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".

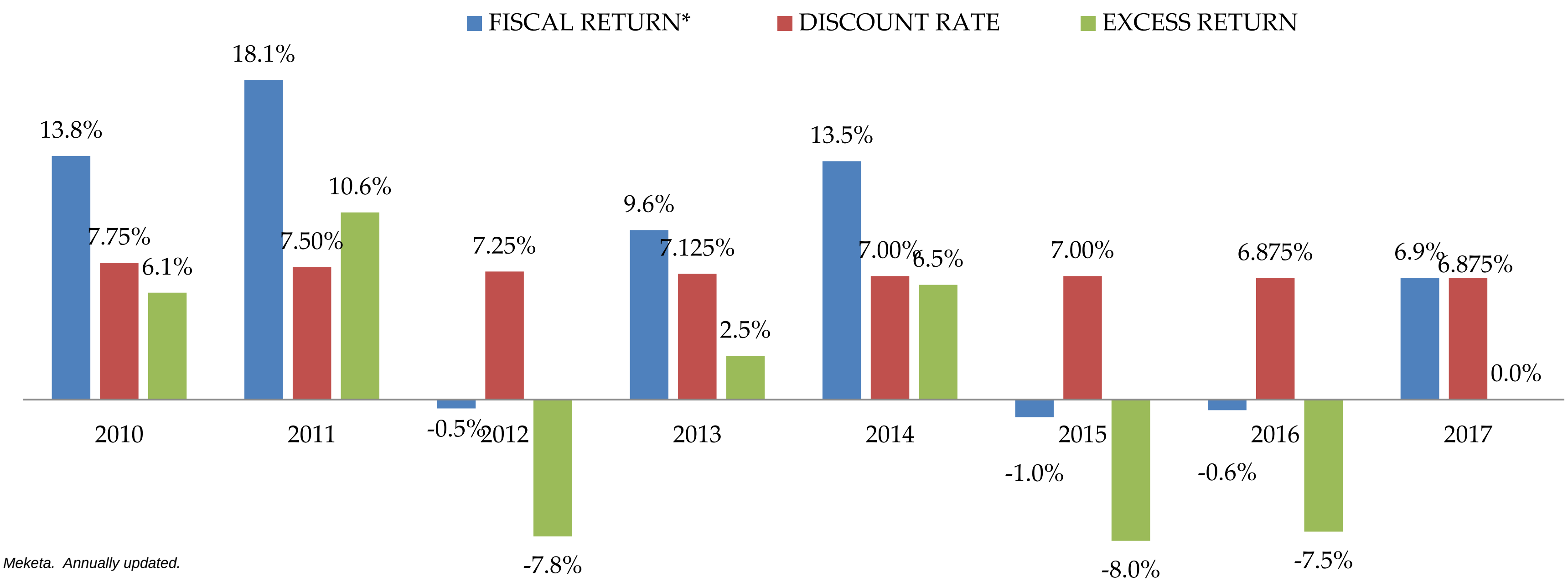
Contents

POLICE & FIRE DISCOUNT RATE HISTORY

FISCAL YEAR	10 YEAR US TREASURY RATE	DISCOUNT RATE	FISCAL YEAR RETURN*	EXCESS TO DISCOUNT RATE	DISCOUNT RATE CHANGE
1997	6.51%	8.00%			
2010	2.97%	7.75%	13.8%	6.1%	-0.25%
2011	3.18%	7.50%	18.1%	10.6%	-0.25%
2012	1.67%	7.25%	-0.5%	-7.8%	-0.25%
2013	2.52%	7.125%	9.6%	2.5%	-0.125%
2014	2.53%	7.00%	13.5%	6.5%	-0.125%
2015	2.35%	7.00%	-1.0%	-8.0%	NC
2016	1.49%	6.875%	-0.6%	-7.5%	-0.125%
2017	2.31%	6.875%	9.7%	2.8%	NC
2018	2.85%	6.875%	6.9%	0.0%	NC

** Fiscal Year Ends 6/30. Returns are net of fund management fees.*

Plan Return versus Discount Rate



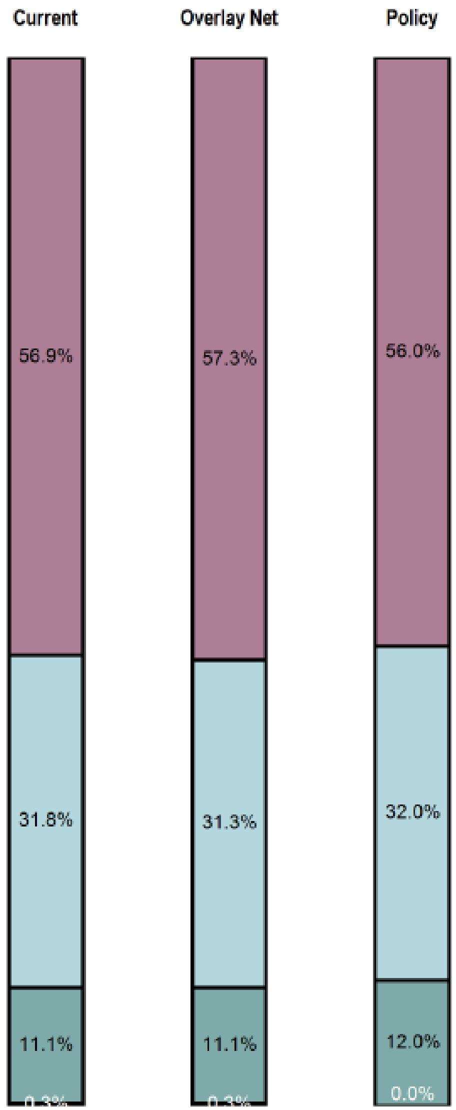
Source: Meketa. Annually updated.

INVESTMENT METRICS

City of San Jose Police and Fire Department Retirement Plan

Total Fund Aggregate

As of March 31, 2019



Allocation vs. Targets and Policy

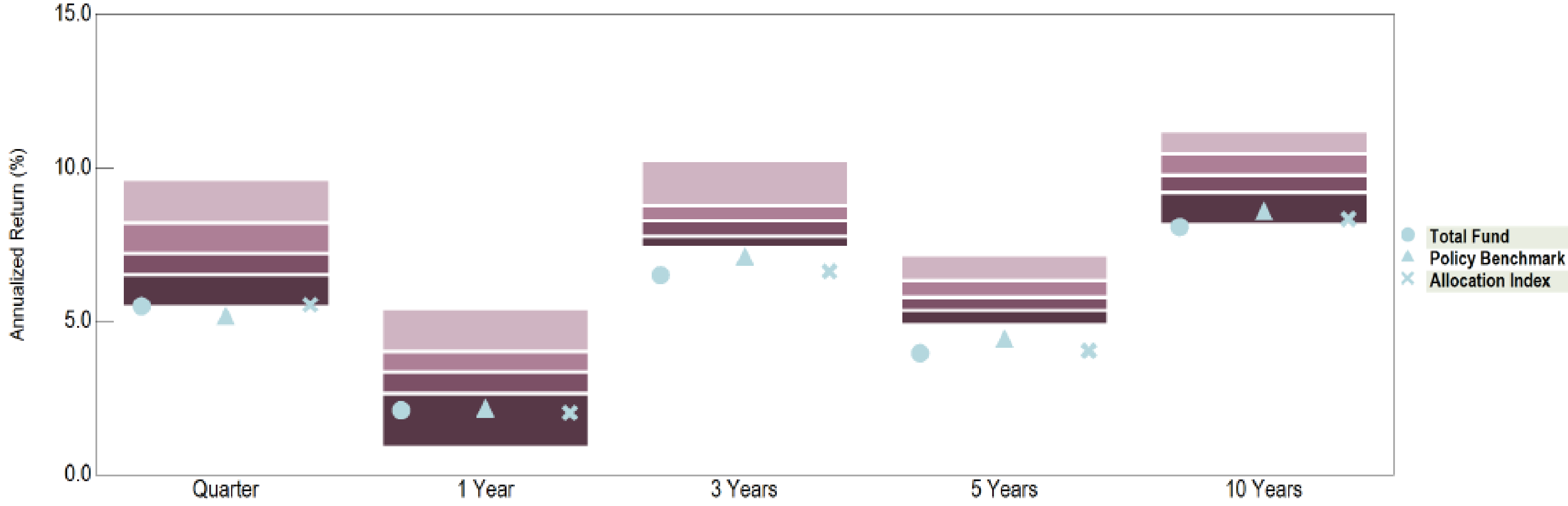
	Current Balance	Current Allocation	Russell Overlay Net Position	Policy
Growth	**$2,042,016,190**	**56.9%**	**57.3%**	**56.0%**
Public Equity	$1,103,519,776	30.7%	31.2%	31.0%
Private Markets	$792,454,783	22.1%	22.1%	22.0%
Emerging Markets Debt	$111,550,529	3.1%	3.1%	3.0%
High Yield Debt	$34,491,101	1.0%	1.0%	0.0%
Zero Beta	**$1,141,749,954**	**31.8%**	**31.3%**	**32.0%**
Absolute Return	$263,358,922	7.3%	7.3%	7.0%
Short-Term IG Bonds	$603,369,830	16.8%	16.8%	20.0%
Immunized Cash Flows	$187,239,383	5.2%	5.2%	5.0%
Cash	$87,781,820	2.4%	2.0%	0.0%
Other	**$397,162,834**	**11.1%**	**11.1%**	**12.0%**
Core Real Estate	$145,678,064	4.1%	4.1%	5.0%
Commodities	$73,933,686	2.1%	2.1%	2.0%
Sovereign bonds ex-US	$104,405,783	2.9%	2.9%	3.0%
TIPS	$73,145,301	2.0%	2.0%	2.0%
Overlay	**$10,543,875**	**0.3%**	**0.3%**	**0.0%**
Total	**$3,591,472,852**	**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] Cash composite includes the cash account, cash collateral in the Russell Investments Overlay program, and residuals from terminated manager assets.

Source: Meketa. Quarterly updated.

INVESTMENT METRICS

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

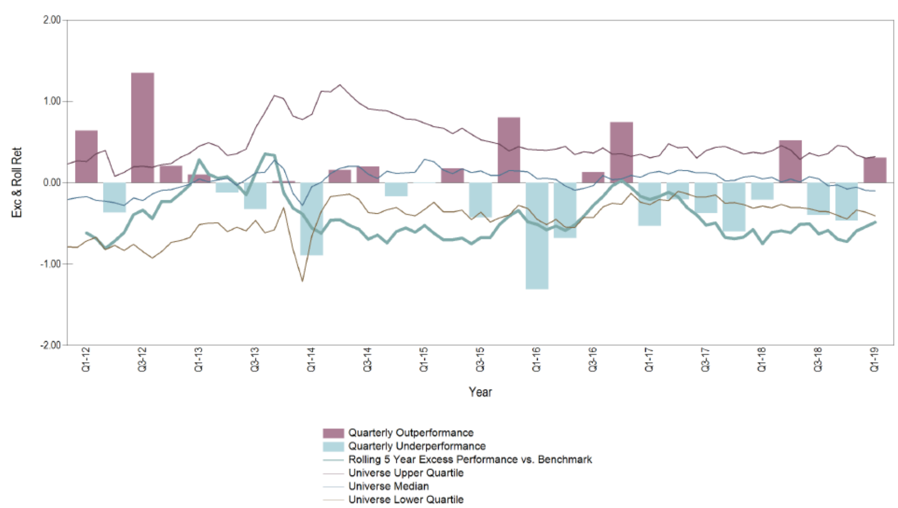


Performance vs. InvestorForce Public DB > $1B Net (Ranking)

Period

Return (Rank)										
5th Percentile	9.6		5.4		10.2		7.1		11.2	
25th Percentile	8.2		4.0		8.8		6.3		10.5	
Median	7.2		3.4		8.3		5.8		9.8	
75th Percentile	6.5		2.6		7.8		5.4		9.2	
95th Percentile	5.5		0.9		7.4		4.9		8.1	
# of Portfolios	78		77		77		74		68	
Total Fund	5.5	(95)	2.1	(84)	6.5	(99)	4.0	(99)	8.1	(96)
Policy Benchmark	5.2	(96)	2.2	(83)	7.1	(99)	4.4	(99)	8.6	(92)
Investable Benchmark Portolio	5.5	(95)	2.0	(84)	6.6	(99)	4.0	(99)	8.3	(94)

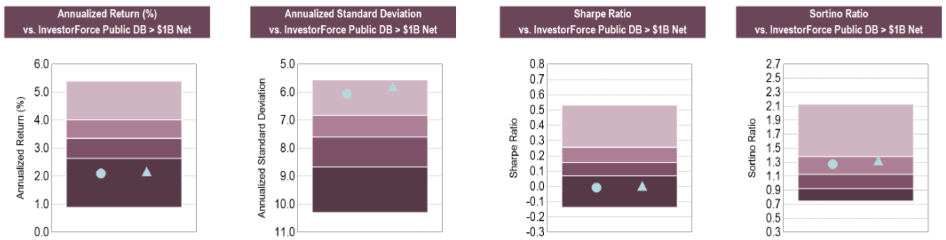
Quarterly Cumulative Excess Performance



Source: Meketa. Quarterly updated.

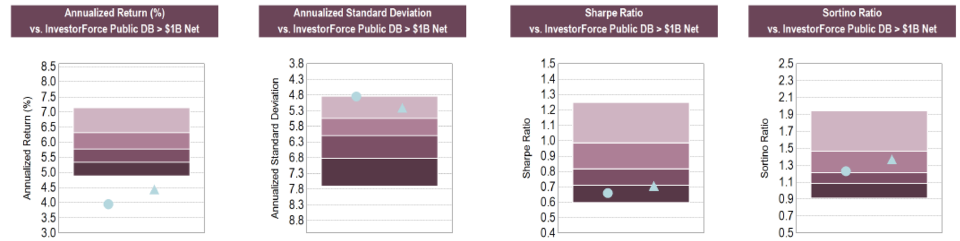
INVESTMENT METRICS

Risk Adjusted Performance – 1 Year



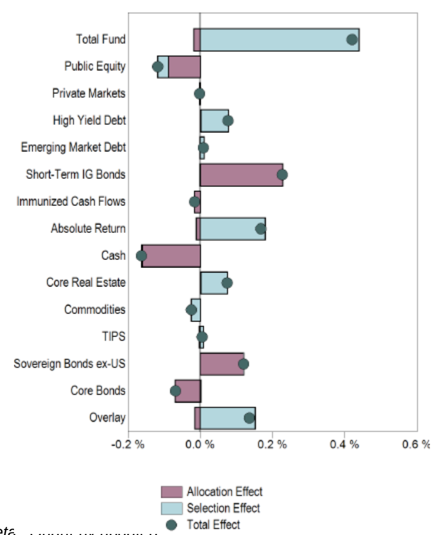
	Annualized Return (%)	Annualized Standard Deviation	Sharpe Ratio	Sortino Ratio
Total Fund				
Value	2.1	6.1	0.0	1.3
Rank	84	9	84	34
Policy Benchmark				
Value	2.2	5.8	0.0	1.3
Rank	83	7	83	30
Universe				
5th %tile	5.4	5.6	0.5	2.1
25th %tile	4.0	6.8	0.3	1.4
Median	3.4	7.6	0.2	1.1
75th %tile	2.6	8.7	0.1	0.9
95th %tile	0.9	10.3	-0.1	0.7

Risk Adjusted Performance – 5 Years

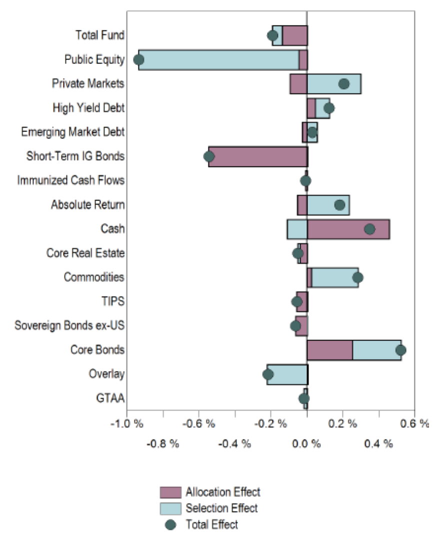


	Annualized Return (%)	Annualized Standard Deviation	Sharpe Ratio	Sortino Ratio
Total Fund				
Value	4.0	4.8	0.7	1.2
Rank	99	6	89	48
Policy Benchmark				
Value	4.4	5.2	0.7	1.4
Rank	99	12	77	34
Universe				
5th %tile	7.1	4.8	1.2	1.9
25th %tile	6.3	5.5	1.0	1.5
Median	5.8	6.1	0.8	1.2
75th %tile	5.4	6.8	0.7	1.1
95th %tile	4.9	7.7	0.6	0.9

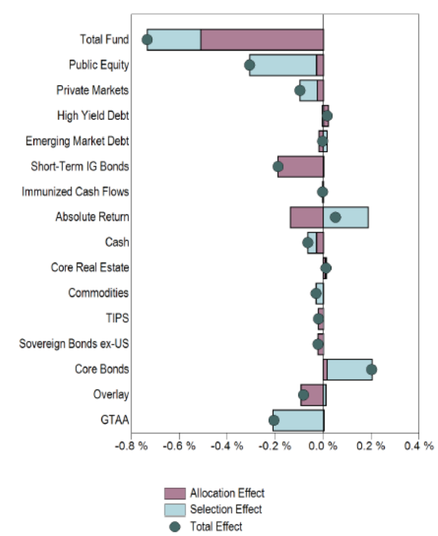
Attribution Effects – 3 Months



Attribution Effects – 1 Year



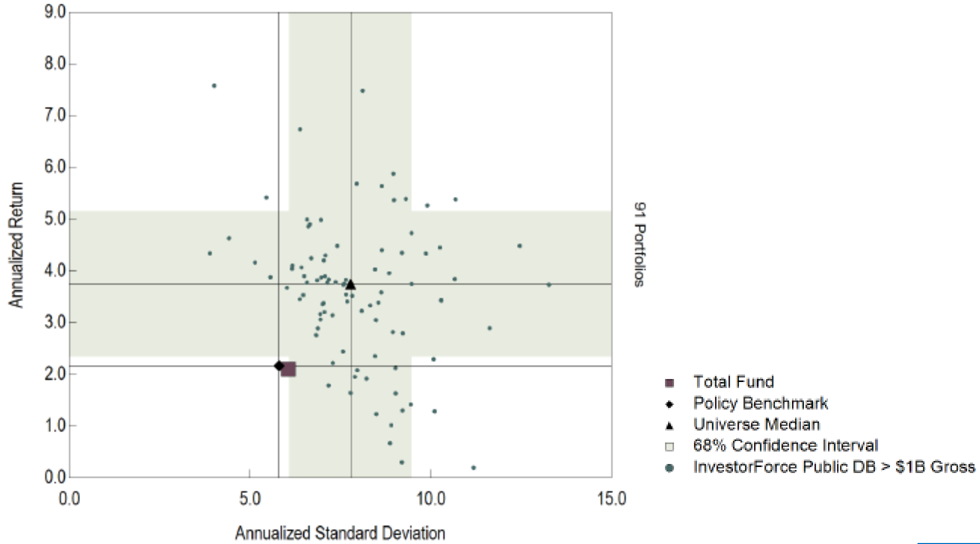
Attribution Effects – 3 Years



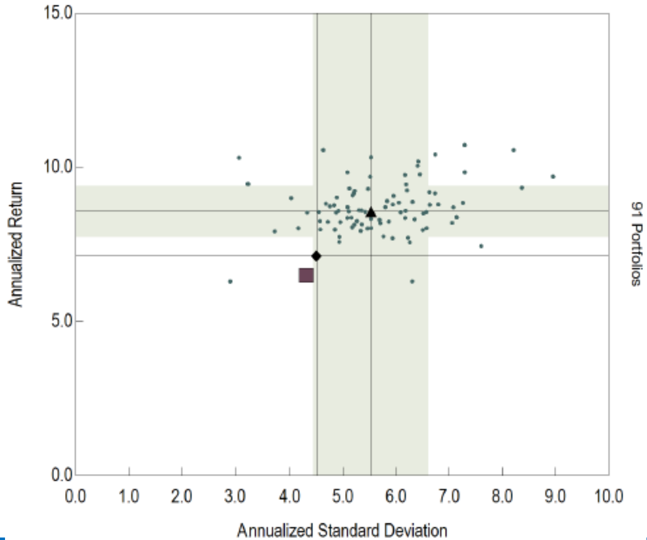
Source: Meketa. Quarterly updated.

INVESTMENT METRICS

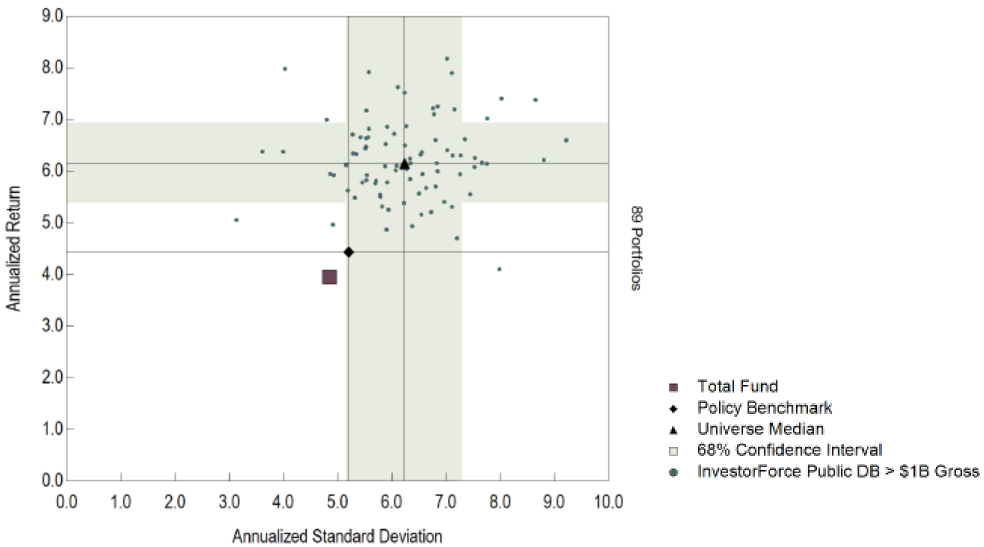
Plan Risk vs. Return – 1 Year



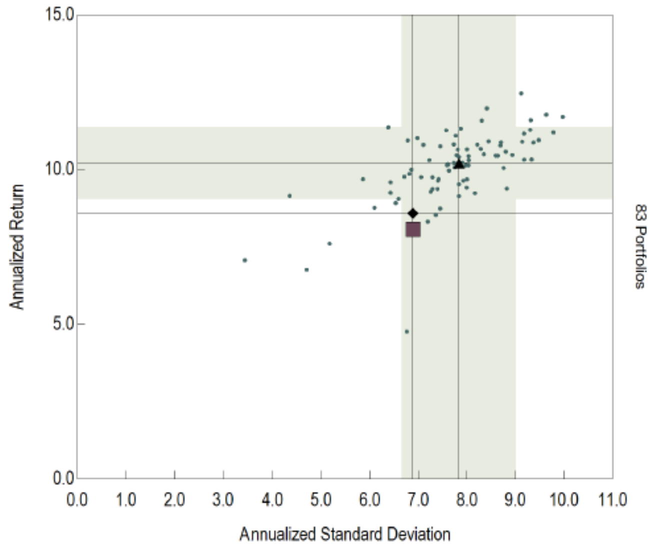
Plan Risk vs. Return – 3 Years



Plan Risk vs. Return – 5 Years



Plan Risk vs. Return – 10 Years

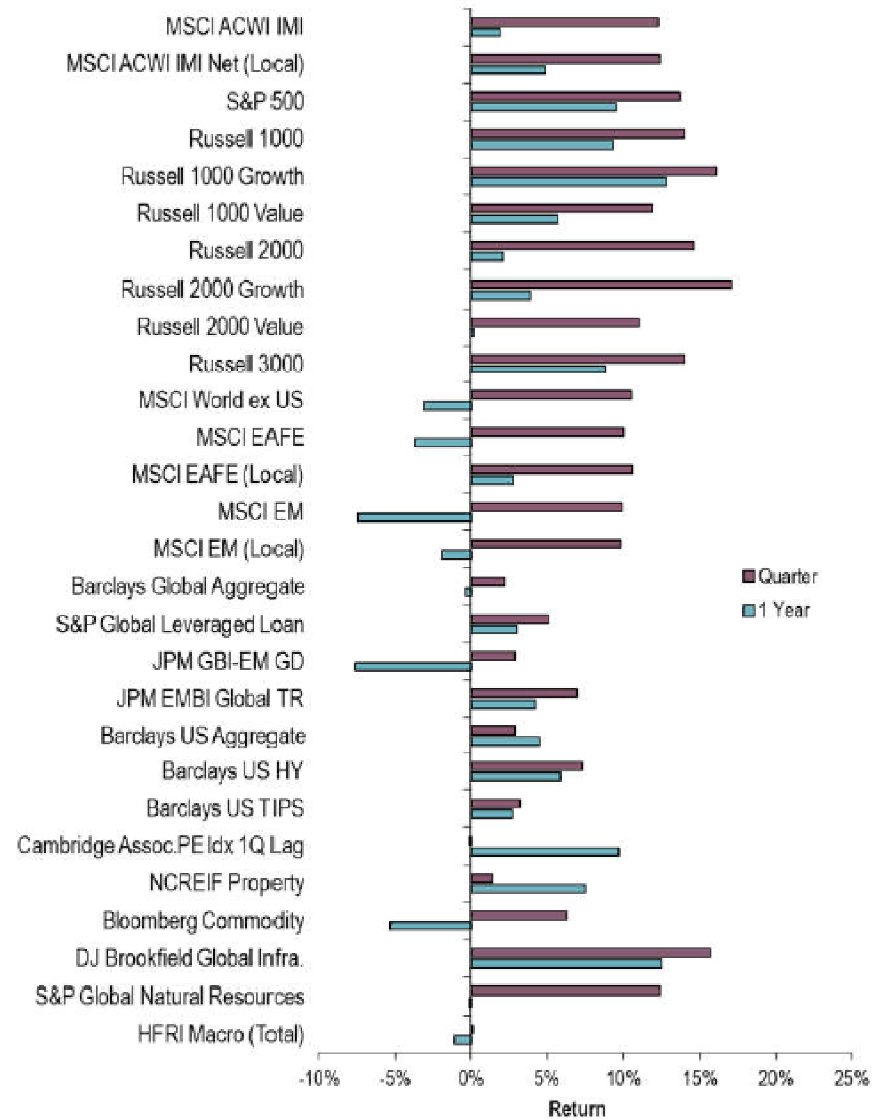


Source: Meketa. Quarterly updated.

CAPITAL MARKET OVERVIEW

Market Environment – 1Q19 Overview

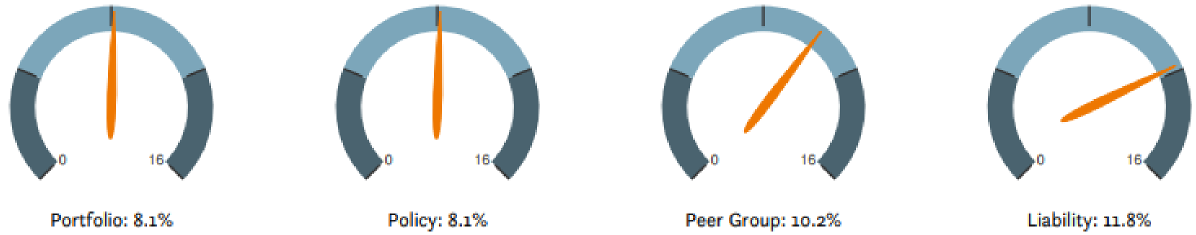
Benchmark	Scope	1Q19 (%)	1 YR (%)	3 YR (%)	5YR (%)	10 YR (%)
Global Equity						
MSCI ACWI IMI	World	12.3	1.9	10.6	6.3	12.3
MSCI ACWI IMI Net (Local)	World (Local Currency)	12.4	4.9	11.1	8.1	12.6
Domestic Equity						
S&P 500	Large Core	13.7	9.5	13.5	10.9	15.9
Russell 1000	Large Core	14.0	9.3	13.5	10.6	16.1
Russell 1000 Growth	Large Growth	16.1	12.8	16.5	13.5	17.5
Russell 1000 Value	Large Value	11.9	5.7	10.5	7.7	14.5
Russell 2000	Small Core	14.6	2.1	12.9	7.1	15.4
Russell 2000 Growth	Small Growth	17.1	3.9	14.9	8.4	16.5
Russell 2000 Value	Small Value	11.0	0.2	10.9	5.6	14.1
Russell 3000	All Cap Core	14.0	8.8	13.5	10.4	16.0
International Equity						
MSCI World ex US	World ex-US	10.5	-3.1	7.3	2.2	8.8
MSCI EAFE	International Developed	10.0	-3.7	7.3	2.3	9.0
MSCI EAFE (Local)	International Developed (Local Currency)	10.6	2.8	8.5	6.0	9.8
MSCI EM	Emerging Markets	9.9	-7.4	10.7	3.7	8.9
MSCI EM (Local)	Emerging Markets (Local Currency)	9.8	-1.9	11.3	7.1	10.2
Global Fixed Income						
Barclays Global Aggregate	Global Core Bonds	2.2	-0.4	1.5	1.0	3.1
S&P Global Leveraged Loan	Bank Loans	5.1	3.0	5.3	3.1	7.5
JPM GBI-EM GD	Emerging Markets Bonds (Local Currency)	2.9	-7.6	3.3	-0.8	4.4
JPM EMBI Global TR	Emerging Market Bonds	7.0	4.2	5.8	5.4	8.5
Domestic Fixed Income						
Barclays US Aggregate	Core Bonds	2.9	4.5	2.0	2.7	3.8
Barclays US HY	High Yield	7.3	5.9	8.6	4.7	11.3
Barclays US TIPS	Inflation	3.2	2.7	1.7	1.9	3.4
Other						
Cambridge Associates PE Index 1Qtr Lag	Private Equity	-0.1	9.7	10.0	10.1	10.7
NCREIF Property	Real Estate	1.4	7.5	8.0	10.2	8.7
Bloomberg Commodity	Commodities	6.3	-5.3	2.2	-8.9	-2.6
DJ Brookfield Global Infrastructure	Infrastructure	15.7	12.5	8.7	5.7	13.4
S&P Global Natural Resources	Natural Resources	12.4	-0.1	13.4	1.8	4.9
HFRI Macro	Hedge Funds	0.1	-1.1	-1.4	0.1	-1.9



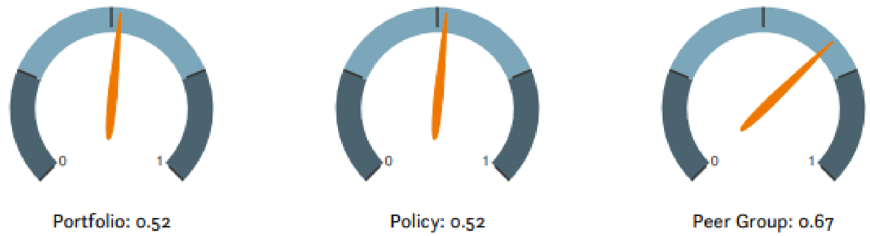
Source: Meketa, Thomson Reuters. Quarterly updated.

RISK METRICS

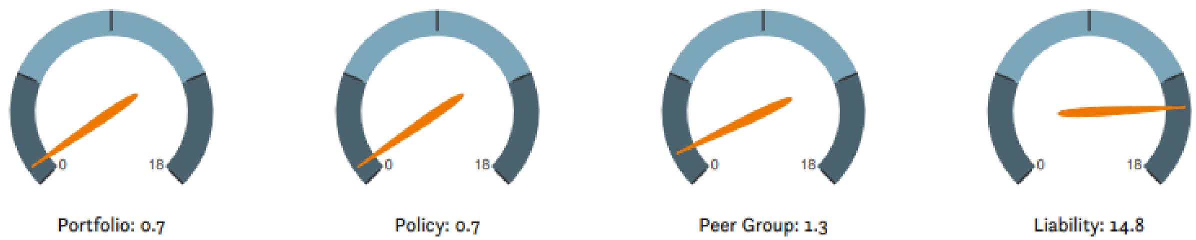
Portfolio risk



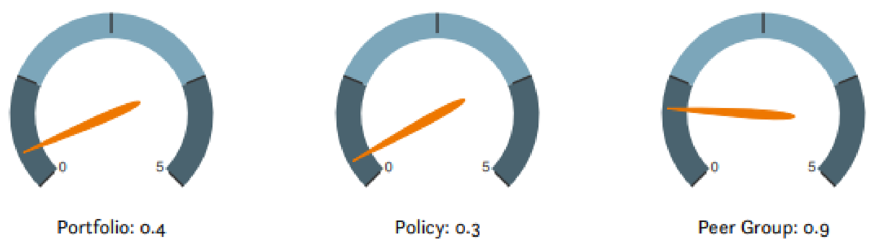
Portfolio equity beta



Portfolio interest rate risk - Duration



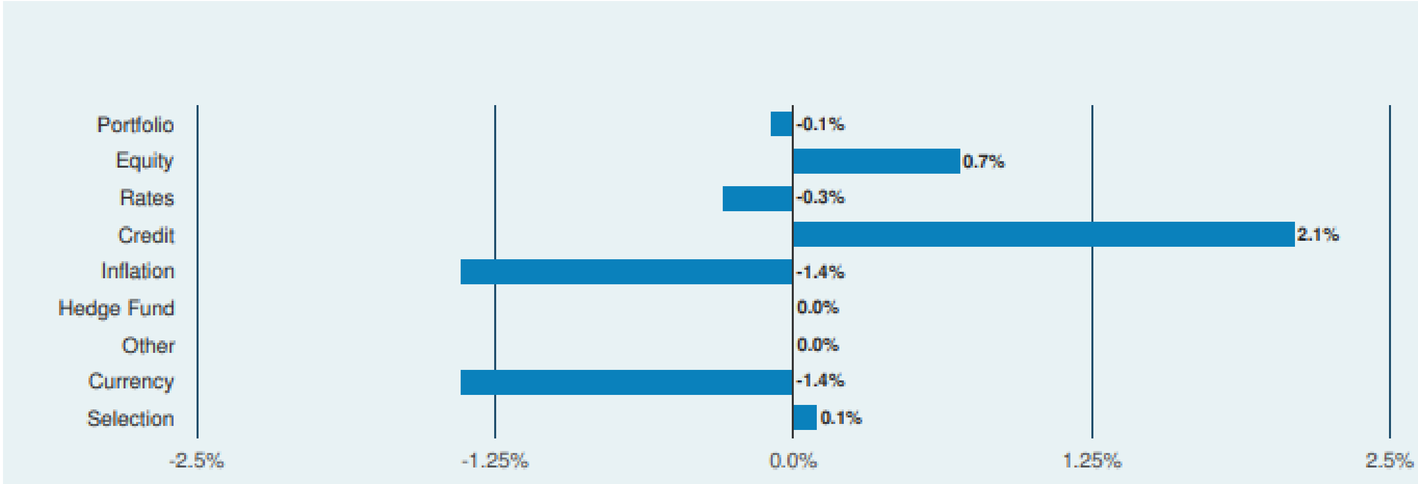
Portfolio credit risk - Spread duration



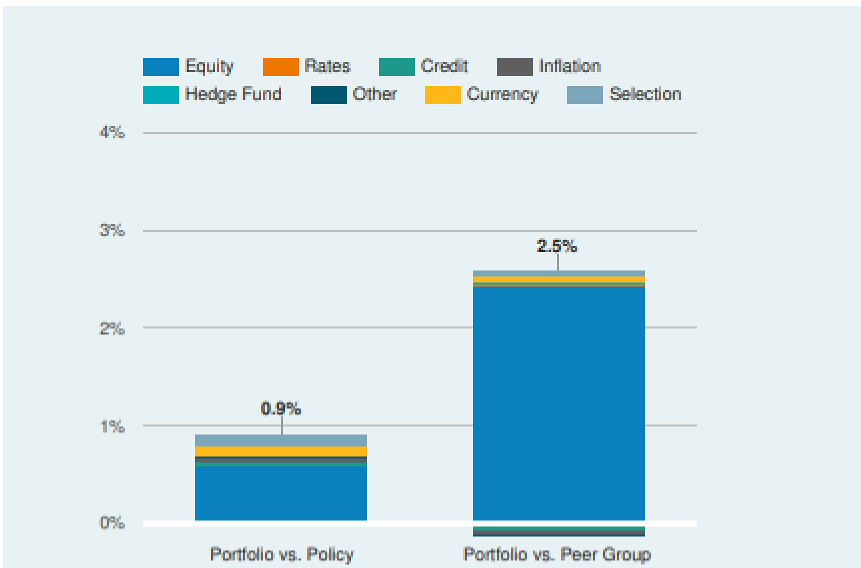
Source: Verus

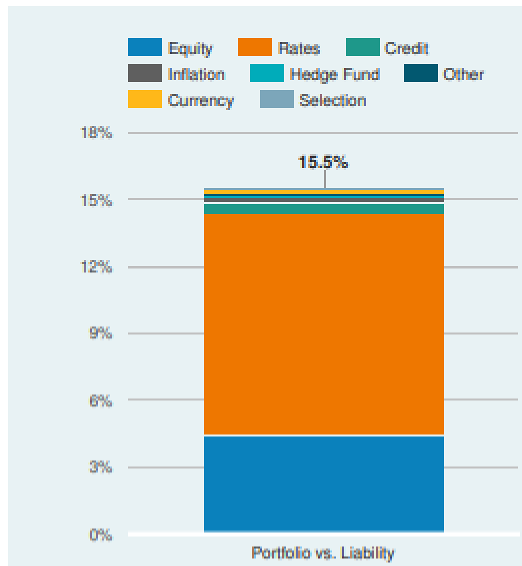
RISK METRICS

Risk factor weight relative to target



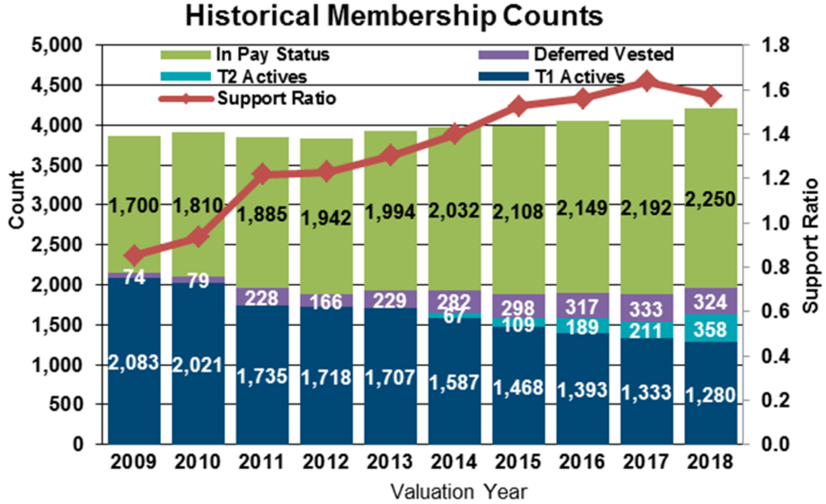
Active risk contribution by risk factor

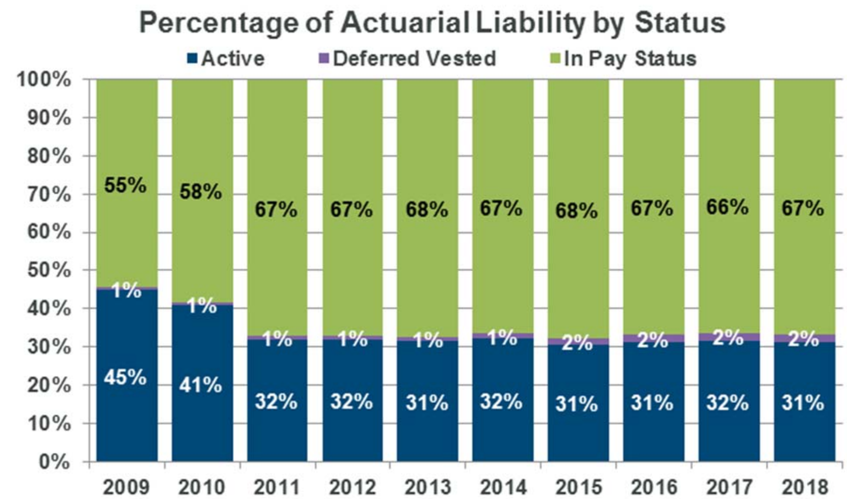


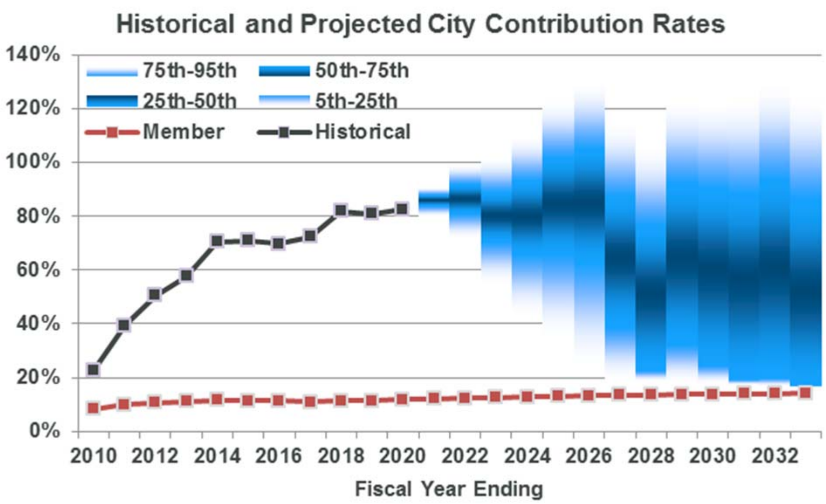


Source: Verus

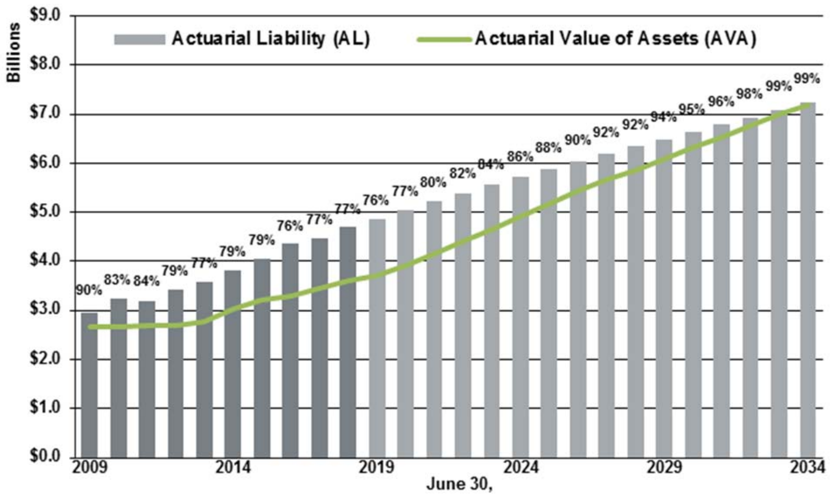
Actuarial Metrics

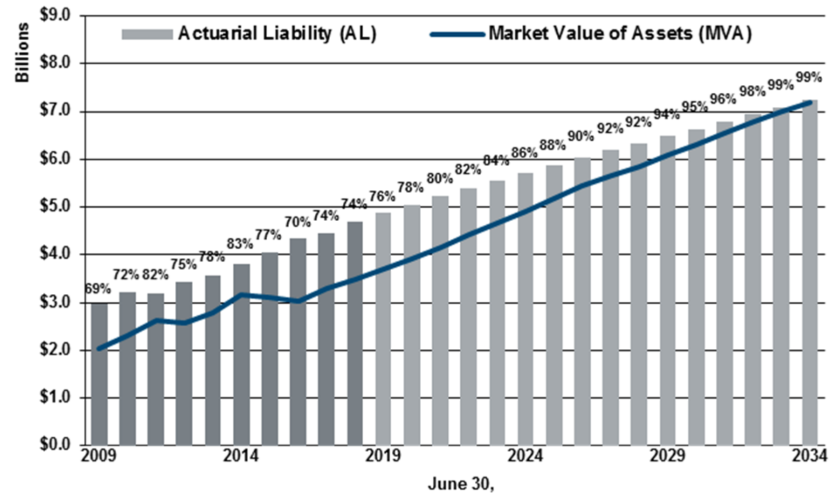


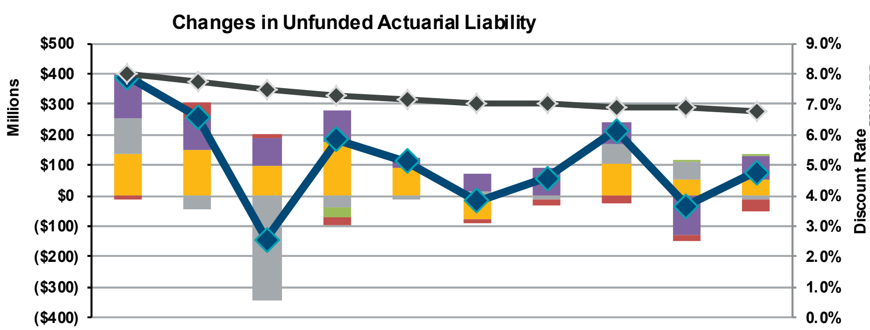




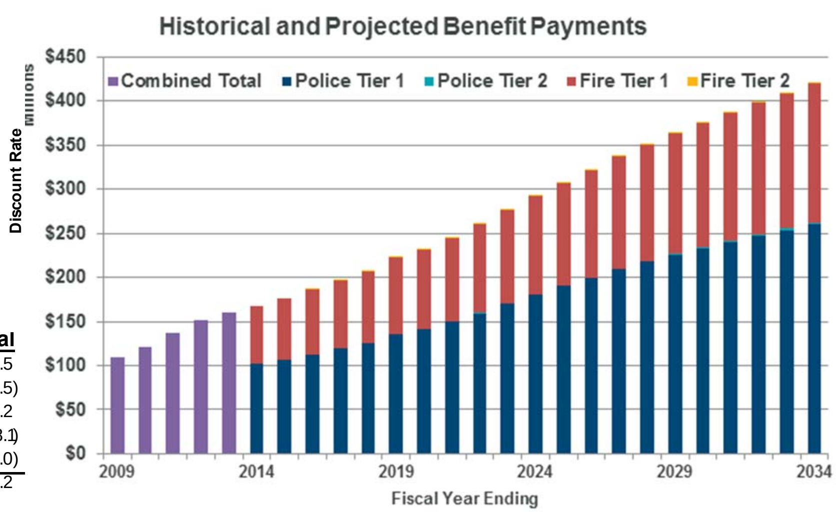
Actuarial Metrics







	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
AVA Investment (G)/L	138.4	149.6	96.5	172.8	91.3	(78.5)	(2.8)	106.8	50.9	53.6	778.5
Liability (G)/L	113.5	(43.9)	(346.1)	(39.4)	(9.9)	14.7	(7.3)	61.3	61.8	(15.1)	(210.5)
Assumption Changes	145.4	104.2	89.1	107.7	28.2	56.3	90.0	72.7	(131.8)	76.4	638.2
Benefit Changes	0.0	0.0	0.0	(32.5)	0.0	0.0	0.0	0.0	4.3	0.2	(28.1)
Contributions	(9.9)	49.9	17.1	(24.6)	2.2	(9.9)	(23.4)	(27.0)	(19.6)	(39.7)	(85.0)
Net Change	387.3	259.8	(143.5)	184.0	111.9	(17.4)	56.5	213.7	(34.4)	75.4	1093.2
Discount Rate	8.00%	7.75%	7.50%	7.25%	7.13%	7.00%	7.00%	6.88%	6.88%	6.75%	

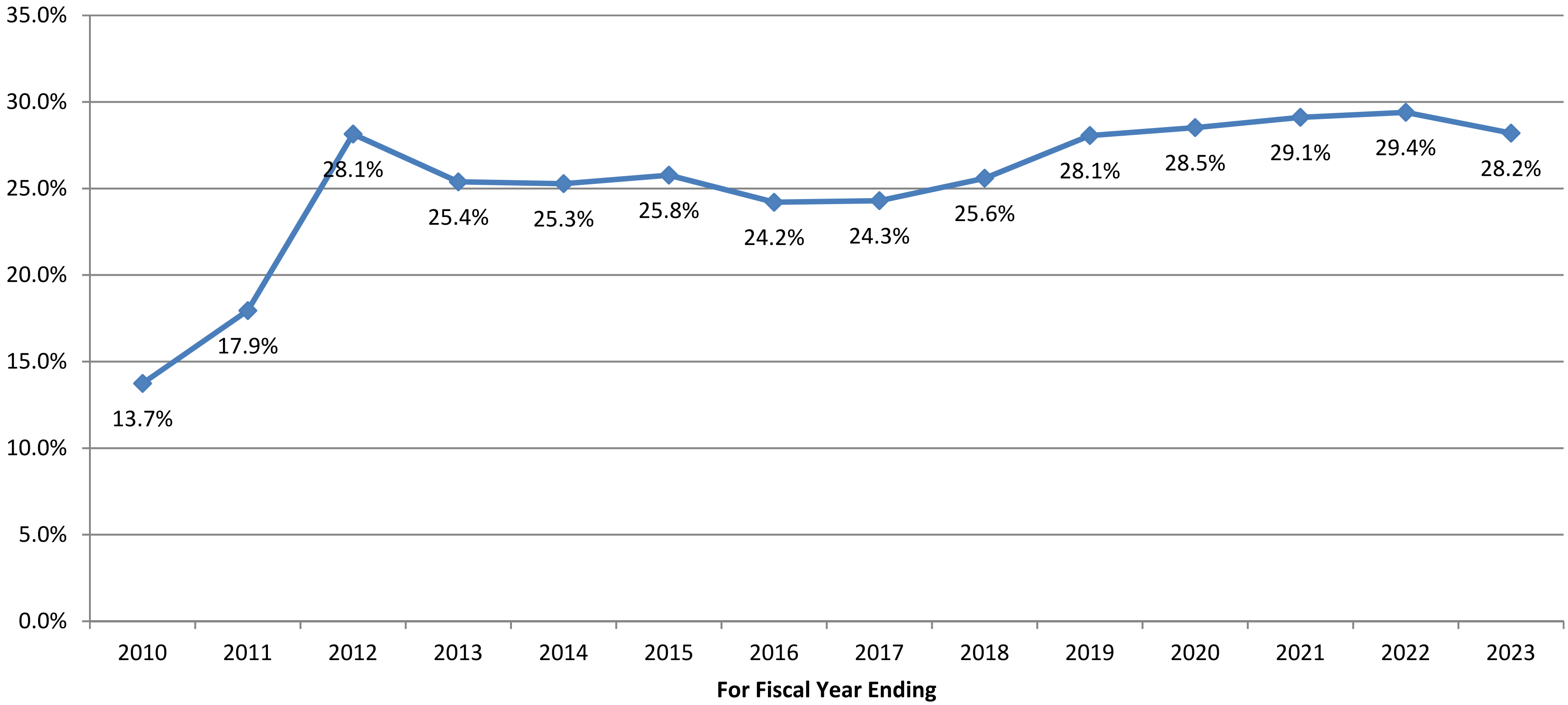


January 4, 2019

CHEIRON Classic Values, Innovative Advice

Changes as of 10/24/17

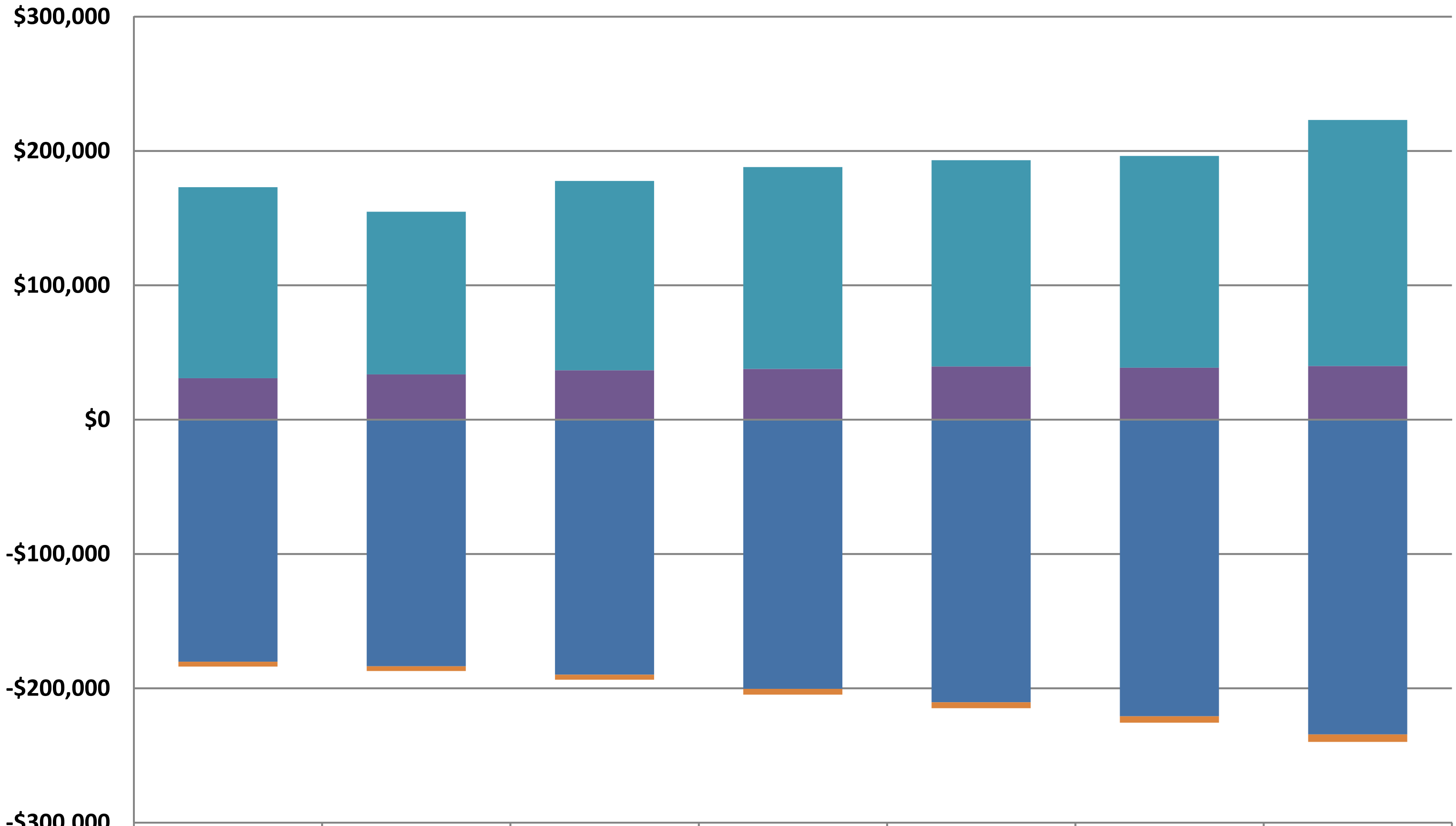
Contributions as % of City Budget



Contribution amounts represent the combined amounts for Federated and Police and Fire. Fiscal years 2019-2023 are the projected contributions and City budget based on the City's 5-Year Economic Forecast and Revenue Projections.

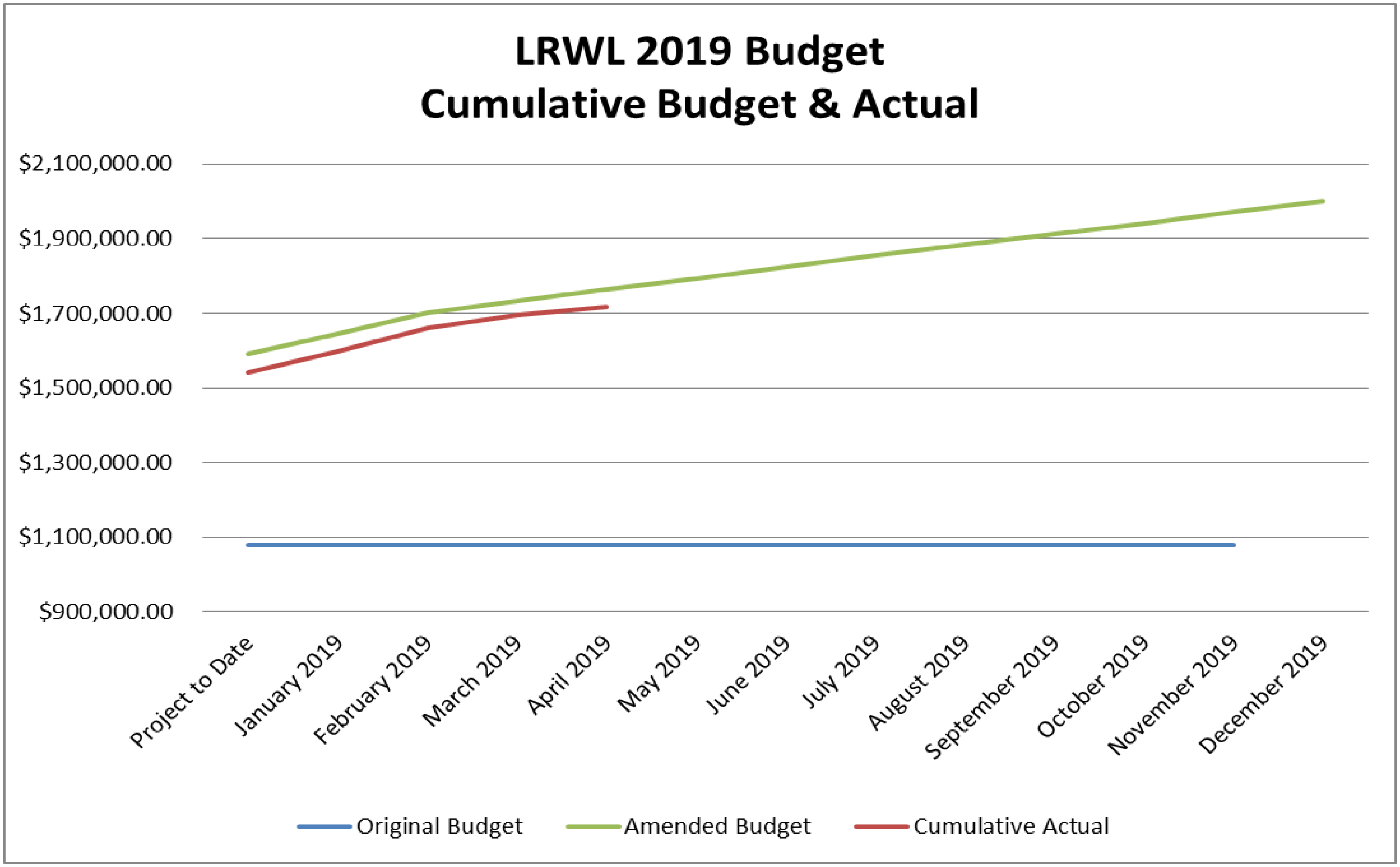
Changes as of October 12, 2018

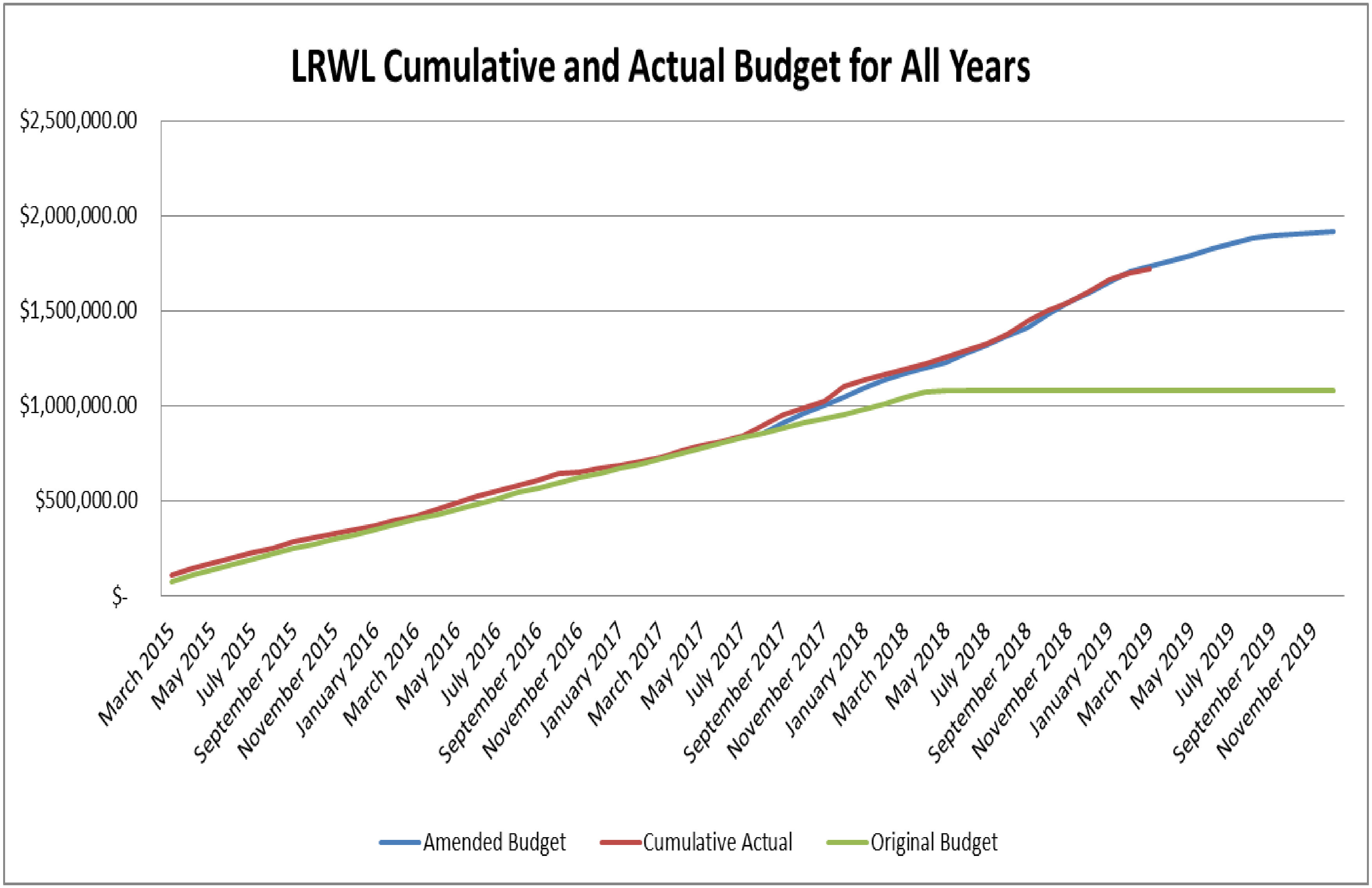
Net Cash Flow / Total Additions and Deductions Before Investment Income/Expense
(In Thousands)

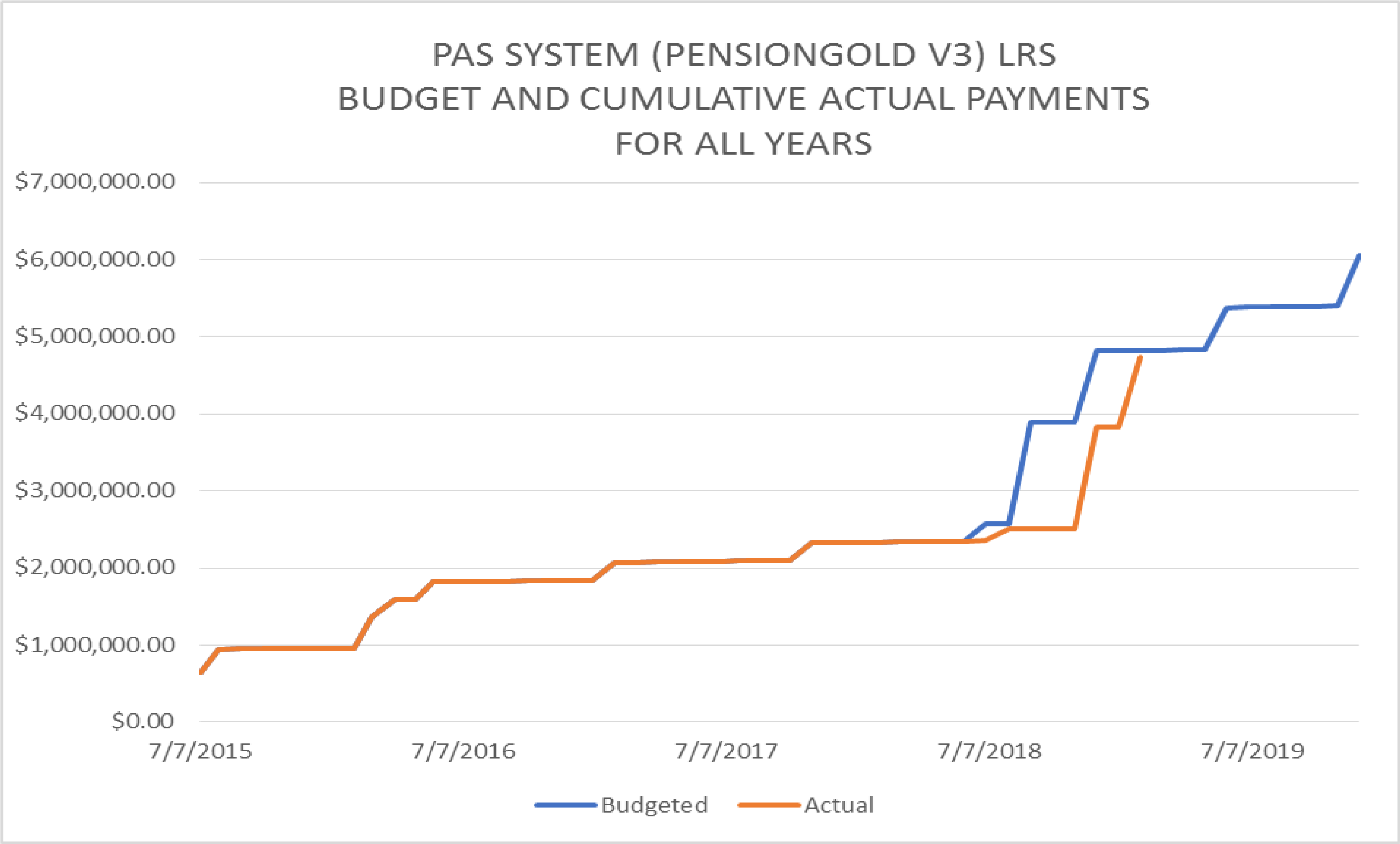


	2012	2013	2014	2015	2016	2017	2018
Administrative Expenses	(3,643)	(3,501)	(3,734)	(4,314)	(4,393)	(4,817)	(5,623)
Benefits	(180,199)	(183,636)	(189,907)	(200,458)	(210,389)	(220,831)	(234,316)
Employer Contributions	142,214	121,042	140,850	150,189	153,545	157,624	183,094
Employee Contributions	30,819	33,725	36,789	37,764	39,515	38,696	39,968

As of April 1, 2019




LRWL Cumulative and Actual Budget for All Years
$2,500,000.00
$2,000,000.00
$1,500,000.00
$1,000,000.00
$500,000.00
$-
March 2015
May 2015
July 2015
September 2015
November 2015
January 2016
March 2016
May 2016
July 2016
September 2016
November 2016
January 2017
March 2017
May 2017
July 2017
September 2017
November 2017
January 2018
March 2018
May 2018
July 2018
September 2018
November 2018
January 2019
March 2019
May 2019
July 2019
September 2019
November 2019
Amended Budget
Cumulative Actual
Original Budget

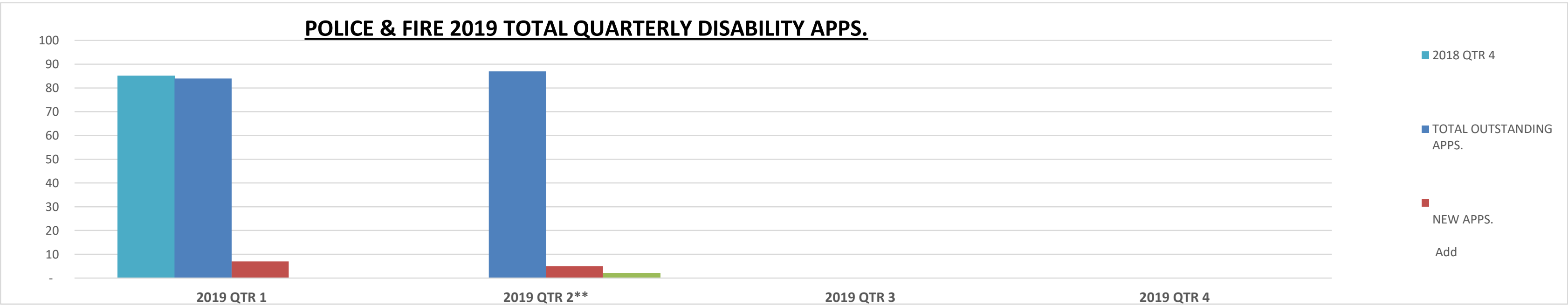

PAS SYSTEM (PENSIONGOLD V3) LRS
BUDGET AND CUMULATIVE ACTUAL PAYMENTS
FOR ALL YEARS
$7,000,000.00
$6,000,000.00
$5,000,000.00
$4,000,000.00
$3,000,000.00
$2,000,000.00
$1,000,000.00
$0.00
7/7/2015
7/7/2016
7/7/2017
7/7/2018
7/7/2019
Budgeted
Actual

POLICE AND FIRE
2019 QUARTERLY DISABILITY STATISTICS

QUARTERLY STATISTICS	NEW APPS. Add	Interim Non-Service Connected Apps. (NSCD) Added; then subtracted in Completed Apps. Add	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 COMMITEE MEETING	APPS. FOR WHICH COMMITTEE DECISION WAS RENDERED AND READY TO GO TO THE BOARD	TOTAL OUTSTANDING APPS.
2018 QTR 4	4	1	3	85	25	46	3	6	2	3	85
2019 QTR 1	7	1	9**	84	27	51	4	2	0	0	84
2019 QTR 2**	5	0	2	87	27	54	2	1	3	0	87
2019 QTR 3											
2019 QTR 4											

SOURCE: QUARTERLY STATISTICS REPORT

**2019 QTR 1: 9 Completed Apps. Includes 1 Interim NSCD App., and 2 Apps. Withdrawn-Discontinued



April-June 2019
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	Notes
1	JUNE	Fire	SCD	No	5	25	10	7	24	71	Approved	James Link
	JUNE	Fire	SCD	Yes	0*	390	307	27	24	748	Approved	Daniel Alvardo

SOURCE: DETAILED QUARTERLY STATISTICS REPORT

***Applicant was MMI When They Submitted App.**

Appendix

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