MEKETA
INVESTMENT GROUP

Oakland Police and Fire Retirement System

November 30, 2020

Cash Flow Report

Asset Class/ Manager Liquidity as of October 31, 2020

Asset Class	Fund	Tier
Domestic Equity	Northern Trust	1
Domestic Equity	iShares MSCI Min Vol ETF	3
Domestic Equity	EARNEST Partners	3
Domestic Equity	Vanguard Russell 2000 Value ETF	3
Domestic Equity	Rice Hall James	3
International Equity	Vanguard Developed ETF	3
International Equity	SGA MSCI ACWI ex-US	3
Covered Calls	Parametric	2
Crisis Risk Offset	Long Duration ETF	3
Domestic Fixed Income	Reams	2
Domestic Fixed Income	Ramirez	2
Domestic Fixed Income	iShares Core US Agg Bond ETF	3
Credit	DDJ	2
Cash	Cash	1

Description of Liquidity Tiers

Tier	Description	$ Exposure (millions)	in Months
1	Public, Scheduled Withdrawal Allowances	100.7	16.8
2	Public, Accommodating of Withdrawals	144.5	24.1
3	Public, Must Plan Withdrawals	147.4	24.6
4	Closely Held	0.0	-
Total		**392.5**	

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Oakland Police and Fire Retirement System

Cash Flow Report

	PFRS Asset Allocation Oct 31st Market Values)*				Actual Cash flows For Oct - Dec Benefits Payable the 1st of each month		Suggested Cash flows For Jan - March 2021 Benefits Payable the 1st of each month	
	Market Value ($mm)	Market Value (%)	Target (%)	$ Variance *(from basic target)*	Inflow ($mm)	Outflow ($mm)	Inflow ($mm)	Outflow ($mm)
Northern Trust	94.4	24.1%	20.0%	15,925,239		(3.0)		(3.0)
iShares MSCI Min Vol ETF	17.8	4.5%	6.0%	(5,722,915)				
EARNEST Partners	34.7	8.8%	8.0%	3,311,183				
Vanguard Russell 2000 Value ETF	7.0	1.8%	3.0%	(4,820,089)				
Rice Hall James	12.3	3.1%	3.0%	560,756				
Total Domestic Equity	**166.3**	**42.4%**	**40.0%**	**9,254,174**				
Vanguard Developed ETF	13.6	3.5%	3.6%	(494,927)				
SGA MSCI ACWI ex-US	32.4	8.2%	8.4%	(590,904)				
Total International Equity	**46.0**	**11.7%**	**12.0%**	**(1,085,830)**				
Total Public Equity	**212.3**	**54.1%**	**52.0%**	**8,168,344**				
Parametric	29.3	7.5%	5.0%	9,627,521				
Total Covered Calls	**29.3**	**7.5%**	**5.0%**	**9,627,521**				
Long Duration ETF	21.9	5.6%	3.3%	8,824,629				
TBD Risk Premia Manager			6.7%	(26,169,675)				
Total Crisis Risk Offset	**21.9**	**5.6%**	**10.0%**	**(17,345,047)**				
Reams	29.3	7.5%	12.0%	(17,758,141)				
DDJ	8.1	2.1%	2.0%	297,244				
Ramirez	77.7	19.8%	19.0%	3,159,126				
iShares Core US Agg Bond ETF	7.6	1.9%		7,635,555				
Total Public Fixed	**122.9**	**31.3%**	**33.0%**	**(6,666,217)**				
Cash	6.2	1.6%	0.0%	6,215,673	10.90	(10.90)	10.90	(10.90)
Total Stable	**129.1**	**32.9%**	**33.0%**	**(450,544)**				
Total Portfolio	**392.5**	**100.0%**	**100.0%**	**---**	***10.90***	***(13.90)***	***10.90***	***(13.90)***

October 31st Market Values by Portfolio Segment

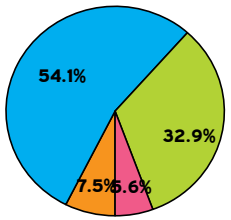
Portfolio Segment	MV ($mm)
Total Domestic Equity	166.3
Total International Equity	46.0
Total Public Equity	212.3
Total Covered Calls	29.3
Total Crisis Risk Offset	21.9
Total Public Fixed	122.9
Total Stable	129.1
Total Portfolio	**392.5**

* Estimated based on PFRS Oct 31, 2020 Northern Trust statement.

Suggested Cash Withdrawals

Manager	Amount
Cash in Treasury	$10.9 million
NT R1000	$3.00 million

Projected Equity to Fixed Allocation (MV) As of 10/31/20



- **Total Covered Calls**
- **Total Public Equity**
- **Total Stable**
- **Total CRO**

$ difference in MV of Public Equity from 52% allocation:

$8.2 million

Projected OPFRS Asset Allocation[1,2]

	Est Mkt Value ($mm)	Est Mkt Value (%)	Target (%)	Projected % Variance *(from target)*	Projected $ Variance *(from target)*
Northern Trust	88.4	22.9	20.0	2.9	11,125,239
iShares MSCI Min Vol ETF	17.8	4.6	6.0	-1.4	(5,362,915)
EARNEST Partners	34.7	9.0	8.0	1.0	3,791,183
Vanguard Russell 2000 Value ETF	7.0	1.8	3.0	-1.2	(4,640,089)
Rice Hall James	12.3	3.2	3.0	0.2	740,756
Total Domestic Equity	**160.3**	**41.5**	**40.0**	**1.5**	**5,654,174**
Vanguard Developed ETF	13.6	3.5	3.6	-0.1	(278,927)
SGA MSCI ACWI ex-US	32.4	8.4	8.4	0.0	(86,904)
Total International Equity	**46.0**	**11.9**	**12.0**	**-0.1**	**(365,830)**
Total Public Equity	**206.3**	**53.4**	**52.0**	**1.4**	**5,288,344**
Parametric	29.3	7.6	5.0	2.6	9,927,521
Total Covered Calls	**29.3**	**7.6**	**5.0**	**2.6**	**9,927,521**
Long Duration ETF	21.9	5.7	3.3	2.3	9,024,628
TBD Risk Premia Manager	0.0	0.0	6.7	-6.7	(25,769,679)
Total Crisis Risk Offset	**21.9**	**5.7**	**10.0**	**-4.3**	**(16,745,051)**
Reams	29.3	7.6	12.0	-4.4	(17,038,141)
DDJ	8.1	2.1	2.0	0.1	417,244
Ramirez	77.7	20.1	19.0	1.1	4,299,126
iShares Core US Agg Bond ETF	7.6	2.0		2.0	7,635,555
Total Public Fixed	**122.9**	**31.8**	**33.0**	**-1.2**	**(4,686,217)**
Cash	6.2	1.6	0.0	1.6	6,215,673
Total Stable	**129.1**	**33.4**	**33.0**	**0.4**	**1,529,456**
Total Portfolio	**386.5**	**100.0**	**100.0**		

[1] Report reflects change in asset allocation from October 31 values listed by Northern Trust, and beneficiary payments estimated at $13.9 million on a quarterly basis per OPFRS. Report reflects quarterly City contributions of $10.9 million. Current City of Oakland quarterly contribution amount is based on FY 2020/2021 actuarial annual required contribution of $43.65 million.

[2] As of October 31st, 2020, the projected equity portfolio represents 53.4% of the Total Portfolio ($5.3 million more than the target allocation of 52%).