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ACMAD Finance Committee Agenda 3:30 P.M-5:00 P.M. 1/9/19, 2018

Committee Members:

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Topics:

- 1. Review OPEB Actuarial Report
- 2. Review OPEB Fund Performance
- 3. Review OPEB investment policy & PFM Funding Policy Analysis
- 4. Review current PARS investment policy & investment options
- 5. Review Internal Controls
- 6. Review draft audit
- 7. Adjourn





Alternative Measurement Method Report for Alameda County Mosquito Abatement District

Valuation Date: July 1, 2017 Measurement Period: July 1, 2017 to June 30, 2018 Reporting Period: July 1, 2017 to June 30, 2018

November 25, 2018

Net OPEB Liability

The District's Net OPEB Liability was measured as of June 30, 2018 and the Total OPEB Liability used to calculate the Net OPEB Liability was determined by an actuarial valuation as of July 1, 2017. Standard actuarial update procedures were used to project/discount from valuation to measurement dates.

Actuarial assumptions. The total OPEB liability was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Salary increases	3.00 percent
Investment rate of return	6.00 percent, net of OPEB plan investment expense
Medical cost trend rate	6.00 percent for 2017; 5.00 percent for 2018 and later
	years
Dental, vision and other cost trend rate	4.00 percent
Age adjustment factor	3.00 percent
Percent married	40 percent
Assumed retirement age	58

Pre-retirement mortality rates were based on the RP-2014 Employee Mortality Table for Males or Females, as appropriate, without projection. Post-retirement mortality rates were based on the RP-2014 Health Annuitant Mortality Table for Males or Females, as appropriate, without projection.

Discount rate. GASB 75 requires a discount rate that reflects the following:

- a) The long-term expected rate of return on OPEB plan investments to the extent that the OPEB plan's fiduciary net position (if any) is projected to be sufficient to make projected benefit payments and assets are expected to be invested using a strategy to achieve that return;
- b) A yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher to the extent that the conditions in (a) are not met.

To determine a resulting single (blended) rate, the amount of the plan's projected fiduciary net position (if any) and the amount of projected benefit payments is compared in each period of projected benefit payments. The discount rate used to measure the District's Total OPEB liability is based on these requirements and the following information:

		Long-Term		
		Expected Return of	Municipal Bond 20-	
		Plan Investments	Year High Grade	Discount
Reporting Date	Measurement Date	(if any)	Rate Index	Rate
July 1, 2017	July 1, 2017	6.00%	3.13%	6.00%
June 30, 2018	June 30, 2018	6.00%	3.62%	6.00%

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The components of the net OPEB liability are as follows:

Total OPEB liability	3,569,703
Plan fiduciary net position	4,286,369
Net OPEB liability (asset)	\$(716,666)
Measurement date	June 30, 2018
Reporting date	June 30, 2018

	Actives	Retirees	Total
Employer present value of future benefits	2,390,253	2,316,830	4,707,083
Employer Total OPEB Liability	1,143,874	2,316,830	3,460,704
Employer Normal Cost	141,592	0	141,592



Schedule of Changes in Net OPEB Liability

Total OPEB Liability	
Service Cost	150,088
Interest	200,500
Changes of benefit terms	0
Difference between expected and actual experience	0
Changes of assumptions	0
Benefit payments ¹	(241,589)
Net change in total OPEB liability	108,999
Total OPEB liability – beginning (a)	\$3,460,704
Total OPEB liability – ending (b)	\$3,569,703
Plan fiduciary net position	
Contributions – employer ¹	63,129
Net investment income	299,763
Benefit payments ¹	(241,589)
Administrative expense	(2,769)
Net change in plan fiduciary net position	118,534
Plan fiduciary net position – beginning (c)	\$4,167,835
Plan fiduciary net position – ending (d)	\$4,286,369
Net OPEB liability – beginning (c) – (a)	\$(707,131)
Net OPEB liability – ending (d) – (b)	\$(716,666)

¹ Amount includes implicit subsidy associated with benefits paid.

Sensitivity of the net OPEB liability to changes in the discount rate. The following presents the net OPEB liability, as well as what the net OPEB liability would be if it were calculated using a discount rate that is 1-percentage point lower (5.00 percent) or 1-percentage-point higher (7.00 percent) than the current discount rate:

	1% Decrease	Discount Rate	1% Increase
	(5.00%)	(6.00%)	(7.00%)
Net OPEB liability (asset)	(231,428)	(716,666)	(1,114,602)

Sensitivity of the net OPEB liability to changes in the healthcare cost trend rates. The following presents the net OPEB liability, as well as what the net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower (5.00 percent decreasing to 4.00 percent) or 1-percentage-point higher (7.00 percent decreasing to 6.00 percent) than the current healthcare cost trend rates:

	1% Decrease	Trend Rate	1% Increase
	(5.00% decreasing	(6.00% decreasing	(7.00% decreasing to
	to 4.00%)	To 5.00%)	6.00%)
Net OPEB liability (asset)	(1,168,428)	(716,666)	(159,426)

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Statement of Fiduciary Net Position

Assets	
Cash, deposits, and cash equivalents	9,995
Receivables:	
Accrued Income	637
Total receivables	0
Investments:	
Mutual Funds - Equity	2,487,397
Mutual Funds – Fixed income	1,788,340
Total Investments	4,275,737
Total Assets	4,286,369
Liabilities	
Payables	0
Total Liabilities	0
Net position restricted for postemployment benefits other than pensions	\$4,286,369
Measurement Date	June 30, 2018
Reporting Date	June 30, 2018

Statement of Changes in Fiduciary Net Position

Additions	
Employer contributions ²	63,129
Investment income:	
Net increase in fair value of investments	299,763
Total additions	362,892
Deductions	
Trustee fees	2,769
Administrative expense	0
Benefit payments ²	241,589
Total deductions	244,358
Net increase in net position	118,534
Net position restricted for postemployment benefits other than	
pensions	* * * * * * * * * *
Beginning of year	\$4,167,835
End of year	\$4,286,369

² Includes \$0 of pay-as-you-go contributions made from sources outside of trust, plus pay-as-you-go contributions of \$178,460 made from the trust (total miscellaneous disbursements assumed to be total pay-as-you-go costs), plus an implicit subsidy amount of \$63,129.

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Investments

Investment policy. Investments are allocated primarily between fixed income and equities. The following is asset allocation as of June 30, 2018:

	Strategic Asset Allocation		
	Mutual Funds - Mutual Funds -		
	Equity	Fixed Income	Other
Actual	58.04%	41.72%	0.24%

Rate of return. For the year ended on the measurement date, the annual money-weighted rate of return on investments, net of investment expense, was 7.30 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts invested.

Annual money-weighted rate of return, net of investment expense	7.30%
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Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the reporting year ended June 30, 2018, the District's deferred outflows of resources and deferred inflows of resources to OPEB from the following sources are:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience ^{3,4}	0	0
Changes in assumptions or other inputs ^{3,4}	0	0
Differences between projected and actual return investments ^{3,4}	0	41,760
Total	\$0	\$41,760

³ Measured at June 30, 2018;

Amounts reported as deferred outflows and deferred inflows of resources will be recognized in OPEB expense as follows:

		Deferred Inflows
Year ended June 30:	Deferred Outflows of Resources	of Resources
2019	0	(10,440)
2020	0	(10,440)
2021	0	(10,440)
2022	0	(10,440)
2023	0	0
2024	0	0



⁴ See Schedule of Deferred Outflows and Inflows of Resources for additional information.

Schedule of Deferred Outflows and Inflows of Resources

Year	Type	Category	Initial Base	Amortization Period	Current Balance
2017	Deferred Outflow	Difference between expected and actual experience	0	0.0	0
2017	Deferred Outflow	Changes in assumptions	0	0.0	0
2017	Deferred Outflow	Net difference between projected and actual earnings on plan investments	0	0.0	0
2018	Deferred Outflow	Difference between expected and actual experience	0	5.6	0
2018	Deferred Outflow	Changes in assumptions	0	5.6	0
2018	Deferred Outflow	Net difference between projected and actual earnings on plan investments	0	5.0	0
	•		•	Total	0

Year	Туре	Category	Initial Base	Amortization Period	Current Balance
2017	Deferred Inflow	Difference between expected and actual experience	0	0.0	0
2017	Deferred Inflow	Changes in assumptions	0	0.0	0
2017	Deferred Inflow	Net difference between projected and actual earnings on plan investments	0	0.0	0
2018	Deferred Inflow	Difference between expected and actual experience	0	5.6	0
2018	Deferred Inflow	Changes in assumptions	0	5.6	0
2018	Deferred Inflow	Net difference between projected and actual earnings on plan investments	52,200	5.0	41,760
			•	Total	41,760



Net OPEB Expense

The District's Net OPEB expense was \$95,354.

Net OPEB Liability - beginning (a)	\$(707,131)
Net OPEB Liability – ending (b)	\$(716,666)
Change in Net OPEB Liability [(b)-(a)]	(9,535)
Change in Deferred Outflows	0
Change in Deferred Inflows	41,760
Employer Contributions	63,129
Net OPEB Expense	\$95,354

Service Cost	150,088
Interest Cost	200,500
Expected Return on Assets	(244,794)
Changes of benefit terms	0
Recognition of Deferred Outflows and Inflows	
Differences between expected and actual experience	0
Changes of assumptions	0
Differences between projected and actual investments	(10,440)
Total	(10,440)
Net OPEB Expense	\$95,354

Actuarially Determined Contribution

The following shows the actuarial determined contribution for year ending June 30, 2018:

Service Cost	150,088
Net OPEB Liability Amortization Payment (30-year)	(36,741)
Total	\$113,347

Valuation Date	July 1, 2017
Discount Rate	6.00%
Salary Increases	3.00%



Plan Description

Plan administration. The District sponsors healthcare coverage under the California Public Employees Medical and Hospital Care Act ("PEMHCA"), commonly referred to as PERS Health. PEMHCA provides health insurance through a variety of Health Maintenance Organization (HMO) and Preferred Provider Organization (PPO) options.

Benefits provided. Employees may retire at age 50 with 5 years of service (age 52 and 5 for hires after 1/1/2013) and receive District-paid contribution. The District contributes up to 100% of the Kaiser Bay Area Non-Medicare single rate, and up to 90% of the 2-party and family rates. Employees hired after 10/1/13 are subject to vesting, on the contribution, equal to 50% for those with 10 years-CalPERS service, grading up to 100% after 20 years. Employees hired after 10/1/13 with less than 10 years CalPERS service will not receive a contribution. The District also offers dental and vision benefits to retirees, and dental benefits are subject to the above-mentioned vesting, for those who retire after April 30, 1986. Retirees who retired before April 30, 1986 and are subject to a \$1,500 annual cap on dental benefits. Survivor benefits are available, and the District pays the PEMHCA administrative fee (0.23% for 2018/19)

Plan membership. At July 1, 2017, membership consisted of the following:

Inactive plan members or beneficiaries currently receiving benefit payments	15
Active plan members	16

Contributions⁵. The District currently finances benefits on a pay-as-you-go basis. The District has established an irrevocable trust to pre-fund retiree health obligations and disburses benefit payments from the trust.



⁵ For purposes of the valuation and determining the discount rate, we have assumed the District contributes \$15,000 annually to the trust.

Actuarial Certification

The results set forth in this supplement are based on our actuarial valuation of the health and welfare benefit plans of the Alameda County Mosquito Abatement District as of July 1, 2017.

The valuation was performed in accordance with generally accepted actuarial principles and practices. We relied on census data for active employees and retirees provided to us by the District. We also made use of claims, premium, expense, and enrollment data, and copies of relevant sections of healthcare documents provided to us by the District, and (when applicable) trust statements prepared by the trustee and provided to us by the District.

The assumptions used in performing the valuation, as summarized in this report, and the results based thereupon, represent our best estimate of the actuarial costs of the program under GASB 74 and GASB 75, and the existing and proposed Actuarial Standards of Practice for measuring post-retirement healthcare benefits.

The undersigned actuary meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Certified by:

Corlo E

Carlos Diaz, ASA, EA, MAAA

Actuary



Alameda County Mosquito Abatement District c/o California School Boards Association



Alameda County Mosquito Abatement District

Investment Performance ReviewFor the Quarter Ended June 30, 2018

Client Management Team PFM Asset Management LLC

Ellen Clark, Senior Managing Consultant Joseph Federico, Senior Analyst 50 California Street Suite 2300 San Francisco, CA 94111 415-982-5544 1735 Market Street 43rd Floor Philadelphia, PA 19103 215-567-6100 Financial Markets & Investment Strategy Review



QUARTERLY MARKET SUMMARY

	QTD	YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
DOMESTIC EQUITY								
S&P 500 Index	3.43%	2.65%	14.37%	16.12%	11.93%	13.42%	13.23%	10.17%
Russell 3000 Index	3.89%	3.22%	14.78%	16.63%	11.58%	13.29%	13.01%	10.23%
Russell 1000 Value Index	1.18%	-1.69%	6.77%	11.06%	8.26%	10.34%	11.27%	8.49%
Russell 1000 Growth Index	5.76%	7.25%	22.51%	21.46%	14.98%	16.36%	14.88%	11.83%
Russell Midcap Index	2.82%	2.35%	12.33%	14.39%	9.58%	12.22%	11.89%	10.23%
Russell 2500 Index	5.71%	5.46%	16.24%	18.03%	10.30%	12.29%	11.85%	10.74%
Russell 2000 Index	7.75%	7.66%	17.57%	21.03%	10.96%	12.46%	11.83%	10.60%
Russell 2000 Value Index	8.30%	5.44%	13.10%	18.83%	11.22%	11.18%	11.10%	9.88%
Russell 2000 Growth Index	7.23%	9.70%	21.86%	23.13%	10.60%	13.65%	12.50%	11.24%
INTERNATIONAL EQUITY								
MSCI EAFE (net)	-1.24%	-2.75%	6.84%	13.36%	4.90%	6.44%	4.89%	2.84%
MSCI AC World Index (net)	0.53%	-0.43%	10.73%	14.68%	8.19%	9.41%	7.96%	5.80%
MSCI AC World ex-U.S. (Net)	-2.61%	-3.77%	7.28%	13.67%	5.07%	5.99%	3.81%	2.54%
MSCI AC World ex-U.S. Small Cap (Net)	-2.60%	-2.94%	10.57%	15.34%	7.94%	8.98%	5.86%	5.77%
MSCI EM (net)	-7.96%	-6.66%	8.20%	15.71%	5.60%	5.01%	1.43%	2.26%
ALTERNATIVES								
FTSE NAREIT Equity REIT Index	10.04%	1.02%	3.50%	0.87%	8.06%	8.31%	9.12%	7.94%
FTSE EPRA/NAREIT Developed Index	5.45%	0.91%	6.70%	3.88%	6.70%	6.89%	7.25%	5.73%
Bloomberg Commodity Index Total Return	0.40%	0.00%	7.35%	0.18%	-4.54%	-6.40%	-7.81%	-9.04%
FIXED INCOME								
Bloomberg Barclays U.S. Aggregate	-0.16%	-1.62%	-0.40%	-0.36%	1.72%	2.27%	2.57%	3.72%
Bloomberg Barclays U.S. Government/Credit	-0.33%	-1.90%	-0.63%	-0.52%	1.83%	2.29%	2.77%	3.78%
Bloomberg Barclays Intermediate U.S. Gov/Credit	0.01%	-0.97%	-0.58%	-0.40%	1.16%	1.60%	1.95%	3.08%
Bloomberg Barclays U.S. Treasury: 1-3 Year	0.21%	0.05%	0.01%	-0.05%	0.40%	0.58%	0.57%	1.25%
Bloomberg Barclays U.SCorp: High Yield	1.03%	0.16%	2.62%	7.54%	5.53%	5.51%	6.32%	8.19%
Credit Suisse Leveraged Loan Index	0.78%	2.38%	4.67%	6.07%	4.33%	4.24%	4.59%	5.00%
BofAML Global HY Constrained (USD)	-1.28%	-1.50%	2.09%	7.12%	5.46%	5.06%	5.80%	7.81%
Bloomberg Barclays Global Aggregate ex-USD	-4.76%	-1.30%	2.79%	-0.56%	3.23%	0.88%	0.09%	1.76%
JPM EMBI Global Diversified	-3.54%	-5.23%	-1.60%	2.15%	4.63%	5.15%	5.21%	6.75%
CASH EQUIVALENT								
90-Day U.S. Treasury Bill	0.45%	0.81%	1.36%	0.90%	0.64%	0.40%	0.30%	0.33%

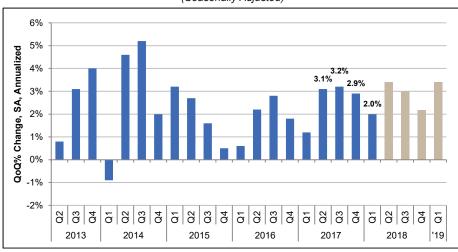
Source: Investment Metrics. Returns are expressed as percentages. Please refer to the last page of this document for important disclosures relating to this material.



THE ECONOMY

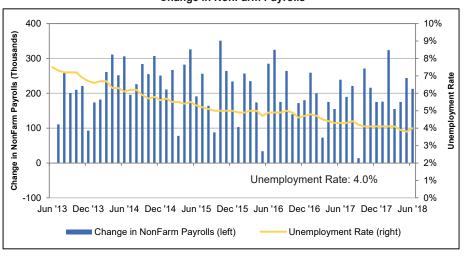
- Real gross domestic product (GDP) for the second quarter of 2018 is projected to be stronger than the first-quarter real GDP growth rate of 2.0 percent. Second-quarter GDP growth is projected to be 4.5 percent by the Federal Reserve Bank of Atlanta (Atlanta Fed) GDPNow forecast. The Bloomberg consensus forecast (shown on the right) stands at 3.4 percent.
- Inflation is picking up: For the 12 months ending in May, annual inflation was 2.8 percent, up from 2.5 percent in April and 2.4 percent in March. Personal income increased 0.4 percent in May from the month prior, according to estimates released by the Bureau of Economic Analysis. Disposable personal income (DPI) increased 0.4 percent and personal consumption expenditures (PCE) increased 0.2 percent in May from the month prior. The June Purchasing Manager Index (PMI) registered 60.2 percent, an increase of 1.5 percent from the May reading of 58.7 percent. Retail sales growth was strong April to June, increasing 5.9 percent compared to the same period in 2017.
- Total nonfarm payrolls employment increased by 213,000 in June, and the unemployment rate rose to 4.0 percent, according to the U.S. Bureau of Labor Statistics. The number of unemployed persons increased by 499,000 to 6.6 million. A year earlier, the jobless rate was 4.3 percent, and the number of unemployed persons was 7.0 million.
- Eurozone GDP growth was 0.4 percent during the first quarter of 2018. Consensus estimates expect to see stronger growth in the second quarter. China's first quarter GDP growth was 6.8%, which will sustain the narrative to expect slower growth from the world's second-largest economy.

U.S. Real GDP Growth
(Seasonally Adjusted)



Source: Bloomberg. Blue bars indicate actual numbers; taupe bars indicate forecasted estimates.

Change in NonFarm Payrolls



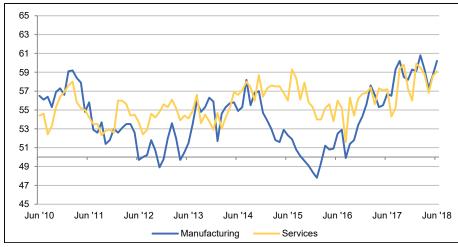
Source: Bloomberg.



WHAT WE'RE WATCHING

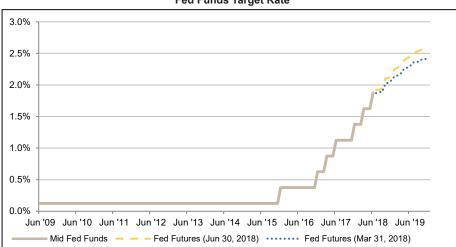
- After a volatile first quarter, the U.S. equity markets stabilized and the bull market continued. The U.S. Dollar (USD) continued to appreciate against a basket of other currencies during the month of June, extending the rally that has continued since February. There are several reasons for the relative strength, including rising interest rates in the U.S., investors seeking safety due to trade tensions and increasing political uncertainty in Europe. Weaker economic data relative to the U.S. has zapped the strength from foreign currencies.
- U.S. economic growth is expected to pick up in the second quarter, according
 to the Atlanta Fed. The U.S. Treasury yield curve continues to flatten based
 on the spread between two-year and 10-year Treasuries. The Federal Open
 Market Committee (FOMC) raised the federal funds target rate from 1.75
 percent to 2.0 percent during its June meeting.
- Returns were broadly strong across U.S. equities: The S&P 500 Index (S&P) rose 3.4 percent this quarter, and the Russell 2000 Index (small-caps) returned 7.8 percent. However, there is concern that higher interest rates could have a negative effect on equities. U.S. unemployment increased from 3.8 percent to 4.0 percent because of an increase in the labor force participation rate.
- The trade war with China remained a hot topic during the second quarter. On June 15, President Trump detailed plans to impose 25 percent tariffs on \$34 billion in goods imported from China, with most of that to take effect July 6. The Chinese State Council's commission on tariffs and customs has stated that it plans to match any tariffs by imposing its own tariffs on U.S. exports. As a consequence, China's currency and the stock market resumed their declines. On top of this, the U.S. has disputes over trade with the European Union (EU), Canada and Mexico.
- Overall, international economies were behind the U.S. last quarter. Emerging Markets (EM) exports growth has been slowing. Brexit talks are continuing, adding to uncertainty for the EU; however, the economy has not yet reacted as strongly as initially estimated. Furthermore, the political splitting of the ruling party in Germany along with settlement of high numbers of refugees in Europe continues to create uncertainty.

ISM Manufacturing & Services PMI



Source: Bloomberg.

Fed Funds Target Rate



Source: Bloomberg.

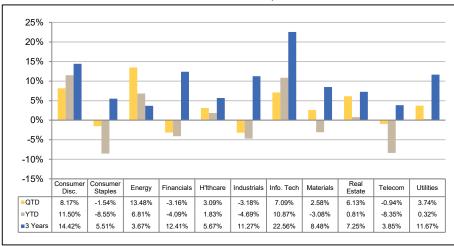


DOMESTIC EQUITY

- The S&P posted a positive return of 3.4 percent for the quarter after a weak first quarter. Returns were boosted by tax reforms and strong earnings growth. Earnings growth in the first quarter for the S&P was 29.6% and is projected to be 19.9% in the second quarter, according to FactSet Earnings Insight. As it currently stands, many valuation measures show the U.S. equity market to be slightly expensive relative to history, with both forward and Shiller price-earnings (P/E) ratios trending higher than long-term averages. Consumer confidence remained strong, and retail sales data suggested a rebound in consumption from a softer first quarter this year.
- The domestic economy bolstered U.S. stocks in the second quarter, especially small-caps and U.S. Real Estate Investment Trusts (REITs), which are less exposed to global revenues. Continuing a pattern that has persisted for some time, gains within the large-cap benchmarks were overwhelmingly driven by a small group of technology companies, and the growth component of the market widely outperformed its value counterpart.
- Industrial stocks underperformed with a return of -3.2 percent due to uncertainty surrounding trade sanctions. Financials also underperformed with a return of -3.2 percent as a result of the flattening yield curve. The best-performing sectors during the second quarter were Energy, Consumer Discretionary and Information Technology with returns of 13.5 percent, 8.2 percent and 7.1 percent, respectively.
- For the second quarter of 2018, the blended earnings growth rate for the S&P was 19.9 percent. If 19.9 percent is the actual growth rate for the quarter, it will mark the second-highest earnings growth since the third quarter of 2010 (34.1 percent). Furthermore, 89 percent of S&P companies have reported a positive earnings per share (EPS) surprise and 85 percent have reported a positive sales surprise. At the sector level, the Information Technology and Healthcare sectors have the highest number of companies issuing positive EPS guidance. Looking at future quarters, analysts currently project earnings growth to continue at about 20 percent through the remainder of 2018, but do predict lower growth in the first half of 2019.

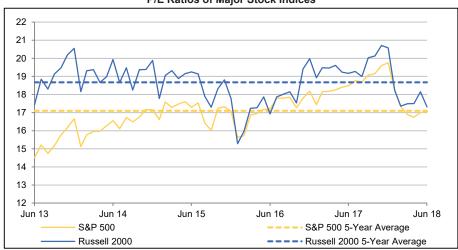
S&P 500 Index Performance by Sector

Periods Ended June 30, 2018



Source: Bloomberg.

P/E Ratios of Major Stock Indices*



Source: Bloomberg.

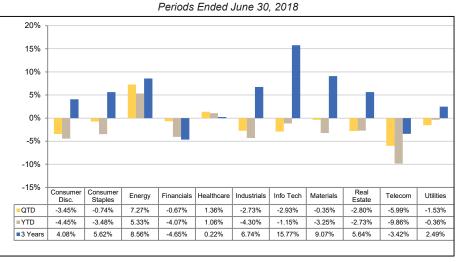
*P/E ratios are calculated based on one-year forward estimates and adjusted to include only positive earnings results for consistency.



NON-U.S. EQUITY

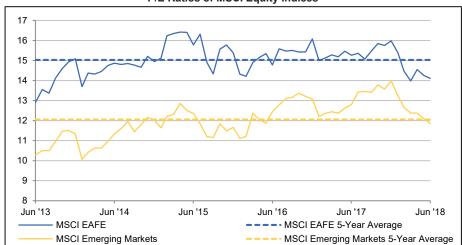
- Developed Markets outside of North America, as measured by the MSCI EAFE Index, fell 1.2 percent in the second guarter. The U.S. opened up a large lead over international and especially EM equities. Foreign currencies weakened, as robust economic indicators and a more hawkish tone from the Federal Reserve (Fed) lent support to the USD.
- Energy and Healthcare were the only positive sectors for the quarter within MSCI ACWI ex-U.S. Index. This quarter was marked by the return of political risk in the Eurozone. There were concerns that Italy would enter re-elections after the inconclusive outcome of the March vote. Furthermore, there are talks of Italy potentially leaving the Eurozone. The prospective coalition's aims include lowering the pension age and cutting taxes.
- EM, as represented by the MSCI Emerging Markets Index, returned -8.0 percent in the second quarter. South Africa, Turkey and Brazil dragged the Index down by returning -12 percent, -25 percent and -26 percent, respectively. Brazil failed to pass much-needed fiscal reform, and Turkey further eroded the credibility of its central bank through executive branch meddling and too-loose monetary policy. South Africa still has not passed positive structural reform nearly six months into its new administration.
- MSCI announced the promotion of Argentina and Saudi Arabia to EM status effective next June. The news had a positive impact on Argentina; however, the market response was only short-lived due to the country's currency crisis, International Monetary Fund (IMF) bailout talks and danger of debt default.
- · Most importantly, the risk of trade war intensified significantly in June, with battle lines now drawn between the U.S. and the rest of the world. In addition to steel tariffs already in place, new tariffs on \$200 billion of Chinese imports and a 20 percent levy on European auto shipments are underway—as are retaliatory measures on U.S. goods from the affected countries

MSCI ACWI ex-U.S. Sectors



Source: Bloomberg.

P/E Ratios of MSCI Equity Indices*



Source: Bloomberg.

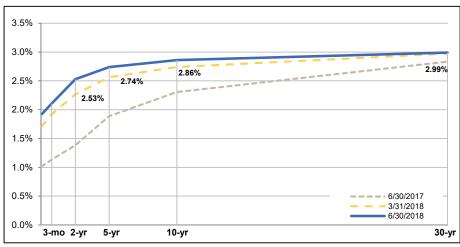
*P/E ratios are calculated based on one-year forward estimates and adjusted to include only positive earnings results for consistency.



FIXED INCOME

- The U.S. bond market, represented by the Bloomberg Barclays U.S.
 Aggregate Index (Aggregate), returned -0.16 percent in the second quarter.
 During the quarter, the yield curve flattened as rates continued to shift higher on the short end led by Fed rate hikes. Intermediate rates also shifted and rose, but more modestly, as the 10-year Treasury increased about 12 basis points (bps) in yield. Most importantly, the spread between two- and 10-year yields reached its lowest point since 2007.
- Despite a rise in the federal funds rate, long-term Treasury yields ended roughly where they started the quarter, with the 30-year bond ending June at a yield of 2.99 percent, an increase of just two bps.
- Investment-grade (IG) corporate spreads rose during the quarter as volatility increased in the bond markets, partially due to trade deal disruption. The Bloomberg Barclays U.S. Corporate Index fell 98 bps during the quarter. High-yield (HY) bonds, as represented by the Bloomberg Barclays U.S. Corporate HY Index, rose 1.03 percent as the extra yield cushion and greater small- to mid-cap domestic focus of its constituents were more isolated from trade impact, while Energy-related names enjoyed the tailwind of rising oil prices.
- The fixed-rate mortgage market, as measured by the Bloomberg Barclays U.S. Mortgage-Backed Securities Index, returned 0.24 percent, while the Bloomberg Barclays U.S. CMBS Index (measuring commercial mortgagebacked securities) was relatively flat at just 0.02 percent.
- Global bond markets suffered from bouts of volatility in the second quarter due to a variety of factors. These included a greater dispersion between accelerating U.S. growth and a softening of economic activity in the rest of the world, escalating trade tensions between the U.S. and China and the formation of a populist coalition government in Italy (the country's 10-year yields spiked up to 2.8 percent during the quarter). Global corporate bonds made negative total returns with USD IG and Euro HY leading the declines.

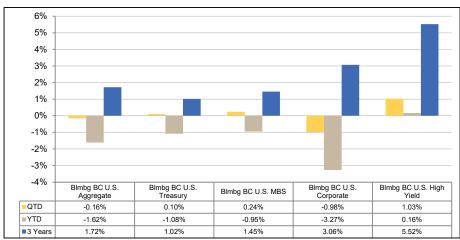
U.S. Treasury Yield Curve



Source: Bloomberg.

Returns for Fixed-Income Segments

Periods Ended June 30, 2018



Source: Bloomberg. "Blmbg BC" is Bloomberg Barclays.

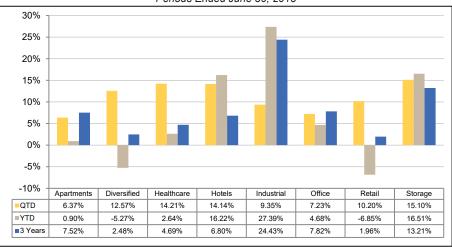


ALTERNATIVES

- REITs, as measured by the FTSE NAREIT Equity REITs Index, gained 10 percent in the second quarter. The sector increases were led by Self-Storage, Healthcare and Lodging/Resorts (Hotels) sectors with returns of 15.1 percent, 14.2 percent and 14.1 percent, respectively.
- Private real estate, as measured by the NCREIF Property Index of 7,553 commercial properties nationwide worth a combined total of about \$567 billion, increased 2.20 percent during the first quarter (second quarter data 2018 is not available yet). Industrial properties, which are primarily Warehouse, was once again the biggest contributor to return at 3.25 percent for the quarter.
- Hedge funds had mixed returns during the second quarter. The HFRX
 Fund Weighted Composite returned 0.84 percent, the HFRX Relative Value
 Arbitrage Index returned 1.2 percent, and the HFRX Macro/CTA Index
 returned 0.22 percent during the quarter; whereas, the HFRX Equity Hedge
 Index returned -0.92 percent.
- Private equity fundraising continued strongly with \$86 billion in aggregate capital raised in the second quarter 2018 worldwide. That brings the total fundraising to \$174 billion year to date (YTD) worldwide. North America led fundraising during the quarter with \$38 billion raised versus \$22 billion in Asia and \$21 billion in Europe. This brings the total private equity dry powder to a new record of \$1.09 trillion as of the end of the second quarter.
- Commodity futures, represented by the Bloomberg Commodity Index of 19 raw materials futures, fell 0.07 percent in the second quarter following a bad first quarter (-0.79 percent). Overall, the Index has declined 0.75 percent in 2017. Recent weakening can be attributed to the strong USD. The gold spot price ended the quarter at \$1,255 per ounce. West Texas Intermediate (WTI) Crude Oil spot prices are at \$74.15, up from \$64.87 at the end of the first quarter.

FTSE NAREIT Sectors

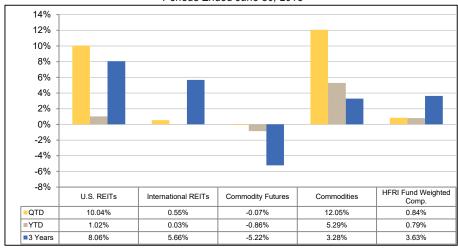
Periods Ended June 30, 2018



Source: Bloomberg.

Returns for Alternative Assets

Periods Ended June 30, 2018

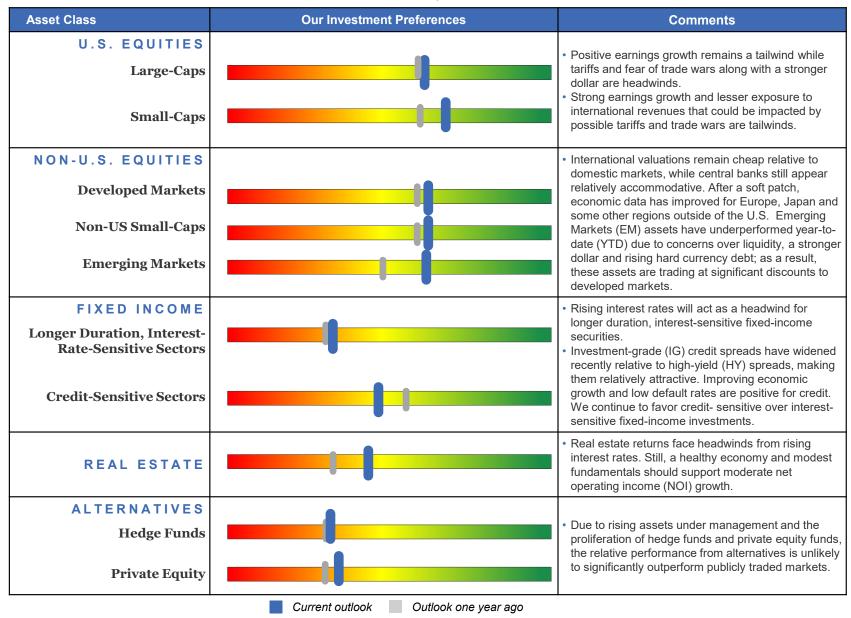


Sources: Bloomberg and Hedge Fund Research, Inc.



Investment Strategy Overview

For the Third Quarter 2018





Plan Performance Summary



Asset Allocation & Performance

	Allocat	ion		Performance(%)						
	Market Value (\$)	%	1 Quarter	Year To Date	1 Year	2 Years	3 Years	5 Years	Since Inception	Inception Date
TOTAL FUND	4,286,368	100.00	0.94	0.27	7.33	8.38	6.36	7.44	7.11	02/01/2011
Blended Policy Benchmark			0.83	-0.23	6.45	8.25	5.95	6.74	6.50	02/01/2011
Domestic Equity	1,635,862	38.16	3.90	3.22	14.62	16.19	11.62	13.09	12.67	02/01/2011
Russell 3000 Index			3.89	3.22	14.78	16.63	11.58	13.29	12.84	02/01/2011
Vanguard Total Stock Market Index	1,472,457	34.35	3.91	3.28	14.82	16.63	11.58	13.26	13.69	05/01/2012
Russell 3000 Index			3.89	3.22	14.78	16.63	11.58	13.29	13.73	05/01/2012
iShares Edge MSCI USA Quality ETF	78,693	1.84	1.31	1.59	14.16	14.57	11.84	N/A	N/A	07/01/2018
S&P 500			3.43	2.65	14.37	16.12	11.93	13.42	N/A	07/01/2018
iShares Core S&P Small-Cap ETF	84,712	1.98	8.70	9.40	20.48	21.45	13.81	14.55	7.62	05/01/2018
S&P SmallCap 600			8.77	9.39	20.50	21.48	13.84	14.60	7.66	05/01/2018
International Equity	851,535	19.87	-1.75	-0.96	10.30	12.80	5.94	7.24	5.02	02/01/2011
MSCI AC World ex USA (Net)			-2.61	-3.77	7.28	13.67	5.07	5.99	3.97	02/01/2011
Vanguard Total International Stock Index Fund	269,149	6.28	-3.17	-3.62	7.10	13.39	5.33	6.42	11.27	10/01/2016
MSCI AC World ex USA (Net)			-2.61	-3.77	7.28	13.67	5.07	5.99	11.44	10/01/2016
Vanguard International Value	176,341	4.11	-3.20	-3.81	7.69	13.61	4.49	6.07	11.28	05/01/2016
MSCI AC World ex USA (Net)			-2.61	-3.77	7.28	13.67	5.07	5.99	10.89	05/01/2016
J. O. Hambro International Select	220,993	5.16	1.24	4.75	15.24	13.86	6.24	10.66	12.89	01/01/2016
MSCI AC World ex USA (Net)			-2.61	-3.77	7.28	13.67	5.07	5.99	10.35	01/01/2016
Oppenheimer Int'l Small Mid Company	108,262	2.53	3.61	6.25	20.15	22.25	14.58	16.67	15.22	04/01/2015
MSCI AC World ex USA Smid Cap Index (Net)			-2.18	-2.90	9.69	14.67	7.27	8.15	7.52	04/01/2015
Hartford Schroders Emerging Markets Equity	76,789	1.79	-8.38	-6.12	9.87	17.80	7.54	N/A	-8.86	03/01/2018
MSCI EM (net)			-7.96	-6.66	8.20	15.71	5.60	5.01	-9.67	03/01/2018



Asset Allocation & Performance

	Allocat	ion	Performance(%)							
	Market Value (\$)	%	1 Quarter	Year To Date	1 Year	2 Years	3 Years	5 Years	Since Inception	Inception Date
Fixed Income	1,788,340	41.72	-0.35	-1.77	-0.32	0.30	2.12	2.78	3.46	02/01/2011
Blmbg. Barc. U.S. Aggregate			-0.16	-1.62	-0.40	-0.36	1.72	2.27	2.78	02/01/2011
Baird Core Plus	648,737	15.13	-0.35	-1.74	-0.16	0.74	2.47	3.09	2.61	05/01/2014
Blmbg. Barc. U.S. Aggregate			-0.16	-1.62	-0.40	-0.36	1.72	2.27	1.97	05/01/2014
DoubleLine Core Fixed Income	294,394	6.87	-0.19	-0.92	0.64	1.21	2.42	3.18	-0.83	09/01/2017
Prudential Total Return Bond Fund	196,525	4.58	-0.53	-1.89	0.59	1.48	3.15	3.75	-1.13	09/01/2017
Blmbg. Barc. U.S. Aggregate			-0.16	-1.62	-0.40	-0.36	1.72	2.27	-1.71	09/01/2017
Vanguard Intermediate-Term Investment Grade	648,684	15.13	-0.39	-2.22	-1.00	-0.16	2.17	2.91	2.72	05/01/2012
Blmbg. Barc. U.S. Credit 5-10 Year Index			-0.59	-2.87	-1.07	0.20	2.62	3.48	3.23	05/01/2012
Cash Equivalent										
First American Government Obligation	10,631	0.25	0.31	0.56	0.92	0.71	0.49	0.29	0.20	02/01/2011



Comparative Performance

	2017	2016	2015	2014	2013
TOTAL FUND	14.66	6.05	0.88	5.97	13.79
Blended Policy Benchmark	14.00	6.77	-0.85	6.12	12.30
Domestic Equity					
Vanguard Total Stock Market Index	21.17	12.66	0.39	12.56	33.52
Russell 3000 Index	21.13	12.74	0.48	12.56	33.55
iShares Edge MSCI USA Quality ETF	22.26	9.18	5.56	11.62	N/A
S&P 500	21.83	11.96	1.38	13.69	32.39
iShares Core S&P Small-Cap ETF	13.20	26.49	-2.00	5.67	41.36
S&P SmallCap 600	13.23	26.56	-1.97	5.76	41.31
International Equity					
Vanguard Total International Stock Index Fund	27.55	4.67	-4.26	-4.17	15.14
Vanguard International Value	27.96	4.46	-6.44	-6.69	22.15
J. O. Hambro International Select	22.89	5.20	-4.05	5.35	38.21
MSCI AC World ex USA (Net)	27.19	4.50	-5.66	-3.87	15.29
Oppenheimer Int'l Small Mid Company	38.30	-0.24	15.15	0.38	45.26
MSCI AC World ex USA Smid Cap Index (Net)	30.35	3.57	0.44	-3.05	17.79
Hartford Schroders Emerging Markets Equity	41.09	10.64	-12.63	N/A	N/A
MSCI EM (net)	37.28	11.19	-14.92	-2.19	-2.60
Fixed Income					
Baird Core Plus	4.65	4.73	0.14	6.59	-1.32
Prudential Total Return Bond Fund	6.71	4.83	0.09	7.25	-0.91
DoubleLine Core Fixed Income	4.66	4.11	0.63	6.86	-1.20
Blmbg. Barc. U.S. Aggregate	3.54	2.65	0.55	5.97	-2.02
Vanguard Intermediate-Term Investment Grade	4.15	3.83	1.53	5.81	-1.37
Blmbg. Barc. U.S. Credit 5-10 Year Index	5.57	5.23	0.69	7.38	-2.05
Cash Equivalent					
First American Government Obligation	0.65	0.26	0.00	0.00	0.00



Account Reconciliation

QTR

	Market Value As of 04/01/2018	Net Flows	Return On Investment	Market Value As of 06/30/2018
TOTAL FUND	4,247,053	(719)	40,034	4,286,368

YTD

	Market Value As of 01/01/2018	Net Flows	Return On Investment	Market Value As of 06/30/2018
TOTAL FUND	4,276,025	(1,418)	11,761	4,286,368

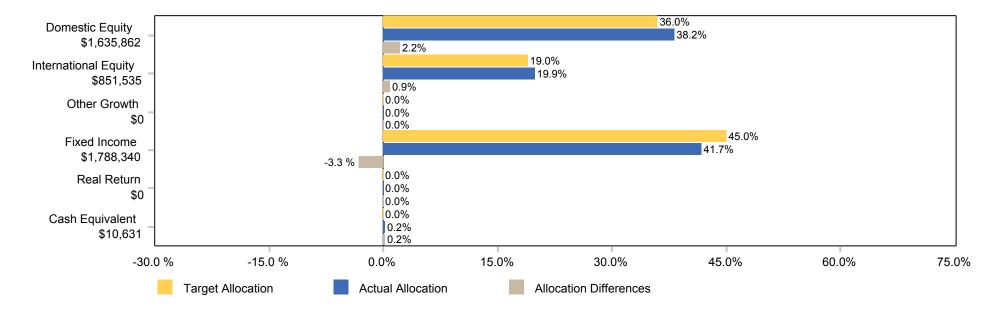
1 Year

	Market Value As of 07/01/2017	Net Flows	Return On Investment	Market Value As of 06/30/2018
TOTAL FUND	4,167,835	(181,229)	299,763	4,286,368



Asset Allocation Compliance - TOTAL FUND

	Asset Allocation (%)	Target Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Differences (%)
TOTAL FUND	100.0	100.0	N/A	N/A	0.0
Domestic Equity	38.2	36.0	16.0	56.0	2.2
International Equity	19.9	19.0	0.0	39.0	0.9
Other Growth	0.0	0.0	0.0	10.0	0.0
Fixed Income	41.7	45.0	25.0	70.0	-3.3
Real Return	0.0	0.0	0.0	10.0	0.0
Cash Equivalent	0.2	0.0	0.0	20.0	0.2





Historical Hybrid Composition - Blended Policy Benchmark

Allocation Mandate	Weight (%)
Feb-2011	
Russell 3000 Index	31.0
MSCI AC World ex USA (Net)	19.0
FTSE NAREIT Equity REIT Index	2.5
Lipper Nat Res Fd IX	2.5
Blmbg. Barc. U.S. Aggregate	45.0
Dec-2015	
Russell 3000 Index	36.0
MSCI AC World ex USA (Net)	19.0
Blmbg. Barc. U.S. Aggregate	45.0



Investment Manager Review



Vanguard Total Stock Market Index

- **Management:** Gerard C. O'Reilly has managed the Fund since its inception in 1994. Walter Nejman is now a co-portfolio manager for the fund. They have been in the investment management industry since 1992 and 2008, respectively.
- Objective: The Fund seeks to track the performance of a benchmark index that measures the investment return of the overall stock market.
- **Strategy:** The Fund employs a "passive management" or indexing investment approach designed to track the performance and characteristics of the CRSP US Total Market Index. These key characteristics include industry weightings and market capitalization, as well as certain financial measures, such as price/earnings ratio and dividend yield.

iShares Edge MSCI USA Quality Factor ETF (QUAL)

- Management: BlackRock Fund Advisors: Diane Hsiung (since 2013), Jennifer Hsui (since 2013), Alan Mason (since 2016) and Greg Savage (since 2013)
- Objective: The Fund seeks to replicate the performance of MSCI USA Sector Neutral Quality Index.
- Strategy: The Fund employs a "passive management" or indexing investment approach designed to track the performance and characteristics of the MSCI USA Sector Neutral Quality Index. These key characteristics include industry weightings and market capitalization, as well as certain financial measures, such as price/earnings ratio and dividend yield. MSCI USA Sector Neutral Quality Index consists of stocks represented within MSCI USA Index that have a higher quality score based on Return on Equity, Debt/Equity and Earnings Variability.

iShares Core S&P Small Cap ETF (IJR)

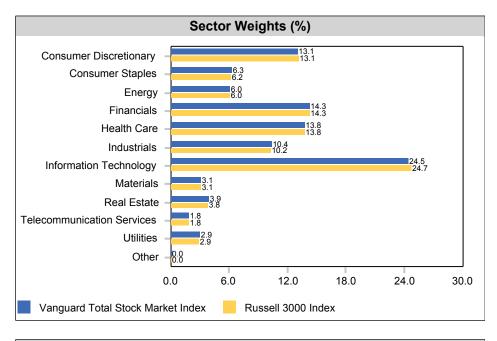
- Management: BlackRock Fund Advisors: Diane Hsiung (since 2008), Jennifer Hsui (since 2012), Alan Mason (since 2016) and Greg Savage (since 2008)
- Objective: The Fund seeks to replicate the performance of S&P SmallCap 600 Index.
- Strategy: The Fund employs a "passive management" or indexing investment approach designed to track the performance and characteristics of the S&P SmallCap 600 Index. These key characteristics include industry weightings and market capitalization, as well as certain financial measures, such as price/earnings ratio and dividend yield. S&P SmallCap 600 Index is a float adjusted market cap weighted index consisting of US smaller capitalization companies.



Portfolio Characteristics As of June 30, 2018

Vanguard Total Stock Market Index vs. Russell 3000 Index

Portfolio Characteristics						
	Portfolio	Benchmark				
Wtd. Avg. Mkt. Cap (\$M)	175,206	177,066				
Median Mkt. Cap (\$M)	1,186	1,807				
Price/Earnings ratio	20.71	20.71				
Price/Book ratio	3.25	3.25				
5 Yr. EPS Growth Rate (%)	14.70	14.68				
Current Yield (%)	1.86	1.85				
Number of Stocks	3,623	3,008				



Top Ten Equity Holdings					
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)	
Apple Inc	2.94	3.25	-0.31	10.76	
Microsoft Corp	2.72	2.67	0.05	8.51	
Amazon.com Inc	2.51	2.47	0.04	17.44	
Facebook Inc	1.67	1.65	0.02	21.61	
JPMorgan Chase & Co	1.27	1.26	0.01	-4.77	
Berkshire Hathaway Inc	1.27	1.29	-0.02	-6.43	
Exxon Mobil Corp	1.26	1.25	0.01	12.00	
Alphabet Inc	1.20	1.20	0.00	8.87	
Alphabet Inc	1.20	1.21	-0.01	8.13	
Johnson & Johnson	1.17	1.16	0.01	-4.61	
% of Portfolio	17.21	17.41	-0.20		

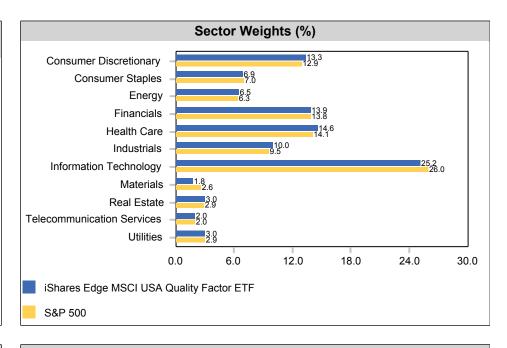
Ten Best Performers					
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)	
Turtle Beach Corp	0.00	0.00	0.00	746.81	
Solid Biosciences Inc	0.00	0.00	0.00	375.07	
Tandem Diabetes Care Inc	0.00	0.00	0.00	343.95	
Intelsat SA	0.00	0.00	0.00	343.08	
Vaalco Energy Inc	0.00	0.00	0.00	216.85	
Evolus Inc	0.00	0.00	0.00	209.97	
Differential Brands Group Inc	0.00	0.00	0.00	189.82	
TapImmune Inc	0.00	0.00	0.00	178.99	
California Resources Corp	0.01	0.01	0.00	164.96	
TransEnterix Inc	0.00	0.00	0.00	156.47	
% of Portfolio	0.01	0.01	0.00		



Portfolio Characteristics As of June 30, 2018

iShares Edge MSCI USA Quality Factor ETF vs. S&P 500

Portfolio Characteristics						
	Portfolio	Benchmark				
Wtd. Avg. Mkt. Cap (\$M)	140,904	213,953				
Median Mkt. Cap (\$M)	21,395	20,691				
Price/Earnings ratio	22.49	20.90				
Price/Book ratio	4.94	3.39				
5 Yr. EPS Growth Rate (%)	8.72	14.76				
Current Yield (%)	2.12	1.96				
Number of Stocks	121	505				



Top Ten Equity Holdings						
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)		
Apple Inc	4.81	3.95	0.86	10.76		
Johnson & Johnson	4.51	1.41	3.10	-4.61		
Mastercard Inc	4.39	0.78	3.61	12.36		
Visa Inc	3.56	1.03	2.53	10.90		
Exxon Mobil Corp	3.56	1.52	2.04	12.00		
Altria Group Inc	3.24	0.47	2.77	-7.75		
3M Co	2.74	0.51	2.23	-9.78		
Blackrock Inc	2.63	0.27	2.36	-7.40		
NVIDIA Corp	2.62	0.62	2.00	2.35		
Nike Inc	2.53	0.44	2.09	20.26		
% of Portfolio	34.59	11.00	23.59			

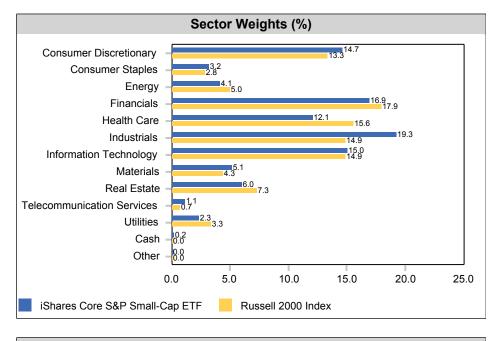
Ten Best Performers					
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)	
lululemon athletica inc	0.22	0.00	0.22	40.09	
Align Technology Inc	0.49	0.11	0.38	36.24	
ONEOK Inc.	0.35	0.12	0.23	24.31	
Tractor Supply Co	0.20	0.04	0.16	21.89	
Valero Energy Corp	0.73	0.21	0.52	20.29	
Nike Inc	2.53	0.44	2.09	20.26	
F5 Networks Inc	0.21	0.05	0.16	19.25	
Automatic Data Processing Inc.	1.27	0.26	1.01	18.81	
Kinder Morgan Inc.	0.38	0.15	0.23	18.80	
Intuit Inc.	1.25	0.22	1.03	18.13	
% of Portfolio	7.63	1.60	6.03		



Portfolio Characteristics As of June 30, 2018

iShares Core S&P Small-Cap ETF vs. Russell 2000 Index

Portfolio Characteristics						
	Portfolio	Benchmark				
Wtd. Avg. Mkt. Cap (\$M)	1,979	2,249				
Median Mkt. Cap (\$M)	1,313	923				
Price/Earnings ratio	22.02	19.12				
Price/Book ratio	2.43	2.45				
5 Yr. EPS Growth Rate (%)	10.65	10.55				
Current Yield (%)	1.41	1.32				
Number of Stocks	594	2,021				



Top Ten Equity Holdings								
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)				
Ligand Pharmaceuticals Inc	0.56	0.20	0.36	25.44				
CACI International Inc.	0.52	0.19	0.33	11.36				
Neogen Corp	0.52	0.18	0.34	19.70				
Stamps.com Inc	0.52	0.20	0.32	25.86				
FirstCash Inc	0.51	0.18	0.33	10.86				
PDC Energy Inc	0.50	0.18	0.32	23.29				
HealthEquity Inc	0.50	0.18	0.32	24.05				
ASGN Inc	0.48	0.18	0.30	-4.51				
Trex Co Inc	0.46	0.17	0.29	15.09				
Axon Enterprise Inc	0.46	0.15	0.31	60.72				
% of Portfolio	5.03	1.81	3.22					

<u>Ten Best Performers</u>							
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)			
Penn Virginia Corp	0.14	0.05	0.09	142.27			
REGENXBIO Inc	0.24	0.09	0.15	140.37			
Pioneer Energy Services Corp	0.06	0.02	0.04	116.67			
Fossil Group Inc	0.15	0.06	0.09	111.58			
World Wrestling Entertainment Inc.	0.37	0.14	0.23	102.61			
Ascena Retail Group Inc	0.09	0.03	0.06	98.26			
Applied Optoelectronics Inc	0.11	0.04	0.07	79.17			
Denbury Resources Inc.	0.24	0.10	0.14	75.55			
Carrizo Oil & Gas Inc	0.27	0.10	0.17	74.06			
Medifast Inc.	0.21	0.09	0.12	71.91			
% of Portfolio	1.88	0.72	1.16				



Vanguard Total International Stock Index

- Management: The Fund is co-managed by Michael Perre and Michelle Louie. Mr. Perre has advised the Fund since 2008 and Ms. Louie has advised the fund since 2016. They have been in the investment industry since 1990 and 2011, respectively.
- **Objective:** The Fund seeks to track the performance of a benchmark index that measures the investment return of stocks across all market capitalizations issued by companies domiciled in both emerging markets and developed markets outside the United States.
- **Strategy:** The Fund employs a "passive management" or indexing investment approach that seeks to track the investment performance of the FTSE Global All Cap ex U.S. Index, an unmanaged benchmark representing stocks from global developed and emerging markets, excluding the United States, across the market capitalization spectrum.

Vanguard International Value

- Management: Sub-advised by ARGA, Edinburgh Partners, and Lazard since 2012, 2008, and 2010, respectively.
- **Objective:** The Fund seeks capital appreciation
- **Strategy:** By combining elements of deep value, traditional value, and relative value investing, the Fund is expected to temper some of the cyclicality that is inherent in value investing, while retaining exposure to the alpha generation capabilities of all three sub-styles. In addition, the Fund provides access to the three underlying strategies that are otherwise not available to mutual fund investors. The Fund is designed to give total international equity exposure, including both developed and emerging markets.

J O Hambro International Select

- **Management:** The fund is co-managed by Christopher Lees and Nudgem Richyal. Both the senior fund managers joined the firm in 2008, having previously worked together at Baring Asset Management.
- Objective: The fund managers aim to exploit market anomalies via an investment process that combines both top-down and bottom-up research.
- Strategy: The fund managers target multiple sources of performance, looking for stocks, sectors, and countries with rising earnings estimates, rising or high and sustainable return on equity, appropriate valuation, and attractive mean reversion and momentum characteristics. They evaluate the correlation between each stock and its sector or country in order to avoid buying "good stocks in bad neighborhoods". A ruthless sell discipline is employed, whereby a stock is immediately sold to zero weight when its fundamentals or technicals deteriorate, or when there is contagion from deteriorating fundamentals or technicals in a stock's sector or country.



Oppenheimer International Small-Mid Company Fund

- **Management:** Rezo Kanovich has been the portfolio manager for this fund since 2012 and previously served as an analyst on Oppenheimer's Global Equity Fund since 2005. He has seventeen years of experience in the investment management industry.
- Objective: The Fund seeks capital appreciation.
- **Strategy:** The Fund invests primarily in small- and mid-cap companies domiciled outside the U.S. that offer opportunities for growth. Rigorous, fundamental analysis is employed to identify future leaders that operate in industries driven by structural growth and high barriers to entry. The Fund seeks companies with meaningful competitive advantages such as technological leadership, intellectual property, strong brands, or industries favoring natural monopolies. Oppenheimer's Global Equity Team uses several secular growth themes as a way to focus attention on certain segments of the global marketplace, which they refer to as MANTRA (Mass Affluence, New Technology, Restructuring and Aging).

Hartford Schroders Emerging Markets Equity

- Management: The fund is managed by a team of five portfolio managers led by Tom Wilson, Schroders' Head of Emerging Markets Equity. He has
 worked at Schroders since 2001 and has been involved with emerging markets equities at Schroders since 2004.
- Objective: The Fund seeks capital appreciation.
- Strategy: The Fund employs an actively managed approach that combines fundamental, bottom-up stock research with a quantitative country allocation process. Country rankings are prepared through evaluation of valuation, growth, currency, momentum, and interest rates. Stock level research targets a core universe of the most liquid stocks in the emerging markets universe, utilizing a relative value approach for stocks across the growth/value spectrum without any systematic style bias. Comprehensive risk controls are employed to keep factor exposures in check and constrain strategy-level tracking error to moderate levels.

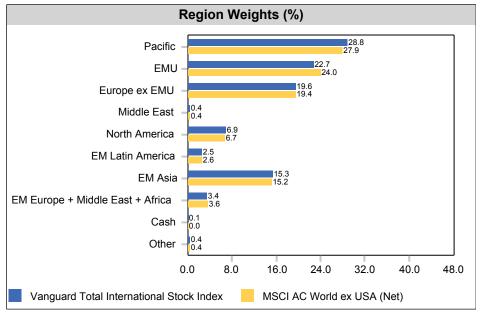


Vanguard Total International Stock Index vs. MSCI AC World ex USA (Net)

Portfolio Characteristics					
	Portfolio	Benchmark			
Wtd. Avg. Mkt. Cap (\$M)	56,653	65,831			
Median Mkt. Cap (\$M)	1,702	8,122			
Price/Earnings ratio	14.07	14.05			
Price/Book ratio	2.21	2.22			
5 Yr. EPS Growth Rate (%)	12.14	11.91			
Current Yield (%)	3.04	3.10			
Number of Stocks	6,300	2,154			

Consumer Discretionary	,			1.7			
-			9.1 9.7	2			
Consumer Staples							
Energ			17.1 ■7.4		20.6		
Financials			-0.1		20.6	1.9	
Health Car			8.1 8.1				
Industrials	3		1	13.0 1.6			
Information Technology	/		1	.5 1.9			
Material	s –		8.5 8.2				
Real Estat	е 🔚	3.8					
Telecommunication Services	s -	3.3 3.7					
Utilitie	s –	3.0 3.0					
Cas	$h = 0.1 \\ 0.0$						
Othe	er - 0.2						
	0.0	5.0	10.0	15.0	20.0	25.0	 30.0
	0.0	5.0	10.0	13.0	20.0	25.0	30.0

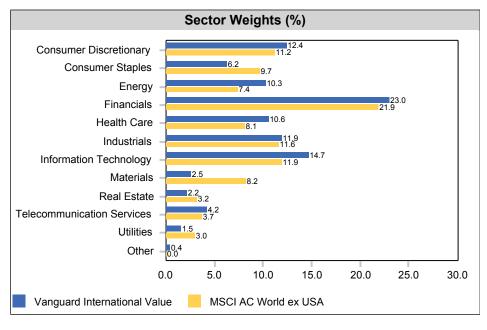
<u>Top Ten Equity Holdings</u>				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Tencent Holdings LTD	1.18	1.37	-0.19	-3.63
Nestle SA, Cham Und Vevey	0.98	1.15	-0.17	0.65
Alibaba Group Holding Ltd	0.83	1.02	-0.19	1.08
Samsung Electronics Co Ltd	0.81	0.96	-0.15	-8.83
HSBC Holdings PLC	0.78	0.90	-0.12	1.42
Taiwan Semicon Manufctrg Co Ltd	0.69	0.84	-0.15	-13.35
Toyota Motor Corp	0.69	0.71	-0.02	0.66
Novartis AG	0.68	0.80	-0.12	-6.50
Royal Dutch Shell PLC	0.64	0.76	-0.12	12.11
Roche Holding AG	0.64	0.74	-0.10	-3.41
% of Portfolio	7.92	9.25	-1.33	



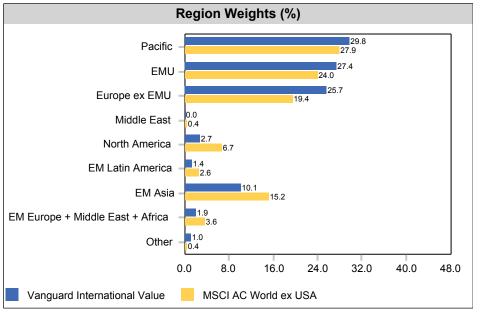


Vanguard International Value vs. MSCI AC World ex USA

Portfolio Characteristics						
	Portfolio	Benchmark				
Wtd. Avg. Mkt. Cap (\$M)	61,862	65,831				
Median Mkt. Cap (\$M)	30,174	8,122				
Price/Earnings ratio	14.14	14.05				
Price/Book ratio	2.19	2.22				
5 Yr. EPS Growth Rate (%)	12.91	11.91				
Current Yield (%)	3.19	3.10				
Number of Stocks	155	2,154				



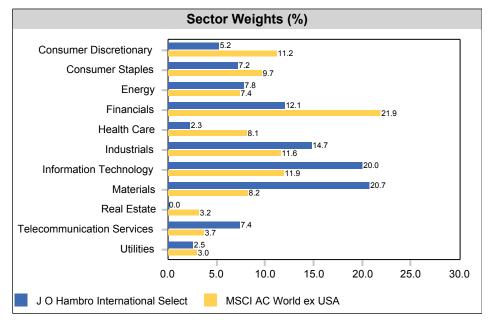
<u>Top Ten Equity Holdings</u>				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Novartis AG	1.95	0.80	1.15	-6.50
TOTAL SA	1.73	0.70	1.03	8.43
Royal Dutch Shell PLC	1.67	0.76	0.91	10.77
DBS Group Holdings Ltd	1.58	0.17	1.41	-3.49
Sumitomo Mitsui Financial Group Inc	1.55	0.25	1.30	-7.45
Sanofi	1.52	0.43	1.09	4.23
Roche Holding AG	1.46	0.74	0.72	-3.41
Tencent Holdings LTD	1.36	1.37	-0.01	-3.63
Icici Bank Ltd	1.33	0.05	1.28	-9.27
Samsung Electronics Co Ltd	1.30	0.96	0.34	-8.83
% of Portfolio	15.45	6.23	9.22	



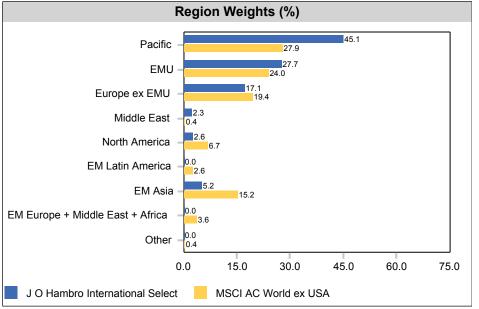


J O Hambro International Select vs. MSCI AC World ex USA

Portfolio Characteristics					
	Portfolio	Benchmark			
Wtd. Avg. Mkt. Cap (\$M)	64,180	65,831			
Median Mkt. Cap (\$M)	28,946	8,122			
Price/Earnings ratio	16.86	14.05			
Price/Book ratio	2.33	2.22			
5 Yr. EPS Growth Rate (%)	11.17	11.91			
Current Yield (%)	2.39	3.10			
Number of Stocks	41	2,154			



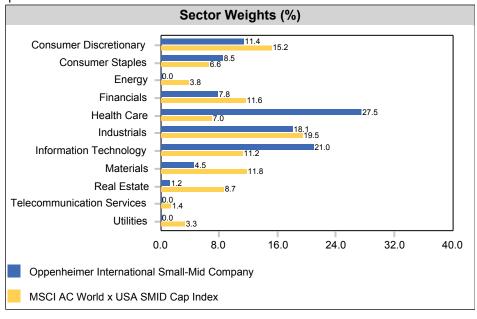
<u>Top Ten Equity Holdings</u>				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Cyber Agent Ltd	2.86	0.03	2.83	20.63
Momo Inc	2.82	0.02	2.80	16.37
Recruit Holdings Co Ltd	2.79	0.15	2.64	11.09
Koninklijke DSM NV	2.75	0.09	2.66	2.63
DeutscheBoerse AG, Franfurt Am M	2.75	0.12	2.63	-0.16
BP PLC	2.74	0.73	2.01	14.92
Kao Corp	2.73	0.18	2.55	2.16
Royal Dutch Shell PLC	2.66	0.64	2.02	13.47
BHP Billiton Ltd	2.63	0.38	2.25	15.60
Accenture PLC	2.62	0.00	2.62	7.53
% of Portfolio	27.35	2.34	25.01	



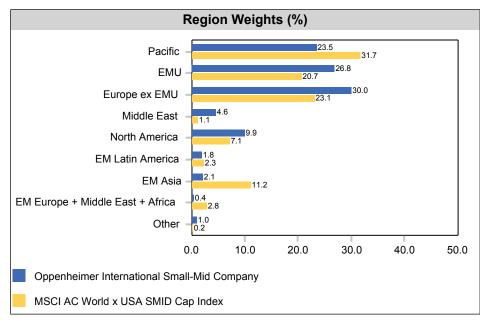


Oppenheimer International Small-Mid Company vs. MSCI AC World x USA SMID Cap Index

Portfolio Characteristics					
	Portfolio	Benchmark			
Wtd. Avg. Mkt. Cap (\$M)	6,943	5,929			
Median Mkt. Cap (\$M)	4,835	1,159			
Price/Earnings ratio	24.92	15.31			
Price/Book ratio	3.27	2.31			
5 Yr. EPS Growth Rate (%)	12.21	15.12			
Current Yield (%)	1.27	2.65			
Number of Stocks	156	5,279			



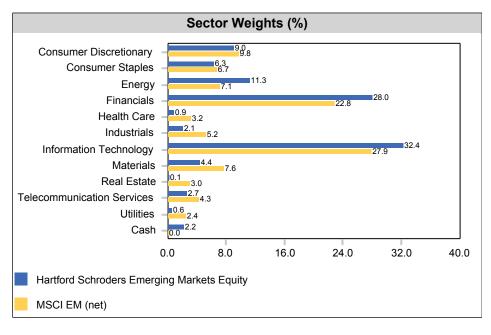
Top Ten Equity Holdings					
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)	
NICE Ltd	2.55	0.08	2.47	10.48	
Carl Zeiss Meditec AG, Jena	1.59	0.04	1.55	7.89	
Tecan Group AG, Maennedorf	1.56	0.04	1.52	15.42	
Ocado Group PLC	1.56	0.09	1.47	81.96	
LIXIL Group Corp	1.54	0.07	1.47	-10.64	
H Lundbeck A/S	1.51	0.06	1.45	25.73	
Obic Co Ltd	1.45	0.07	1.38	-0.72	
Lonza Group AG, Zuerich	1.44	0.26	1.18	13.46	
LivaNova PLC	1.24	0.00	1.24	12.79	
Ariake Japan Co Ltd	1.23	0.02	1.21	7.29	
% of Portfolio	15.67	0.73	14.94		



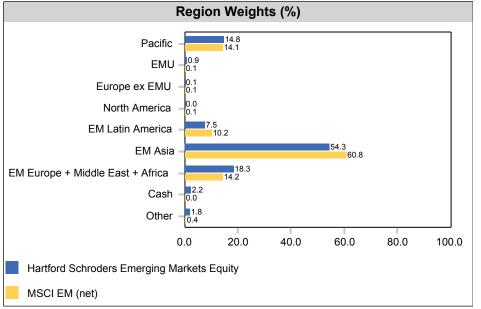


Hartford Schroders Emerging Markets Equity vs. MSCI EM (net)

Portfolio Characteristics					
	Portfolio	Benchmark			
Wtd. Avg. Mkt. Cap (\$M)	112,795	87,534			
Median Mkt. Cap (\$M)	12,800	5,227			
Price/Earnings ratio	14.38	13.39			
Price/Book ratio	2.94	2.58			
5 Yr. EPS Growth Rate (%)	14.06	15.38			
Current Yield (%)	2.64	2.65			
Number of Stocks	102	1,138			



<u>Top Ten Equity Holdings</u>				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Tencent Holdings LTD	6.99	5.46	1.53	-3.63
Samsung Electronics Co Ltd	6.90	3.85	3.05	-8.83
Alibaba Group Holding Ltd	5.32	4.09	1.23	1.08
Taiwan Semicon Manufctrg Co Ltd	4.76	3.34	1.42	-13.35
China Construction Bank Corp	3.67	1.70	1.97	-10.03
Oil Co LUKOIL PJSC	2.86	0.56	2.30	-0.76
Sberbank of Russia OJSC	2.53	0.72	1.81	-18.01
China Petroleum & Chemical Corp	2.25	0.43	1.82	8.60
Naspers Ltd	2.23	2.13	0.10	3.91
CASH	2.22	0.00	2.22	N/A
% of Portfolio	39.73	22.28	17.45	





Baird Core Plus

- **Management:** The Fund has been managed by a team of six portfolio managers since its inception in 2000. The most senior trio of the management team has been working together for over 30 years.
- Objective: The Fund seeks to maximize long-term total return and achieve an annual return that exceeds its benchmark.
- **Strategy:** The Fund normally invests at least 80% of assets in the following types of U.S. dollar-denominated debt securities: U.S. government, U.S. government agencies, asset-backed and mortgage-backed obligations of U.S. issuers and corporate debt of U.S. and foreign issuers. It invests primarily in investment-grade debt securities, but can invest up to 20% of net assets in non-investment grade securities.

DoubleLine Core Fixed

- Management: Jeff Gundlach, CEO/CIO of DoubleLine Capital has been managing the Fund since 2010. Jeff Sherman, Deputy CIO, has co-managed the Fund since 2016.
- **Objective:** The Fund seeks to maximize current income and total return.
- Strategy: The Fund may invest in fixed income securities of any credit quality including up to a third of its net assets in junk bonds, bank loans and assignments rated below investment grade or unrated but determined by the Adviser to be of comparable quality, and credit default swaps of companies in the high yield universe. The Fund may also invest a portion of its net assets in fixed income instruments issued or guaranteed by companies, financial institutions and government entities in emerging market countries. The Fund may pursue its investment objective and obtain exposures to some or all of the asset classes described above by investing in other investment companies, including, ETFs and investment companies sponsored or managed by the Adviser and its affiliates. In managing the Fund's investments, under normal market conditions, the portfolio manager intends to seek to construct an investment portfolio with a weighted average effective duration of no less than two years and no more than eight years.

Prudential Total Return

- Management: Senior portfolio managers Michael Collins (since 2009), Rich Piccirillo (2012) and Greg Peters (2014) have managed the Fund joined by Chief Investment Strategist Robert Tipp (2002). PGIM Fixed Income is the primary public fixed-income asset management unit of PGIM, a whollyowned subsidiary of Prudential Financial, Inc.
- **Objective:** The Fund seeks total return by investing in a diversified portfolio of bonds from multiple fixed income sectors.
- Strategy: The Fund allocates assets among different debt securities, including (but not limited to) US Government securities, mortgage-related and asset-backed securities, corporate debt securities and foreign securities. The Fund may invest up to 30% of its investable assets in high risk, below investment-grade securities having a rating of not lower than CCC. The Fund may invest up to 30% of its investable assets in foreign debt securities. The Fund has the flexibility to allocate its investments across different sectors of the fixed-income securities markets at varying duration. Up to 25% may be expressed through various derivative strategies.



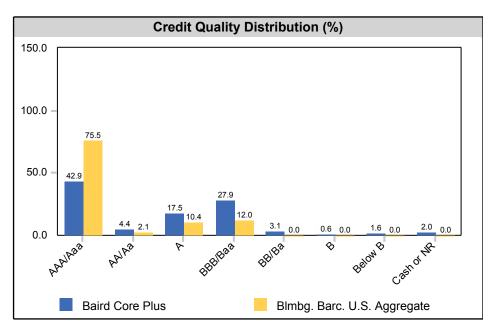
Vanguard Intermediate-Term Investment Grade

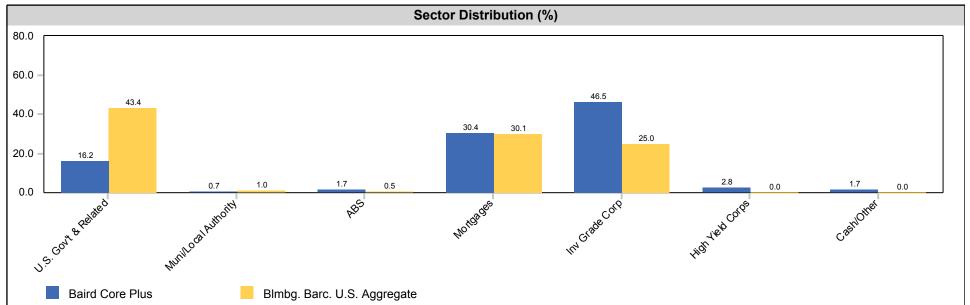
- **Management:** The Fund is managed by Gregory S. Nassour, CFA. He has been advising the Fund since 2008 and has worked in the investment management industry since 1992.
- Objective: The Fund seeks to provide a moderate and sustainable level of current income.
- Strategy: The Fund invests in a variety of high-quality and, to a lesser extent, medium-quality fixed income securities, at least 80% of which will be short- and intermediate-term investment-grade securities. High-quality fixed income securities are those rated the equivalent of A3 or better by Moody's Investors Service, Inc., or another independent rating agency; medium-quality fixed income securities are those rated the equivalent of Baa1, Baa2, or Baa3 by Moody's, or another independent rating agency. Investment-grade fixed income securities are those rated the equivalent of Baa3 and above by Moody's. The fund is expected to maintain a dollar-weighted average maturity of 5 to 10 years.



Baird Core Plus vs. Blmbg. Barc. U.S. Aggregate

Portfolio Characteristics					
	Portfolio	Benchmark			
Effective Duration	5.79	6.01			
Yield To Maturity (%)	3.73	3.29			
Avg. Maturity	7.80	8.39			
Avg. Quality	Α	AA			
Coupon Rate (%)	3.65	3.11			

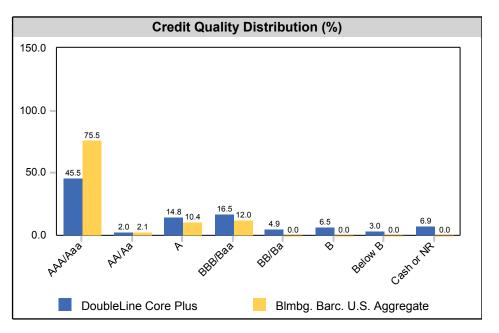


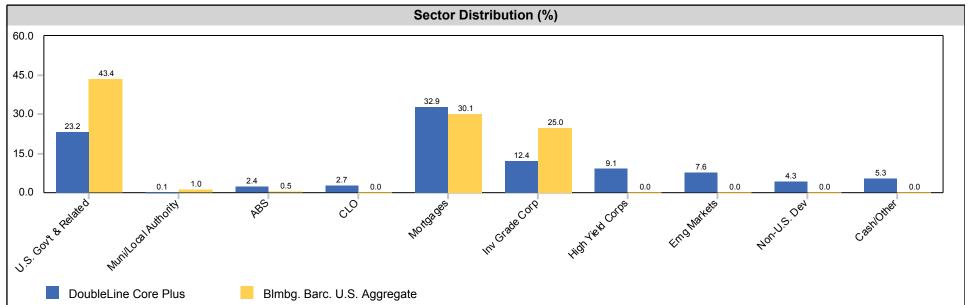




DoubleLine Core Plus vs. Blmbg. Barc. U.S. Aggregate

Portfolio Characteristics				
	Portfolio	Benchmark		
Effective Duration	4.98	6.01		
Yield To Maturity (%)	3.88	3.29		
Avg. Maturity	7.19	8.39		
Avg. Quality	Α	AA		
Coupon Rate (%)	3.89	3.11		

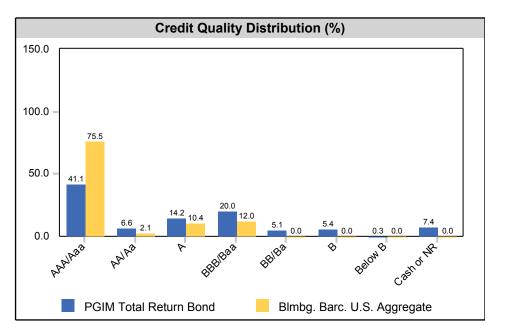


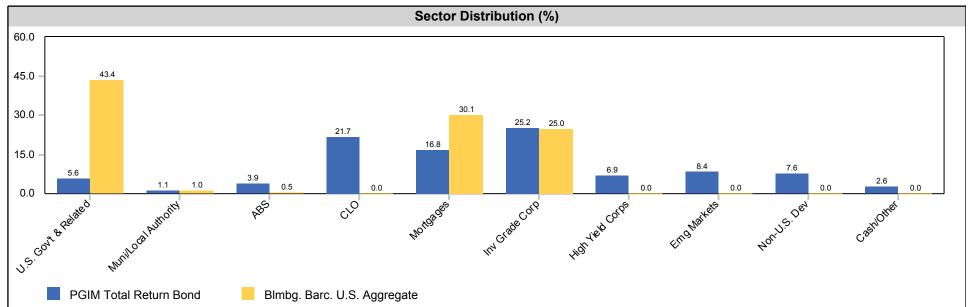




PGIM Total Return Bond vs. Blmbg. Barc. U.S. Aggregate

Portfolio Characteristics			
	Portfolio	Benchmark	
Effective Duration	6.37	6.01	
Yield To Maturity (%)	4.22	3.29	
Avg. Maturity	7.51	8.39	
Avg. Quality	Α	AA	
Coupon Rate (%)	3.51	3.11	

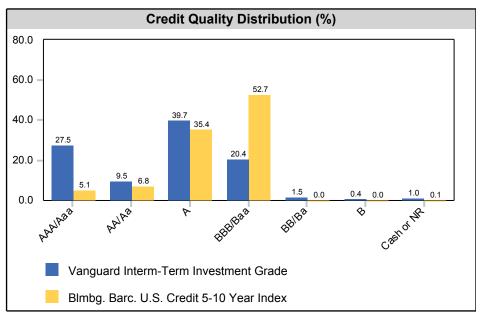


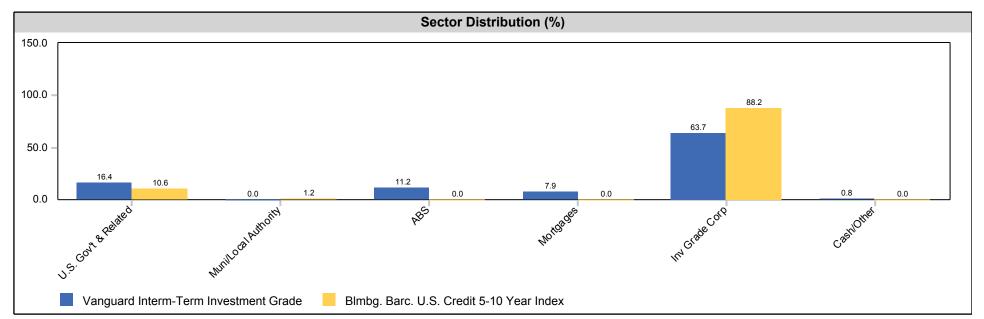




Vanguard Interm-Term Investment Grade vs. Blmbg. Barc. U.S. Credit 5-10 Year Index

Portfolio Characteristics			
	Portfolio	Benchmark	
Effective Duration	5.50	6.36	
Yield To Maturity (%)	3.82	4.08	
Avg. Maturity	6.10	7.74	
Avg. Quality	Α	Α	
Coupon Rate (%)	2.95	3.75	







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Multi-Asset Class Portfolio Update

April 11, 2018

EVENT

PFM's Multi-Asset Class Investment Committee (the "Committee") has made the following changes to client portfolios after assessing the recent market volatility:

- The Committee has voted to rebalance client portfolios back to the tactical weights, i.e., the portfolios will continue to be overweight domestic equity and international equity and underweight fixed income.
- Within domestic equity, the Committee has decided to add dedicated exposure to smaller capitalization stocks so client portfolios are modestly overweight small-caps and modestly underweight large-caps. The allocation to small-caps will be sourced from existing domestic equity managers.

SUMMARY

The Committee decided to rebalance client portfolios back to the tactical weights, i.e., the slight overweight to domestic equity and international equity will remain along with an underweight to fixed income within the multi-asset class portfolios. The portfolio tilts have been in excess of the tactical overweights/underweights over the last few months as the equity markets rallied and fixed income markets sold off. The decision to rebalance was driven by our view of current market volatility. While we are still positive on the fundamentals, and find equities to be attractive relative to fixed income markets, in light of increased market volatility, we have decided to rebalance.

Within domestic equity, the Committee has decided to add a dedicated small-cap exposure. The recent tariffs and fear of trade wars has led to an increase in market volatility. In case of any trade wars, larger capitalization companies are expected to be negatively impacted more since they derive a greater percentage of their revenue internationally compared to smaller capitalization companies. As a result, portfolios are being positioned to be modestly overweight small-cap companies relative to large-cap companies, which is expected to better insulate the portfolio from an increase in volatility. Furthermore, earnings growth is expected to be strong across small-cap companies in 2018 and the valuations for small-caps look attractive relative to last year.

The allocation to small-caps will be implemented through the use of a passive investment since actively managed portfolios have struggled to outperform the S&P Small Cap 600 Index (S&P 600). According to the S&P Indices Versus Active ("SPIVA") Scorecard published by S&P Dow Jones Indices LLC, as of December 29, 2017, the percentage of small-cap active managers that have outperformed the S&P 600 over the trailing 1-, 3- and 5-years is at 52.3%, 11.2%, and 8.8% respectively. According to the Investment Metrics database, in terms of relative performance, as of February 28, 2018, the S&P 600's performance ranks in the 38th-percentile for the trailing 1-year and in the top 10th-percentile for the trailing 3- and 5-year time periods. As a result, the Committee prefers a passive index exposure within small-cap stocks and has selected the iShares Core S&P Small-Cap ETF (Ticker: IJR), which has an expense ratio of 0.07%.

The S&P 600 Index is a higher quality index that includes stocks that have positive cumulative earnings in the last four quarters as well as in the recent quarter. The Russell 2000 Index, (which also represents small-cap stocks) on the other hand, does not impose an earnings requirement and as a result, includes about one-third non-revenue earners. A passive allocation to the S&P 600 Index will allow client portfolios to be exposed to higher quality small-cap stocks and is expected to offer better downside protection than the Russell 2000 Index in the case of an equity sell-off.



ASSESSMENT

While the equity markets have seen an increase in volatility, the fundamentals are in line with expectations - synchronized global economic growth that took shape in 2017 is expected to continue into 2018. Domestically, economic growth as well as corporate fundamentals, as seen by strong earnings growth and tighter credit spreads, remain strong. As a result, client portfolios will continue to be overweight domestic equity and international equity while being underweight fixed income as the Fed continues to signal additional rate increases this year. With the inclusion of the dedicated small-cap equity allocation, the portfolios are being repositioned to better weather any volatility arising out of the anticipated trade wars.

We appreciate your continued confidence in PFM. Should you have any specific questions or wish to discuss this topic in more detail, please contact your client manager directly.

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Money Manager Update

April 13, 2018

EVENT

Vanguard has announced portfolio manager changes to several actively managed funds, including the Intermediate Term Investment Grade Credit Fund.

SUMMARY

Greg Nassour, formerly head of the Fixed Income Group, has decided to leave Vanguard to pursue other opportunities. Effective immediately, Samuel Martinez and Daniel Shaykevich have been added to the prospectus as portfolio managers. Their biographies are listed below:

Samuel C. Martinez, CFA, is a portfolio manager and co-head of the Structured Products Team within Vanguard Fixed Income Group. Mr. Martinez is also a member of the Global Credit Team, which is responsible for developing portfolio allocation strategy in the active funds for various taxable fixed income asset classes (global corporates, emerging markets, and structured products). Before his current role, he worked in various trading and portfolio management roles at Vanguard. Mr. Martinez earned a B.S. from Southern Utah University and an M.B.A. from The Wharton School of the University of Pennsylvania. He also holds the Chartered Financial Analyst (CFA) designation.

Daniel Shaykevich is a principal and portfolio manager, and a member of the Global Credit Team. Mr. Shaykevich is also the co-head of the Emerging Markets and Sovereign Debt Team. Mr. Shaykevich earned a B.S. in computer science and economics from Carnegie Mellon University.

As a reminder, the Fixed Income Group includes over 150 investment professionals. Actively managed strategies have a "Hub and satellite" approach with the lead strategists (the "Hub") including John Hollyer – Global Head of Fixed Income, Christopher Alwine, who is transitioning to Global Head of Credit and several others. Messrs. Martinez and Shaykevich will report to Christopher Alwine. Importantly, Vanguard has indicated this change will not affect the investment philosophy or strategy of the fund.

ASSESSMENT

With no change in investment strategy, we believe there will be a smooth transition for management of the Fund. Vanguard's actively managed portfolios are very diversified and implemented through a large number of analysts and traders on the team with input from sector heads. As such, PFM does not believe this will have a material impact on the Fund but will closely monitor the transition and ongoing management to reaffirm our conviction in the strategy and team.

We appreciate your continued confidence in PFM. Should you have any specific questions or wish to discuss this topic in more detail, please contact your client manager directly.



Multi-Asset Class Portfolio Update

June 25, 2018

EVENT SUMMARY

The PFM Asset Management LLC ("PFMAM") Multi-Asset Class Investment Committee (the "Committee") has terminated T. Rowe Price Dividend Growth Fund from the domestic equity portion of client portfolios and transferred those proceeds to iShares Edge MSCI USA Quality Factor ETF (Ticker: QUAL). This move retains the higher quality allocation within domestic equity, a tilt that the Committee favors in the current period of rising volatility. This change does not affect the overall asset allocation as client portfolios remain overweight domestic and international equities while underweight fixed income.

ASSESSMENT

T. Rowe Price Dividend Growth Fund provided a large-cap, active allocation within the domestic equity portion of client portfolios. The fund invests in stocks with the ability to grow their dividends leading to a higher quality, defensive return profile. As a result of their focus on stocks with the ability to grow dividends, the fund has been underweight the Information Technology sector, which has hurt their relative performance since it was added to client portfolios in November 2016. Dividend growth strategies were initially added to client portfolios in December 2011 to ensure a high quality bias and have served well from a downside protection standpoint.

The Committee has decided to replace T. Rowe Price Dividend Growth Fund with another high quality manager— iShares Edge MSCI USA Quality Factor ETF. This ETF tracks the MSCI USA Sector Neutral Quality Index and provides a similar high quality exposure to U.S. large cap equities, albeit at a lower cost and without undertaking sector bets. The ETF is designed to be invested in higher quality stocks within each sector through a quality rank that is based on an individual stocks' return on equity, debt to equity and earnings variability. The higher the quality rank of a stock, the higher the allocation to the stock in the ETF (capped at 5%). This ability to retain a high quality, defensive profile in client portfolios, without taking a sector bet, at a lower expense ratio (0.15% vs 0.51% for I share class of T. Rowe Price Dividend Growth Fund), makes this ETF an attractive replacement.

iShares Edge MSCI USA Quality Factor ETF has \$5.4 billion in assets (as of 6/19/2018) across 124 stock holdings. BlackRock Fund Advisors is the fund's investment advisor.

CONCLUSION

The reallocation of assets within the domestic equity allocation by replacing T. Rowe Price Dividend Growth Fund with iShares Edge MSCI USA Quality Factor ETF does not impact our higher level asset allocation views. Client portfolios continue to be overweight domestic and international equities while being underweight fixed income. The Committee continues to favor the higher quality tilt in conjunction with our overweight to equity, as well as the current market condition of rising volatility.

The Committee believes that client portfolios have been adjusted to achieve similar exposure at a lower expense ratio. We appreciate your continued confidence in working toward your investment objectives with PFMAM as your investment adviser. Should you have any specific questions or wish to discuss this topic in more detail, please contact your client manager directly.

The information contained in this report is not an offer to purchase or sell any securities. This is for general information purposes only and is not intended to provide specific investment advice or a specific recommendation. PFM Asset Management LLC is an investment advisor registered under the Investment Advisers Act of 1940.



Press Release

Media Contact:

Ayesha Mays, Communications Specialist, 215-557-1237, maysa@pfm.com

FOR IMMEDIATE RELEASE

PFM's Multi-Asset Class Management Practice Expands Product Offering to Broaden Manager Access and Leverage Purchasing Power

Asset growth enables firm to offer wider range of client services

Philadelphia (May 17, 2018): In a move to broaden the financial solutions it provides to clients, PFM's Multi-Asset Class Management (MACM) group is partnering with State Street Bank and Trust Company to introduce three sub-advised mutual funds: the PFM Multi-Manager Domestic Equity, PFM Multi-Manager International Equity and PFM Multi-Manager Fixed-Income funds.

"We're excited to be able to offer these new solutions to our clients," said PFM Managing Director Marc Ammaturo, who leads the MACM business along with PFM Managing Director John Spagnola. "Through aggregation of our clients' assets, we are accessing professional investment managers in three distinct asset classes."

PFM's MACM team currently manages each client's portfolio independently, and oversees institutional assets including endowments, foundations, hospitals, higher education organizations, Taft-Hartley funds, public pension, Other Post-Employment Benefit (OPEB) funds and insurance trusts. By pooling clients' assets into these new mutual funds the MACM team will increase collective purchasing power.

"We have committed substantial resources in the belief that leveraging the majority of our clients' purchasing power will enable those clients to experience a more optimal solution and better outcomes from a risk-reward standpoint," noted Spagnola.

The ability to create registered mutual funds, funded from clients' assets, was made possible by MACM's success and growth. The group increased its discretionary assets under management from \$1.5 billion in January 2012 to nearly \$10.9 billion as of March 31, 2018. PFM's asset management business overall had \$86.8 billion in assets under management as of that date. The company also currently provides non-discretionary investment advisory services for \$38.9 billion in assets.

"Our investment philosophy is not going to change," Spagnola said. "We practice open architecture in how we customize client solutions, and we are purely independent in our approach. We are big believers in using passively managed index funds where it makes sense in efficient markets and then employing active managers where we think they can add incremental value over the benchmark. These mutual funds will continue to embrace that philosophy."

PFM will receive no additional investment management fees from advisory clients for providing the mutual fund arrangement.

"I think our transparency is a big element as to why we've been successful," Ammaturo added.

"We focus on transparency and disclosure when it comes to fees, not only at the investment advisor level but also at the underlying manager level."

About PFM

At PFM, more than 600 employees - asset managers, financial advisors and consultants - partner with clients in every region of the country to transform their world. We combine superior financial advice, disciplined management and ingenuity to build, power, move and educate.

PFM is the marketing name for a group of affiliated companies providing a range of services. All services are provided through separate agreements with each company. This material is for general information purposes only and is not intended to provide specific advice or a specific recommendation.

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Press Release

Media Contact:

Ayesha Mays, Communications Specialist, 215-557-1237, maysa@pfm.com

FOR IMMEDIATE RELEASE

Alex Gurvich Moves to PFM as Director of Research

PHILADELPHIA (July 9, 2018): Alex Gurvich, a Latvia-born investment strategist and portfolio manager with 25 years' experience, has moved to PFM to assume the new position of Director of Research. In that role, Gurvich will oversee PFM's team of analysts who research the global markets and economies, as well as public and private markets and asset classes.

"Alex is a perfect fit for us due to his diverse background, his quantitative skills and his passions for investing and mentoring," said PFM Managing Director John Spagnola, a senior member of PFM's asset management business. "Alex has a unique background for this position. Aside from his quantitative expertise, he is fluent in French and Russian, has worked overseas and is a PhD candidate. So his skill set will be very complementary to our existing structure."

Gurvich comes to PFM from the Commonfund, an asset management firm for nonprofits, endowments and foundations. He served there as an investment portfolio researcher, modeling and analyzing factor exposures for equity managers and funds. He has also worked for Bain and Company in Moscow, London and Stockholm and for GE Capital in the venture capital area. He also ran his own long/short hedge fund for 10 years.

"I am delighted to join the high-quality, growing Outsourced Chief Investment Officer (OCIO) team at PFM Asset Management," Gurvich said. "The team has built a successful business helping institutional clients, such as endowments and foundations, to provide sophisticated investment solutions and manage their multi-asset portfolios. I was attracted to PFM because of its quality people, entrepreneurial spirit and dedication to its clients. As the Director of Investment Research, managing Investment Research, Asset Allocation and Manager Selection teams, I look forward to serving clients, contributing to investment research, and helping grow the business."

Gurvich earned a BA in Physics at the University of Chicago, an MBA in Finance and Business Strategy at INSEAD at Fontainebleau in France, an MS in Financial Engineering from New York University Polytechnic Institute and is a PhD candidate in Financial Engineering at Stevens Institute of Technology. He has written academic papers and developed strategy in Environmental and Social Governance (ESG), a set of standards socially conscious investors use to screen potential investments.

"ESG is an area that we are exploring within our OCIO business and our fixed income management," Spagnola said. "Alex's experience in ESG was another factor that greatly appealed to us."

The research generated by Gurvich and his team bubbles up into PFM's Multi-Asset Class Investment Committee, comprising senior managers in the asset management business. The information facilitates robust discussions about economic and global market events, individual managers' performance and changes in ownership. It allows the committee to make informed decisions regarding allocations or fund managers within PFM clients' portfolios.

PFM's asset management business has experienced tremendous growth in recent years. It has \$86.8 billion in assets under management. PFM also currently provides non-discretionary investment advisory services for \$38.9 billion in assets.

"We've been fortunate," Spagnola said. "As we grow and add new clients, we are in an enviable position to be able to add resources, and we hope to continue that trend. As we build out our clients' portfolios and add ideas within the traditional and alternative space, we're going to continue adding people like Alex who can help us make informed decisions."

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INVESTMENT POLICY STATEMENT FOR

ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT OTHER POST-EMPLOYMENT BENEFITS TRUST

Revised November 18, 2015

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The Alameda County Mosquito Abatement District (the "District") has established the Alameda County Mosquito Abatement District Other Post-Employment Benefits Trust (the "Trust"). The Trust is intended to provide for funding of non-pension post-employment benefits ("OPEB") for those employees who meet the age and service requirements outlined in the District's plan documents. The Trustees of the Trust hereby adopt this Investment Policy Statement ("Policy Statement") for the following purposes.

Purpose

The main investment objective of the Trust is to achieve long-term growth of Trust assets by maximizing long-term rate of return on investments and minimizing risk of loss to fulfill the District's current and long-term OPEB obligations.

The purpose of this Policy Statement is to achieve the following:

- 1. Document investment objectives, performance expectations and investment guidelines for Trust assets.
- 2. Establish an appropriate investment strategy for managing all Trust assets, including an investment time horizon, risk tolerance ranges and asset allocation to provide sufficient diversification and overall return over the long-term time horizon of the Trust.
- 3. Establish investment guidelines to control overall risk and liquidity.
- 4. Establish periodic performance reporting requirements to monitor investment results and confirm that the investment policy is being followed.
- 5. Comply with fiduciary, prudence, due diligence and legal requirements for Trust assets.

Investment Authority

The District has a Board of Directors (the "Board") that oversees the policies and procedures related to the operation and administration of the Trust. The Board will have authority to implement the investment policy and guidelines in the best interest of the Trust to best satisfy the purposes of the Trust. In implementing this Policy Statement, the Board believes it may delegate certain functions to:

1. An investment advisor ("Advisor") to assist the Board in the investment process and to maintain compliance with this Policy Statement. The Advisor may assist the Board in establishing investment policy objectives and guidelines and may also select investments with discretion to purchase, sell, or hold specific securities that will be used to meet the Fund's investment objectives. The Advisor will: 1) adjust asset allocation for the Fund subject to the guidelines and limitations set forth in this Policy Statement; 2) select investment managers ("Managers") and strategies consistent with its role as a fiduciary; 3) monitor and review

Managers and measure and evaluate their performance against their peers based upon the performance of the total funds under their direct management; and 4) execute other tasks as deemed appropriate in its role as Advisor for Fund assets. The investment vehicles allowed may include mutual funds, commingled trusts, separate accounts, limited partnerships and other investment vehicles deemed to be appropriate by the Advisor. The Advisor shall never take possession of securities, cash or other assets of the Fund, all of which shall be held by the custodian. The Advisor must be registered with the Securities and Exchange Commission.

- 2. A custodian selected by the Trustees to maintain possession of physical securities and records of street name securities owned by the Trust, collect dividend and interest payments, redeem maturing securities, and effect receipt and delivery following purchases and sales. The custodian may also perform regular accounting of all assets owned, purchased, or sold, as well as movement of assets into and out of the Trust.
- 3. A trustee appointed by the Trustees, such as a bank trust department, if the Trust does not have its own Trustees, to assume fiduciary responsibility for the administration of Trust assets; provided, however, that if the Board shall have appointed an investment advisor, then any trustee appointed under this paragraph shall have no authority with respect to selection of investments.
- 4. Specialists such as attorneys, auditors, actuaries and, retirement plan consultants to assist the Board in meeting its responsibilities and obligations to administer Trust assets prudently.

Statement of Investment Objectives

The investment objectives of the Trust are as follows:

- 1. To invest assets of the Trust in a manner consistent with the following fiduciary standards:
 (a) all transactions undertaken must be for the sole interest of Trust beneficiaries, and (b) assets are to be diversified in order to minimize the impact of large losses from individual investments.
- 2. To provide for funding and anticipated withdrawals on a continuing basis for payment of benefits and reasonable expenses of operation of the Trust.
- 3. To conserve and enhance the value of Trust assets in real terms over the long-term through asset appreciation and income generation, while maintaining a reasonable investment risk profile.
- 4. To minimize principal fluctuations, subject to performance expectations over the long-term Time Horizon (as defined below).
- 5. To achieve a long-term level of return commensurate with contemporary economic conditions and equal to or exceeding the investment objective set forth in this Policy Statement under the section labeled "Performance Expectations".

Investment Guidelines

Within this section of the Policy Statement, several terms will be used to articulate various investment concepts. The descriptions are meant to be general and may share investments otherwise considered to be in the same asset class. They are:

"Growth Assets" - a collection of investments and/or asset classes whose primary risk and return characteristics are focused on capital appreciation. Investments within the Growth Assets category can include income and risk mitigating characteristics, so long as the predominant investment risk and return characteristic is capital appreciation. Examples of such investments or asset classes are: domestic and international equities or equity funds, and certain real estate investments.

"Income Assets" - a collection of investments and/or asset classes whose primary risk and return characteristics are focused on income generation. Investments within the Income Assets category can include capital appreciation and risk mitigating characteristics, so long as the primary investment risk and return characteristic is income generation. Examples of such investments or asset classes are: fixed income securities, guaranteed investment contracts, and certain real estate investments.

"Real Return Assets" - a collection of investments and/or asset classes whose primary risk and return characteristics are focused on real returns after inflation. Investments within the Real Return category can include inflation protected securities, commodities, and certain real estate investments.

Time Horizon

The Trust's investment objectives are based on a long-term investment horizon ("Time Horizon") of five years or longer. Interim fluctuations should be viewed with appropriate perspective. The Board has adopted a long-term investment horizon such that the risks and duration of investment losses are carefully weighed against the long-term potential for appreciation of assets.

Liquidity and Diversification

In general, the Trust may hold some cash, cash equivalent, and/or money market funds for near-term Trust benefits and expenses (the "Trust Distributions"). Remaining assets will be invested in longer-term investments and shall be diversified with the intent to minimize the risk of long-term investment losses. Consequently, the total portfolio will be constructed and maintained to provide diversification with regard to the concentration of holdings in individual issues, issuers, countries, governments or industries.

Asset Allocation

The Board believes that to achieve the greatest likelihood of meeting the Trust's investment objectives and the best balance between risk and return for optimal diversification, assets will be invested in accordance with the targets for each asset class as follows to achieve an average total annual rate of return that is equal to or greater than the Trust's actuarial discount rate or target rate of return over the long-term, as described in the section titled "Performance Expectations".

	Asset Weightings		
<u>Asset Classes</u>	Range	Target	
Growth Assets			
Domestic Equity	16% - 56%	36%	
International Equity	0% - 39%	19%	
Other	0% - 10%	0%	
Income Assets			
Fixed Income	25% - 70%	45%	
Other	0% - 10%	0%	
Real Return Assets	0% - 10%	0%	
Cash Equivalents	0% - 20%	0%	

The Advisor and each Manager will be evaluated against their peers on the performance of the total funds under their direct management.

Rebalancing Philosophy

The asset allocation range established by this Policy Statement represents a long-term perspective. As such, rapid unanticipated market shifts or changes in economic conditions may cause the asset mix to fall outside Policy Statement ranges. When allocations breach the specified ranges, the Advisor will rebalance the assets within the specified ranges. The Advisor may also rebalance based on market conditions.

Risk Tolerance

Subject to investment objectives and performance expectations, the Trust will be managed in a style that seeks to minimize principal fluctuations over the established Time Horizon.

Performance Expectations

Over the long-term, five years or longer, the performance objective for the Trust will be to achieve an average total annual rate of return that is equal to or greater than the Trust's actuarial discount rate, which is expected to be 6%. Additionally, it is expected that the annual rate of return on Trust assets will be commensurate with the then prevailing investment environment. Measurement of this return expectation will be judged by reviewing returns in the context of industry standard benchmarks, peer universe comparisons for individual Trust investments and blended benchmark comparisons for the Trust in its entirety.

Selection of Investment Managers

The Advisor shall prudently select appropriate Managers to invest the assets of the Trust. Managers must meet the following criteria:

- The Manager must provide historical quarterly performance data compliant with Global Investment Performance Standards (GIPS[®]), Securities & Exchange Commission ("SEC"), Financial Industry Regulatory Agency ("FINRA") or industry recognized standards, as appropriate.
- The Manager must provide detailed information on the history of the firm, key personnel, support personnel, key clients, and fee schedule (including most-favored-nation clauses). This information can be a copy of a recent Request for Proposal ("RFP") completed by the Manager or regulatory disclosure.
- The Manager must clearly articulate the investment strategy that will be followed and document that the strategy has been successfully adhered to over time.
- The investment professionals making the investment decisions must have a minimum of three (3) years of experience managing similar strategies either at their current firm or at previous firms.
- Where other than common funds such as mutual funds or commingled trusts are utilized, the Manager must confirm receipt, understanding and adherence to this Policy Statement and any investment specific policies by signing a consent form provided to the Manager prior to investment of Trust assets.

Guidelines for Portfolio Holdings

Direct Investments by Advisor

Every effort shall be made, to the extent practical, prudent and appropriate, to select investments that have investment objectives and policies that are consistent with this Policy Statement (as outlined in the following sub-sections of the "Guidelines for Portfolio Holdings"). However, given the nature of the investments, it is recognized that there may be deviations between this Policy Statement and the objectives of these investments. No funds with a net asset value of each share of less than \$10 shall be purchased or held. All fixed-income funds are excluded from this requirement.

Limitations on Managers' Portfolios

EQUITIES

No more than the greater of 5% or weighting in the relevant index (Russell 3000 Index for U.S. issues and MSCI ACWI ex-U.S. for non-U.S. issues) of the total equity portfolio valued at market may be invested in the common equity of any one corporation; ownership of the shares of one company shall not exceed 5% of those outstanding; and not more than 40% of equity valued at market may be held in any one sector, as defined by the Global Industry Classification Standard (GICS).

<u>Domestic Equities</u>: Other than the above constraints, there are no quantitative guidelines as to issues, industry or individual security diversification. However, prudent diversification standards should be developed and maintained by the Manager.

<u>International Equities:</u> The overall non-U.S. equity allocation should include a diverse global mix that is comprised of the equity of companies from multiple countries, regions and sectors.

FIXED INCOME

Fixed income securities of any one issuer shall not exceed 5% of the total bond portfolio at time of purchase. The 5% limitation does not apply to issues of the U.S. Treasury or other Federal Agencies. The overall rating of the fixed income assets as calculated by the Advisor shall be at least "A", or investment grade, based on the rating of one Nationally Recognized Statistical Rating Organization ("NRSRO").

The Trust will avoid mutual funds whose primary focus is adding value through the use of high yield bonds. This does not exclude investment grade fixed-income funds which may contain a small component of high yield securities.

Fixed income investments will not contain more than an aggregate of 10% in derivative instruments such as options, futures contracts, or swap agreements. It is understood that mortgage-backed and asset-backed securities are not considered derivative instruments.

OTHER ASSETS (ALTERNATIVES)

Alternatives may consist of real estate and commodities, when deemed appropriate. The total allocation to this category may not exceed 10% of the overall portfolio. Prior to adding an allocation to any of the following asset classes, with the exception of publicly-traded mutual fund vehicles, the Advisor shall receive approval from the Board.

<u>Real Estate:</u> Consists solely of publicly traded Real Estate Investment Trust ("REIT") securities. Investments of this type are designed to provide a stable level of income combined with potential for

price appreciation, particularly in periods of unexpected inflation. For purposes of asset allocation targets and limitations, publicly traded REITs will be categorized as "Other" under the Growth Assets category.

<u>Inflation Hedge:</u> Shall consist of pooled vehicles holding among other assets: Treasury Inflation Protected Securities ("TIPS"), commodities or commodity contracts, index-linked derivative contracts, certain real estate or real property funds and the equity of companies in businesses thought to hedge inflation. Inflation hedge assets will be reported in the Real Return Assets category.

CASH EQUIVALENTS

Cash equivalents shall be held in funds complying with Rule 2(a)-7 of the Investment Company Act of 1940.

Portfolio Risk Hedging

Portfolio investments designed to hedge various risks including volatility risk, interest rate risk, etc. are allowed to the extent that the investments are not used for the sole purpose of leveraging Trust assets. One example of a hedge vehicle is an exchange traded fund ("ETF") which takes short positions.

Prohibited Investments

Except for purchase within authorized investments, securities having the following characteristics are not authorized and shall not be purchased or held: letter stock and other unregistered securities, direct commodities or commodity contracts, or private placements (with the exception of Rule 144A securities), or venture capital funds, private equity, or hedge funds and stocks with a value of less than \$10.00. Further, derivatives, options, or futures for the sole purpose of direct portfolio leveraging are prohibited. Direct ownership of real estate, natural resource properties such as oil, gas or timber and the purchase of collectibles is also prohibited. All investments shall have a ready market and be listed on a major exchange.

Safekeeping

All assets of the Trust shall be held by a custodian approved by the Board for safekeeping of Trust assets. The custodian shall produce statements on a monthly basis, listing the name and value of all assets held, and the dates and nature of all transactions in accordance with the terms in the Trust Agreement. Investments of the Trust not held as liquidity or Investment Assets shall, at all times, be invested in interest-bearing accounts. Investments and portfolio securities may not be loaned.

Control Procedures

Review of Investment Objectives

The Advisor shall review annually and report to the Board the appropriateness of this Policy Statement for achieving the Trust's stated objectives. It is not expected that this Policy Statement will change frequently. In particular, short-term changes in the financial markets should not require an adjustment in this Policy Statement.

Review of Investment Performance

The Advisor shall report on a quarterly basis to the Board to review the investment performance of the Trust. In addition, the Advisor will be responsible for keeping the Board advised of any material change in investment strategy, Managers, and other pertinent information potentially affecting performance of the Trust.

The Advisor shall compare the investment results on a quarterly basis to appropriate peer universe benchmarks, as well as market indices in both equity and fixed income markets. Examples of benchmarks and indexes that will be used include the Russell 3000 Index for broad U.S. equity strategies; S&P 500 Index for large cap U.S. equities, Russell 2000 Index for small cap U.S. equities, MSCI ACWI ex-U.S. Index for broad based non-U.S. equity strategies; MSCI Europe, Australasia, and Far East (EAFE) Index for developed markets international equities, Barclays Capital Aggregate Bond Index for fixed income securities, and the U.S. 91 Day T-bill for cash equivalents. The Russell 3000 Index will be used to benchmark the U.S. equities portfolio; the MSCI ACWI ex-U.S. Index will be used to benchmark the fixed income portfolio. The categories "Other" will be benchmarked against appropriate indices depending on the specific characteristics of the strategies and funds used.

Voting of Proxies

The Board recognizes that proxies are a significant and valuable tool in corporate governance. The voting rights of individual stocks held in separate accounts or collective, common, or pooled funds will be exercised by the investment managers in accordance with their own proxy voting policies. The voting rights of funds will be exercised by the Advisor.

Adoption of Investment Policy Statement

Any changes and exceptions to this Policy Statement will be made in writing and adopted by the Board. Once adopted, changes and exceptions will be delivered to each Manager, as appropriate, by the Advisor.

Approved by the Alameda County Mosquito Abatement District Board of Directors:

Resolved by:

Menge Yorng
Chair

Nov. 18. 2015
Date



Alameda County Mosquito Abatement District

Funding Policy Analysis and the Implications for the Portfolio and Asset Allocation

Joseph Federico, Senior Analyst

January 9, 2019



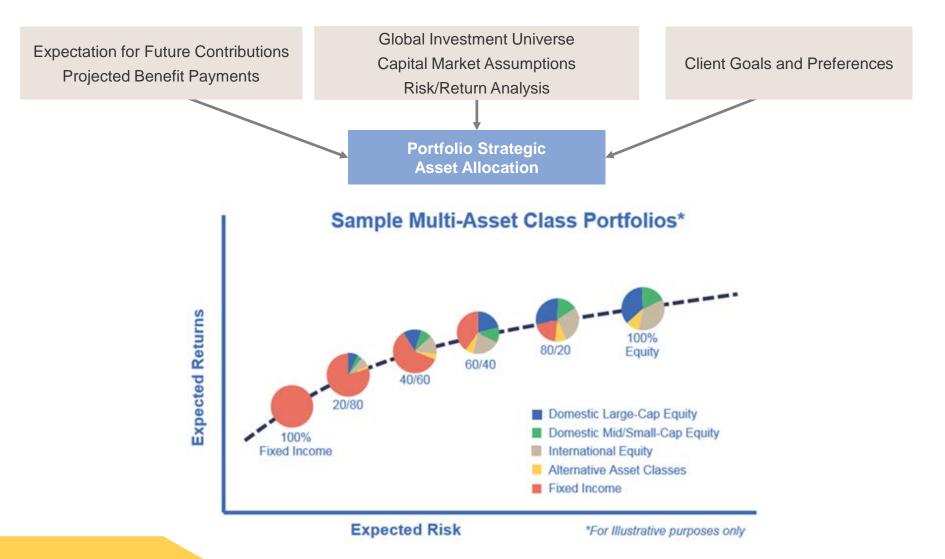
Purpose of this Study

- Should ACMAD adjust the asset allocation (i.e. reduce risk, lower volatility) in the OPEB portfolio moving forward?
- Should ACMAD revise the Funding Policy?
 - Is the current practice of no contributions to the OPEB sustainable?

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Selecting a Strategic Asset Allocation For the District



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Assumptions

Actuarial Assumptions¹:

2018 Actuarial Value of Assets: \$4,286,369

2018 Accrued Liability: \$3,569,703

Discount Rate: 6.0%

Medical cost trend rate: 5.0%

Normal Costs: \$150,088

Benefit Payments: \$241,589

PFM Assumptions:

Normal Costs will grow @ 5.0% (medical cost trend rate)

Benefit Payments will grow @ 5.0% (medical cost trend rate)

Asset Allocation Sugguestions:

- Current 55% Equity / 45% Fixed Income Portfolio:
 - Excludes below investment grade fixed income assets
- 50% Equity / 50 Fixed Income Portfolio
 - Excludes below investment grade fixed income assets
- 45% Equity / 55% Fixed Income Portfolio
 - w/ High Yield / Emerging Market Debt



2019 Capital Market Assumptions

	Intermediate:	Next 5 Years	Long Term	Projections
	Expected Return	Expected Risk	Expected Return	Expected Risk
US Equity	6.0%	16%	7.5%	16%
International Developed Equity	6.6%	17%	7.4%	17%
Emerging Markets Equity	6.1%	20%	7.5%	20%
Core Fixed Income	3.0%	4%	5.1%	4%
Intermediate Investment Grade	3.7%	6%	6.1%	6%
Emerging Markets Debt	4.0%	10%	6.7%	10%
High Yield	4.3%	9%	6.6%	9%
Bank Loans	4.4%	6%	5.4%	6%
REITs	5.7%	12%	6.5%	12%
Private Equity Real Estate	6.5%	15%	7.8%	15%
Commodities	4.9%	16%	5.5%	16%
Hedge Funds	5.5%	15%	7.2%	15%
Private Equity	7.1%	25%	9.5%	25%
Cash	3.2%	1%	3.5%	1%

For the intermediate term (up to 5 years), our capital market assumptions derive from our assessment of current economic conditions, including corporate profits, balance sheets, etc., and current valuations for various asset classes. Our long-term assumptions are derived using an economic building block approach that projects economic and corporate profit growth and takes into consideration the fundamental factors driving long-term real economic growth, our expectation for inflation, productivity and labor force growth.



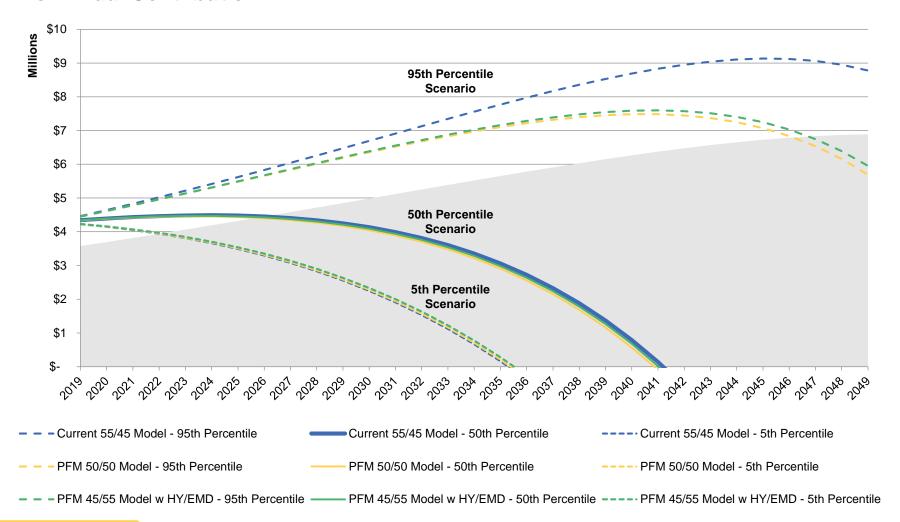
Portfolios Examined

	Current 55/45 Model	PFM 50/50 Model	PFM 45/55 Model w HY/EMD
Equity	55.0%	50.0%	45.0%
Domestic Equity	36.0%	33.0%	29.0%
International Developed Equity	13.5%	12.0%	11.5%
Emerging Markets Equity	5.5%	5.0%	4.5%
Fixed Income	45.0%	50.0%	55.0%
Core Fixed Income	30.0%	33.3%	27.5%
Investment Grade Corporate	15.0%	16.7%	13.8%
Emerging Markets Debt	0.0%	0.0%	6.9%
High Yield	0.0%	0.0%	6.9%

Intermediate-Term Assump. (5 Y	'ears)					
Expected Return	5.1%	5.0%	5.0%			
Standard Deviation	9.4%	8.7%	8.6%			
Probability of 6.0% Return	41.6%	39.1%	39.1%			
Long-Term Assump. (30 Years)						
Expected Return	7.0%	6.9%	6.9%			
Standard Deviation	9.4%	8.7%	8.6%			
Probability of 6.0% Return	73.5%	72.7%	73.2%			

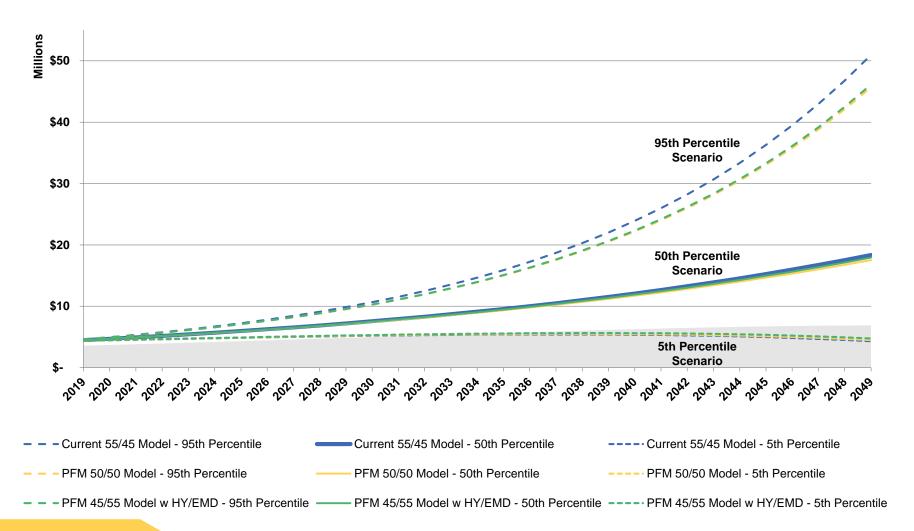


Current Funding Practice No Annual Contribution



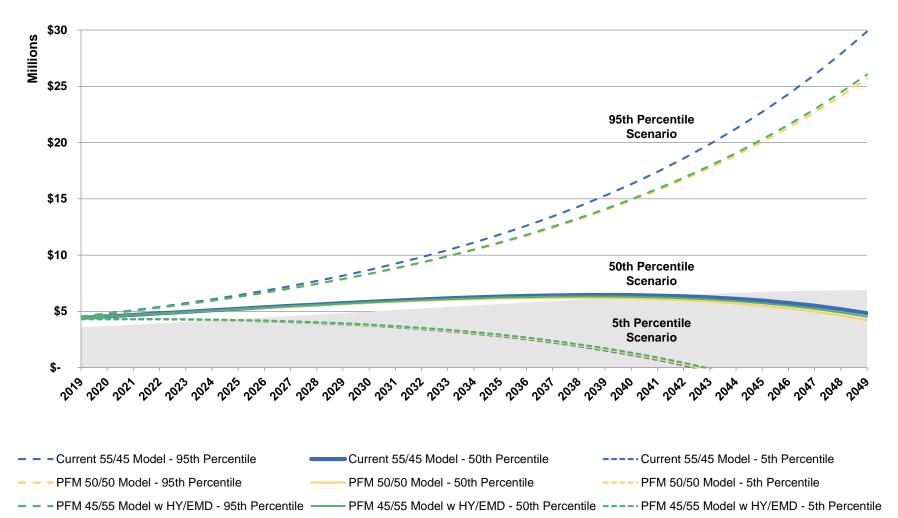


Funding Scenario 1 Annual Contribution = 100% of Normal Costs





Funding Scenario 2 Annual Contribution = 50% of Normal Costs





2019 Capital Market Assumptions, Correlations

Correlations														
	US Equity	International Developed Equity	Emerging Markets Equity	Core Bonds	Intermediate Investment Grade Corp	Emerging Markets Debt	High Yield	Bank Loans	REITs	Private Equity Real Estate	Commodities	Hedge Funds	Private Equity	Cash
US Equity	1													
International Developed Equity	0.8	1												
Emerging Markets Equity	0.7	0.7	1											
Core Bonds	0.3	0.2	0.2	1										
Intermediate Investment Grade	0.3	0.2	0.2	0.9	1									
Emerging Markets Debt	0.5	0.5	0.5	0.4	0.4	1								
High Yield	0.7	0.5	0.5	0.4	0.4	0.4	1							
Bank Loans	0.4	0.3	0.3	0.3	0.3	0.7	0.7	1						
REITs	0.5	0.4	0.4	0.3	0.3	0.3	0.4	0.4	1					
Private Equity Real Estate	0.4	0.3	0.3	0.3	0.3	0.2	0.4	0.2	0.8	1				
Commodities	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.1	1			
Hedge Funds	0.6	0.5	0.5	0.4	0.4	0.3	0.4	0.4	0.4	0.3	0.2	1		
Private Equity	0.7	0.6	0.6	0.3	0.3	0.3	0.5	0.2	0.4	0.4	0.1	0.5	1	
Cash	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	1

Please refer to PFM's 2019 Capital Market Assumptions for a complete description of the methodology used to develop these assumptions and important disclosures.



Definitions

- Actuarial Value of Assets (AVA)¹: The value of the Fund's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly plans use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the ADC.
- Actuarial Accrued Liability for Pensioners and Beneficiaries¹: The single-sum value of lifetime benefits to existing pensioners and beneficiaries. This sum takes account of life expectancies appropriate to the ages of the annuitants and the interest that the sum is expected to earn before it is entirely paid out in benefits.
- Plan Fiduciary Net Position¹: Market value of assets
- Normal Cost²:
 - Portion of PVB allocated to (or "earned" during) current year
 - Value of employee and employer current service benefit
- Healthcare Cost Trend Rates¹: The rate of change in per capita health costs over time.



Disclaimers

Any investment advice in this document is provided solely by PFM Asset Management LLC. PFM's asset management business is an investment advisor registered under the Investment Advisers Act of 1940.

This material is based on information obtained from sources generally believed to be reliable and available to the public, however we cannot guarantee its accuracy, completeness or suitability. This material is for general information purposes only and is not intended to provide specific advice or a specific recommendation. All statements as to what will or may happen under certain circumstances are based on assumptions, some but not all of which are noted in the presentation. Assumptions may or may not be proven correct as actual events occur, and results may depend on events outside of your or our control. Changes in assumptions may have a material effect on results. Past performance does not necessarily reflect and is not a guaranty of future results. The information contained in this presentation is not an offer to purchase or sell any securities.





Investment Guidelines Document

Alameda County Mosquito Abatement District

Employee Benefit Pension Plan

February 2018

Investment Guidelines Document

Scope and Purpose

The purpose of this Investment Guidelines Document is to:

- Facilitate the process of ongoing communication between the Plan Sponsor and its plan fiduciaries;
- Confirm the Plan's investment goals and objectives and management policies applicable to the investment portfolio identified below and obtained from the Plan Sponsor;
- Provide a framework to construct a well-diversified asset mix that can potentially be expected to meet the account's short- and long-term needs that is consistent with the account's investment objectives, liquidity considerations and risk tolerance;
- Identify any unique considerations that may restrict or limit the investment discretion of its designated investment managers;
- Help maintain a long-term perspective when market volatility is caused by short-term market movements.

Key Plan Sponsor Account Information as of February 2018

Plan Sponsor: Alameda County Mosquito Abatement District

Governance: The Board of the Alameda County Mosquito Abatement District

Plan Name ("Plan"): Alameda County Mosquito Abatement District Employee Benefit

Pension Plan

Trustee: US Bank

Contact: Susan Hughes, 949-224-7209

susan.hughes@usbank.com

Type of Account: Pension Plan

ERISA Status: Not subject to ERISA

Investment Manager: US Bank, as discretionary trustee, has delegated investment

management responsibilities to HighMark Capital Management,

Inc. ("Investment Manager"), an SEC-registered investment

adviser

Contact: Andrew Brown, CFA, 415-705-7605

Andrew.Brown@highmarkcapital.com

Investment Authority: Except as otherwise noted, the Trustee, US Bank, has delegated investment authority to HighMark Capital Management, an SEC-registered investment adviser. Investment Manager has full investment discretion over the managed assets in the account. Investment Manager is authorized to purchase, sell, exchange, invest, reinvest and manage the designated assets held in the account, all in accordance with account's investment objectives, without prior approval or subsequent approval of any other party(ies).

Investment Objectives and Constraints

The goal of the Plan's investment program is to provide a reasonable level of growth which, will result in sufficient assets to pay the present and future obligations of the Plan. The following objectives are intended to assist in achieving this goal:

- The Plan should seek to earn a return in excess of its policy benchmark over the life of the Plan.
- The Plan's assets will be managed on a total return basis which takes into consideration both investment income and capital appreciation. While the Plan Sponsor recognizes the importance of preservation of capital, it also adheres to the principle that varying degrees of investment risk are generally rewarded with compensating returns. To achieve these objectives, the Plan Sponsor allocates its assets (asset allocation) with a strategic perspective of the capital markets.

Investment Time Horizon: Intermediate-Term 5 - 7 years

Anticipated Cash Flows: Assets in the Plan will seek to mitigate the impact of future rate

increases from CalPERS. It is not anticipated that the Plan will see a high level of disbursements in the first five years of the Plan. However, situations may arise, leading to a disbursement

in assets to the CalPERS Trust.

Investment Objective: The primary objective is to generate a reasonable level of

growth. The assets in this Plan will eventually be used to fund Pension Plan obligations for assets managed in the CalPERS

Trust.

Risk Tolerance: Moderately Conservative

The account's risk tolerance has been rated moderately conservative, which demonstrates that the account can accept modest price fluctuations to pursue its investment objectives.

Strategic Asset Allocation: The asset allocation ranges for this objective are listed below:

	Strategic Asset Allocation Ranges	S
Cash	Fixed Income	Equity
0-20%	50%-80%	20%-40%
Policy: 5%	Policy: 65%	Policy: 30%

Market conditions may cause the account's asset allocation to vary from the stated range from time to time. The Investment Manager will rebalance the portfolio no less than quarterly and/or when the actual weighting differs substantially from the strategic range, if appropriate and consistent with your objectives.

Security Guidelines:

Equities

With the exception of limitations and constraints described above, Investment Manager may allocate assets of the equity portion of the account among various market capitalizations (large, mid, small) and investment styles (value, growth). Further, Investment Manager may allocate assets among domestic, international developed and emerging market equity securities.

Total Equities	20%-40%
Equity Style	Range
Domestic Large Cap Equity	10%-30%
Domestic Mid Cap Equity	0%-10%
Domestic Small Cap Equity	0%-12%
International Equity (incl. Emerging Markets)	0%-12%
Real Estate Investment Trust (REIT)	0%-8%

Fixed income

In the fixed income portion of the account, Investment Manager may allocate assets among various sectors and industries, as well as varying maturities and credit quality that are consistent with the overall goals and objectives of the portfolio.

Total Fixed Income	50%-80%
Fixed Income Style	Range
Long-term bonds (maturities >7 years)	0%30%
Intermediate-term bonds (maturities 3-7 years)	30%-80%
Short-Term bonds (maturities <3 years)	0%-25%
High Yield bonds	0%-6%

Performance Benchmarks:

The performance of the total Plan shall be measured over a three and five-year periods. These periods are considered sufficient to accommodate the market cycles experienced with investments. The performance shall be compared to the return of the total portfolio blended benchmark shown below.

Total Portfolio Blended Benchmark

- 15.50% S&P 500 Index
- 3.00% Russell Mid Cap Index
- 4.50% Russell 2000 Index
- 2.00% MSCI Emerging Markets Index
- 4.00% MSCI EAFE Index
- 1.00% Wilshire REIT Index
- 49.25% Bloomberg Barclays US Aggregate Index
- 14.00% ML 1-3 Year US Corp/Gov't Index
- 1.75% US High Yield Master II Index
- 5.00% Citi 1Mth T-Bill Index

Asset Class/Style Benchmarks

Over a market cycle, the long-term objective for each investment strategy is to add value to a market benchmark. The following are the benchmarks used to monitor each investment strategy:

Large Cap Equity

S&P 500 Index

Growth Value

S&P 500 Growth Index

Mid Cap Equity

S&P 500 Value Index Russell Mid Cap Index

Growth

Russell Mid Cap Growth Index

Value

Russell Mid Cap Value Index

Small Cap Equity

Russell 2000 Index

Growth

Russell 2000 Growth Index

Value

Russell 2000 Value Index

REITs

Wilshire REIT Index

International Equity

MSCI EAFE Index

Investment Grade Bonds

Bloomberg Barclays US Aggregate Index

High Yield

US High Yield Master II Index

Security Selection

Investment Manager may utilize a full range of investment vehicles when constructing the investment portfolio, including but not limited to individual securities, mutual funds, and exchange-traded funds. In addition, to the extent permissible, Investment Manager is authorized to invest in shares of mutual funds in which the Investment Manager serves as advisor or sub-adviser.

Investment Limitations:

The following investment transactions are prohibited:

- Direct investments in precious metals (precious metals mutual funds and exchange-traded funds are permissible).
- Venture Capital
- Short sales*
- Purchases of Letter Stock, Private Placements, or direct payments
- Leveraged Transactions*
- Commodities Transactions Puts, calls, straddles, or other option strategies*
- Purchases of real estate, with the exception of REITs
- Derivatives, with exception of ETFs*

Duties and Responsibilities

Responsibilities of Plan Sponsor

The Plan Administrator for the Alameda County Mosquito Abatement District is responsible for:

- Confirming the accuracy of this Investment Guidelines Document, in writing.
- Advising Trustee and Investment Manager of any change in the plan/account's financial situation, funding status, or cash flows, which could possibly necessitate a change to the account's overall risk tolerance, time horizon or liquidity requirements; and thus, would dictate a change to the overall investment objective and goals for the account.
- Monitoring and supervising all service vendors and investment options, including investment managers.
- Avoiding prohibited transactions and conflicts of interest.

Responsibilities of Trustee

The plan Trustee is responsible for:

- Valuing the holdings.
- Collecting all income and dividends owed to the Plan.
- Settling all transactions (buy-sell orders).

Responsibilities of Investment Manager

The Investment Manager is responsible for:

- Assisting the Plan Administrator for the Alameda County Mosquito Abatement District with the development and maintenance of this Investment Policy Guideline document.
- Meeting with Plan Administrator for the Alameda County Mosquito Abatement District to review portfolio structure, holdings, and performance.
- Designing, recommending and implementing an appropriate asset allocation consistent with the investment objectives, time horizon, risk profile, guidelines and constraints outlined in this statement.
- Researching and monitoring investment advisers and investment vehicles.
- Purchasing, selling, and reinvesting in securities held in the account.
- Monitoring the performance of all selected assets.
- Voting proxies, if applicable.
- Recommending changes to any of the above.

^{*}Permissible in diversified mutual funds and exchange-traded funds

- Periodically reviewing the suitability of the investments, being available to meet with the committee at least once each year and being available at such other times within reason at your request.
- Preparing and presenting appropriate reports.
- Informing the Plan Administrator for the Alameda County Mosquito Abatement District if changes occur in personnel that are responsible for portfolio management or research.

Acknowledgement and Acceptance

I/We being the Plan Sponsor with responsibility for the account(s) held on behalf of the Plan Sponsor specified below, designate Investment Manager as having the investment discretion and management responsibility indicated in relation to all assets of the Plan or specified Account. If such designation is set forth in the Plan/trust, I/We hereby confirm such designation as Investment Manager.

I have read the Investment Guidelines Document, and confirm the accuracy of it, including the terms and conditions under which the assets in this account are to be held, managed, and disposed of by Investment Manager. This Investment Guidelines Document supersedes all previous versions of an Investment Guidelines Document or investment objective instructions that may have been executed for this account.

Plan Sponsor: Alameda County Mosquito Abatement District

Investment Manager: Andrew Brown, CFA, Senior Portfolio Manager, (415) 705-7605



PARS DIVERSIFIED PORTFOLIOS **CONSERVATIVE**

Q3 2018

WHY THE PARS DIVERSIFIED **CONSERVATIVE PORTFOLIO?**

Comprehensive Investment Solution

HighMark® Capital Management, Inc.'s (HighMark) diversified investment portfolios are designed to balance return expectations with risk tolerance. Key features include: sophisticated asset allocation and optimization techniques, four layers of diversification (asset class, style, manager, and security), access to rigorously screened, top tier money managers, flexible investment options, and experienced investment management.

Rigorous Manager Due Diligence

Our manager review committee utilizes a rigorous screening process that searches for investment managers and styles that have not only produced above-average returns within acceptable risk parameters, but have the resources and commitment to continue to deliver these results. We have set high standards for our investment managers and funds. This is a highly specialized, time consuming approach dedicated to one goal: competitive and consistent performance.

Flexible Investment Options

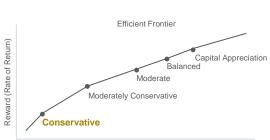
In order to meet the unique needs of our clients, we offer access to flexible implementation strategies: HighMark Plus utilizes actively managed mutual funds while Index Plus utilizes index-based securities, including exchange-traded funds. Both investment options leverage HighMark's active asset allocation approach.

Risk Management

The portfolio is constructed to control risk through four layers of diversification - asset classes (cash, fixed income, equity), investment styles (large cap, small cap, international, value, growth), managers and securities. Disciplined mutual fund selection and monitoring process helps to drive return potential while reducing portfolio risk.

INVESTMENT OBJECTIVE

To provide a consistent level of inflation-protected income over the long-term. The major portion of the assets will be fixed income related. Equity securities are utilized to provide inflation protection.



Risk (Standard Deviation)

ASSET ALLOCATION — CONSERVATIVE PORTFOLIO

	Strategic Range	Policy	Tactical
Equity	5 – 20%	15%	16%
Fixed Income	60 - 95%	80%	78%
Cash	0 – 20%	5%	6%

(Gross of Investment Management Fees, but ANNUALIZED TOTAL RETURNS Net of Embedded Fund Fees)

HighMark Plus Composite (Active)

	•		`	,
	Current Quarter*			0.98%
	Blended Benchmar	K*,**		0.93%
	Year To Date*			0.08%
	Blended Benchmar	k*		0.50%
	1 Year			1.25%
	Blended Benchmar	k		1.50%
	3 Year			3.76%
	Blended Benchmar	k		3.33%
	5 Year			3.35%
	Blended Benchmar	k		3.19%
	10 Year			4.89%
	Blended Benchmar	k		3.99%

Index Plus Composite (Passive)

Current Quarter*	0.85%
Blended Benchmark*,**	0.93%
Year To Date*	-0.02%
Blended Benchmark*	0.50%
1 Year	1.06%
Blended Benchmark	1.50%
3 Year	3.17%
Blended Benchmark	3.33%
5 Year	3.02%
Blended Benchmark	3.19%
10 Year	4.22%
Blended Benchmark	3.99%

^{*}Returns less than 1-year are not annualized. **Breakdown for Blended Benchmark: 7.5% S&P500, 1.5% Russell Mid Cap, 2.5% Russell 2000, 1% MSCI EM (net), 2% MSCI EAFE (net), 52.25% BBG Barclays US Agg, 25.75% ICE BofAML 1-3 Yr US Corp/Gov1, 2% ICE BofAML US High Yield Master II, 0.5% Wilshire REIT, and 5% FTSE 1 Mth T-Bill. Prior to October 2012, the blended benchmarks were 12% S&F 500; 1% Russell 2000, 2% MSCI EAFE (net), 40% ICE BofAML 1-3 Year Corp./Gov1, 40% BBG Barcalys US Agg, 5% FTSE 1 Mth T-Bill. Prior to April 2007, the blended benchmarks were 15% S&P 500, 40% ICE BofAML 1-3Yr Corp/Gov, 40% BBG Barcalys US Agg, and 5% FTSE 1 Mth T-Bill.

ANNUAL RETURNS

HighMark Plus Composite (Active)

riigiiiviark rius com	posite (Active)
2008	-9.04%
2009	15.59%
2010	8.68%
2011	2.19%
2012	8.45%
2013	3.69%
2014	3.88%
2015	0.29%
2016	4.18%
2017	6.73%

	index Plus Composite (Passive)	
	2008	-6.70%
	2009	10.49%
	2010	7.67%
	2011	3.70%
	2012	6.22%
	2013	3.40%
	2014	4.32%
	2015	0.06%
	2016	3.75%
	2017	5.52%

PORTFOLIO FACTS

HighMark Plus (Active)

Composite Inception Date	07/2004
No of Holdings in Portfolio	18

Index Plus (Passive)

Composite Inception Date	07/2004
No of Holdings in Portfolio	12

12

HOLDINGS

HighMark Plus (Active)

Columbia Contrarian Core I3
Vanguard Growth & Income Adm

Dodge & Cox Stock Fund

Harbor Capital Appreciation - Retirement

T. Rowe Price Growth Stock - I

iShares Russell Mid-Cap ETF

Vanguard Real Estate ETF

Undiscovered Managers Behavioral Value

T. Rowe Price New Horizons - I

Nationwide Bailard International Equities

Dodge & Cox International Stock

MFS International Growth - R6

Hartford Schroders Emerging Markets Eq

Vanguard Short-Term Invest-Grade Adm

PIMCO Total Return Fund - Inst

PGIM Total Return Bond - R6

DoubleLine Core Fixed Income - I

First American Government Obligations Z

Index Plus (Passive)

iShares Core S&P 500 ETF

iShares S&P 500 Value

iShares S&P 500 Growth

iShares Russell Mid-Cap ETF

Vanguard Real Estate ETF

iShares Russell 2000 Value

iShares Russell 2000 Growth

iShares MSCI EAFE ETF

Vanguard FTSE Emerging Markets ETF

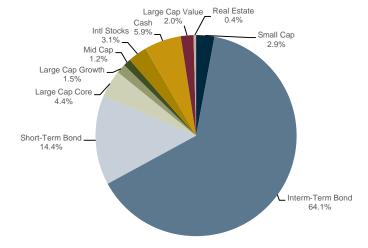
Vanguard Short-Term Invest-Grade Adm

iShares Core U.S. Aggregate

First American Government Obligations Z

Holdings are subject to change at the discretion of the investment manager.

STYLE



The performance records shown represent size-weighted composites of tax exempt accounts that meet the following criteria: Composites are managed by HighMark's HighMark Capital Advisors (HCA) with full investment authority according to the PARS Conservative active and passive objectives and do not have equity concentration of 25% or more in one common stock security.

The adviser to the PARS portfolios is US Bank, and HighMark serves as sub-adviser to US Bank to manage these portfolios. US Bank may charge clients as much as 0.60% annual management fee based on a sliding scale. As of September 30, 2018, the blended rate is 0.58%. US Bank pays HighMark 60% of the annual management fee for assets sub-advised by HighMark under its sub-advisory agreement with US Bank. The 36 basis points paid to HighMark, as well as other expenses that may be incurred in the management of the portfolio, will reduce the portfolio returns. Assuming an investment for five years, a 5% annual total return, and an annual sub-advisory fee rate of 0.36% deducted from the assets at market at the end of each year, a 10 million initial value would grow to \$12.54 million after fees (Net-of-Fees) and \$12.76 million before fees (Gross-of-Fees). Gross returns are presented before management and custodial fees but after all trading expenses and reflect the reinvestment of dividends and other income. Client's return will be reduced by the advisory fees and other expenses it may incur as a client. Additional information regarding the firm's policies and procedures for calculating and reporting performance results are calculated and presented in U.S. dollars and do not reflect the deduction of investment advisory fees, custody fees, or taxes but do reflect the deduction of trading expenses. Returns are calculated based on tradedate accounting.

Blended benchmarks represent HighMark's strategic allocations between equity, fixed income, and cash and are rebalanced monthly. Benchmark returns do not reflect the deduction of advisory fees or other expenses of investing but assumes the reinvestment of dividends and other earnings. An investor cannot invest directly in an index. The unmanaged S&P 500 Index is representative of the performance of large companies in the U.S. stock market. The MSCI EAFE Index is a free float-adjusted market capitalization index designed to measure developed market equity performance, excluding the U.S. and Canada. The MSCI Emerging Markets Free Index is a free float-adjusted market capitalization index that is designed to measure equity markets performance in the global emerging markets. The Russell Midcap Index measures the performance of the mid-cap segment of the U.S. equity universe. The Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. The US High Yield Master II Index tracks the performance of below investment grade U.S. dollar-denominated corporate bonds publicly issued in the U.S. domestic market. Wilshire REIT index measures U.S. publicly traded Real Estate Investment Trusts. The unmanaged Bloomberg Barclays Capital (BC) U.S. Aggregate Bond Index is generally representative of the U.S. taxable bond market as a whole. The Merrill Lynch (MLI) 1-3 Year U.S. Corporate & Government Index tracks the bond performance of The ML U.S. Corporate & Government Index, with a remaining term to final maturity less than 3 years. The unmanaged FTSE 1-Month Treasury Bill Index tracks the yield of the 1-month U.S.

HighMark Capital Management, Inc. (HighMark), an SEC-registered investment adviser, is a wholly owned subsidiary of MUFG Union Bank, N.A. (MUB). HighMark manages institutional separate account portfolios for a wide variety of for-profit and nonprofit organizations, public agencies, and public and private retirement plans. MUB, a subsidiary of MUFG Americas Holdings Corporation, provides certain services to HighMark and is compensated for these services. Past performance does not guarantee future results. Individual account management and construction will vary depending on each client's investment needs and objectives. Investments employing HighMark strategies are NOT insured by the FDIC or by any other Federal Government Agency, are NOT Bank deposits, are NOT guaranteed by the Bank or any Bank affiliate, and MAY lose value, including possible loss of principal.

HIGHMARK CAPITAL MANAGEMENT

350 California Street Suite 1600 San Francisco, CA 94104 800-582-4734

ABOUT THE ADVISER

HighMark® Capital Management, Inc. (HighMark) has nearly 100 years (including predecessor organizations) of institutional money management experience with \$7.9 billion in assets under management and \$7.6 billion in assets under advisement*. HighMark has a long term disciplined approach to money management and currently manages assets for a wide array of clients.

ABOUT THE PORTFOLIO MANAGEMENT TEAM Andrew Brown, CFA®

Senior Portfolio Manager
Investment Experience: since 1994
HighMark Tenure: since 1997
Education: MBA, University of Southern California;
BA, University of Southern California

Salvatore "Tory" Milazzo III, CFA® Senior Portfolio Manager

Senior Portfolio Manager Investment Experience: since 2004 HighMark Tenure: since 2014 Education: BA, Colgate University

J. Keith Stribling, CFA®

Senior Portfolio Manager Investment Experience: since 1985 HighMark Tenure: since 1995 Education: BA, Stetson University

Christiane Tsuda

Senior Portfolio Manager Investment Experience: since 1987 HighMark Tenure: since 2010

Education: BA, International Christian University, Tokyo

Anne Wimmer, CFA®

Senior Portfolio Manager Investment Experience: since 1987 HighMark Tenure: since 2007

Education: BA, University of California, Santa Barbara

Randy Yurchak, CFA® Senior Portfolio Manager

Senior Portfolio Manager Investment Experience: since 2002 HighMark Tenure: since 2017 Education: MBA, Arizona State University; BS, University of Washington

Asset Allocation Committee

Number of Members: 16 Average Years of Experience: 27 Average Tenure (Years): 14

Manager Review Group

Number of Members: 7 Average Years of Experience: 18 Average Tenure (Years): 6

*Assets under management ("AUM") include assets for which HighMark provides continuous and regular supervisory and management services. Assets under advisement ("AUA") include assets for which HighMark provides certain investment advisory services (including, but not limited to, investment research and strategies) for client assets of its parent company, MUFG Union Bank, N.A.



PARS DIVERSIFIED PORTFOLIOS **MODERATELY CONSERVATIVE**

Q3 2018

WHY THE PARS DIVERSIFIED MODERATELY CONSERVATIVE PORTFOLIO?

Comprehensive Investment Solution

HighMark® Capital Management, Inc.'s (HighMark) diversified investment portfolios are designed to balance return expectations with risk tolerance. Key features include: sophisticated asset allocation and optimization techniques, four layers of diversification (asset class, style, manager, and security), access to rigorously screened, top tier money managers, flexible investment options, and experienced investment management.

Rigorous Manager Due Diligence

Our manager review committee utilizes a rigorous screening process that searches for investment managers and styles that have not only produced above-average returns within acceptable risk parameters, but have the resources and commitment to continue to deliver these results. We have set high standards for our investment managers and funds. This is a highly specialized, time consuming approach dedicated to one goal: competitive and consistent performance.

Flexible Investment Options

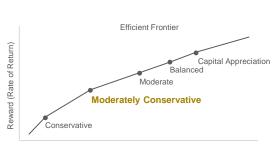
In order to meet the unique needs of our clients, we offer access to flexible implementation strategies: HighMark Plus utilizes actively managed mutual funds while Index Plus utilizes index-based securities, including exchange-traded funds. Both investment options leverage HighMark's active asset allocation approach.

Risk Management

The portfolio is constructed to control risk through four layers of diversification - asset classes (cash, fixed income, equity), investment styles (large cap, small cap, international, value, growth), managers and securities. Disciplined mutual fund selection and monitoring process helps to drive return potential while reducing portfolio risk.

INVESTMENT OBJECTIVE

To provide current income and moderate capital appreciation. The major portion of the assets is committed to incomeproducing securities. Market fluctuations should be expected.



Risk (Standard Deviation)

ASSET ALLOCATION — MODERATELY CONSERVATIVE PORTFOLIO

	Strategic Range	Policy	Tactical
Equity	20 - 40%	30%	31%
Fixed Income	50 - 80%	65%	66%
Cash	0 - 20%	5%	3%

(Gross of Investment Management Fees, but ANNUALIZED TOTAL RETURNS Net of Embedded Fund Fees)

HighMark Plus Composite (Active)

	Current Quarter*	1.69%
	Blended Benchmark*,**	1.66%
	Year To Date*	1.22%
	Blended Benchmark*	1.57%
	1 Year	3.18%
	Blended Benchmark	3.47%
	3 Year	5.64%
	Blended Benchmark	5.45%
	5 Year	4.62%
	Blended Benchmark	4.71%
	10 Year	6.03%
	Blended Benchmark	5.37%
	* Returns less than 1-year are not annualized. **Br	eakdown fo

Index Plus Composite (Passive)

Current Quarter*	1.53%
Blended Benchmark*,**	1.66%
Year To Date*	1.01%
Blended Benchmark*	1.57%
1 Year	2.85%
Blended Benchmark	3.47%
3 Year	5.18%
Blended Benchmark	5.45%
5 Year	4.45%
Blended Benchmark	4.71%
10 Year	5.34%
Blended Benchmark	5.37%

for Blended Benchmark: 15.5% S&P500, 3% Russell Mid Cap. 4.5% Returns less than 1-year are not annualized. **Breakdown for Blended Benchmark: 15.5% S&P500, 3% Russell Mid Cap, 4.5% Russell 2000, 2% MSCI EM (net), 4% MSCI EAFE (net), 49.25% BBG Barclays US Agg, 4% ICE BofAML 1-3 Yr US Corp/Gov¹t, 1.75% ICE BofAML US High Yield Master II, 1% Wilshire REIT, and 5% FTSE 1 Mth T-Bill. Prior to October 2012, the blended benchmarks were 25% S&P 500; 1.5% Russell 2000, 3.5% MSCI EAFE (net), 25% ICE BofAML 1-3 Year Corp./Govt, 40% BBG Barclays US Agg, 5% FTSE 1 Mth T-Bill. Prior to April 2007, the blended benchmarks were 30% S&P 500, 25% ICE BofAML 1-3Yr Corp/Gov, 40% BBG Barclays US Agg, and 5% FTSE 1 Mth T-Bill.

ANNUAL RETURNS

HighMark Plus Composite (Active)

-	
2008	-15.37%
2009	18.71%
2010	10.46%
2011	1.75%
2012	10.88%
2013	7.30%
2014	4.41%
2015	0.32%
2016	4.94%
2017	9.56%

Index Plus Composite (Passive)

maox i ido o o impoonto (i do	0.10)
2008	-12.40%
2009	11.92%
2010	9.72%
2011	3.24%
2012	8.24%
2013	6.78%
2014	5.40%
2015	-0.18%
2016	5.42%
2017	8.08%

PORTFOLIO FACTS

HighMark Plus (Active)

Composite Inception Date	08/2004
No of Holdings in Portfolio	18

Index Plus (Passive)

Composite Inception Date	05/2005
No of Holdings in Portfolio	12

HOLDINGS

HighMark Plus (Active)

Columbia Contrarian Core I3 Vanguard Growth & Income Adm

Dodge & Cox Stock Fund

Harbor Capital Appreciation - Retirement

T. Rowe Price Growth Stock - I

iShares Russell Mid-Cap ETF

Vanguard Real Estate ETF

Undiscovered Managers Behavioral Value

T. Rowe Price New Horizons - I

Nationwide Bailard International Equities

Dodge & Cox International Stock

MFS International Growth - R6

Hartford Schroders Emerging Markets Eq

Vanguard Short-Term Invest-Grade Adm

PIMCO Total Return Fund - Inst

PGIM Total Return Bond - R6

DoubleLine Core Fixed Income - I

First American Government Obligations Z

Index Plus (Passive)

iShares Core S&P 500 ETF

iShares S&P 500 Value

iShares S&P 500 Growth

iShares Russell Mid-Cap ETF

Vanguard Real Estate ETF

iShares Russell 2000 Value

iShares Russell 2000 Growth

iShares MSCI EAFE ETF

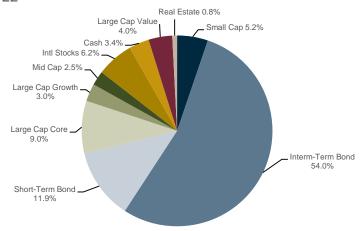
Vanguard FTSE Emerging Markets ETF Vanguard Short-Term Invest-Grade Adm

iShares Core U.S. Aggregate

First American Government Obligations Z

Holdings are subject to change at the discretion of the investment manager.

STYLE



The performance records shown represent size-weighted composites of tax exempt accounts that meet the following criteria: Composites are managed by HighMark's HighMark Capital Advisors (HCA) with full investment authority according to the PARS Moderately Conservative active and passive objectives and do not have equity concentration of 25% or more in one common stock security.

common stock security.

The adviser to the PARS portfolios is US Bank, and HighMark serves as sub-adviser to US Bank to manage these portfolios. US Bank may charge clients as much as 0.60% annual management fee based on a sliding scale. As of September 30, 2018, the blended rate is 0.58%. US Bank pays HighMark 60% of the annual management fee for assets sub-advised by HighMark under its sub-advisory agreement with US Bank. The 36 basis points paid to HighMark, as well as other expenses that may be incurred in the management of the portfolio, will reduce the portfolio returns. Assuming an investment for five years, a 5% annual total return, and an annual sub-advisory fee rate of 0.36% deducted from the assets at market at the end of each year, a 10 million initial value would grow to \$12.54 million after fees (Net-of-Fees) and \$12.76 million before fees (Gross-of-Fees). Gross returns are presented before management and custodial fees but after all trading expenses and reflect the reinvestment of dividends and other income. Client's return will be reduced by the advisory fees and other expenses it may incur as a client. Additional information regarding the firm's policies and procedures for calculating and reporting performance results is available upon request. In Q1 2010, the PARS Composite definition was changed from \$750,000 minimum to no minimum. Performance results are calculated and presented in U.S. dollars and do not reflect the deduction of investment advisory fees, or taxes but do reflect the deduction of investment advisory fees, custody fees, or taxes but do reflect the deduction of trading expenses. Returns are calculated based on trade-

Blended benchmarks represent HighMark's strategic allocations between equity, fixed income, and cash and are rebalanced Blended benchmarks represent HighMark's strategic allocations between equity, fixed income, and cash and are rebalanced monthly. Benchmark returns do not reflect the deduction of advisory fees or other expenses of investing but assumes the reinvestment of dividends and other earnings. An investor cannot invest directly in an index. The unmanaged S&P 500 Index is representative of the performance of large companies in the U.S. stock market. The MSCI EAFE Index is a free float-adjusted market capitalization index designed to measure developed market equity performance, excluding the U.S. and Canada. The MSCI Emerging Markets Free Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. The Russell Midcap Index measures the performance of the mid-cap segment of the U.S. equity universe. The Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. The US High Yield Master II Index tracks the performance of below investment grade U.S. dollar-denominated corporate bonds publicly issued in the U.S. domestic market. Wilshire REIT index measures U.S. publicly traded Real Estate Investment Trusts. The ummanaged Bloomberg Barclays Capital (BC) U.S. Aggregate Bond Index is generally representative of the U.S. taxable bond market as a whole. The Merrill Lynch (ML) 1-3 Year U.S. Corporate & Government Index tracks the bond performance of The ML U.S. Corporate & Government Index, with a remaining term to final maturity less than 3 years. The unmanaged FTSE 1-Month Treasury Bill Index tracks the yield of the 1-month U.S. Treasury Bill.

HighMark Capital Management, Inc. (HighMark), an SEC-registered investment adviser, is a wholly owned subsidiary of MUFG Union Bank, N.A. (MUB). HighMark manages institutional separate account portfolios for a wide variety of for-profit and nonprofit organizations, public agencies, and public and private retirement plans. MUB, a subsidiary of MUFG Americas Holdings Corporation, provides certain services to HighMark and is compensated for these services. Past performance does not guarantee future results. Individual account management and construction will vary depending on each client's investment needs and objectives. Investments employing HighMark strategies are NOT insured by the FDIC or by any other Federal Government Agency, are NOT Bank deposits, are NOT guaranteed by the Bank or any Bank affiliate, and MAY lose value, including possible loss of principal.

HIGHMARK CAPITAL MANAGEMENT

350 California Street **Suite 1600** San Francisco, CA 94104 800-582-4734

ABOUT THE ADVISER

HighMark® Capital Management, Inc. (HighMark) has nearly 100 years (including predecessor organizations) of institutional money management experience with \$7.9 billion in assets under management and \$7.6 billion in assets under advisement*. HighMark has a long term disciplined approach to money management and currently manages assets for a wide array of

ABOUT THE PORTFOLIO MANAGEMENT TEAM Andrew Brown, CFA®

Senior Portfolio Manager Investment Experience: since 1994 HighMark Tenure: since 1997 Education: MBA, University of Southern California; BA, University of Southern California

Salvatore "Tory" Milazzo III, CFA® Senior Portfolio Manager

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Education: BA, University of California, Santa Barbara

Randy Yurchak, CFA® Senior Portfolio Manager

Investment Experience: since 2002 HighMark Tenure: since 2017 Education: MBA, Arizona State University; BS, University of Washington

Asset Allocation Committee

Number of Members: 16 Average Years of Experience: 27 Average Tenure (Years): 14

Manager Review Group

Number of Members: 7 Average Years of Experience: 18 Average Tenure (Years): 6

*Assets under management ("AUM") include assets for which HighMark provides continuous and regular supervisory and management services. Assets under advisement ("AUA") include assets for which HighMark provides certain investment advisory services (including, but not limited to, investment research and strategies) for client assets of its parent company, MUFG Union Bank, N.A.



PARS DIVERSIFIED PORTFOLIOS MODERATE

Q3 2018

WHY THE PARS DIVERSIFIED MODERATE PORTFOLIO?

Comprehensive Investment Solution

HighMark® Capital Management, Inc.'s (HighMark) diversified investment portfolios are designed to balance return expectations with risk tolerance. Key features include: sophisticated asset allocation and optimization techniques, four layers of diversification (asset class, style, manager, and security), access to rigorously screened, top tier money managers, flexible investment options, and experienced investment management.

Rigorous Manager Due Diligence

Our manager review committee utilizes a rigorous screening process that searches for investment managers and styles that have not only produced above-average returns within acceptable risk parameters, but have the resources and commitment to continue to deliver these results. We have set high standards for our investment managers and funds. This is a highly specialized, time consuming approach dedicated to one goal: competitive and consistent performance.

Flexible Investment Options

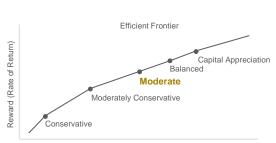
In order to meet the unique needs of our clients, we offer access to flexible implementation strategies: HighMark Plus utilizes actively managed mutual funds while Index Plus utilizes index-based securities, including exchange-traded funds. Both investment options leverage HighMark's active asset allocation approach.

Risk Management

The portfolio is constructed to control risk through four layers of diversification – asset classes (cash, fixed income, equity), investment styles (large cap, small cap, international, value, growth), managers and securities. Disciplined mutual fund selection and monitoring process helps to drive return potential while reducing portfolio risk.

INVESTMENT OBJECTIVE

To provide growth of principal and income. It is expected that dividend and interest income will comprise a significant portion of total return, although growth through capital appreciation is equally important.



Risk (Standard Deviation)

ASSET ALLOCATION — MODERATE PORTFOLIO

	Strategic Range	Policy	Tactical
Equity	40 - 60%	50%	51%
Fixed Income	40 - 60%	45%	46%
Cash	0 - 20%	5%	3%

ANNUALIZED TOTAL RETURNS (Gross of Investment Management Fees, but Net of Embedded Fund Fees)

HighMark Plus Composite (Active)

riigiiwant rias composite (7tt	otivo)
Current Quarter*	2.59%
Blended Benchmark*,**	2.70%
Year To Date*	2.87%
Blended Benchmark*	3.32%
1 Year	5.93%
Blended Benchmark	6.37%
3 Year	8.21%
Blended Benchmark	8.30%
5 Year	6.30%
Blended Benchmark	6.64%
10 Year	7.15%
Blended Benchmark	6.99%

Index Plus Composite (Passive)

•	*
Current Quarter*	2.50%
Blended Benchmark*,**	2.70%
Year To Date*	2.59%
Blended Benchmark*	3.32%
1 Year	5.53%
Blended Benchmark	6.37%
3 Year	7.82%
Blended Benchmark	8.30%
5 Year	6.16%
Blended Benchmark	6.64%
10 Year	6.81%
Blended Benchmark	6.99%

Returns less than 1-year are not annualized. **Breakdown for Blended Benchmark: 26.5% S&P500, 5% Russell Mid Cap, 7.5% Russell 2000, 3.25% MSCI EM (net), 6% MSCI EAFE (net), 33.50% BBG Barclays US Agg, 10% ICE BofAML 1-3 Yr US Corp/Gov't, 1.50% ICE BofAML US High Yield Master II, 1.75% Wilshire REIT, and 5% FTSE 1 Mth T-Bill. Prior to October 2012, the blended benchmarks were 43% S&P 500; 2% Russell 2000, 5% MSCI EAFE (net), 15% ICE BofAML 1-3 Year Corp./Covt, 30% BBG Barclays US Agg, 5% FTSE 1 Mth T-Bill. Prior to April 2007, the blended benchmarks were 50% S&P 500, 15% ICE BofAML 1-3Yr Corp/Gov, 30% BBG Barclays US Agg, and 5% FTSE 1 Mth T-Bill.

ANNUAL RETURNS

HighMark Plus Composite (Active)

	()
2008	-22.88%
2009	21.47%
2010	12.42%
2011	0.55%
2012	12.25%
2013	13.06%
2014	4.84%
2015	0.14%
2016	6.45%
2017	13 19%

Index Plus Composite (Passive)

	1 (
2008		-18.14%
2009		16.05%
2010		11.77%
2011		2.29%
2012		10.91%
2013		12.79%
2014		5.72%
2015		-0.52%
2016		7.23%
2017		11.59%

PORTFOLIO FACTS

HighMark Plus (Active)

Composite Inception Date	10/2004
No of Holdings in Portfolio	18

Index Plus (Passive)

Composite Inception Date	05/2006
No of Holdings in Portfolio	12

HOLDINGS

HighMark Plus (Active)

Columbia Contrarian Core I3 Vanguard Growth & Income Adm

Dodge & Cox Stock Fund

Harbor Capital Appreciation - Retirement

T. Rowe Price Growth Stock - I

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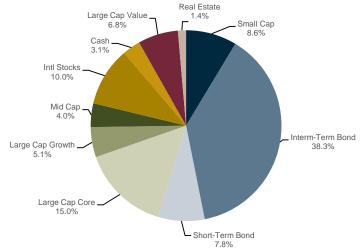
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Blended benchmarks represent HighMark's strategic allocations between equity, fixed income, and cash and are rebalanced monthly. Benchmark returns do not reflect the deduction of advisory fees or other expenses of investing but assumes the reinvestment of dividends and other earnings. An investor cannot invest directly in an index. The unmanaged S&P 500 Index is representative of the performance of large companies in the U.S. stock market. The MSCI EAFE Index is a free float-adjusted market capitalization index designed to measure developed market equity performance, excluding the U.S. and Canada. The MSCI Emerging Markets Free Index is a free float-adjusted market capitalization index that is designed to measure equity markets performance in the global emerging markets. The Russell Midcap Index measures the performance of the mid-cap segment of the U.S. equity universe. The Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. The US High Yield Master II Index tracks the performance of below investment grade U.S. dollar-denominated corporate bonds publicly issued in the U.S. domestic market. Wilshire REIT index measures U.S. publicly traded Real Estate Investment Trusts. The unmanaged Bloomberg Barclays Capital (BC) U.S. Aggregate Bond Index is generally representative of the U.S. taxable bond market as a whole. The Merrill Lynch (MLI) 1-3 Year U.S. Corporate & Government Index tracks the bond performance of The ML U.S. Corporate & Government Index, with a remaining term to final maturity less than 3 years. The unmanaged FTSE 1-Month Treasury Bill Index tracks the yield of the 1-month U.S. Treasury Bill.

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Asset Allocation Committee

Number of Members: 16 Average Years of Experience: 27 Average Tenure (Years): 14

Manager Review Group

Number of Members: 7 Average Years of Experience: 18 Average Tenure (Years): 6

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PARS DIVERSIFIED PORTFOLIOS BALANCED

Q3 2018

WHY THE PARS DIVERSIFIED BALANCED PORTFOLIO?

Comprehensive Investment Solution

HighMark® Capital Management, Inc.'s (HighMark) diversified investment portfolios are designed to balance return expectations with risk tolerance. Key features include: sophisticated asset allocation and optimization techniques, four layers of diversification (asset class, style, manager, and security), access to rigorously screened, top tier money managers, flexible investment options, and experienced investment management.

Rigorous Manager Due Diligence

Our manager review committee utilizes a rigorous screening process that searches for investment managers and styles that have not only produced above-average returns within acceptable risk parameters, but have the resources and commitment to continue to deliver these results. We have set high standards for our investment managers and funds. This is a highly specialized, time consuming approach dedicated to one goal: competitive and consistent performance.

Flexible Investment Options

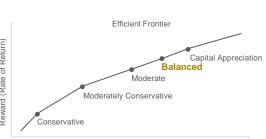
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Risk Management

The portfolio is constructed to control risk through four layers of diversification – asset classes (cash, fixed income, equity), investment styles (large cap, small cap, international, value, growth), managers and securities. Disciplined mutual fund selection and monitoring process helps to drive return potential while reducing portfolio risk.

INVESTMENT OBJECTIVE

To provide growth of principal and income. While dividend and interest income are an important component of the objective's total return, it is expected that capital appreciation will comprise a larger portion of the total return.



Risk (Standard Deviation)

ASSET ALLOCATION — BALANCED PORTFOLIO

	Strategic Range	Policy	Tactical
Equity	50 – 70%	60%	61%
Fixed Income	30 - 50%	35%	36%
Cash	0 – 20%	5%	3%

ANNUALIZED TOTAL RETURNS Net of Embedded Fund Fees)

(Gross of Investment Management Fees, but Net of Embedded Fund Fees)

HighMark Plus Composite (Active)

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Current Quarter*	3.14%
Blended Benchmark*,**	3.22%
Year To Date*	3.82%
Blended Benchmark*	4.17%
1 Year	7.44%
Blended Benchmark	7.83%
3 Year	9.53%
Blended Benchmark	9.75%
5 Year	7.14%
Blended Benchmark	7.62%
10 Year	7.72%
Blended Benchmark	7.85%
* Returns less than 1-year are not annuali:	zed **Breakdown fo

Index Plus Composite (Passive)

Current Quarter*	2.99%
Blended Benchmark*,**	3.22%
Year To Date*	3.27%
Blended Benchmark*	4.17%
1 Year	6.75%
Blended Benchmark	7.83%
3 Year	9.18%
Blended Benchmark	9.75%
5 Year	7.03%
Blended Benchmark	7.62%
10 Year	7.37%
Blended Benchmark	7.85%

Returns less than 1-year are not annualized. **Breakdown for Blended Benchmark: 32% S&P500, 6% Russell Mid Cap, 9% Russell 2000, 4% MSCI EM (net), 7% MSCI EAFE (net), 27% BBG Barclays US Agg, 6.75% ICE BofAML 1-3 Yr US Corp/Gov¹t, 1.25% ICE BofAML US High Yield Master II, 2% Wilshire REIT, and 5% FTSE 1 Mth T-Bill. Prior to October 2012, the blended benchmarks were 51% S&P 500; 3% Russell 2000, 6% MSCI EAFE (net), 5% ICE BofAML 1-3 Year Corp/Govt, 30% BBG Barclays US Agg, 5% FTSE 1 Mth T-Bill. Prior to April 2007, the blended benchmarks were 60% S&P 500, 5% ICE BofAML 1-3 Yr Corp/Gov, 30% BBG Barclays US Agg, and 5% FTSE 1 Mth T-Bill.

ANNUAL RETURNS

HighMark Plus Composite (Active)

2008		-25.72%
2009		21.36%
2010		14.11%
2011		-0.46%
2012		13.25%
2013		16.61%
2014		4.70%
2015		0.04%
2016		6.81%
2017		15.46%

Index Plus Composite (Passive)

maox i ido composito (i do	0.10)
2008	-23.22%
2009	17.62%
2010	12.76%
2011	1.60%
2012	11.93%
2013	15.63%
2014	6.08%
2015	-0.81%
2016	8.25%
2017	13.39%

PORTFOLIO FACTS

HighMark Plus (Active)

Composite Inception Date	10/2006	Composite Inception Date	10/2007
No of Holdings in Portfolio	18	No of Holdings in Portfolio	12

Index Plus (Passive)

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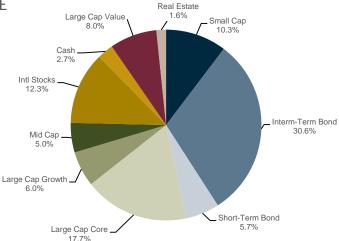
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Senior Portfolio Manager Investment Experience: since 2004 HighMark Tenure: since 2014 Education: BA, Colgate University

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Senior Portfolio Manager Investment Experience: since 1985 HighMark Tenure: since 1995 Education: BA, Stetson University

Christiane Tsuda

Senior Portfolio Manager Investment Experience: since 1987 HighMark Tenure: since 2010

Education: BA, International Christian University, Tokyo

Anne Wimmer, CFA®

Senior Portfolio Manager Investment Experience: since 1987 HighMark Tenure: since 2007

Education: BA, University of California, Santa Barbara

Randy Yurchak, CFA® Senior Portfolio Manager

Senior Portfolio Manager Investment Experience: since 2002 HighMark Tenure: since 2017 Education: MBA, Arizona State University; BS, University of Washington

Asset Allocation Committee

Number of Members: 16 Average Years of Experience: 27 Average Tenure (Years): 14

Manager Review Group

Number of Members: 7 Average Years of Experience: 18 Average Tenure (Years): 6

*Assets under management ("AUM") include assets for which HighMark provides continuous and regular supervisory and management services. Assets under advisement ("AUA") include assets for which HighMark provides certain investment advisory services (including, but not limited to, investment research and strategies) for client assets of its parent company, MUFG Union Bank, N.A.



PARS DIVERSIFIED PORTFOLIOS CAPITAL APPRECIATION

Q3 2018

WHY THE PARS DIVERSIFIED CAPITAL APPRECIATION PORTFOLIO?

Comprehensive Investment Solution

HighMark® Capital Management, Inc.'s (HighMark) diversified investment portfolios are designed to balance return expectations with risk tolerance. Key features include: sophisticated asset allocation and optimization techniques, four layers of diversification (asset class, style, manager, and security), access to rigorously screened, top tier money managers, flexible investment options, and experienced investment management.

Rigorous Manager Due Diligence

Our manager review committee utilizes a rigorous screening process that searches for investment managers and styles that have not only produced above-average returns within acceptable risk parameters, but have the resources and commitment to continue to deliver these results. We have set high standards for our investment managers and funds. This is a highly specialized, time consuming approach dedicated to one goal: competitive and consistent performance.

Flexible Investment Options

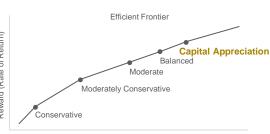
In order to meet the unique needs of our clients, we offer access to flexible implementation strategies: HighMark Plus utilizes actively managed mutual funds while Index Plus utilizes index-based securities, including exchange-traded funds. Both investment options leverage HighMark's active asset allocation approach.

Risk Management

The portfolio is constructed to control risk through four layers of diversification – asset classes (cash, fixed income, equity), investment styles (large cap, small cap, international, value, growth), managers and securities. Disciplined mutual fund selection and monitoring process helps to drive return potential while reducing portfolio risk.

INVESTMENT OBJECTIVE

The primary goal of the Capital Appreciation objective is growth of principal. The major portion of the assets are invested in equity securities and market fluctuations are expected.



Risk (Standard Deviation)

ASSET ALLOCATION — CAPITAL APPRECIATION PORTFOLIO

	Strategic Range	Policy	Tactical
Equity	65 - 85%	75%	76%
Fixed Income	10 - 30%	20%	22%
Cash	0 - 20%	5%	2%

(Gross of Investment Management Fees, but ANNUALIZED TOTAL RETURNS Net of Embedded Fund Fees)

HighMark Plus Composite (Active)

•	
Current Quarter*	3.80%
Blended Benchmark*,**	3.93%
Year To Date*	5.04%
Blended Benchmark*	5.24%
1 Year	9.41%
Blended Benchmark	9.81%
3 Year	11.35%
Blended Benchmark	11.81%
5 Year	8.47%
Blended Benchmark	8.91%
Inception to Date (117-Mos.)	10.58%
Blended Benchmark	11.28%

^{*} Returns less than 1-year are not annualized. **Breakdown for Blended Benchmark: 39.5% S&P500, 7.5% Russell Mid Cap, 10.5% Russell 2000, 5.25% MSCI EM (net), 10.25% MSCI EAFE (net), 16% BBG Barclays US Agg, 3% ICE BofAML 1-3 Yr US Corp/Gov't, 1% ICE BofAML US High Yield Master II, 2% Wilshire REIT, and 5% FTSE 1 Mth T-Bill.

ANNUAL RETURNS

HighMark Plus Composite (Active)

•	
2008	N/A%
2009	23.77%
2010	12.95%
2011	-1.35%
2012	13.87%
2013	20.33%
2014	6.05%
2015	-0.27%
2016	8.81%
2017	16.72%

PORTFOLIO FACTS

HighMark Plus (Active)		Index Plus (Passive)	
Composite Inception Date	01/2009	Composite Inception Date	N/A
No of Holdings in Portfolio	18	No of Holdings in Portfolio	12

HOLDINGS

HighMark Plus (Active)

Columbia Contrarian Core I3 Vanguard Growth & Income Adm

Dodge & Cox Stock Fund

Harbor Capital Appreciation - Retirement

T. Rowe Price Growth Stock - I

iShares Russell Mid-Cap ETF

Vanguard Real Estate ETF

Undiscovered Managers Behavioral Value

T. Rowe Price New Horizons - I

Nationwide Bailard International Equities

Dodge & Cox International Stock

MFS International Growth - R6

Hartford Schroders Emerging Markets Eq

Vanguard Short-Term Invest-Grade Adm

PIMCO Total Return Fund - Inst

PGIM Total Return Bond - R6

DoubleLine Core Fixed Income - I

First American Government Obligations Z

Index Plus (Passive)

iShares Core S&P 500 ETF

iShares S&P 500 Value

iShares S&P 500 Growth

iShares Russell Mid-Cap ETF

Vanguard Real Estate ETF

iShares Russell 2000 Value

iShares Russell 2000 Growth

iShares MSCI EAFE ETF

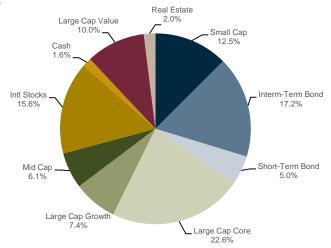
Vanguard FTSE Emerging Markets ETF Vanguard Short-Term Invest-Grade Adm

iShares Core U.S. Aggregate

First American Government Obligations Z

Holdings are subject to change at the discretion of the investment manager.

STYLE



The performance records shown represent size-weighted composites of tax exempt accounts that meet the following criteria: Composites are managed by HighMark's HighMark Capital Advisors (HCA) with full investment authority according to the PARS Capital Appreciation active and passive objectives and do not have equity concentration of 25% or more in one common stock security.

common stock security.

The adviser to the PARS portfolios is US Bank, and HighMark serves as sub-adviser to US Bank to manage these portfolios. US Bank may charge clients as much as 0.60% annual management fee based on a sliding scale. As of September 30, 2018, the blended rate is 0.58%. US Bank pays HighMark 60% of the annual management fee for assets sub-advised by HighMark under its sub-advisory agreement with US Bank. The 36 basis points paid to HighMark, as well as other expenses that may be incurred in the management of the portfolio, will reduce the portfolio returns. Assuming an investment for five years, a 5% annual total return, and an annual sub-advisory fee rate of 0.36% deducted from the assets at market at the end of each year, a 10 million initial value would grow to \$12.54 million after fees (Net-of-Fees) and \$12.76 million before fees (Gross-of-Fees). Gross returns are presented before management and custodial fees but after all trading expenses and reflect the reinvestment of dividends and other income. Client's return will be reduced by the advisory fees and other expenses it may incur as a client. Additional information regarding the firm's policies and procedures for calculating and reporting performance results is available upon request. In O1 2010, the PARS Composite definition was changed from \$750,000 minimum to no minimum. Performance results are calculated and presented in U.S. dollars and do not reflect the deduction of investment advisory fees, custody fees, or taxes but do reflect the deduction of trading expenses. Returns are calculated based on tradedate accounting. date accounting.

Blended benchmarks represent HighMark's strategic allocations between equity, fixed income, and cash and are rebalanced monthly. Benchmark returns do not reflect the deduction of advisory fees or other expenses of investing but assumes the reinvestment of dividends and other earnings. An investor cannot invest directly in an index. The unmanaged S&P 500 Index is representative of the performance of large companies in the U.S. stock market. The MSCI EAFE Index is a free float-adjusted market capitalization index designed to measure developed market equity performance, excluding the U.S. and Canada. The MSCI Emerging Markets Free Index is a free float-adjusted market capitalization index that is designed to measure equity markets performance in the global emerging markets. The Russell Midcap Index measures the performance of the mid-cap segment of the U.S. equity universe. The Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. The US High Yield Master II Index tracks the performance of below investment grade U.S. dollar-denominated corporate bonds publicly issued in the U.S. domestic market. Wilshire REIT index measures U.S. publicly traded Real Estate Investment Trusts. The unmanaged Bloomberg Barclays Capital (BC) U.S. Aggregate Bond Index is generally representative of the U.S. taxable bond market as a whole. The Merrill Lynch (ML) 1-3 Year U.S. Corporate & Government Index tracks the bond performance of The ML U.S. Corporate & Government Index, with a remaining term to final maturity less than 3 years. The unmanaged FTSE 1-Month Treasury Bill Index tracks the yield of the 1-month U.S. Treasury Bill. Treasury Bill.

HighMark Capital Management, Inc. (HighMark), an SEC-registered investment adviser, is a wholly owned subsidiary of MUFG Union Bank, N.A. (MUB). HighMark manages institutional separate account portfolios for a wide variety of for-profit and nonprofit organizations, public agencies, and public and private retirement plans. MUB, a subsidiary of MUFG Americas Holdings Corporation, provides certain services to HighMark and is compensated for these services. Past performance does not guarantee future results. Individual account management and construction will vary depending on each client's investment needs and objectives. Investments employing HighMark strategies are NOT insured by the FDIC or by any other Federal Government Agency, are NOT Bank deposits, are NOT guaranteed by the Bank or any Bank affiliate, and MAY lose value, including possible loss of principal.

HIGHMARK CAPITAL MANAGEMENT

350 California Street **Suite 1600** San Francisco, CA 94104 800-582-4734

ABOUT THE ADVISER

HighMark® Capital Management, Inc. (HighMark) has nearly 100 years (including predecessor organizations) of institutional money management experience with \$7.9 billion in assets under management and \$7.6 billion in assets under advisement*. HighMark has a long term disciplined approach to money management and currently manages assets for a wide array of

ABOUT THE PORTFOLIO MANAGEMENT TEAM Andrew Brown, CFA®

Senior Portfolio Manager Investment Experience: since 1994 HighMark Tenure: since 1997 Education: MBA, University of Southern California; BA, University of Southern California

Salvatore "Tory" Milazzo III, CFA® Senior Portfolio Manager

Investment Experience: since 2004 HighMark Tenure: since 2014 Education: BA, Colgate University

J. Keith Stribling, CFA®

Senior Portfolio Manager Investment Experience: since 1985 HighMark Tenure: since 1995 Education: BA, Stetson University

Christiane Tsuda

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Alameda County Mosquito Abatement District Internal Controls-2019

1. CHECK SIGNING AUTHORIZATION

..All checks must have two signatures: the General Manager and one Trustee. The General Manager may delegate a pre-authorized staff member to sign if unavailable. Check signing authorization is approved through a form and process provided by the checking account bank who also files all approved signers.

2. DISTRICT PURCHASING PROCESS

Nine Staff members are authorized by the General Manager to make purchases on behalf of the District (including him/herself). These purchases must be within budget approved by the Board. Invoices are sent from the vendor to the District by mail, e-mail. FAX, or can be obtained at the point of sale and given to the Accounting Associate by the employee making the charge. Employees are required to sign each invoice and must write the budget account code under which the charge should be posted on the invoice. The Accounting Associate reviews each invoice for budget compliance. Invoices are entered into the District's accounting system (Safe Software) as they are received. The Accounting Associate prepares a check for each invoice twice a month. The check is attached to the invoice along with any other documentation for the charge it is paying, and these documents are reviewed by the General Manager or his/her authorized designee and a Trustees per section #1. A copy of each invoice is placed in the vendor files. A check register is included in the financial reports section of the Board Packet to be reviewed by the Board at each monthly regular board meeting. The checks listed in this report compliments and is referenced by the monthly income statement, investment, reserves and cash statement, and the (soon to be included) monthly balance sheet. In case of an emergency, the Board has authorized the General Manager to withdraw up to \$5,000 from the checking account without a Trustee signature (if unavailable). If this authority is used, the General Manager must specifically report this withdraw at the next regular Board meeting.

3. ELECTRONIC FUND TRANSFERS

The General Manager and the Accounting Associate are the only individuals who can authorize wire transfers of District funds. Any transfer either requires double authentication, such as transfers from the checking account, or an emailed confirmation that is reviewed and sent to each other. The General Manager and Accounting Associate transfers funds between CAMP and PARS Reserve Accounts, the Working Capital (LAIF) account, the District's OPEB Account, the District's checking account, and the District's Member and Property Contingency Funds held by the Vector Control Joint Powers Board Authority (VCJPA). Only the General Manager and the District's payroll service are authorized to withdraw money from the payroll bank account. Documentation of the receipt of funds transferred is attached to the bank statement from which the funds were moved and examined by the auditor at the end of the year.

4. CASH RECEIPTS

The District rarely receives cash. Its major sources of revenue are property tax and benefit assessments, which are collected by the County and allocated to an account designated to the District in the General Fund. Checks are occasionally received in the mail at the District office from miscellaneous sources. When this occurs, the funds are deposited in the checking account. Where a ,a copy of the check and receipt are filed, and revenues are entered in the

District's accounting software. For funds kept in the County Treasury, a revenue and expenditure report (BARS) for the prior fiscal year is reviewed by the Accounting Associate from when received typically in early October. The Independent Auditor also reviews this report and checks it against the District's records.

5. BANK AND CASH ACCOUNT RECONCILIATIONS

The District maintains a payroll account to cover payroll expense. This account does not have check writing privileges. Only the General Manager and the District's payroll service are authorized to withdraw money from this account. Twice a month, the General Manager or Accounting Associate makes a deposit in this account in an amount equal to the total payroll for the current 2-week period. The District's payroll service prepares paychecks written from this account. Bank reconciliations for the following accounts are prepared monthly by the Accounting Associate: payroll bank (Bank of America), checking account (Bank of the West), CAMP, LAIF, PARS, and the County Treasury account. Monthly bank reconciliations are reviewed and signed by the General Manager Statements from the Vector Control Joint Powers Agency (VCJPA) member Contingency Fund and reserve accounts are reconciled quarterly. The County Treasury ledger detail is given to the District usually in October following the close of the fiscal year on June 30.

6. CREDIT CARDS

The District has a corporate credit card account. The General Manager and Accounting Associate are the Administrators on this account and are the only people authorized to access account information, order cards, or set credit limits on the cards. Nine people have been issued credit cards on this account. They are: The General Manager, Accounting Associate, IT Director, Regulatory & Public Affairs Director, Vector Scientist, Lab Director, Assistant Vector Scientist, Field Operations Supervisor, and Mechanical Specialist. These cards can only be used to make District purchases and cannot be used for purchasing personal goods. These employees are authorized to purchase items only according to approved accounts of the District's budget. Card limits are set by the General Manager at \$10,000.00, with temporary increases given to cover large expenses.

The Accounting Associate records the charges in the general ledger in the District's accounting software. When the statements are received, the accounting associate reconciles the statements, and attaches all necessary receipts. The cardholder reviews the statement to confirm that that the purchases were in fact made by them. After reviewing the statement, the employee signs it to acknowledge its accuracy and returns it to the Accounting Associate. The General Manager reviews the credit card statements and attached documentation. A master list of all charges, who made them, and which budget account they were charged to is then prepared by the Accounting Associate and reviewed by the General Manager and Trustee monthly in the process of signing that month's credit card payment check. The total amount for all cards is reconciled to the total amount in the monthly bill to ensure that the General Manager has knowledge of all cards in use and all purchases made.

7. CAPITAL ASSETS

The Accounting Associate maintains a capital depreciation schedule. All items with a value or purchase price over \$5,000 are capitalized. The capital depreciation schedule is updated monthly.

8. PETTY CASH

The District maintains a petty cash balance of \$500, which is kept in a locked cabinet. The Accounting Associate and General Manager hold the only keys to the cabinet. When an employee requests to be reimbursed for District purchases up to \$50 through petty cash, they fill out a request form and attach the appropriate receipt. The form must be signed by the employee and the General Manager and then submitted to the Accounting Associate. The Accounting Associate disburses petty cash on receipt of the signed form and documentation. The Employee will then sign off on the request form, confirming that they received the payment, The Accounting Associate tracks all withdrawals and deposits in the petty cash fund. When the petty cash fund needs to be replenished, the Accounting Associate prepares a check, to be reviewed by the normal check signing process detailed in section #2 made out to the General Manager or Accounting Associate, for up to \$500.Petty cash transactions are posted to the General ledger at the end of each month.

9. PAYROLL AND BENEFITS

The District has 17 full time employees. Payroll checks are cut bi-monthly. The payroll company (OnePoint) prepares Forms 941 and DE6 and delivers them to the District. Some employees receive their pay by Electronic Fund Transfer (EFT) which is handled by the payroll bank. The Accounting Associate records payroll to the general ledger twice a month. Payroll is paid out of the payroll bank account.

. The District has seasonal hourly employees and salaried employees. Timesheets are reviewed by supervisors before submittal to the Accounting Associate.

10. BUDGET PROCESS

The General Manager prepares a preliminary budget, which is presented to the Board at two public Board meetings after reviewed by the Finance Committee at open meetings. Trustees review and comment on the budget at these meetings. The Board approves the final budget in June. All budget adjustments must be approved by the Board.

11. VOIDED TRANSACTIONS

. Voided checks are kept in a folder that is locked in the filing cabinet. All voided checks are reported though the checking account banking reporting system, Web Direct.

12. <u>DETECTION OF FRAUD AND ABUSE</u>

The District prepares its own checks and uses Positive Pay to ensure only valid checks are being cashed. This optional coverage provided by the checking account bank sends daily alerts to the General Manager of account activity and reconciles the monthly check register with cashed checks. All checks require an original signature by the General manager and one Trustee. The Board reviews the check registry list at its monthly Board meeting. At each Board meeting, the board also reviews a comparison of year-to-date expenditures for each budget category in comparison with the amount budgeted. All transactions are processed through the

checking account. When revenue is deposited into the County Treasury account, the money is transferred to the District's LAIF working capital account. Twice a month, the total amount of expenditures is transferred from the LAIF account to the Bank of the West account to cover operating expenses.

The payroll account does not allow checks to be written and withdrawal requires authorization by the General Manager or the payroll company. At each payroll period, the payroll company delivers a summary sheet with the amounts paid to each employee and amounts withheld for taxes. The Accounting Associate reviews these reports and checks them against the amounts entered for each employee in the payroll request form online. The monthly statements from the payroll bank and checking account bank are also checked against these reports. These statements with their backup documentation are then reviewed by the General Manager

13. NON-RECURRING AND CLOSING JOURNAL ENTRIES

All journal entries are prepared by the Accounting Associate and reviewed by the General Manager. Documentation of the year end closing is reviewed by the General Manager before sending to the Independent audit firm.

14. RISK MANAGEMENT

The District is insured through the VCJPA's optional Alliant Crime Insurance Program (ACIP) against any loss of monies and securities due to dishonest acts or failures of employees to faithfully perform duties as part of a risk management pool.

15. THIRD PARTY CONTRACTORS

The District does not use third party contractors for collection or disbursement of bills other than the payroll company, one point. The district uses SCI Consulting Group to perform Benefit Assessment and Special Tax reviews. They provide the information to the District on funds collected, but the funds are collected by the County Treasurer.

16. INFORMATION TECHNOLOGY

The District's accounting software (is installed only on the Accounting Associate's computer. The District has a network of computers backed up almost every day. Sage software is backed up daily in the cloud.

ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT HAYWARD, CALIFORNIA

BASIC FINANCIAL STATEMENTS
and
MEMORANDUM ON INTERNAL CONTROL
AND
REQUIRED COMMUNICATIONS

JUNE 30, 2018

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ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT BASIC FINANCIAL STATEMENTS For the Year Ended June 30, 2018

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3

ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT BASIC FINANCIAL STATEMENTS For the Year Ended June 30, 2018

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12/28/18

INDEPENDENT AUDITOR'S REPORT

Board of Trustees Alameda County Mosquito Abatement District Hayward, California

Report on Financial Statements

We have audited the basic financial statements of the governmental activities and the General Fund of the Alameda County Mosquito Abatement District (District), as of and for the year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise the District's basic financial statements as listed in the Table of Contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the District's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the governmental activities and the General Fund of the Alameda County Mosquito Abatement District, as of June 30, 2018, and the changes in financial position thereof and the budgetary comparisons listed as part of the basic financial statements for the year then ended, in conformity with accounting principles generally accepted in the United States of America.

Emphasis of a Matter

Management adopted the provisions of Governmental Accounting Standards Board Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions, which became effective during the year ended June 30, 2018 and required a prior period adjustment to the financial statements and required the restatement of net position as discussed in Note 11.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that Management's Discussion and Analysis and other Required Supplementary Information related tables be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Pleasant Hill, California DATE

Management's Discussion and Analysis

ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT STATEMENT OF NET POSITION JUNE 30, 2018

	Governmental Activities
ASSETS	
Current assets: Cash and investments (Note 3)	\$7,138,612
Total current assets	7,138,612
Non current assets: Capital assets, nondepreciable (Note 4) Capital assets, depreciable, net of accumulated depreciation (Note 4) Net OPEB asset (Note 9)	61,406 2,687,400 716,666
Total non current assets	3,465,472
Total Assets	10,604,084
DEFERRED OUTFLOWS OF RESOURCES	
Pension related (Note 8)	818,392
Total deferred outflows of resources	818,392
LIABILITIES	
Current liabilities: Accounts payable Compensated absences (Note 2F)	81,543 167,855
Total current liabilities	249,398
Non current liabilities: Net pension liability (Note 8)	2,642,666
Total non current liabilities	2,642,666
Total liabilities	2,892,064
DEFERRED INFLOWS OF RESOURCES	
Pension related (Note 8) OPEB related (Note 9)	809,861 41,760
Total deferred inflows of resources	851,621
NET POSITION (Note 2J)	
Net investment in capital assets Unrestricted	2,748,806 4,929,985
Total Net Position	\$7,678,791

ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT STATEMENT OF ACTIVITIES FOR THE YEAR ENDED JUNE 30, 2018

			Net (Expense) Revenue and
		Program	Change in
		Revenues	Net Position
		Charges	
	P.	for Services	Governmental Activities
Functions/Programs	Expenses	Services	Activities
Governmental Activities:	do 574 000		(\$2.574.203)
District operations	\$3,574,293		(\$3,574,293)
Total Governmental Activities	\$3,574,293		(3,574,293)
General revenues:			2.054.120
Property taxes			2,054,129
Redevelopment distributions			236,382 2,026,453
Special assessments			16,220
Government aid			25,505
Interest			264,661
Miscellaneous			204,001
Total General Revenues			4,623,350
Change in Net Position			1,049,057
Net Position - Beginning, as restated (Note	11)		6,629,734
Net Position - Ending			\$7,678,791

ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT GOVERNMENTAL FUND - GENERAL FUND BALANCE SHEET JUNE 30, 2018

ASSETS

Cash and investments (Note 3) Prepaid retirement expense	\$7,138,612
Total Assets	\$7,138,612
LIABILITIES	
Accounts payable	\$81,543
Total Liabilities	81,543
FUND BALANCES	
Assigned for capital projects Assigned for dry period cash	2,822,828 4,234,241
Total Fund Balances	7,057,069
Total Liabilities and Fund Balances	\$7,138,612

ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT

Reconciliation of the

GOVERNMENTAL FUNDS - BALANCE SHEET

with the

STATEMENT OF NET POSITION

JUNE 30, 2018

Total fund balances reported on the governmental funds balance sheet	\$7,057,069
Amounts reported for Governmental Activities in the Statement of Net Position are different from those reported in the Governmental Funds above because of the following:	
CAPITAL ASSETS Capital assets used in Governmental Activities are not current assets or financial resources and therefore are not reported in the Governmental Funds.	2,748,806
DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES Deferred outflows of resources - pension related Deferred inflows of resources - pension related Deferred inflows of resources - OPEB related	818,392 (809,861) (41,760)
LONG TERM ASSETS AND LIABILITIES The assets and liabilities below are not due and payable in the current period and therefore are not reported in the Funds: Current portion of compensated absences Collective net pension liability Net OPEB asset	(167,855) (2,642,666) 716,666
NET POSITION OF GOVERNMENTAL ACTIVITIES	\$7,678,791

ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT GOVERNMENTAL FUND - GENERAL FUND STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCE FOR THE YEAR ENDED JUNE 30, 2018

REVENUES	** ** 100
Property taxes	\$2,054,129
Redevelopment distributions	236,382
Special assessments	2,026,453
Government aid (Homeowners Property Tax Relief, State Subvention)	16,220
Interest	25,505
Miscellaneous	264,661
Total Revenues	4,623,350
EXPENDITURES	2 490 027
Salaries and fringe benefits	2,480,037 999,776
Materials, supplies and services	•
Capital outlay	499,979
Total Expenditures	3,979,792
NET CHANGE IN FUND BALANCE	643,558
BEGINNING FUND BALANCE	\$6,413,511
ENDING ELINID DALANCE	\$7,057,069
ENDING FUND BALANCE	27,307,003

ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT

Reconciliation of the

NET CHANGE IN FUND BALANCES - TOTAL GOVERNMENTAL FUNDS

with the

STATEMENT OF ACTIVITIES FOR THE YEAR ENDED JUNE 30, 2018

The schedule below reconciles the Net Changes in Fund Balances reported on the Governmental Funds Statement of Revenues, Expenditures and Changes in Fund Balance, which measures only changes in current assets and current liabilities on the modified accrual basis, with the Change in Net Position of Governmental Activities reported in the Statement of Activities, which is prepared on the full accrual basis.

NET CHANGE IN FUND BALANCES - TOTAL GOVERNMENTAL FUNDS

\$643,558

Amounts reported for governmental activities in the Statement of Activities are different because of the following:

CAPITAL ASSETS TRANSACTIONS

Governmental Funds report capital outlays as expenditures. However, in the Statement of Activities the cost of those assets is capitalized and allocated over their estimated useful lives and reported as depreciation expense.

144,685

NON-CURRENT ITEMS

The amounts below included in the Statement of Activities do not provide or (require) the use of current financial resources and therefore are not reported as revenue or expenditures in governmental funds (net change):

Compensated absences Pension expense, net of deferred inflows and outflows Salary and benefit expenses related to OPEB (27,949)

320,988 (32,225)

CHANGE IN NET POSITION OF GOVERNMENTAL ACTIVITIES

\$1,049,057

ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT GENERAL FUND

STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCE BUDGET AND ACTUAL FOR THE YEAR ENDED JUNE 30, 2018

	Original & Final		Variance with Final Budget Positive
	Budget	Actual	(Negative)
REVENUES			
Property taxes	\$1,823,586	\$2,054,129	\$230,543
Redevelopment distributions		236,382	236,382
Special assessments Governmental aid	1,899,117	2,026,453	127,336
(Homeowners Property Tax Relief, State Subvention)		16,220	16,220
Transfer from OPEB trust	193,009		(193,009)
Interest	8,000	25,505	17,505
Miscellaneous	5,000	264,661	259,661
Total Revenues	3,928,712	4,623,350	694,638
EXPENDITURES			
Salaries and fringe benefits	2,647,842	2,480,037	167,805
Materials, supplies and services	1,103,397	999,776	103,621
Capital outlay	295,000	499,979	(204,979)
Total Expenditures	4,046,239	3,979,792	66,447
EXCESS (DEFICIENCY) OF REVENUES			
OVER REVENUES	(\$117,527)	643,558	\$761,085
BEGINNING FUND BALANCE		\$6,413,511	
ENDING FUND BALANCE		\$7,057,069	

ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT FIDUCIARY ACTIVITIES

STATEMENT OF FIDUCIARY NET POSITION OTHER POST-EMPLOYMENT BENEFITS (OPEB) TRUST FUND JUNE 30, 2018

ASSETS	OPEB Trust Fund
Cash and cash equivalents (Note 3) Investments, at fair value (Note 3):	\$10,622
Equity mutual funds	2,487,397
Fixed income mutual funds	1,788,340
Total Assets	\$4,286,359
NET POSITION	
Net position held in trust for Other Post-Employment Benefits	\$4,286,359
Total net position	\$4,286,359

ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT OPEB TRUST FUND STATEMENT OF CHANGES IN

FIDUCIARY NET POSITION FOR THE YEAR ENDED JUNE 30, 2018

ADDITIONS Investment income: Interest and dividends Net increase in fair value investments Total additions	\$96,741 430,447 527,188
DEDUCTIONS Benefits Administrative expense Total deductions	178,460 2,769 181,229
NET CHANGE IN FUND BALANCE	345,959
BEGINNING FUND BALANCE	\$3,940,400
ENDING FUND BALANCE	\$4,286,359

NOTE 1 - GENERAL

The Alameda County Mosquito Abatement District (the District) is a special district established in 1930 and empowered to take all necessary and proper steps for the control of mosquitoes within the District's service area.

The District evaluated whether any other entity should be included in these basic financial statements. The basic, but not the only, criterion for including a governmental department, agency, institution, commission, public authority, or other governmental organization in a governmental unit's reporting entity for general purpose financial reports is the ability of the governmental unit's elected officials to exercise oversight responsibility over such agencies. Oversight responsibility implies that one governmental unit is dependent on another and that the dependent unit should be reported as part of the other. Oversight responsibility is derived from the governmental unit's power and includes, but is not limited to:

- Financial interdependency
- Selection of governing authority
- Designation of management
- Ability to significantly influence operations
- Accountability for fiscal matters

Based upon the above criteria, the District determined that it had no component units as of June 30, 2018, or during the fiscal year then ended.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Accounts and Records

The District maintains a cash receipts journal for recording fees collected at 23187 Connecticut Street, Hayward, CA 94545. The assessment of property, collection of taxes, disbursement of cash, and the maintenance of the general ledger for all funds are provided by the County of Alameda. Custodianship of the District's accounts and records is vested with the Auditor Controller of Alameda County (the County).

B. Accounting Principles

The District accounts for its financial transactions in accordance with the policies and procedures recommended by the State of California. The accounting policies of the District conform to U.S. generally accepted accounting principles as prescribed by the Governmental Accounting Standards Board (GASB) and the American Institute of Certified Public Accountants (AICPA).

1) Government-wide and Fund Financial Statements:

The Government-wide Financial Statements (the Statement of Net Position and the Statement of Activities) report on the District as a whole. The Statement of Activities demonstrates the degree to which the direct expenses of the District's functions are offset by program revenues.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Direct expenses are those that are clearly identifiable with the District's functions. Program revenues include charges for services. Other items not properly included among program revenues are reported instead as general revenues. The District's General Fund is presented as a separate financial statement (Balance Sheet and the Statement of Revenues, Expenditures and Changes in Fund Balance).

2) Measurement Focus, Basis of Accounting and Financial Statement Presentation:

Government-wide Financial Statements

The Statement of Net Position and the Statement of Activities are prepared using the *economic resources* measurement focus and the *accrual* basis of accounting. Revenues are recorded when earned and expenses are recorded when a liability is incurred regardless of the timing of the related cash flows. Grants and similar items are recognized as revenues as soon as all eligibility requirements imposed by the provider have been met.

Fund Financial Statements

Governmental fund financial statements are reported using the current financial resources measurement focus and the accrual basis of accounting. Revenues are recognized as soon as they are both measurable and available. Revenues are considered to be available when they are collectible within the current period or soon enough thereafter to pay liabilities of the current period. For this purpose, the District considers revenues to be available if they are collected within 60 days of the end of the current fiscal period. Expenditures generally are recorded when a liability is incurred, as under accrual accounting.

The District reports the following major governmental fund:

General Fund: This is the general operating fund of the District. It is used to account for all financial resources except those required to be accounted for in another fund. There are no other funds of the District.

Fiduciary Fund Types

Other Post Employment Benefit Trust (the Trust) is used to report resources that are required to be held in trust to accumulate resources for post employment benefit payments to qualified employees. These funds are not incorporated into the government wide financial statements.

The Trust financial statements are prepared using the economic resources measurement focus and the accrual basis of accounting. Cost of third party administrators, actuarial reports, audits and similar costs incurred exclusively for the Trust are paid from resources from the Trust. Routine administrative costs of administrating the benefit plans, accounting services and other costs are absorbed by the District.

Benefits: Benefit expense and benefits payable are recognized when payments for benefits of members are made by the employer.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

3) Use of Estimates:

The process of preparing the basic financial statements in conformity with U.S. generally accepted accounting principles requires the use of estimates and assumptions regarding certain types of assets, liabilities, revenues, and expenditures/ expenses. Such estimates primarily relate to unsettled transactions and events as of the date of the basic financial statements. Accordingly, upon settlement, actual results may differ from estimated amounts.

C. Budget and Budgetary Accounting

The District annually adopts a budget for its General Fund to be effective July 1 for the ensuing fiscal year. The District's Board may amend the budget by resolution during the fiscal year and approves all budgetary transfers. Expenditures were under appropriations by \$\\$.

D. Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The District categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The fair value hierarchy categorizes the inputs to valuation techniques used to measure fair value into three levels based on the extent to which inputs used in measuring fair value are observable in the market.

Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2 inputs are inputs - other than quoted prices included within level 1 - that are observable for an asset or liability, either directly or indirectly.

Level 3 inputs are unobservable inputs for an asset or liability.

If the fair value of an asset or liability is measured using inputs from more than one level of the fair value hierarchy, the measurement is considered to be based on the lowest priority level input that is significant to the entire measurement.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

E. Capital Assets

Capital assets are those purchased or acquired with an original cost of \$5,000 or more and are reported at historical cost or estimated historical cost. Contributed assets are reported at fair market value as of the date received. Additions, improvements, and other capital outlays that significantly extend the useful life of an asset are capitalized. The costs of normal maintenance and repairs that do not add to the value of the assets or materially extend the asset's lives are not capitalized, but are expensed as incurred.

Depreciation on all capital assets is computed using a straight-line basis over the following estimated useful lives:

Class	Estimated Useful Life in Years
Land	Not Depreciable
Structures and Improvements	5 - 39
Machinery and Equipment	5 - 7

F. Compensated Absences

All vacation pay is accrued when incurred. Employee compensated absences hours are capped at 400 hours. The District's accrued vacation was \$167,855 as of June 30, 2018.

G. Pensions, Pension Expenses and Deferred Outflows/Inflows of Resources Related to Pensions

For purposes of measuring the net pension liability and deferred outflows/inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Alameda County Mosquito Abatement District's California Public Employees' Retirement System (CalPERS) plans (Plans) and additions to/deductions from the Plans' fiduciary net position have been determined on the same basis as they are reported by CalPERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

H. OPEB Liabilities, OPEB Expenses and Deferred Outflows/Inflows of Resources Related to OPEB

For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the District's OPEB Plan and additions to/deductions from the OPEB Plan's fiduciary net position have been determined on the same basis as they are reported by PARS Trust. For this purpose, benefit payments are recognized when currently due and payable in accordance with the benefit terms. Investments are reported at fair value.

I. Fund Equity

The accompanying basic financial statements reflect certain changes that have been made with respect to the reporting of the components of fund balances for governmental funds. In previous years, fund balances for governmental funds were reported in accordance with previous standards that included components for reserved fund balance, unreserved fund balance, designated fund balance, and undesignated fund balance. Due to the implementation of GASB Statement No. 54, the components of the fund balances of governmental funds now reflect the component classifications described below. In the fund financial statements, governmental fund balances are reported in the following classifications:

Nonspendable fund balance includes amounts that are not in a spendable form, such as prepaid items or supplies inventories, or that are legally or contractually required to remain intact, such as principal endowments.

<u>Restricted</u> fund balance includes amounts that are subject to externally enforceable legal restrictions imposed by outside parties (i.e., creditors, grantors, contributors) or that are imposed by law through constitutional provisions or enabling legislation.

Committed fund balance includes amounts whose use is constrained by specific limitations that the government imposes upon itself, as determined by a formal action of the highest level of decision making authority. The Board of Trustees serves as the District's highest level of decision-making authority and has the authority to establish, modify or rescind a fund balance commitment via minutes action.

<u>Assigned</u> fund balance includes amounts intended to be used by the District for specific purposes, subject to change, as established either directly by the Board of Trustees or by management officials to whom assignment authority has been delegated by the Board of Trustees.

<u>Unassigned</u> fund balance is the residual classification that includes spendable amounts in the General Fund that are available for any purpose.

When expenditures are incurred for purposes for which both restricted and unrestricted (committed, assigned or unassigned) fund balances are available, the District specifies that restricted revenues will be applied first. When expenditures are incurred for purposes for which committed, assigned or unassigned fund balances are available, the District's policy is to apply committed fund balance first, then assigned fund balance, and finally unassigned fund balance.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

J. Net Position

GASB Statement No. 34 added the concept of Net Position. The Statement of Net Position reports the difference between the District's total assets and the District's total liabilities, including all the District's long-term assets and debt. The Statement of Net Position presents similar information to the old balance sheet format, but presents it in a way that focuses the reader on the composition of the District's net position, by subtracting total liabilities from total assets.

The Statement of Net Position breaks out net position as follows:

Restricted describes the portion of net position that is restricted as to use by the terms and conditions of agreements with outside parties, governmental regulations, laws, or other restrictions that the District cannot unilaterally alter.

Unrestricted describes the portion of net position that is not restricted from use.

Net investment in capital assets, describes the portion of net position that is represented by the current net book value of the District's capital assets, less the outstanding balance of any debt issued to finance these assets.

NOTE 3 – CASH AND INVESTMENTS

Cash and investments consisted of the following as of June 30, 2018:

Governmental Activities:	Carrying Value
Pooled cash and investments	\$4,045,657
California Local Agency Investment Fund	7,035
Cash with VCJPA	388,444
Cash in Bank of America	123,976
Camp	2,017,285
PARS	502,036
Bank of the West	54,179
Total cash and investments	\$7,138,612
Fiduciary Funds:	Carrying Value
Money market mutual funds	\$10,622
Equity mutual funds	2,487,397
Bond mutual funds	1,788,340
Total cash and investments	\$4,286,359

Investments are reported at fair value. The District adjusts the carrying value of its investments, if material, to reflect their fair value at the fiscal year end, and includes the effect of these adjustments in income for that fiscal year. Investments in equity securities, corporate bonds and issues of the U.S. Government are valued at the last reported sales price of the fiscal year end. International securities reflect current exchange rates in effect at the fiscal year end. Purchases and sales of securities are recorded on a trade date basis.

NOTE 3 – CASH AND INVESTMENTS (Continued)

A. Custodial Credit Risk - Deposits

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for deposits and investments is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party.

California Law requires banks and savings and loan associations to pledge government securities with a market value of 110% of the District's cash on deposit or first trust deed mortgage notes with a value of 150% of the deposit as collateral for these deposits. Under California Law, this collateral is held in the District's name and places the District ahead of general creditors of the institution.

B. Investments

The District's cash and investments with the County Treasurer are invested under policy guidelines established by the County. Credit risk information regarding the cash held by the Treasurer is included in the Comprehensive Annual Financial Report of the County of Alameda. The District has a formal investment policy for the District's OPEB Trust fiduciary fund discussed in section C below.

The credit risk regarding the investment in the Vector Control Joint Powers Agency (VCJPA) is included in the financial statements of the Vector Control Joint Powers Agency.

The District voluntarily participates in LAIF (Local Agency Investment Fund), regulated under Section 16429 of the State Government Code. LAIF allows local agencies such as the District to participate in a Pooled Money Investment Account managed by the State Treasurer Office and overseen by the Pooled Money Investment Board and the State Treasurer Investment Committee. A Local Agency Investment Advisory Board oversees LAIF. The fair value of the District's position in the pool is the same as the value of its pool shares. The total amount invested by all public agencies in LAIF, as of June 30, 2018 was approximately \$86.2 billion. The District had a contractual withdrawal value of \$7,048 in LAIF. At June 30, 2018, these investments matured in an average of 193 days.

The District voluntarily participates in CAMP (California Asset Management Trust). The Trust is organized and operated in a manner and in accordance with objectives and policies intended to preserve principal, provide liquidity so that Shareholders will have ready access to their pooled funds, provide a high level of current income consistent with preserving principal and maintaining liquidity, and place investments, document investment transactions, in respect to the investment of debt issuances, and account for funds in a manner that is in compliance with the arbitrage rebate and yield restrictions requirements as set forth in the Internal Revenue Code and related U.S. Treasury regulations. The Trust's Investment Advisor currently invests available cash in the Pool, in a limited list of investments authorized by California Government Code Section 53601. The fair market value of the District's position in the pool, as of June 30, 2018 was approximately \$10.5 million. At June 30, 2018, these investments matured in an average of 60 days. As of June 30, 2018, the investments had an ending balance of \$2,017,285.

NOTE 3 – CASH AND INVESTMENTS (Continued)

C. Investments of the Fiduciary-Type Activities

Permitted Deposits and Investments - The District's Board of Trustees has appointed the Trust Board to oversee policies and procedures related to the operation and administration of the Other Post Employment Benefit Trust (the Trust). The Trust's Investment Policy is authorized to make deposit/investments in insured commercial banks, savings and loan institutions, obligations of the U.S. Treasury and U.S. Agencies, money market mutual funds with portfolios of securities issued or guaranteed by the United States or agreement to repurchase these same obligations, and commercial paper rated A or higher by one of the three standard rating services. The Trust may also invest in certain non U.S. obligations, LAIF, mutual funds, real estate investment trusts and equity securities.

D. Custodial Credit Risk - Investments

Generally, credit risk is the risk that an issuer of an investment will not fulfill its obligations to the holder of the investment. The Trust's investment policy requires all securities to be held by a third party custodian designated by the Trust's Board. The investment policy also provides that this risk be mitigated by investing in investment grade securities and by diversifying the investment portfolio. As of June 30, 2018, no investments were exposed to custodial credit risk.

E. Concentration of Credit Risk

The Trust's investment policy requires diversification of the investment portfolio to minimize risk of loss resulting from over-concentration in a particular type of security, risk factor, issuer or maturity. As of June 30, 2018, 58% of the funds' assets were held in equity mutual funds and 42% in fixed income mutual funds.

F. Fair Value Hierarchy

The District categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure fair value of the assets. Level 1 inputs are quoted prices in an active market for identical assets; Level 2 inputs are significant other observable inputs; and Level 3 inputs are significant unobservable inputs.

NOTE 3 – CASH AND INVESTMENTS (Continued)

The following is a summary of the fair value hierarchy of the fair value of investments of the District as of June 30, 2018:

Governmental Activities:	Level 2	Total
Pooled cash and investments	\$4,045,657	\$4,045,657
Investments Measure at Amortized Cost:		
California Local Agency Investment Fund		7,048
CAMP	2,017,272	2,017,272
PARS	502,036	502,036
Note Rated:		
Cash with VCJPA		388,444
Cash in Bank of America		123,976
Cash in Bank of the West		54,179
Total cash and investments	\$6,564,965	\$7,138,612
Other Post-Employment Benefit Trust:	Level 2	Total
Equity mutual funds	\$2,487,397	\$2,487,397
Bond mutual funds	1,788,340	1,788,340
Investments Measure at Amortized Cost:		
Money market mutual funds		10,622
Total cash and investments	\$4,275,737	\$4,286,359

As of June 30, 2018 the District had \$4,045,648 of cash and investments pooled with the County that is classified in Level 2 of the fair value hierarchy. The fair value of the pooled investment fund is provided by the County Treasurer and is valued using quoted prices for identical instruments in markets that are not active. Fair value is defined as the quoted market value on the last trading day of the period. These prices are obtained from various pricing sources.

NOTE 3 – CASH AND INVESTMENTS (Continued)

G. Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. The Trust's investment policy provides that the exposure to interest rate risk be mitigated by purchasing a diverse combination of shorter term and longer term investments. Information about the sensitivity of the fair value of investments, held by the trustee, to market interest rate fluctuations is provided in the table below:

	Investment Maturity (In Years)			Investment
Governmental Activities:	Fair Value	Less than 1	1-5	Rating
Pooled cash and investments	\$4,045,657	\$2,103,742	\$1,941,915	AA
California Local Agency Investment Fund	7,035	7,035		Not rated
Cash with VCJPA	388,444	388,444		Not rated
Cash in Bank of America	123,976	123,976		Not rated
Bank of the West	54,179	54,179		
CAMP	2,017,285	2,017,285		
PARS	502,036	502,036		
Total cash and investments	\$7,138,612	\$5,196,697	\$1,941,915	
	Investment Mata	rity (In Years)	Investment	
Other Post-Employment Benefit Trust:	Fair Value	Less than 1	Rating	
Money market mutual funds	\$10,622	\$10,622	AA	
Equity mutual funds	2,487,397	2,487,397	Not rated	
Bond mutual funds	1,788,340	1,788,340	Not rated	
Total cash and investments	\$4,286,359	\$4,286,359		

NOTE 4 – CAPITAL ASSETS

An analysis of capital assets at June 30, 2018, is as follows:

	Balance June 30, 2017	Additions	Balance June 30, 2018	NBV June 30, 2018
Governmental activities				
Capital assets not being depreciated:				4.4.40.6
Land	\$61,406		\$61,406	\$61,406
Total capital assets not being depreciated	61,406	<u> </u>	61,406	\$61,406
Capital assets being depreciated:				
Structures and improvements	4,379,435	\$149,588	4,529,023	\$2,375,929
Machinery and equipment	1,278,766	274,309	1,553,075	311,471
Total capital assets being depreciated	5,658,201	423,897	6,082,098	\$2,687,400
Less accumulated depreciation for:				
Structures and improvements	(1,956,557)	(196,537)	(2,153,094)	
Machinery and equipment	(1,158,929)	(82,675)	(1,241,604)	
Total accumulated depreciation	(3,115,486)	(279,212)	(3,394,698)	
Total depreciable assets	2,542,715	\$144,685	2,687,400	
Total capital assets - net of depreciation	\$2,604,121		\$2,748,806	

NOTE 5 – ACCRUED VACATION

Accumulated unpaid employee vacation benefits are recognized as liabilities of the District. The amount of accumulated vacation totaled \$167,855 and \$139,906 at June 30, 2018 and 2017, respectively.

NOTE 6 - PROPERTY TAX LEVY, COLLECTIONS AND MAXIMUM RATES

The State of California (the State) Constitution Article XIIIA provides that the combined maximum property tax rate on any given property may not exceed 1% of its assessed value unless voters have approved an additional amount. Assessed value *is* calculated at 100% of market value as defined by Article XIIIA and may be increased by no more than 2% per year unless the property is sold or transferred. The State Legislature has determined the method of distribution of receipts from a 1% tax levy among counties, cities, school districts and other districts. Counties, cities, school districts and other districts may levy such additional tax as is necessary to provide for voter approved debt service.

The County of Alameda assesses properties, bills, and collects property taxes as follows:

	Secured	<u>Unsecured</u>
Valuation dates	March 1	March 1
Lien/levy dates	July 1	July 1
Due dates	50% on February 1	Upon receipt of billing
	50% on February 1	
Delinquent as of	December 10 (for November)	August 31

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April 10 (for February)

NOTE 6 - PROPERTY TAX LEVY, COLLECTIONS AND MAXIMUM RATES (Continued)

The term "unsecured" refers to taxes on property not secured by lines on real property.

Property taxes levied are recorded as revenue when received, in the fiscal year of levy, due to the adoption of the "alternate method" of property tax distribution, known as the Teeter Plan, by the District and the County. The Teeter Plan authorizes the auditor/controller of the County to allocate 100% of the secured property taxes billed, but not yet paid. The County remits tax monies to the District in three installments as follows:

50% remitted on December 15 40% remitted on April 15 10% remitted on June 30

NOTE 7 – SELF-INSURANCE AND JOINT POWERS AGENCY

The District participates with other districts in the Vector Control Joint Powers Agency ("VCJPA") The VCJPA was established under the provisions of California Government Code Section 6500 et seq.

The program covers the District's individual workers' compensation claims of \$500,000 for any one loss; excess insurance is obtained to cover individual claims at the statutory limit and \$5,000,000 for Employer's Liability. The District is self-insured for claims under \$500,000.

Annual premiums, based on the District's total payroll, are deposited in the District's separate Pooled Workers' Compensation Account (the Account) at the VCJPA. The Account is reduced by the District's share of all program claim settlements, excess insurance premiums and related administrative expenses. Three years after the end of each fiscal year, the VCJPA is to make a retroactive adjustment to refund/collect any remaining balance/deficit in the District's account. While the District's ultimate share of workers' compensation claim settlements and related administrative expenses is uncertain, the District's management does not believe it will have a material impact on the District's basic financial statements.

The District also participates in a pool for general liability coverage. The program covers comprehensive, general, errors and omissions, and automobile liability. The program covers individual claims for the first \$1,000,000 and purchases excess insurance from \$1,000,000 to \$10,000,000.

Annual premiums are deposited in the District's separate Liability Account at the VCJPA. The account is reduced by the District's share of all program claim settlement, excess insurance premiums and related administrative expenses. Five years after the end of each fiscal year, the VCJPA will make a retroactive adjustment to refund/ collect any remaining balance/ deficit in the District's account. While the District's ultimate share of liability claim settlement and related administrative expenses is uncertain, the District's management does not believe it will have a material impact on the District's basic financial statements. The \$388,444 in deposit with the VCJPA as of June 30, 2018, represents additional monies, under the District's control, which the District may use for future self-insurance related expenditures or any other purpose.

Deposits at the VCJPA bear interest based on the average daily balance maintained by each district. These deposits are managed by Bickmore Risk Services.

NOTE 8 - CALPERS PENSION PLAN

A. Plan Description

All qualified permanent and probationary employees are eligible to participate in the District's separate Miscellaneous Employee Pension Plans, cost-sharing multiple employer defined benefit pension plans administered by the California Public Employees' Retirement System (CalPERS). Benefit provisions under the Plans are established by State statute and District resolution. CalPERS issues publicly available reports that include a full description of the pension plans regarding benefit provisions, assumptions and membership information that can be found on the CalPERS website.

B. Benefits Provided

Benefits Provided - CalPERS provides service retirement and disability benefits, annual cost of living adjustments and death benefits to plan members, who must be public employees and beneficiaries. Benefits are based on years of credited service, equal to one year of full time employment. Members with five years of total service are eligible to retire at age 50 with statutorily reduced benefits. All members are eligible for non-duty disability benefits after 10 years of service. The death benefit is one of the following: the Basic Death Benefit, the 1957 Survivor Benefit, or the Optional Settlement 2W Death Benefit. The cost of living adjustments for each plan are applied as specified by the Public Employees' Retirement Law.

The Plan provisions and benefits in effect at June 30, 2018, are summarized as follows:

	Miscellaneous	
	Prior to	On or after
Hire date	January 1, 2013	January 1, 2013
Benefit formula	2% at 55	2% at 62
Benefit vesting schedule	5 years service	5 years service
Benefit payments	monthly for life	monthly for life
Retirement age	50	52
Monthly benefits, as a % of eligible compensation	1.426% - 2.418%	1.000% - 2.5000%
Required employee contribution rates	7.00%	6.50%
Required employer contribution rates	9.56%	6.91%

Contributions - Section 20814(c) of the California Public Employees' Retirement Law requires that the employer contribution rates for all public employers be determined on an annual *basis* by the actuary and shall be effective on the July 1 following notice of a change in the rate. Funding contributions for the Plans are determined annually on an actuarial basis as of June 30 by CalPERS. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. The District is required to contribute the difference between the actuarially determined rate and the contribution rate of employees.

NOTE 8 – CALPERS PENSION PLAN (Continued)

For the year ended June 30, 2018 the contributions recognized as part of pension expense for each Plan were as follows:

Contributions - employer Miscellaneous \$317,084

As of June 30, 2018, the District reported net pension liabilities for its proportionate shares of the net pension liability of the Miscellaneous Plans as follows:

Proportionate Share
of Net Pension Liability
Miscellaneous \$2,642,666

The District's net pension liability for the Plans is measured as the proportionate share of the net pension liability. The net pension liability of the Plans is measured as of June 30, 2017, and the total pension liability for each Plan used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2016 rolled forward to June 30, 2017 using standard update procedures. The District's proportion of the net pension liability was based on a projection of the District's long-term share of contributions to the pension plans relative to the projected contributions of all participating employers, actuarially determined. The District's proportionate share of the net pension liability for each Plan as of June 30, 2016 and 2017 was as follows:

	Miscellaneous
Proportion - June 30, 2016	0.073%
Proportion - June 30, 2017	0.076%
Change - Increase (Decrease)	0.003%

For the year ended June 30, 2018, the District recognized pension expense of (\$151,034). At June 30, 2018, the District reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows	Deferred Inflows
	of Resources	of Resources
Pension contributions subsequent to measurement date	\$317,084	
Differences between expected and actual experience	9,978	(\$2,286)
Changes of assumptions		(94,402)
Change in proportion and differences between employer		
contributions and proportionate share of contributions		(713,173)
Net difference between projected and actual earnings		
on pension plan investments	491,330	
Total	\$818,392	(\$809,861)

NOTE 8 - CALPERS PENSION PLAN (Continued)

The \$317,084 reported as deferred outflows of resources related to contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized as pension expense as follows:

Year Ended	Annual
June 30	Amortization
2018	(\$436,475)
2019	(180,950)
2020	181,612
2021	127,260
Thereafter	

Actuarial Assumptions – the total pension liabilities in the June 30, 2016 actuarial valuations were determined using the following actuarial assumptions.

	Miscellaneous
Valuation Date	June 30, 2016
Measurement Date	June 30, 2017
Actuarial Cost Method	Entry-Age Normal in accordance with
	the requirements of GASB Statement No. 68
Actuarial Assumptions:	
Discount Rate	7.15%
Inflation	2.75%
Salary Increases	Varies by Entry-Age and Service
Mortality Rate Table ¹	Derived using CalPers Membership Data for all Funds
Post Retirement Benefit Increase	Contract COLA up to 2.75% until Purchasing
	Power
	Protection Allowance Floor on Purchasing Power
	applies, 2.75% thereafter

⁽¹⁾ The mortality table used was developed based on CalPERS' specific data. The table includes

The underlying mortality assumptions and all other actuarial assumptions used in the June 30, 2016 valuation were based on the results of a January 2014 actuarial experience study for the period 1997 to 2011. Further details of the Experience Study can found on the CalPERS website.

²⁰ years of mortality improvements using Society of Actuaries Scale BB. For more details on this table, please refer to the 2014 experience study report.

NOTE 8 – CALPERS PENSION PLAN (Continued)

Change of Assumptions - GASB 68, paragraph 68 states that long long-term expected rate of return should be determined net of pension plan investment expense, but without reduction for pension plan administrative expense. The discount rate of 7.65 percent used for the June 30, 2016 measurement date was net of administrative expenses. The discount rate of 7.15 percent used for the June 30, 2017 measurement date is without reduction of pension plan administrative expense. All other assumptions for the June 30, 2016 measurement date were the same as those used for the June 30, 2017 measurement date.

Discount Rate - The discount rate used to measure the total pension liability was 7.15% for each Plan. To determine whether the municipal bond rate should be used in the calculation of a discount rate for each plan, CalPERS stress tested plans that would most likely result in a discount rate that would be different from the actuarially assumed discount rate. Based on the testing, none of the tested plans run out of assets. Therefore, the current 7.15 percent discount rate is adequate and the use of the municipal bond rate calculation is not necessary. The long term expected discount rate of 7.15 percent will be applied to all plans in the Public Employees Retirement Fund (PERF). The stress test results are presented in a detailed report that can be obtained from the CalPERS website.

The long-term expected rate of return on pension plan investments was determined using a buildingblock method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class.

In determining the long-term expected rate of return, CalPERS took into account both short-term and long-term market return expectations as well as the expected pension fund cash flows. Using historical returns on all the funds' asset classes, expected compound returns were calculated over the short-term (first 10 years) and the long-term (11-60 years) using a building-block approach. Using the expected nominal returns for both short-term and long-term, the present value of benefits was calculated for each fund. The expected rate of return was set by calculating the single equivalent expected return that arrived at the same present value of benefits for cash flows as the one calculated using both short-term and long term returns. The expected rate of return was then set equivalent to the single equivalent rate calculated above and rounded down to the nearest one quarter of one percent

The table below reflects the long-term expected real rate of return by asset class. The rate of return was calculated using the capital market assumptions applied to determine the discount rate and asset allocation. These rates of return are net of administrative expenses.

NOTE 8 - CALPERS PENSION PLAN (Continued)

Asset Class	New Strategic Allocation	Real Return Years 1 - 10(a)	Real Return Years 11+(b)
Global Equity	47.0%	4.90%	5.38%
Global Fixed Income	19.0%	0.80%	2.27%
Inflation Sensitive	6.0%	0.60%	1.39%
Private Equity	12.0%	6.60%	6.63%
Real Estate	11.0%	2.80%	5.21%
Infrastructure and Forestland	3.0%	3.90%	5.36%
Liquidity	2.0%	-0.40%	-0.90%
Total	100%		

- (a) An expected inflation of 2.5% used for this period.
- (b) An expected inflation of 3.0% used for this period.

Sensitivity of the Proportionate Share of the Net Pension lability to Changes in the Discount Rate - The following presents the District's proportionate share of the net pension liability for each Plan, calculated using the discount rate for each Plan, as well as what the District's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage point higher than the current rate:

	Miscellaneous
1% Decrease	6.15%
Net Pension Liability	\$4,238,495
Current Discount Rate	7.15%
Net Pension Liability	\$2,642,666
1% Increase	8.15%
Net Pension Liability	\$1,323,793

Pension Plan Fiduciary Net Position - Detailed information about each pension plan's fiduciary net position is available in the separately issued CalPERS financial reports.

NOTE 9 – POST-EMPLOYMENT BENEFITS OTHER THAN RETIREMENT

A. General Information about the District's Other Post Employment Benefit (OPEB) Plan

Plan Description. As authorized by the District's Board of Trustees, the District administers a single employer defined benefit health care plan. The defined benefit post-employment healthcare plan provides medical benefits to eligible District employees who retire from the District at age 50 or older, are eligible for a CalPERS pension, and have been employed by the District for at least 10 years. The District's OPEB Trust is shown as a fiduciary fund in this financial report.

Benefits Provided. The District provides health care for employees and dependents (and also for retirees and their dependents) in accordance with the California Public Employees Medical and Hospital Care Act (PEMHCA), more commonly referred to as PERS Health. Employees may choose one of five medical options: Blue Shield HMO, Kaiser HMO, PERSCare PPO, Blue Shield Net Value HMO, or PERSChoice PPO. The District has a cap on employer contributions set each year at 100% of the Kaiser one-party rate for the Bay Area/Sacramento region for individual coverage and 90% of the corresponding two-party rate for second and third tier coverages. Employees and retirees may choose a more expensive coverage but they must pay any premiums in excess of the cap. The District also pays for vision and dental for employees and retirees, in addition to the medical cap. There is a small group of retirees (pre-1980 retirees) who are reimbursed up to \$1,200 per year for dental coverage for the retiree and spouse (each). All others are covered by Delta Dental. The District also pays a 0.45% of premium administrative charge for all retirees.

Funding Policy. There is no statutory requirement for the District to prefund its OPEB obligation. The District has established a trust fund which is currently almost fully funded. The District currently pays for retiree healthcare benefits on a pay-as-you-go basis until the District trust is funded, which is in process. There are no employee contributions. For the fiscal year ending June 30, 2018, the District's plan paid approximately \$\frac{1}{2}\$ for retiree healthcare plan benefits.

NOTE 9 – POST-EMPLOYMENT BENEFITS OTHER THAN RETIREMENT (Continued)

Employees Covered by Benefit Terms. Membership in the plan consisted of the following at the measurement date of June 30, 2018:

Active employees	16
Inactive employees or beneficiaries currently	
receiving benefit payments	15
Total	31

B. Net OPEB Liability

Actuarial Methods and Assumptions. – The District's net OPEB liability was measured as of June 30, 2018 and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation dated July 1, 2017.

	Actuarial Assumptions
Valuation Date	July 01, 2017
Measurement Date	June 30, 2018
Actuarial Cost Method	Entry Age Normal Cost, level of pay
Actuarial Assumptions:	
Discount Rate	3.00%
Payroll Growth	3.00%
Investment Rate of Return	6.00%

Pre-retirement mortality rates were based on the RP-2014 Employee Mortality
Table for Males or Females, as appropriate, without projection. Postretirement mortality rates were based on the RP-2014 Health Annuitant
Mortality Table for Males or Females, as appropriate, without projection.

5.00% for 2018 and later years

Mortality Rate Medical Cost Trend Rate

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

		Target
Asset Class		Allocation
Mutual Funds - Equity		58.04%
Mutual Funds - Fixed Income		41.72%
Other		0.24%
	Total	100.00%

NOTE 9 – POST-EMPLOYMENT BENEFITS OTHER THAN RETIREMENT (Continued)

Rate of Return. For the year ended on the measurement date, the annual money-weighted rate of return on investments, net of investment expense, was 7.30%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts invested.

Discount Rate. The discount rate used to measure the total OPEB liability was 3.00%.

C. Changes in Net OPEB Liability

The changes in the net OPEB liability follows:

Increase (Decrease)		
Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability/(Asset) (a) - (b)
\$3,460,704	\$4,167,835	(\$707,131)
150,088		150,088
200,500		200,500
	63,129	(63,129)
	299,763	(299,763)
	(2,769)	2,769
(241,589)	(241,589)	
108,999	118,534	(9,535)
\$3,569,703	\$4,286,369	(\$716,666)
	Total OPEB Liability (a) \$3,460,704 150,088 200,500 (241,589) 108,999	Total OPEB Liability (a) (b) \$3,460,704 \$4,167,835 150,088 200,500 63,129 299,763 (2,769) (241,589) 108,999 118,534

D. Sensitivity of the Net OPEB Liability to Changes in the Discount Rate and Healthcare Cost Trend Rates

The following presents the net OPEB liability of the District, as well as what the District's net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (5.00%) or 1-percentage-point higher (7.00%) than the current discount rate:

Net OPEB Liability/(Asset)			
Discount Rate -1%	Discount Rate	Discount Rate +1%	
(5.00%)	(6.00%)	(7.00%)	
(\$231,428)	(\$716,666)	(\$1,114,602)	

NOTE 9 – POST-EMPLOYMENT BENEFITS OTHER THAN RETIREMENT (Continued)

The following presents the net OPEB liability of the District, as well as what the District's net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower (5.00% decreasing to 2.00%) or 1-percentage-point higher (7.00% decreasing to 6.00%) than the current healthcare cost trend rates:

1	Net OPEB Liability/(Asset)	
1% Decrease	Medical Cost	1% Increase
	Trend Rates	
(5.00% decreasing	(6.00% decreasing	(7.00% decreasing
to 4.00%)	to 5.00%)	to 6.00%)
(\$1,168,428)	(\$716,666)	(\$159,426)

E. OPEB Expense and Deferred Outflows/Inflows of Resources Related to OPEB

For the year ended June 30, 2018, the District recognized OPEB expense of \$32,225. At June 30, 2018, the District reported deferred outflows and inflows of resources related to OPEB from the following sources:

	Deferred Inflows of Resources
Net differences between projected and actual earnings on	
plan investments	(\$41,760)
Total	(\$41,760)

Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized as part of OPEB expense as follows:

Annual	
Amortization	
(\$10,440)	
(10,440)	
(10,440)	
(10,440)	

NOTE 10 - DEFERRED COMPENSATION PLAN

The District employees may defer a portion of their compensation under a District sponsored Deferred Compensation Plan (the Plan) created in accordance with Internal Revenue Code Section 457. Under this Plan, participants are not taxed on the deferred portion of the compensation until it is distributed to them; distributions may be made only at termination, retirement, death or in an emergency as defined by the Plan. A total of 10 employees' deferred compensation during the fiscal year ended June 30, 2018.

The laws governing the Plan assets require Plan assets to be held by a Trust for the exclusive benefits of Plan participants and their beneficiaries. Since the assets held under this Plan are not the District's property, are not managed by the District and are not subject to claims by general creditors of the District, they have been excluded from these financial statements.

NOTE 11 – NET POSITION RESTATEMENT

During the fiscal year 2017/18, the District implemented Governmental Accounting Standards Board Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions, as disclosed in Note 9. Accordingly, beginning net position was reduced by \$1,512,220.

SCHEDULE OF THE PLAN'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY AND RELATED RATIOS AS OF THE MEASUREMENT DATE

	Miscellaneous			
Measurement Date	6/30/2014	6/30/2015	6/30/2016	6/30/2017
Di J. Gallan S. Alas Niet Dannian I inhility				
Plan's proportion of the Net Pension Liability (Asset)	0.0309%	0.0780%	0.0735%	0.0761%
Plan's proportion share of the Net Pension				
Liability (Asset)	\$1,923,046	\$2,028,906	\$2,551,572	\$2,642,666
Plan's Covered Payroll	\$1,287,185	\$1,467,683	\$1,580,981	\$1,588,441
Plan's Proportionate Share of the Net				
Pension				
Liability/(Asset) as a Percentage of its				4 < < 0 = 0.1
Covered Payroll	149.40%	138.24%	161.39%	166.37%
Plan's Proportionate Share of the Fiduciary Net Position as a Percentage of the Plan's				
Total Pension Liability	83.0287%	78.2766%	78.9294%	77.7053%

^{*-} Fiscal year 2015 was the 1st year of implementation.

ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT

Cost-Sharing Multiple Employer Defined Pension Plan

Last 10 Years*

SCHEDULE OF CONTRIBUTIONS

	Miscellan	eous Plan		
	Fiscal Year 2015	Fiscal Year 2016	Fiscal Year 2017	Fiscal Year 2018
Actuarially determined contribution	\$152,526	\$205,340	\$136,053	\$317,084
Contributions in relation to the actuarially				
determined contributions	(152,526)	(205,340)	(136,053)	(317,084)
Contribution deficiency (excess)	\$0	\$0	\$0	\$0
Covered payroll	\$1,287,185	\$1,467,683	\$1,580,981	\$1,588,441
Contributions as a percentage of covered payroll	11.85%	13.99%	8.61%	19.96%
Notes to Schedule			6/0.0/0.01.5	C 100 1001 C
Valuation date:	6/30/2013	6/30/2014	6/30/2015	6/30/2016

Methods and assumptions used to determine contribution rates:

Actuarial cost method

Entry age

Amortization method

Level percentage of payroll, closed

Remaining amortization period

15 years

Asset valuation method

5-year smoothed market

Inflation

2.75%

(1)

Salary increases Investment rate of return

7.15% (2)

Mortality

Derived using CalPERS Membership Data

Post Retirement Benefit Increase

Contract COLA up to 2.75% until

Purchasing Power Protection

Allowance

Floor on Purchasing Power applies,

2.75% thereafter

⁽¹⁾ Depending on age, service and type of employment

⁽²⁾ Net of pension plan investment expenses, including inflation

^{*-} Fiscal year 2015 was the 1st year of implementation.

SCHEDULE OF CHANGES IN THE NET OPEB LIABILITY AND RELATED RATIOS

Single Employer Defined Benefit Health Care Plan Last 10 fiscal years*

Measurement Date	6/30/18
Total OPEB Liability	
Service Cost	\$150,088
Interest	200,500
Changes in benefit terms	
Differences between expected and actual experience	
Changes of assumptions	
Benefit payments	(241,589)
Net change in total OPEB liability	108,999
Total OPEB liability - beginning	3,460,704
Total OPEB liability - ending (a)	\$3,569,703
Plan fiduciary net position Contributions - employer Contributions - employee	\$63,129
Net investment income	299,763
Administrative expense	(2,769)
Benefit payments	(241,589)
Net change in plan fiduciary net position	118,534
Plan fiduciary net position - beginning	4,167,835
Plan fiduciary net position - ending (b)	\$4,286,369
• • • • • • • • • • • • • • • • • • • •	
Net OPEB liability - ending (a)-(b)	(\$716,666)
Plan fiduciary net position as a percentage of the total OPEB liability	120.08%
Covered-employee payroll	\$1,588,441
Net OPEB liability as a percentage of covered-employee payroll	-45.12%

^{*} Fiscal year 2018 was the first year of implementation.

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CONTRIBUTIONS Single Employer Defined Benefit Health Care Plan

Last 10 fiscal years*

Fiscal Year Ended June 30,	2018
Actuarially determined contribution Contributions in relation to the	\$113,347
actuarially determined contribution	(113,347)
Contribution deficiency (excess)	\$226,694
Covered-employee payroll	\$1,588,441
Contributions as a percentage of covered-employee payroll	-7.14%
Notes to Schedule Valuation date:	July 1, 2017
Methods and assumptions used to determine contribution ra	ates:
Valuation Date	July 01, 2017
Actuarial Assumptions: Discount Rate	3.00%
Inflation	3,00%
Payroll Growth Investment Rate of Return	6.00%
	Pre-retirement mortality rates were based on the RP-2014 Employee Mortality Table for Males or Females, as appropriate, without projection. Post-retirement mortality rates were based on the RP-2014 Health Annuitant

Mortality Rate

Medical Cost Trend Rate

Mortality Table for Males or Females, as appropriate, without projection.

5.00% for 2018 and later years

^{*} Fiscal year 2018 was the first year of implementation.

MEMORANDUM ON INTERNAL CONTROL

Board of Trustees Alameda County Mosquito Abatement District Hayward, California

In planning and performing our audit of the basic financial statements of the Alameda County Mosquito Abatement District (District), in accordance with auditing standards generally accepted in the United States of America, we considered the District's internal control over financial reporting (internal control) as a basis for designing our auditing procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control. Accordingly, we do not express an opinion on the effectiveness of the District's internal control.

Our consideration of internal control was for the limited purpose described in the preceding paragraph and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and, therefore, material weaknesses or significant deficiencies may exist and that were not identified. In addition, because of inherent limitations in internal control, including the possibility of management override of controls, misstatements due to error or fraud may occur and not be detected by such controls. However, as discussed below, we identified certain deficiencies in internal control that we consider to be significant deficiencies.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the District's financial statements will not be prevented, or detected and corrected on a timely basis. We did not identify any deficiencies in internal control that we consider to be material weaknesses.

A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. We consider the deficiencies in internal control included on the Schedule of Significant Deficiencies to be significant deficiencies.

Included in the Schedule of Other Matters are recommendations not meeting the above definition that we believe to be of potential benefit to the District.

This communication is intended solely for the information and use of management, Board of Trustees and others within the organization and is not intended to be and should not be used by anyone other than these specified parties.

Pleasant Hill, California DATE

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ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT SCHEDULE OF SIGNIFICANT DEFICIENCIES FOR THE YEAR ENDED JUNE 30, 2018

2018-01 Accurate Preparation of the District's Bank Reconciliation

Criteria: Bank reconciliation should be prepared accurately, and any unreconciled differences should addressed.

Condition: Per review of the June 30, 2018 bank reconciliation for the District's cash account held with Bank of the West, we noted an unreconciled difference of \$161,351. The bank reconciliation appeared to have been reviewed.

Cause: The District did not incorporate the ending balance of the cash account in the bank reconciliation which caused the unreconciled difference.

Effect: The potential of an inaccurate general ledger cash balance may occur.

Recommendation: The District should review the bank reconciliation for any unreconciled differences and ensure the general ledger for cash is presented accurately.

Management's Response:

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ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT SCHEDULE OF OTHER MATTERS FOR THE YEAR ENDED JUNE 30, 2018

2018-02 Upcoming Governmental Accounting Standards Board Pronouncements

EFFECTIVE FISCAL YEAR 2018/19:

GASB 83 - Certain Asset Retirement Obligations

This Statement addresses accounting and financial reporting for certain asset retirement obligations (AROs). An ARO is a legally enforceable liability associated with the retirement of a tangible capital asset. A government that has legal obligations to perform future asset retirement activities related to its tangible capital assets should recognize a liability based on the guidance in this Statement.

This Statement establishes criteria for determining the timing and pattern of recognition of a liability and a corresponding deferred outflow of resources for AROs. This Statement requires that recognition occur when the liability is both incurred and reasonably estimable. The determination of when the liability is incurred should be based on the occurrence of external laws, regulations, contracts, or court judgments, together with the occurrence of an internal event that obligates a government to perform asset retirement activities. Laws and regulations may require governments to take specific actions to retire certain tangible capital assets at the end of the useful lives of those capital assets, such as decommissioning nuclear reactors and dismantling and removing sewage treatment plants. Other obligations to retire tangible capital assets may arise from contracts or court judgments. Internal obligating events include the occurrence of contamination, placing into operation a tangible capital asset that is required to be retired, abandoning a tangible capital asset before it is placed into operation, or acquiring a tangible capital asset that has an existing ARO.

This Statement requires the measurement of an ARO to be based on the best estimate of the current value of outlays expected to be incurred. The best estimate should include probability weighting of all potential outcomes, when such information is available or can be obtained at reasonable cost. If probability weighting is not feasible at reasonable cost, the most likely amount should be used. This Statement requires that a deferred outflow of resources associated with an ARO be measured at the amount of the corresponding liability upon initial measurement.

This Statement requires the current value of a government's AROs to be adjusted for the effects of general inflation or deflation at least annually. In addition, it requires a government to evaluate all relevant factors at least annually to determine whether the effects of one or more of the factors are expected to significantly change the estimated asset retirement outlays. A government should remeasure an ARO only when the result of the evaluation indicates there is a significant change in the estimated outlays. The deferred outflows of resources should be reduced and recognized as outflows of resources (for example, as an expense) in a systematic and rational manner over the estimated useful life of the tangible capital asset.

GASB 83 - Certain Asset Retirement Obligations (Continued)

A government may have a minority share (less than 50 percent) of ownership interest in a jointly owned tangible capital asset in which a nongovernmental entity is the majority owner and reports its ARO in accordance with the guidance of another recognized accounting standards setter. Additionally, a government may have a minority share of ownership interest in a jointly owned tangible capital asset in which no joint owner has a majority ownership, and a nongovernmental joint owner that has operational responsibility for the jointly owned tangible capital asset reports the associated ARO in accordance with the guidance of another recognized accounting standards setter. In both situations, the government's minority share of an ARO should be reported using the measurement produced by the nongovernmental majority owner or the nongovernmental minority owner that has operational responsibility, without adjustment to conform to the liability measurement and recognition requirements of this Statement.

In some cases, governments are legally required to provide funding or other financial assurance for their performance of asset retirement activities. This Statement requires disclosure of how those funding and assurance requirements are being met by a government, as well as the amount of any assets restricted for payment of the government's AROs, if not separately displayed in the financial statements.

This Statement also requires disclosure of information about the nature of a government's AROs, the methods and assumptions used for the estimates of the liabilities, and the estimated remaining useful life of the associated tangible capital assets. If an ARO (or portions thereof) has been incurred by a government but is not yet recognized because it is not reasonably estimable, the government is required to disclose that fact and the reasons therefor. This Statement requires similar disclosures for a government's minority shares of AROs.

GASB 88 - Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements

The primary objective of this Statement is to improve the information that is disclosed in notes to government financial statements related to debt, including direct borrowings and direct placements. It also clarifies which liabilities governments should include when disclosing information related to debt.

This Statement defines debt for purposes of disclosure in notes to financial statements as a liability that arises from a contractual obligation to pay cash (or other assets that may be used in lieu of cash) in one or more payments to settle an amount that is fixed at the date the contractual obligation is established.

This Statement requires that additional essential information related to debt be disclosed in notes to financial statements, including unused lines of credit; assets pledged as collateral for the debt; and terms specified in debt agreements related to significant events of default with finance-related consequences, significant termination events with finance-related consequences, and significant subjective acceleration clauses.

For notes to financial statements related to debt, this Statement also requires that existing and additional information be provided for direct borrowings and direct placements of debt separately from other debt.

GASB 88 - <u>Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements</u> (<u>Continued</u>)

How the Changes in This Statement Improve Financial Reporting

The requirements of this Statement will improve financial reporting by providing users of financial statements with essential information that currently is not consistently provided. In addition, information about resources to liquidate debt and the risks associated with changes in terms associated with debt will be disclosed. As a result, users will have better information to understand the effects of debt on a government's future resource flows.

EFFECTIVE FISCAL YEAR 2019/20:

GASB 84 - Fiduciary Activities

The objective of this Statement is to improve guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported.

This Statement establishes criteria for identifying fiduciary activities of all state and local governments. The focus of the criteria generally is on (1) whether a government is controlling the assets of the fiduciary activity and (2) the beneficiaries with whom a fiduciary relationship exists. Separate criteria are included to identify fiduciary component units and postemployment benefit arrangements that are fiduciary activities.

An activity meeting the criteria should be reported in a fiduciary fund in the basic financial statements. Governments with activities meeting the criteria should present a statement of fiduciary net position and a statement of changes in fiduciary net position. An exception to that requirement is provided for a business-type activity that normally expects to hold custodial assets for three months or less.

This Statement describes four fiduciary funds that should be reported, if applicable: (1) pension (and other employee benefit) trust funds, (2) investment trust funds, (3) private-purpose trust funds, and (4) custodial funds. Custodial funds generally should report fiduciary activities that are not held in a trust or equivalent arrangement that meets specific criteria.

A fiduciary component unit, when reported in the fiduciary fund financial statements of a primary government, should combine its information with its component units that are fiduciary component units and aggregate that combined information with the primary government's fiduciary funds.

This Statement also provides for recognition of a liability to the beneficiaries in a fiduciary fund when an event has occurred that compels the government to disburse fiduciary resources. Events that compel a government to disburse fiduciary resources occur when a demand for the resources has been made or when no further action, approval, or condition is required to be taken or met by the beneficiary to release the assets.

GASB 90 - Majority Equity Interests—an amendment of GASB Statements No. 14 and No. 61)

The primary objectives of this Statement are to improve the consistency and comparability of reporting a government's majority equity interest in a legally separate organization and to improve the relevance of financial statement information for certain component units. It defines a majority equity interest and specifies that a majority equity interest in a legally separate organization should be reported as an investment if a government's holding of the equity interest meets the definition of an investment. A majority equity interest that meets the definition of an investment should be measured using the equity method, unless it is held by a special-purpose government engaged only in fiduciary activities, a fiduciary fund, or an endowment (including permanent and term endowments) or permanent fund. Those governments and funds should measure the majority equity interest at fair value.

For all other holdings of a majority equity interest in a legally separate organization, a government should report the legally separate organization as a component unit, and the government or fund that holds the equity interest should report an asset related to the majority equity interest using the equity method. This Statement establishes that ownership of a majority equity interest in a legally separate organization results in the government being financially accountable for the legally separate organization and, therefore, the government should report that organization as a component unit.

This Statement also requires that a component unit in which a government has a 100 percent equity interest account for its assets, deferred outflows of resources, liabilities, and deferred inflows of resources at acquisition value at the date the government acquired a 100 percent equity interest in the component unit. Transactions presented in flows statements of the component unit in that circumstance should include only transactions that occurred subsequent to the acquisition.

The requirements of this Statement are effective for reporting periods beginning after December 15, 2018. Earlier application is encouraged. The requirements should be applied retroactively, except for the provisions related to (1) reporting a majority equity interest in a component unit and (2) reporting a component unit if the government acquires a 100 percent equity interest. Those provisions should be applied on a prospective basis.

EFFECTIVE FISCAL YEAR 2020/21:

GASB 87 – Leases

The objective of this Statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases by governments. This Statement increases the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities.

GASB 87 – Leases (Continued)

A lease is defined as a contract that conveys control of the right to use another entity's nonfinancial asset (the underlying asset) as specified in the contract for a period of time in an exchange or exchange-like transaction. Examples of nonfinancial assets include buildings, land, vehicles, and equipment. Any contract that meets this definition should be accounted for under the leases guidance, unless specifically excluded in this Statement.

GASB 89 - Accounting for Interest Cost Incurred before the End of a Construction Period

The objectives of this Statement are (1) to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and (2) to simplify accounting for interest cost incurred before the end of a construction period.

This Statement establishes accounting requirements for interest cost incurred before the end of a construction period. Such interest cost includes all interest that previously was accounted for in accordance with the requirements of paragraphs 5–22 of Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements, which are superseded by this Statement. This Statement requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. As a result, interest cost incurred before the end of a construction period will not be included in the historical cost of a capital asset reported in a business-type activity or enterprise fund.

This Statement also reiterates that in financial statements prepared using the current financial resources measurement focus, interest cost incurred before the end of a construction period should be recognized as an expenditure on a basis consistent with governmental fund accounting principles.

ALAMEDA COUNTY MOSQUITO ABATEMENT DISTRICT STATUS OF PRIOR YEAR SIGNIFICANT DEFICIENCIES FOR THE YEAR ENDED JUNE 30, 2018

2017-01 Property Tax Journal Entry

Criteria: Property tax revenue should be recorded via journal entry throughout the fiscal year.

Condition: During our review of the financial statements, it came to our attention that some of the property tax activity was not booked in the District's general ledger.

Cause: The District missed booking this transaction due to key staff turnover.

Effect: The journal entry to record the property tax was over \$4 million and was booked after the end of the fiscal year.

Recommendation: The District should record the property during the fiscal year under audit.

Current Status: This item was corrected in fiscal year 2017/2018, however, property tax was recorded in the District's general ledger under one account and not allocated to the appropriate account based on property tax revenue type.

12/28/18

REQUIRED COMMUNICATIONS

To the Board of Trustees of The Alameda County Mosquito Abatement District Hayward, California

We have audited the basic financial statements of the Alameda County Mosquito Abatement District (District) for the year ended June 30, 2018. Professional standards require that we communicate to you the following information related to our audit under generally accepted auditing standards.

Significant Audit Findings

Accounting Policies

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by the District are described in Note 2 to the financial statements. No new accounting policies were adopted and the application of existing policies was not changed during the year, except as follows:

GASB 75 – <u>Accounting and Financial Reporting for Postemployment Benefits Other Than</u> Pensions

In June 2015, GASB issued Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions. Statement 75 establishes new accounting and financial reporting requirements for governments whose employees are provided with OPEB, as well as for certain non-employer governments that have a legal obligation to provide financial support for OPEB provided to the employees of other entities.

This Statement also includes requirements to address financial reporting for assets accumulated for purposes of providing defined benefit OPEB through OPEB plans that are not administered through trusts that meet the specified criteria.

The pronouncement became effective, and as disclosed in Note 9 and 11 to the financial statements and required a prior period restatement for the cumulative effect on the financial statements.

Unusual Transactions, Controversial or Emerging Areas

We noted no transactions entered into by District during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Estimates

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's current judgments. Those judgments are normally based on knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimates affecting the District's financial statements are depreciation, claims liability and actuarial estimates for the District's pension related deferred outflows and inflows of resources, net pension liability and other post-employment benefits.

The value of the assets, liability and assumptions used to determine annual required contributions for other post-employment benefits is determined by an actuary study provided to the District. The value of the District's deferred outflows and inflows of resources and collective net pension liability was obtained from an actuarial valuation.

Management's estimate of depreciation is based on the estimated useful lives of the capital assets, and its estimate of claims is based on the District Attorney's estimates of current and potential litigation, as well as actuary studies provided for the District as of June 30, 2018. We evaluated the key factors and assumptions used to develop the depreciation expense and claims liability and reviewed the current actuary study and determined that they are reasonable in relation to the basic financial statements taken as a whole.

Disclosures

The financial statement disclosures are neutral, consistent, and clear.

Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. Management has corrected all such misstatements. In addition, none of the misstatements detected as a result of audit procedures and corrected by management were material, either individually or in the aggregate, to each opinion unit's financial statements taken as a whole.

Professional standards require us to accumulate all known and likely uncorrected misstatements identified during the audit, other than those that are trivial, and communicate them to the appropriate level of management. We have no such misstatements to report to the Board of Trustees.

Disagreements with Management

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations

We have requested certain representations from management that are included in a management representation letter dated DATE.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to the governmental unit's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the governmental unit's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Other Information Accompanying the Financial Statements

With respect to the required supplementary information accompanying the financial statements, we applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We did not express an opinion nor provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

This information is intended solely for the use of the Board of Trustees and management and is not intended to be, and should not be, used by anyone other than these specified parties.

Pleasant Hill, California DATE