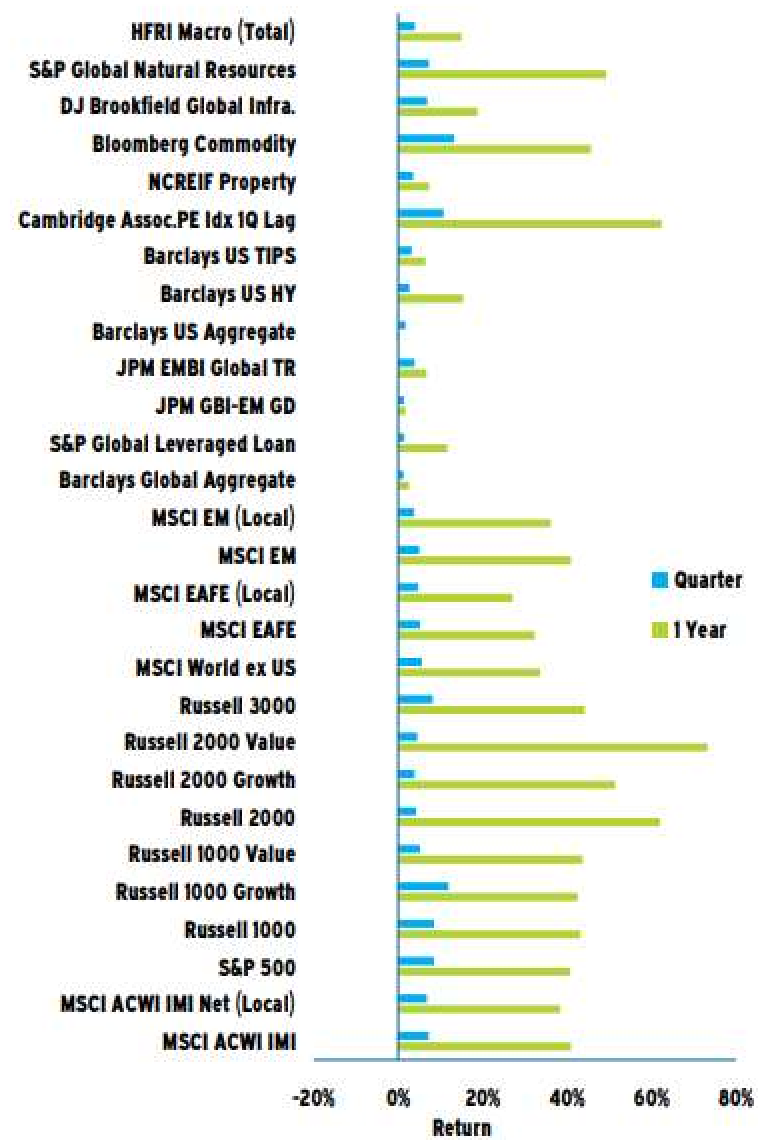


Source: Meketa. Quarterly updated.

CAPITAL MARKET OVERVIEW

Market Environment – 2Q21 Overview

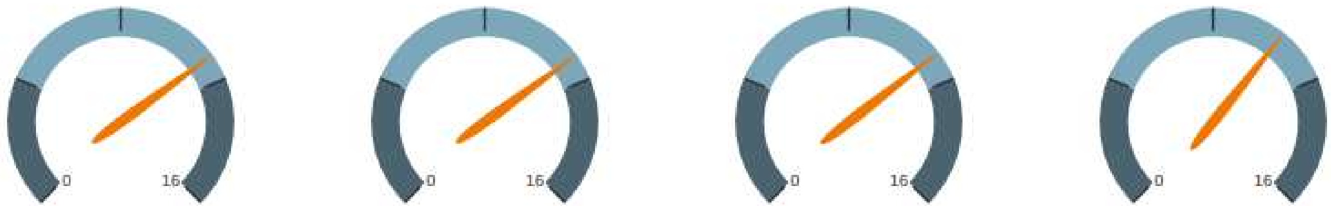
Benchmark	Scope	2Q21 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
Global Equity						
MSCI ACWI IMI	World	7.2	40.9	14.2	14.5	9.9
MSCI ACWI IMI Net (Local)	World (Local Currency)	6.9	38.3	14.1	14.5	11.2
Domestic Equity						
S&P 500	Large Core	8.5	40.8	18.7	17.6	14.8
Russell 1000	Large Core	8.5	43.1	19.2	18.0	14.9
Russell 1000 Growth	Large Growth	11.9	42.5	25.1	23.7	17.9
Russell 1000 Value	Large Value	5.2	43.7	12.4	11.9	11.6
Russell 2000	Small Core	4.3	62.0	13.5	16.5	12.3
Russell 2000 Growth	Small Growth	3.9	51.4	15.9	18.8	13.5
Russell 2000 Value	Small Value	4.6	73.3	10.3	13.6	10.8
Russell 3000	All Cap Core	8.2	44.2	18.7	17.9	14.7
International Equity						
MSCI World ex US	World ex-US	5.6	33.6	8.6	10.4	5.7
MSCI EAFE	International Developed	5.2	32.3	8.3	10.3	5.9
MSCI EAFE (Local)	International Developed (Local Currency)	4.8	27.1	7.5	10.0	8.1
MSCI EM	Emerging Markets	5.0	40.9	11.3	13.0	4.3
MSCI EM (Local)	Emerging Markets (Local Currency)	3.8	36.1	12.0	13.6	7.6
Global Fixed Income						
Barclays Global Aggregate	Global Core Bonds	1.3	2.6	4.2	2.3	2.1
S&P Global Leveraged Loan	Bank Loans	1.5	11.7	3.9	4.8	4.1
JPM GBI-EM GD	Emerging Markets Bonds (Local Currency)	1.4	1.8	7.2	6.4	7.0
JPM EMBI Global TR	Emerging Market Bonds	3.9	6.8	6.5	4.4	5.3
Domestic Fixed Income						
Barclays US Aggregate	Core Bonds	1.8	-0.3	5.3	3.0	3.4
Barclays US HY	High Yield	2.7	15.4	7.4	7.5	6.7
Barclays US TIPS	Inflation	3.2	6.5	6.5	4.2	3.4
Other						
Cambridge AssociatesPE Index 1Qtr Lag	Private Equity	10.8	62.4	24.5	20.5	16.5
NCREIF Property	Real Estate	3.6	7.4	5.5	6.1	8.8
Bloomberg Commodity	Commodities	13.3	45.6	3.9	2.4	-4.4
DJ Brookfield Global Infrastructure	Infrastructure	6.9	18.8	8.0	6.8	8.2
S&P Global Natural Resources	Natural Resources	7.3	49.3	6.1	11.4	2.3
HFRI Macro	Hedge Funds	4.0	15.0	5.9	3.2	2.0



Source: Meketa, Quarterly updated.

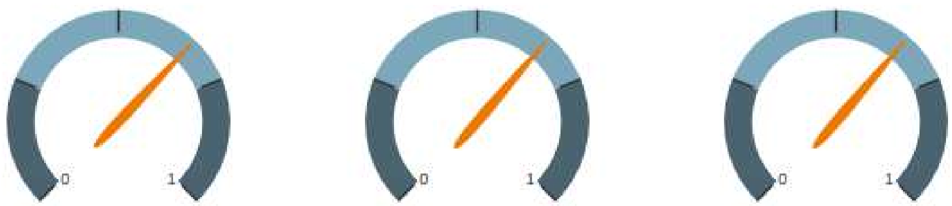
RISK METHODS

1 Portfolio risk



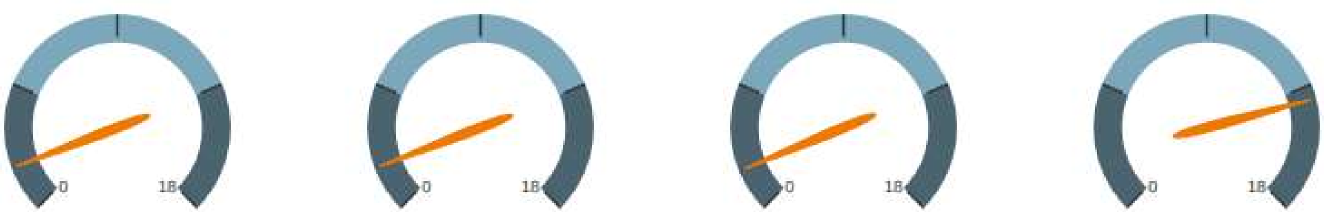
Portfolio: 11.2% | Policy: 11.2% | Peer Group: 11.1% | Liability: 10.3%

2 Portfolio equity beta



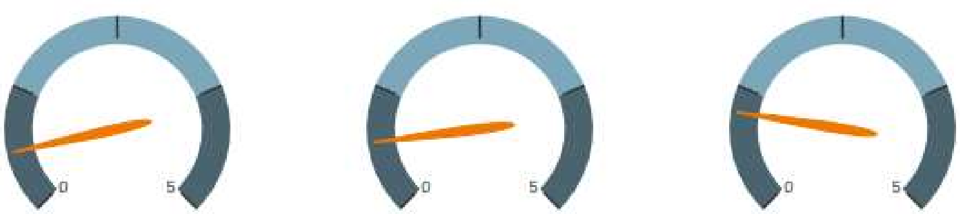
Portfolio: 0.66 | Policy: 0.65 | Peer Group: 0.65

3 Portfolio interest rate risk - Duration



Portfolio: 1.6 | Policy: 1.6 | Peer Group: 1.5 | Liability: 14.0

4 Portfolio credit risk - Spread duration

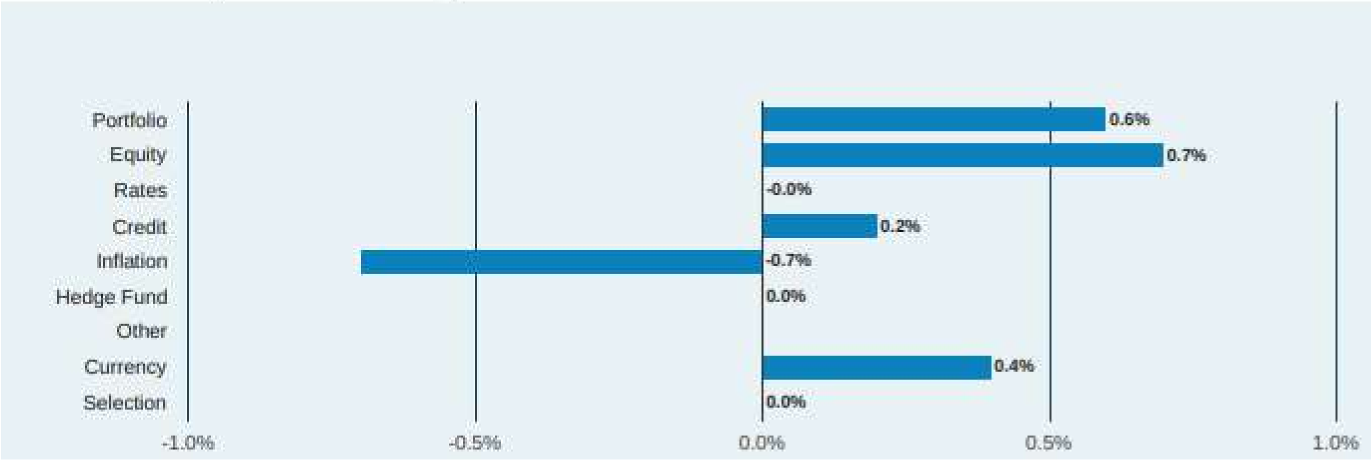


Portfolio: 0.6 | Policy: 0.7 | Peer Group: 1.0

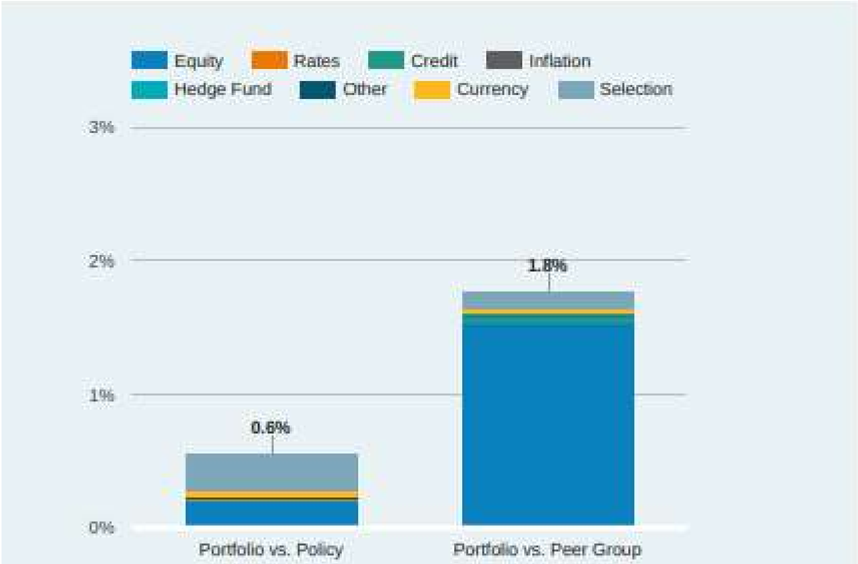
Source: Verus

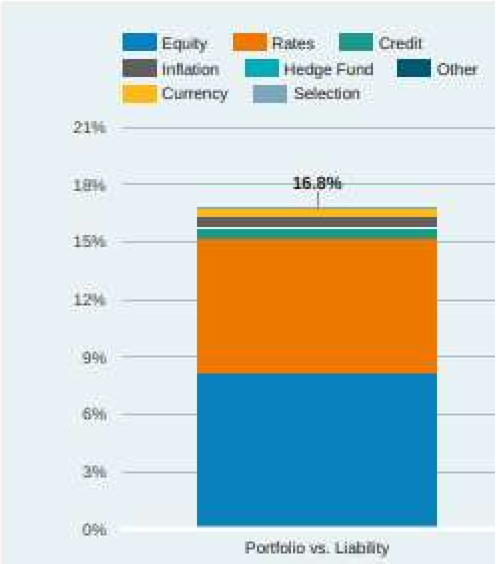
RISK METRICS

Risk factor weight relative to target



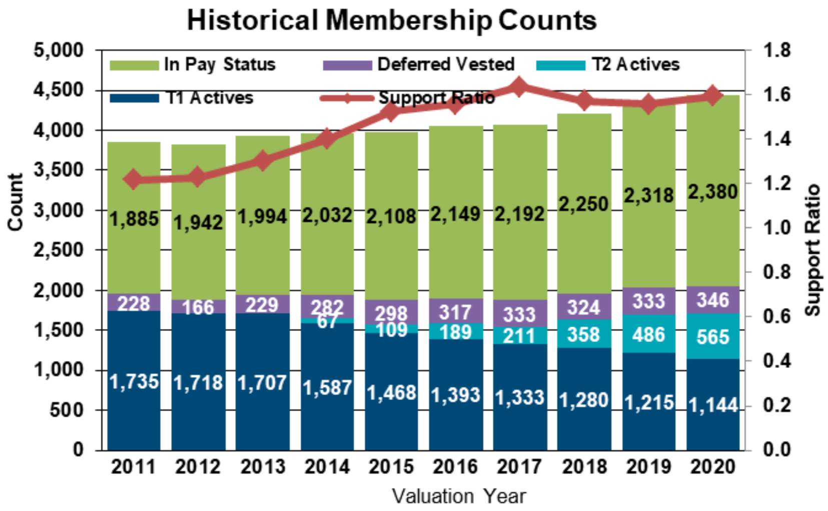
Active risk contribution by risk factor

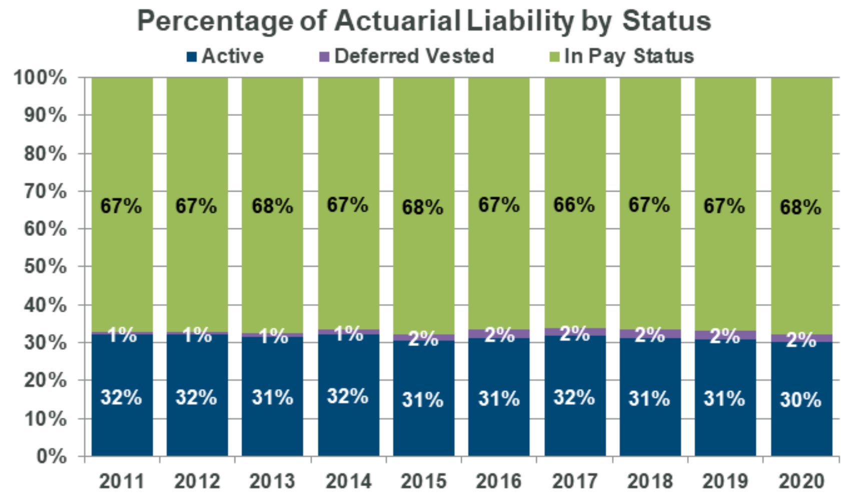


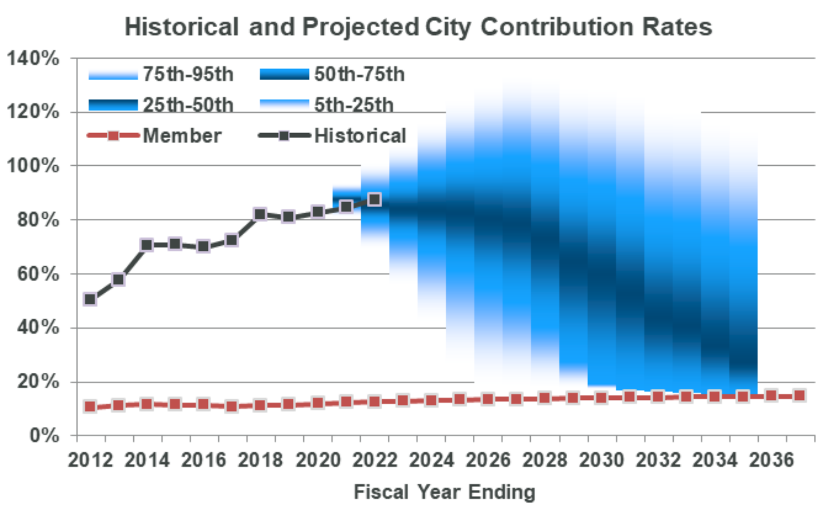


Source: Verus

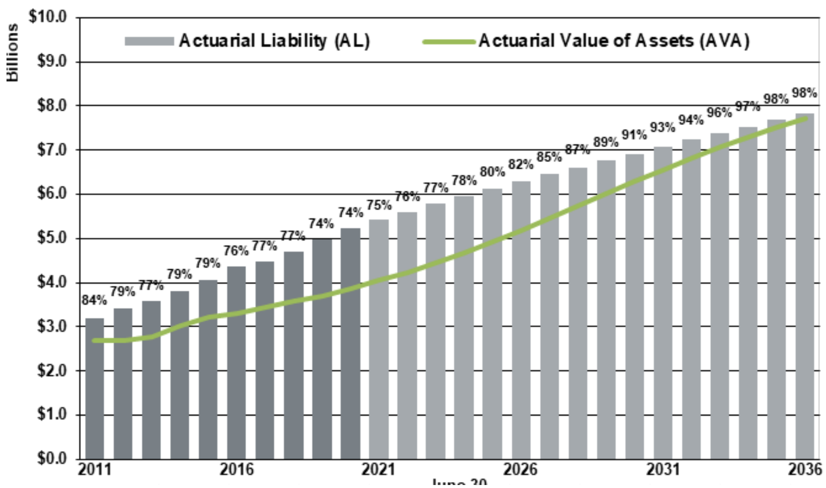
Actuarial Metrics

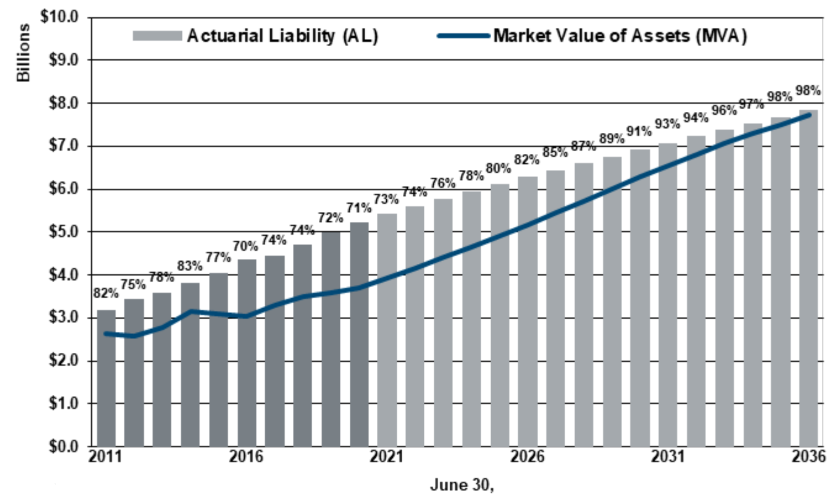




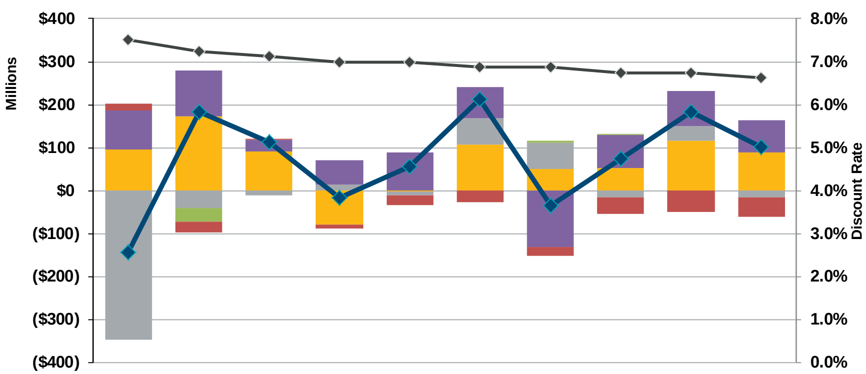


Actuarial Metrics

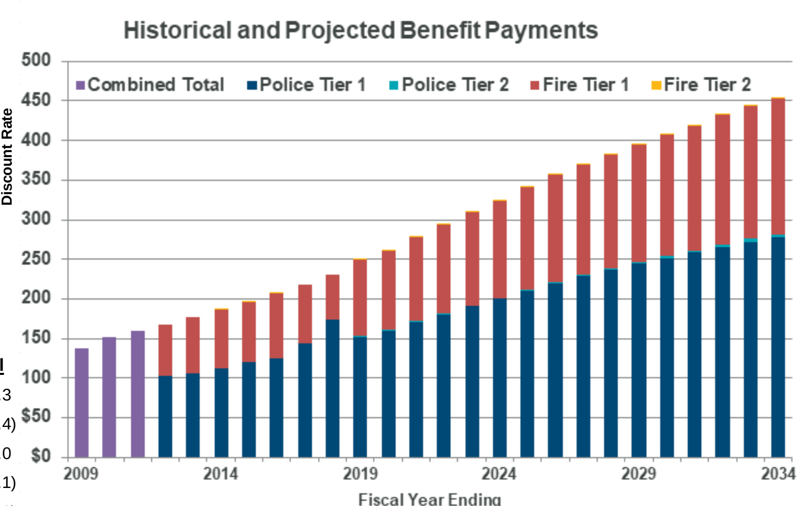


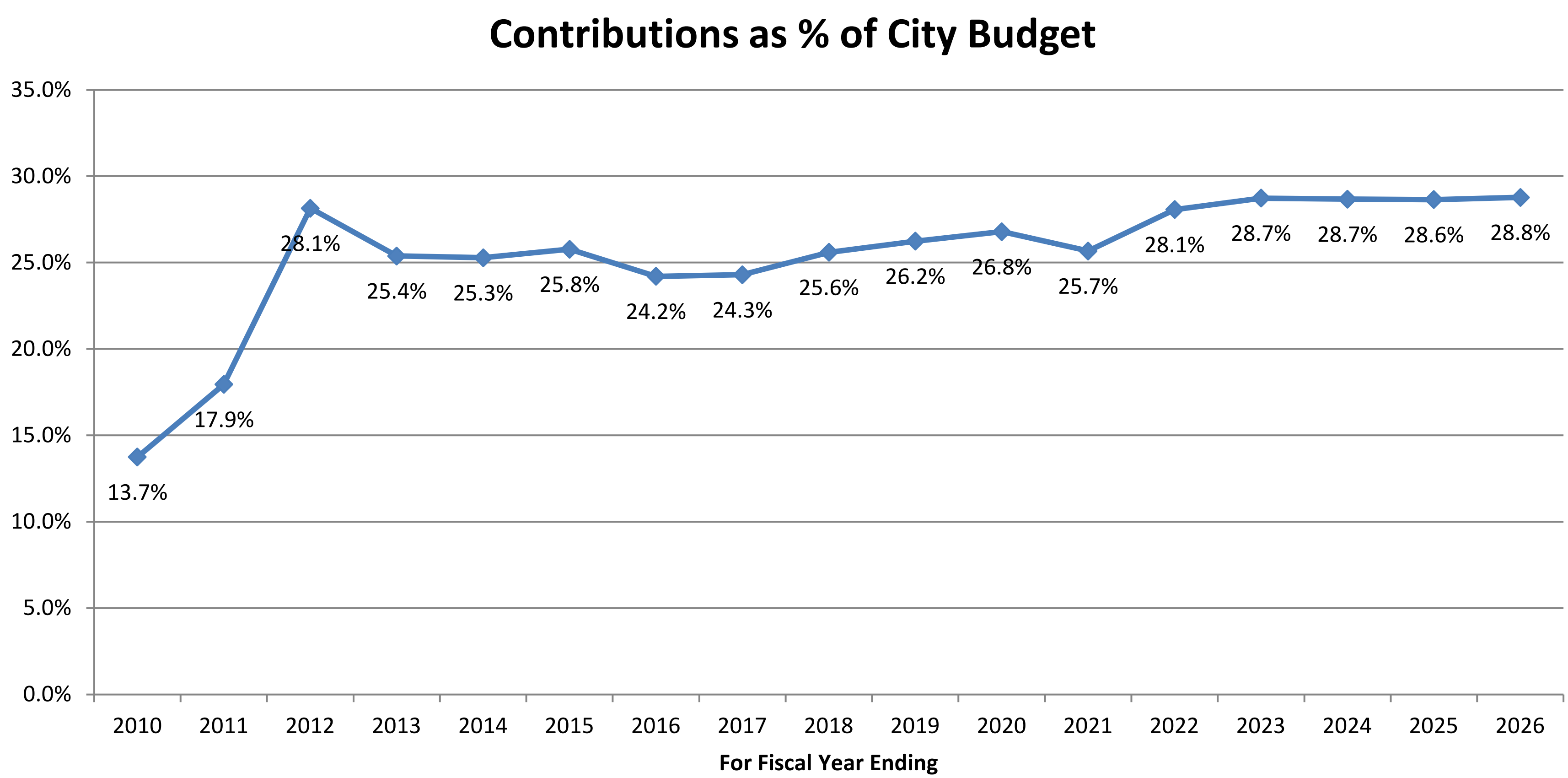


Changes in Unfunded Actuarial Liability



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
AVA Investment (G)/L	96.5	172.8	91.3	(78.5)	(2.8)	106.8	50.9	53.6	116.2	89.5	696.3
Liability (G)/L	(346.1)	(39.4)	(9.9)	14.7	(7.3)	61.3	61.8	(15.1)	35.1	(15.4)	(260.4)
Assumption Changes	89.1	107.7	28.2	56.3	90.0	72.7	(131.8)	76.4	80.9	73.5	543.0
Benefit Changes	0.0	(32.5)	0.0	0.0	0.0	0.0	4.3	0.2	0.0	0.0	(28.1)
Contributions	17.1	(24.6)	2.2	(9.9)	(23.4)	(27.0)	(19.6)	(39.7)	(49.8)	(46.5)	(221.2)
Net Change	(143.5)	184.0	111.9	(17.4)	56.5	213.7	(34.4)	75.4	182.3	101.3	729.6
Discount Rate	7.50%	7.25%	7.13%	7.00%	7.00%	6.88%	6.88%	6.75%	6.75%	6.63%	

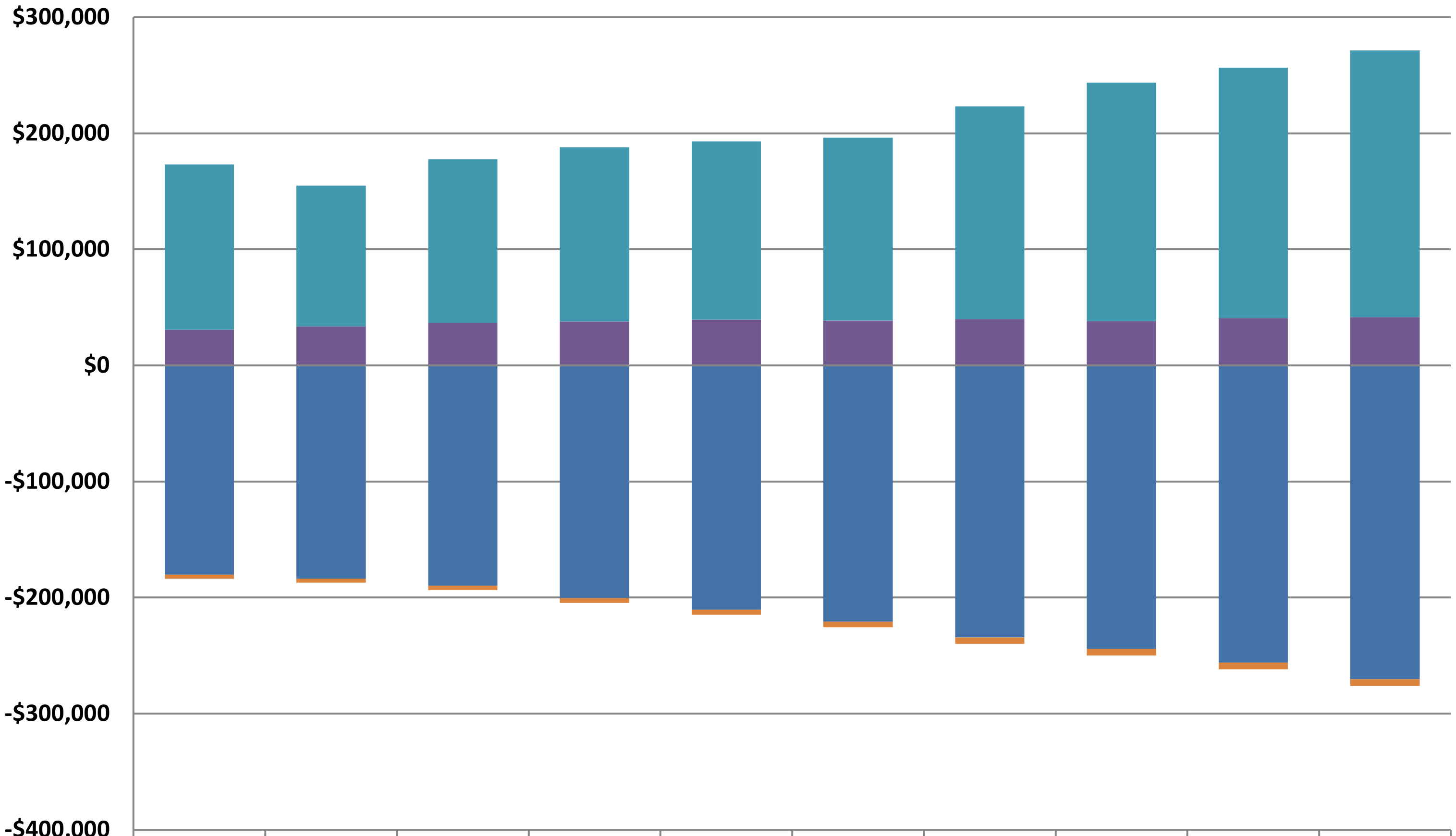




Contribution amounts represent the combined amounts for Federated and Police and Fire. Fiscal years 2022-2026 are the projected contributions and City budget based on the City's 5-Year Forecast and Revenue Projections (General Fund Forecast Expenditure Summary I-25)

Changes as of 10/19/21

Net Cash Flow / Total Additions and Deductions Before Investment Income/Expense
(In Thousands)



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Administrative Expenses	(3,643)	(3,501)	(3,734)	(4,314)	(4,393)	(4,817)	(5,623)	(5,495)	(5,727)	(5,874)
Benefits	(180,199)	(183,636)	(189,907)	(200,458)	(210,389)	(220,831)	(234,316)	(244,411)	(256,039)	(270,284)
Employer Contributions	142,214	121,042	140,850	150,189	153,545	157,624	183,094	205,362	215,831	229,767
Employee Contributions	30,819	33,725	36,789	37,764	39,515	38,696	39,968	38,126	40,780	41,508

POLICE AND FIRE
2021 QUARTERLY DISABILITY STATISTICS

QUARTERLY STATISTICS	NEW APPS. Add	Interim Non Service-Connected (NSCD) APPROVALS SCD APPLICATON REMAINS PENDING, No Change in Census Numbers	COMPLETED APPS. Subtract	TOTAL OUTSTANDING APPS.	BREAKOUT DETAIL OF "TOTAL OUTSTANDING APPS." APPS. DEFERRED BY ATTORNEY OR APPLICANT	APPS. THAT ARE NOT MMI AND ARE NOT READY TO PROCEED	APPS. THAT ARE MMI AND ARE READY FOR INDEPENDENT MEDICAL EVALUATION (IME)	APPS. FOR WHICH IME EXAM IS DONE, IME REPORT IS REC'D. AND READY FOR BOARD MEDICAL ADVISOR REPORT	APPS. FOR WHICH BOARD MEDICAL ADVISOR REPORT WAS REC'D. AND ARE READY FOR COMMITTEE MEETING	APPS. FOR WHICH COMMITTEE DECISION WAS RENDERED AND READY TO GO TO THE BOARD	TOTAL OUTSTANDING APPS.
2020 QTR 4	10	2	6*	120	25	89	5	1	0	0	120
2021 QTR 1	7	0	2	125	25	96	2	0	2	0	125
2021 QTR 2	7	0	2*	130	25	96	7	0	1	1	130
2021 QTR 3											
2021 QTR 4											

SOURCE: QUARTERLY STATISTICS REPORT

***Includes 1 Application Withdrawn**

April - June 2021
Completed Applications Processing Times

Month of Board Approval	Fire or Police	Service Connected Disability Retirement (SCD) or Non-Service-Connected Disability Retirement (NSCD)	Change of Status (COS) From Service Ret. to Disability Ret.	Days From App. Rec'd. to MMI	Days From MMI to IME Appt.	Days From IME Appt. to Med. Advisor Report	Days From Med. Advisor Report to Committee	Days From First Agenda Date too Final Board Date	Days From App. To Final Board	Approved or Denied	Name	Notes
May, 2021	Fire	SCD	NO	0	119	19	22	31	191	Approved or	K. Spillner	MMI at time of application

SOURCE: DETAILED QUARTERLY STATISTICS REPORT

Appendix

- Investment Dashboard – Updated Quarterly
- Actuarial Dashboard – Updated Annually
- Accounting Dashboard – Updated Annually
- Benefits Dashboard – Updated Quarterly