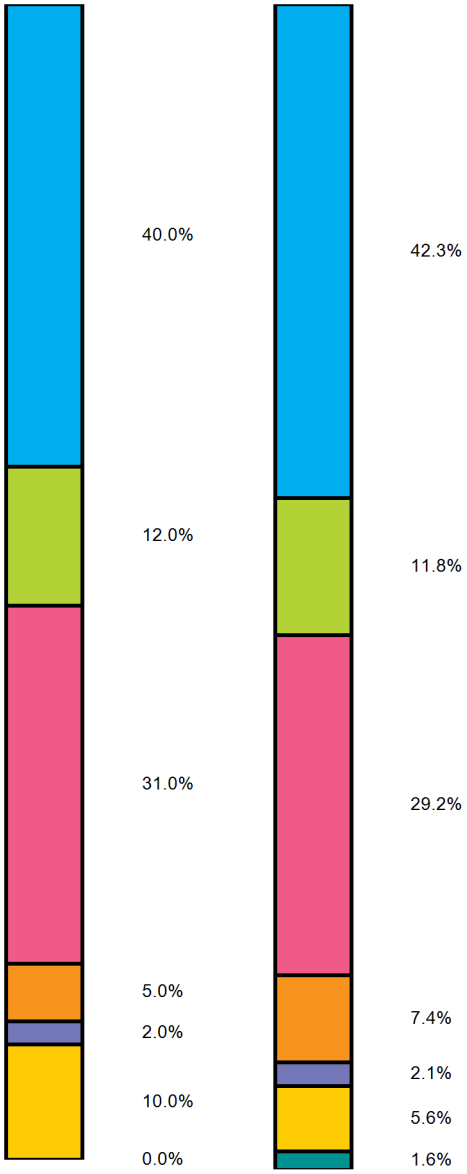
MEKETA
INVESTMENT GROUP

Oakland Police and Fire Retirement System

October 31, 2020

October Flash Report

OPFRS Total Plan As of October 31, 2020

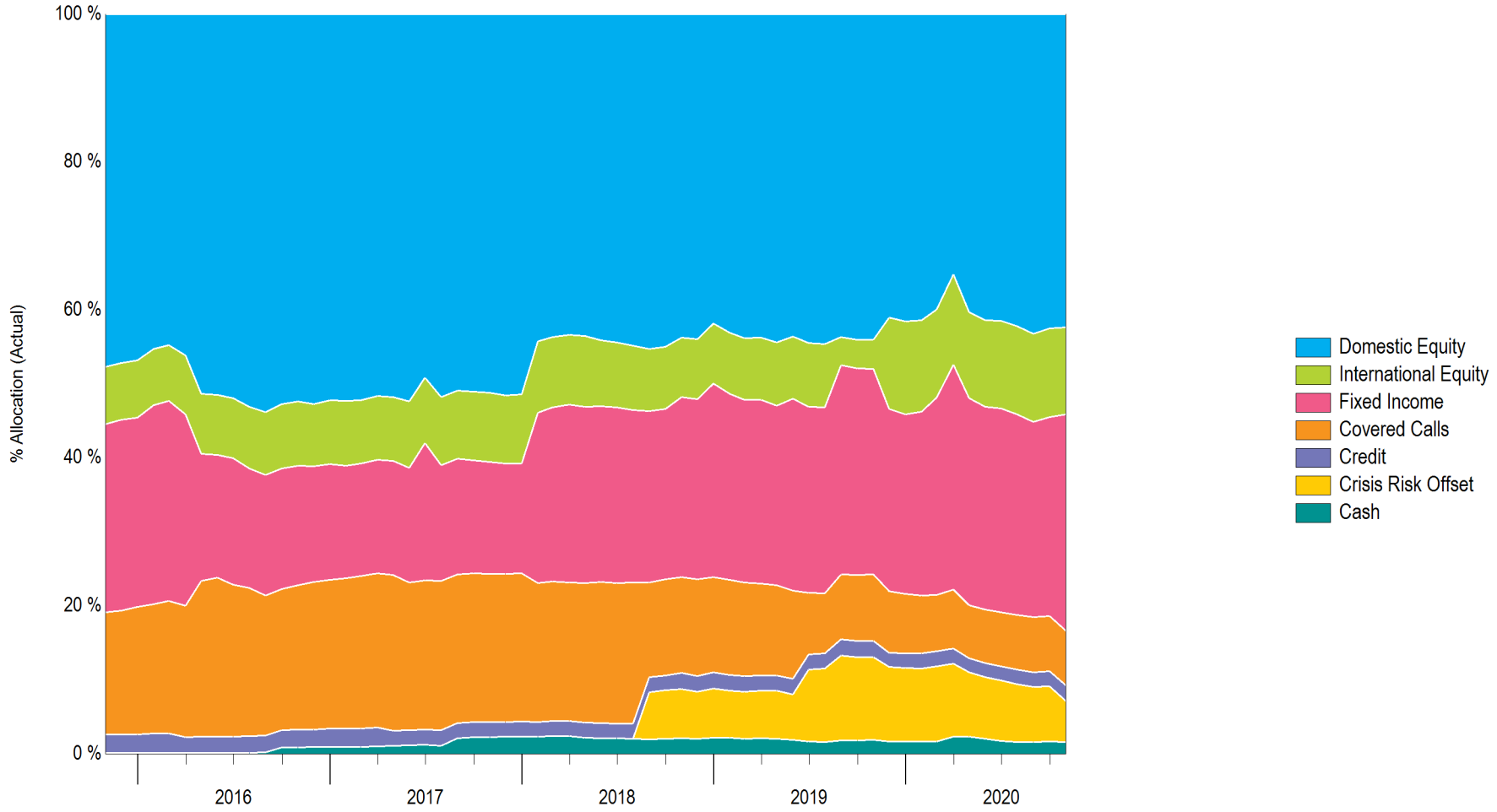


Allocation vs. Targets and Policy

	Current Balance	Current Allocation	Policy	Difference	Within IPS Range?
Domestic Equity	$166,273,796	42.3%	40.0%	2.3%	Yes
International Equity	$46,334,303	11.8%	12.0%	-0.2%	Yes
Fixed Income	$114,726,790	29.2%	31.0%	-1.8%	Yes
Covered Calls	$29,254,974	7.4%	5.0%	2.4%	Yes
Credit	$8,148,225	2.1%	2.0%	0.1%	Yes
Crisis Risk Offset	$21,909,584	5.6%	10.0%	-4.4%	Yes
Cash	$6,215,673	1.6%	0.0%	1.6%	Yes
Total	**$392,863,345**	**100.0%**	**100.0%**		

OPFRS Total Plan As of October 31, 2020

Asset Allocation History
5 Years Ending October 31, 2020



OPFRS Total Plan As of October 31, 2020

Asset Class Performance Summary

	Market Value ($)	% of Portfolio	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
OPFRS Total Plan	**392,863,345**	**100.0**	**-1.5**	**3.6**	**-1.1**	**2.6**	**5.5**	**7.6**	**7.8**	**6.7**	**Dec-88**
OPFRS Policy Benchmark			*-1.7*	*3.4*	*1.6*	*5.1*	*5.9*	*7.7*	*7.5*	*8.1*	*Dec-88*
Domestic Equity	**166,273,796**	**42.3**	**-1.6**	**6.6**	**1.1**	**7.8**	**8.8**	**10.9**	**12.5**	**8.5**	**Jun-97**
Russell 3000 (Blend)			*-2.2*	*6.9*	*3.1*	*10.1*	*10.0*	*11.5*	*12.8*	*8.7*	*Jun-97*
International Equity	**46,334,303**	**11.8**	**-3.4**	**2.0**	**-9.8**	**-4.5**	**0.0**	**4.8**	**4.6**	**4.9**	**Jan-98**
MSCI ACWI ex US (Blend)			*-2.1*	*4.1*	*-7.1*	*-2.2*	*0.3*	*4.8*	*3.9*	*5.2*	*Jan-98*
Fixed Income	**114,726,790**	**29.2**	**-0.6**	**1.3**	**5.9**	**6.1**	**5.3**	**4.7**	**4.1**	**5.6**	**Dec-93**
Blmbg BC Universal (Blend)			*-0.4*	*0.6*	*5.8*	*6.0*	*5.0*	*4.3*	*3.8*	*5.4*	*Dec-93*
Credit	**8,148,225**	**2.1**	**1.5**	**9.3**	**2.0**	**6.0**	**2.8**	**6.1**	**--**	**5.2**	**Feb-15**
BBgBarc US High Yield TR			*0.5*	*5.1*	*1.1*	*3.5*	*4.2*	*6.3*	*6.3*	*5.4*	*Feb-15*
Covered Calls	**29,254,974**	**7.4**	**-2.1**	**4.8**	**-1.1**	**2.8**	**5.7**	**8.1**	**--**	**7.5**	**Apr-14**
CBOE S&P 500 BuyWrite USD			*-3.6*	*2.6*	*-12.9*	*-10.2*	*-0.4*	*3.1*	*5.5*	*3.7*	*Apr-14*
Crisis Risk Offset	**21,909,584**	**5.6**	**-3.1**	**-4.3**	**-23.6**	**-23.2**	**--**	**--**	**--**	**-9.5**	**Aug-18**
SG Multi Alternative Risk Premia Index			*-2.0*	*-2.7*	*-14.9*	*-14.6*	*--*	*--*	*--*	*-6.2*	*Aug-18*
Cash	**6,215,673**	**1.6**	**0.0**	**0.0**	**1.0**	**1.3**	**1.9**	**1.4**	**--**	**0.7**	**Mar-11**
FTSE T-Bill 3 Months TR			*0.0*	*0.0*	*0.6*	*0.9*	*1.6*	*1.2*	*0.6*	*0.6*	*Mar-11*

OPFRS Total Plan As of October 31, 2020

Trailing Net Performance

	Market Value ($)	% of Portfolio	% of Sector	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
OPFRS Total Plan	**392,863,345**	**100.0**	**--**	**-1.5**	**3.6**	**-1.1**	**2.6**	**5.5**	**7.6**	**7.8**	**6.7**	**Dec-88**
OPFRS Policy Benchmark				*-1.7*	*3.4*	*1.6*	*5.1*	*5.9*	*7.7*	*7.5*	*8.1*	*Dec-88*
Domestic Equity	**166,273,796**	**42.3**	**42.3**	**-1.6**	**6.6**	**1.1**	**7.8**	**8.8**	**10.9**	**12.5**	**8.5**	**Jun-97**
Russell 3000 (Blend)				*-2.2*	*6.9*	*3.1*	*10.1*	*10.0*	*11.5*	*12.8*	*8.7*	*Jun-97*
Northern Trust Russell 1000	94,435,050	24.0	56.8	-2.4	6.8	3.8	10.8	10.6	11.7	13.0	13.5	Jun-10
Russell 1000				*-2.4*	*6.8*	*3.8*	*10.9*	*10.6*	*11.8*	*13.0*	*13.5*	*Jun-10*
EARNEST Partners	34,715,107	8.8	20.9	0.2	8.6	2.7	9.2	10.4	13.1	13.3	9.8	Apr-06
Russell MidCap				*0.6*	*8.1*	*-1.7*	*4.1*	*6.8*	*9.0*	*11.4*	*8.2*	*Apr-06*
Vanguard Russell 2000 Value	6,956,383	1.8	4.2	3.6	6.5	-18.4	-13.7	--	--	--	-9.6	Aug-19
Russell 2000 Value				*3.6*	*6.2*	*-18.7*	*-13.9*	*-4.1*	*3.7*	*7.1*	*-10.1*	*Aug-19*
Rice Hall James	12,337,228	3.1	7.4	-0.5	5.2	2.5	9.5	6.2	--	--	7.8	Jul-17
Russell 2000 Growth				*0.8*	*8.0*	*4.7*	*13.4*	*7.9*	*10.4*	*12.0*	*9.5*	*Jul-17*
iShares Edge MSCI Min Vol	17,830,028	4.5	10.7	-3.2	2.2	--	--	--	--	--	15.3	Apr-20
MSCI USA Minimum Volatility GR USD				*-3.4*	*2.1*	*-4.5*	*-1.4*	*8.6*	*10.4*	*12.7*	*15.3*	*Apr-20*
International Equity	**46,334,303**	**11.8**	**11.8**	**-3.4**	**2.0**	**-9.8**	**-4.5**	**0.0**	**4.8**	**4.6**	**4.9**	**Jan-98**
MSCI ACWI ex US (Blend)				*-2.1*	*4.1*	*-7.1*	*-2.2*	*0.3*	*4.8*	*3.9*	*5.2*	*Jan-98*
Vanguard Developed Markets ETF	13,636,839	3.5	29.4	-3.5	2.3	-8.9	-4.5	--	--	--	1.5	Sep-19
FTSE Developed All Cap Ex US TR USD				*-3.7*	*2.1*	*-9.3*	*-4.8*	*-0.7*	*2.9*	*2.3*	*1.3*	*Sep-19*
SGA ACWI ex-U.S. Equity	32,383,217	8.2	69.9	-3.5	2.2	-8.9	--	--	--	--	-8.4	Dec-19
MSCI ACWI ex USA Gross				*-2.1*	*4.1*	*-7.1*	*-2.2*	*0.3*	*4.8*	*3.9*	*-3.1*	*Dec-19*

International equity performance inclusive of residual cash in Fisher and Hansberger transition accounts.

OPFRS Total Plan As of October 31, 2020

	Market Value ($)	% of Portfolio	% of Sector	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Fixed Income	**114,726,790**	**29.2**	**29.2**	**-0.6**	**1.3**	**5.9**	**6.1**	**5.3**	**4.7**	**4.1**	**5.6**	**Dec-93**
Blmbg BC Universal (Blend)				*-0.4*	*0.6*	*5.8*	*6.0*	*5.0*	*4.3*	*3.8*	*5.4*	*Dec-93*
Ramirez	77,743,446	19.8	67.8	-0.7	1.2	4.7	4.6	5.0	--	--	5.1	Jan-17
BBgBarc US Aggregate TR				*-0.4*	*0.2*	*6.3*	*6.2*	*5.1*	*4.1*	*3.6*	*4.8*	*Jan-17*
Reams	29,347,745	7.5	25.6	-0.2	1.8	17.8	17.5	9.1	6.5	5.3	6.1	Feb-98
Blmbg BC Universal (Blend)				*-0.4*	*0.6*	*5.8*	*6.0*	*5.0*	*4.3*	*3.8*	*5.1*	*Feb-98*
iShares Core US Aggregate Bond ETF	7,635,555	1.9	6.7									
Credit	**8,148,225**	**2.1**	**2.1**	**1.5**	**9.3**	**2.0**	**6.0**	**2.8**	**6.1**	**--**	**5.2**	**Feb-15**
BBgBarc US High Yield TR				*0.5*	*5.1*	*1.1*	*3.5*	*4.2*	*6.3*	*6.3*	*5.4*	*Feb-15*
DDJ Capital	8,148,225	2.1	100.0	1.5	9.3	2.0	6.0	2.8	6.1	--	5.2	Feb-15
ICE BofA High Yield Master TR				*0.5*	*5.2*	*0.2*	*2.5*	*3.9*	*6.2*	*6.1*	*5.2*	*Feb-15*
Covered Calls	**29,254,974**	**7.4**	**7.4**	**-2.1**	**4.8**	**-1.1**	**2.8**	**5.7**	**8.1**	**--**	**7.5**	**Apr-14**
CBOE S&P 500 BuyWrite USD				*-3.6*	*2.6*	*-12.9*	*-10.2*	*-0.4*	*3.1*	*5.5*	*3.7*	*Apr-14*
Parametric BXM	13,432,883	3.4	45.9	-1.9	4.2	-3.7	-1.0	3.3	6.1	--	5.8	Apr-14
CBOE S&P 500 BuyWrite USD				*-3.6*	*2.6*	*-12.9*	*-10.2*	*-0.4*	*3.1*	*5.5*	*3.7*	*Apr-14*
Parametric DeltaShift	15,822,091	4.0	54.1	-2.4	5.3	1.3	6.5	8.0	9.9	--	9.7	Apr-14
CBOE S&P 500 BuyWrite USD				*-3.6*	*2.6*	*-12.9*	*-10.2*	*-0.4*	*3.1*	*5.5*	*3.7*	*Apr-14*
Crisis Risk Offset	**21,909,584**	**5.6**	**5.6**	**-3.1**	**-4.3**	**-23.6**	**-23.2**	**--**	**--**	**--**	**-9.5**	**Aug-18**
SG Multi Alternative Risk Premia Index				*-2.0*	*-2.7*	*-14.9*	*-14.6*	*--*	*--*	*--*	*-6.2*	*Aug-18*
Vanguard Long-Term Treasury ETF	21,909,584	5.6	100.0	-3.3	-3.3	17.0	13.2	--	--	--	15.4	Jul-19
BBgBarc US Govt Long TR				*-3.0*	*-2.8*	*17.5*	*13.7*	*10.7*	*7.6*	*7.2*	*15.8*	*Jul-19*
Cash	**6,215,673**	**1.6**	**1.6**	**0.0**	**0.0**	**1.0**	**1.3**	**1.9**	**1.4**	**--**	**0.7**	**Mar-11**
FTSE T-Bill 3 Months TR				*0.0*	*0.0*	*0.6*	*0.9*	*1.6*	*1.2*	*0.6*	*0.6*	*Mar-11*
Cash	224,673	0.1	3.6	0.0	0.3	1.5	1.8	2.1	1.5	--	0.8	Mar-11
FTSE T-Bill 3 Months TR				*0.0*	*0.0*	*0.6*	*0.9*	*1.6*	*1.2*	*0.6*	*0.6*	*Mar-11*
Cash - Treasury	5,991,000	1.5	96.4									

iShares Core US Aggregate Bond ETF funded 10/28/2020. Performance will be shown after the first full month of performance.

OPFRS Total Plan As of October 31, 2020

Cash Flow Summary Month to Date	Beginning Market Value	Net Cash Flow	Net Investment Change	Ending Market Value
Cash	$213,670	$11,003	$0	$224,673
Cash - Treasury	$6,291,000	-$300,000	$0	$5,991,000
DDJ Capital	$8,028,648	$0	$119,577	$8,148,225
EARNEST Partners	$34,661,855	$0	$53,252	$34,715,107
Fisher Transition	$71,466	-$2,600	-$357	$68,509
Hansberger Transition	$206,936	$0	$38,802	$245,738
iShares Core US Aggregate Bond ETF	$0	$7,635,555	$0	$7,635,555
iShares Edge MSCI Min Vol	$18,419,148	$0	-$589,120	$17,830,028
Northern Trust Russell 1000	$97,755,168	-$1,000,000	-$2,320,118	$94,435,050
Parametric BXM	$13,692,936	$0	-$260,053	$13,432,883
Parametric DeltaShift	$16,203,027	$0	-$380,936	$15,822,091
Parametric Systematic Alternative Risk Premia	$15,284,520	-$15,271,118	-$13,402	--
Ramirez	$78,306,337	$0	-$562,890	$77,743,446
Reams	$29,394,894	$0	-$47,149	$29,347,745
Reams Low Duration	$44	$0	$0	$44
Rice Hall James	$12,400,423	$0	-$63,195	$12,337,228
Securities Lending Northern Trust	$0	-$8,404	$8,404	$0
SGA ACWI ex-U.S. Equity	$33,541,668	$0	-$1,158,451	$32,383,217
Vanguard Developed Markets ETF	$14,122,361	$0	-$485,522	$13,636,839
Vanguard Long-Term Treasury ETF	$14,747,360	$7,635,555	-$473,331	$21,909,584
Vanguard Russell 2000 Value	$6,725,783	$0	$230,599	$6,956,383
Total	**$400,067,242**	**-$1,300,009**	**-$5,903,888**	**$392,863,345**

OPFRS Total Plan As of October 31, 2020

Benchmark History
As of October 31, 2020

Total Plan x Securities Lending x Reams LD Exception Comp		
1/1/2019	Present	40% Russell 3000 / 12% MSCI ACWI ex USA Gross / 33% BBgBarc US Universal TR / 5% CBOE BXM / 6.7% SG Multi Alternative Risk Premia Index / 3.3% BBgBarc US Treasury Long TR
5/1/2016	12/31/2018	48% Russell 3000 / 12% MSCI ACWI ex USA Gross / 20% BBgBarc US Universal TR / 20% CBOE BXM
10/1/2015	4/30/2016	43% Russell 3000 / 12% MSCI ACWI ex USA Gross / 20% BBgBarc US Universal TR / 15% CBOE BXM / 10% CPI - All Urban Consumers (unadjusted) +3%
1/1/2014	9/30/2015	48% Russell 3000 / 12% MSCI ACWI ex USA Gross / 20% BBgBarc US Universal TR / 10% CBOE BXM / 10% CPI - All Urban Consumers (unadjusted) +3%
3/1/2013	12/31/2013	40% Russell 3000 / 10% MSCI ACWI ex USA Gross / 17% BBgBarc US Universal TR / 33% ICE BofA 3M US Treasury TR USD
8/1/2012	2/28/2013	20% Russell 3000 / 7% MSCI ACWI ex USA Gross / 18% BBgBarc US Universal TR / 55% ICE BofA 3M US Treasury TR USD
10/1/2007	7/31/2012	53% Russell 3000 / 17% MSCI ACWI ex USA Gross / 30% BBgBarc US Universal TR
4/1/2006	9/30/2007	35% Russell 3000 / 15% MSCI ACWI ex USA Gross / 50% BBgBarc US Universal TR
1/1/2005	3/31/2006	35% Russell 3000 / 15% MSCI ACWI ex USA Gross / 50% BBgBarc US Aggregate TR
4/1/1998	12/31/2004	50% BBgBarc US Aggregate TR / 10% Russell 1000 / 20% Russell 1000 Value / 5% Russell MidCap / 15% MSCI EAFE
9/1/1988	3/31/1998	40% S&P 500 / 55% BBgBarc US Aggregate TR / 5% FTSE T-Bill 3 Months TR

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