





RETIREMENT BOARD CALENDAR SHEET Retirement Board Meeting of January 11, 2017

To: Retirement Board

Through: Jay Huish 
Executive Director

William J. Coaker, Jr. – CFA, MBA 
Chief Investment Officer

From: Joe Bates
Security Analyst

Date: January 11, 2017

Re: Chief Investment Officer's Report – Plan Value

Best Available as of December 31, 2016

	<u>Value</u> ⁽¹⁾ (000)	<u>MTD</u> (%)	<u>QTD</u> (%)	<u>YTD</u> (%)	<u>FYTD</u> (%)
San Francisco Empl. Ret. Sys.	20,987,740	1.15	0.97	7.46	4.75
Total Global Equity	9,721,546	1.85	1.07	8.06	7.44
<i>US Equity</i>	4,873,959	1.67	3.56	11.33	9.32
<i>Intl Equity</i>	4,333,620	2.05	-1.82	4.21	5.39
<i>Global Equity</i>	513,966	1.95	2.17	10.11	6.83
Total Fixed Income	4,641,938	0.60	-1.53	5.35	0.30
Total Absolute Return	503,278	0.00	1.31		
Total Private Equity	2,972,371	0.26	2.79	7.94	4.95
Total Real Assets	2,696,513	0.81	3.53	10.96	4.43
Total Cash (Inv+Ded) Ex Sec Lending	452,094	0.07	0.29	0.68	0.43
Total Cash (Inv+Ded) Inc Sec Lending		0.21	0.57	1.79	0.85

Notes:

⁽¹⁾ Valuations are preliminary and are reported gross of fees. The reported returns are based on prior month-end values that have been audited and adjusted by our Custody Bank since the last report.

**SFERS Asset Allocation
December 31, 2016**

(In \$ Million)	Section 1 - Current Month										Section 2 - Projected (2-Month Period)				
	11/30/16	Cash	Cash	Market	12/31/16	12/31/16	Asset Allocation			Compli-	Re-	Net	2/28/17	2/28/17	Compli-
	<u>Beg. Bal.</u>	<u>In</u>	<u>Out</u>	<u>Change</u> ⁽¹⁾	<u>End. Bal.</u>	<u>Allocation</u>	<u>Target</u>	<u>Min</u>	<u>Max</u>	<u>ance</u>	<u>Bal'g</u>	<u>Cash</u>	<u>Proj'd Bal</u>	<u>Allocation</u>	<u>ance</u>
	[a]	[b]	[c]	[d]	[e]						[f]	[g]	[h] = [e]+[f]+[g]		
Growth/Capital Appreciation															
Global Equity (A)	9,876.3	150.0	(567.2)	262.5	9,721.5	46.5%	40%	40%	54%	Yes		154.9	9,876.4	47.6%	Yes
Private Equity (B)	2,929.8	92.4	(88.2)	38.4	2,972.4	14.2%	18%	10%	20%	Yes		48.2	3,020.5	14.6%	Yes
Total Growth/Capital Appreciation (A) + (B)	12,806.1	242.4	(655.4)	300.9	12,693.9	60.8%	63%	53%	73%	Yes		203.0	12,896.9	62.2%	Yes
Total Real Assets/Inflation Hedge															
Real Assets	2,554.9	86.8	(33.4)	88.2	2,696.5	12.9%	17%	9%	15%	Yes		36.3	2,732.8	13.2%	Yes
Total Absolute Return															
Absolute Return	250.3	250.0	0.0	3.0	503.3	2.4%	5%	0%	5%	Yes		0.0	503.3	2.4%	Yes
Capital Preservation/Risk Reduction															
Fixed Income (C)	4,783.7	311.9	(462.3)	8.7	4,641.9	22.2%	20%	20%	30%	Yes		(146.2)	4,495.7	21.7%	Yes
Investment Cash (D)	179.1	1,148.4	(973.1)	0.0	354.4	1.7%	0%	0%	1%	No	(150.0)	(93.2)	111.2	0.5%	Yes
Dedicated Cash -Benefits	96.2	85.5	(84.0)	0.0	97.7						150.0	(176.0)	71.7		
			Benefit Pymt												
Total Capital Preservation/Risk Reduction (C) + (D)	4,962.7	1,460.3	(1,435.4)	8.7	4,996.3	23.9%	20%	20%	30%	Yes	(150.0)	(239.4)	4,607.0	22.2%	Yes
Total Portfolio	20,670.1	2,125.0	(2,208.2)	400.8	20,987.7						0.0	(176.0)	20,811.7		
Monthly MV % Change					1.5%										
Total Investment Portfolio (excl Ded Cash)	20,574.0			400.8	20,890.0	100.0%	100%				(150.0)	0.0	20,740.0	100.0%	
Monthly MV % Change					1.5%										

Cash In = Interportfolio In; Cash Out = Interportfolio Out.

Beginning and Ending Asset Balances are based on 'Entry Dates'.

Asset Allocation is calculated based on Total Portfolio assets minus Dedicated Cash

⁽¹⁾Market Change includes income received except for Inv and Ded Cash accounts.

Estimated Unfunded Commitments as of Current Month End:

PE : \$2,610.4

RA : \$1,967.2

FI : \$397.7

Total : \$4,975.3

RE Bridge Loan : \$30.0

SFERS Asset Allocation - with Sub Asset Classes
December 31, 2016

	Section 1 - Current Month										Section 2 - Projected (2-Month Period)				
	(In \$ Million)										Re-	Net	2/28/17	02/28/17	Compli-
	11/30/16	Cash	Cash	Mkt	12/31/16	12/31/16	Asset Allocation			Compli-	Bal'g	Cash	Proj'd Bal	Allocation	ance
Begin. Bal.	In	Out	Change	End. Bal.	Allocation	Target	Min	Max	ance	[f]	[g]	[h] = [e] + [f] + [g]			
[a]	[b]	[c]	[d]	[e]											
Growth/Capital Appreciation															
Global Equity (A)	9,876.3	150.0	(567.2)	262.5	9,721.5	46.5%	40%	40%	54%	Yes	0.0	154.9	9,576.4	46.9%	Yes
US Large Cap Core:	1,281.1		(133.2)	25.5	1,173.4	12.1%	16%	10%	22%	Yes			1,173.4	12.3%	Yes
Enhanced S&P: QMA	749.3			12.3	761.5	7.8%	5%	0%	7%	No			761.5	8.0%	No
Passive: MSCI-US ex Fossil Fuels	107.9		(0.3)	2.0	109.7	1.1%							109.7	1.1%	
US Large Cap Growth:	{ 467.0 }			{ (0.5) }	{ 466.4 }	{ 4.8% }	{ 9% }	{ 6% }	{ 12% }	Yes			{ 466.4 }	{ 4.9% }	{ 8.8% }
Sands	{ 382.9 }			{ (5.2) }	{ 377.7 }	{ 3.9% }							{ 377.7 }	{ 3.9% }	Yes
US Large Cap Value:	1,061.9			26.2	1,088.1	11.2%	9%	6%	12%	Yes			1,088.1	11.4%	Yes
Passive: BlackRock															
US Small Cap:	{ 119.5 }			{ 2.4 }	{ 121.8 }	{ 1.3% }	{ 6% }	{ 4% }	{ 8% }	Yes			{ 121.8 }	{ 1.3% }	
Core: Bivium	{ 242.1 }		(50.0)	{ 4.4 }	{ 196.5 }	{ 2.0% }							{ 196.5 }	{ 2.1% }	Yes
Growth: NT Russell 2000 Gth Fd	{ 347.3 }		(75.0)	{ 87.9 }	{ 360.2 }	{ 3.7% }							{ 360.2 }	{ 3.8% }	
Value: DFA															
US Convertibles:	{ 211.2 }			{ 2.3 }	{ 213.5 }	{ 2.2% }	{ 3% }	{ 0% }	{ 5% }	Yes			{ 213.5 }	{ 2.2% }	Yes
Zazove	{ 60.2 }		(55.0)	{ (0.1) }	{ 5.1 }	{ 0.1% }					(5.1)		{ 0.0 }	{ 0.0% }	Yes
International Core:	{ 658.1 }			{ 18.0 }	{ 676.1 }	{ 7.0% }	{ 14% }	{ 9% }	{ 19% }	Yes			{ 676.1 }	{ 7.1% }	
AQR	{ 226.6 }			{ 3.4 }	{ 230.0 }	{ 2.4% }							{ 230.0 }	{ 2.4% }	Yes
Cap Guardian	{ 252.0 }			{ 8.6 }	{ 260.6 }	{ 2.7% }							{ 260.6 }	{ 2.7% }	
NT EAFE Passive															
International Growth:	521.8			12.5	534.3	5.5%	5%	3%	7%	Yes			534.3	5.6%	Yes
William Blair															
International Value:	{ 484.3 }			{ 19.0 }	{ 503.3 }	{ 5.2% }	{ 11% }	{ 7% }	{ 15% }	Yes			{ 503.3 }	{ 5.3% }	Yes
LSV	{ 482.3 }			{ 13.6 }	{ 495.9 }	{ 5.1% }							{ 495.9 }	{ 5.2% }	Yes
Causeway															
International Small Cap:	{ 436.2 }			{ 10.6 }	{ 446.9 }	{ 4.6% }	{ 6% }	{ 4% }	{ 8% }	Yes			{ 446.9 }	{ 4.7% }	Yes
DFA	{ 332.2 }		(40.0)	{ 8.4 }	{ 300.6 }	{ 3.1% }					(60.0)		{ 240.6 }	{ 2.5% }	Yes
Pyramis															
Emerging Mkts.:	{ 259.1 }			{ 3.6 }	{ 262.7 }	{ 2.7% }	{ 11% }	{ 7% }	{ 15% }	Yes			{ 262.7 }	{ 2.7% }	
Mondrian	{ 120.1 }			{ (0.0) }	{ 120.1 }	{ 1.2% }					(80.0)		{ 120.1 }	{ 1.3% }	{ 8.4% }
Wellington	{ 107.0 }		(103.7)	{ (3.3) }	{ 0.0 }	{ 0.0% }							{ 0.0 }	{ 0.0% }	No
Capital Intl (EMGF)	{ 0.0 }	150.0		{ 0.0 }	{ 150.0 }	{ 1.5% }							{ 150.0 }	{ 1.6% }	
Himalaya Capital	{ 160.4 }			{ 0.9 }	{ 161.3 }	{ 1.7% }							{ 161.3 }	{ 1.7% }	
DFA Small Cap	{ 295.5 }		(110.0)	{ 0.2 }	{ 185.8 }	{ 1.9% }							{ 185.8 }	{ 1.9% }	
DFA Core															
Global Equity	504.3			9.7	514.0	5.3%	5%	0%	7%	Yes			514.0	5.4%	Yes
Arrowstreet Capital															
Opportunistic Strategies:	{ 1.0 }			{ (0.0) }	{ 1.0 }	{ 0.0% }	{ 0% }	{ 0% }	{ 10% }	Yes			{ 1.0 }	{ 0.0% }	Yes
Ashmore GSSF III	{ 3.7 }			{ 0.0 }	{ 3.7 }	{ 0.0% }							{ 3.7 }	{ 0.0% }	Yes
Ashmore GSSF V															
Monthly MV % Change for Intl Equity					-1.6%	100.0%	100%							100.0%	
Private Equity (B)	2,929.8	92.4	(88.2)	38.4	2,972.4	14.2%	18%	10%	20%	Yes	0.0	48.2	3,020.5	14.8%	Yes
Monthly MV % Change for Private Equity					1.5%										
Total Growth/Capital Appreciation (A) + (B)	12,806.1	242.4	(655.4)	300.9	12,693.9	60.8%	63%	53%	73%	Yes	0.0	203.0	12,596.9	61.6%	Yes
Monthly MV % Change					-0.9%										

SFERS Asset Allocation - with Sub Asset Classes (Cont'd)
December 31, 2016

	Section 1 - Current Month										Section 2 - Projected (2-Month Period)						
	11/30/16	Cash		Cash	Mkt	12/31/16	12/31/16	Asset Allocation			Compl-	Re-	Net	02/28/17	02/28/17	Compli-	
	Begin. Bal.	In	Out	Change	End. Bal.	Allocation	Target	Min	Max	ance	Bal'g	Cash	Proj'd Bal	Allocation	ance		
(In \$ Million)	[a]	+	[b]	+	[c]	+	[d]	=	[e]								
	[a]	+	[b]	+	[c]	+	[d]	=	[e]								
Total Real Assets/Inflation Hedge																	
Real Assets	<u>2,554.9</u>		<u>86.8</u>		<u>(33.4)</u>		<u>88.2</u>		<u>2,696.5</u>		<u>12.9%</u>	<u>17%</u>	<u>9%</u>	<u>15%</u>		<u>Yes</u>	
Global-Blackrock EPRA NAREI Index	156.4						1.4		157.8		5.9%	10%	8%	12%		No	
Monthly MV % Change for Total Real Assets									5.5%								
Total Absolute Return																	
Absolute Return	<u>250.3</u>		<u>250.0</u>		<u>0.0</u>		<u>3.0</u>		<u>503.3</u>		<u>2.4%</u>	<u>5%</u>	<u>0%</u>	<u>5%</u>		<u>Yes</u>	
SF Absolute Return Investors A	250.3		250.0				3.0		503.3		100.0%					Yes	
Monthly MV % Change for Total Absolute Return									101.1%								
Capital Preservation/Risk Reduction																	
Fixed Income (C)	<u>4,783.7</u>		<u>311.9</u>		<u>(462.3)</u>		<u>8.7</u>		<u>4,641.9</u>		<u>22.2%</u>	<u>20%</u>	<u>20%</u>	<u>30%</u>		<u>Yes</u>	
Passive Index:																	
BC US Debt Index Fund	927.8						1.3		604.1		13.0%	3%	0%	20%		Yes	
1-3 Year Treasury	309.3		300.0				0.6		609.9		13.1%					Yes	
Core US Bonds:																	
Internal Fixed	115.2						(114.8)		0.0		0.0%	10%	0%	20%		Yes	
Core Plus:																	
{ AFL-CIO }	{ 230.6 }						(0.5)		{ 225.7 }		{ 4.9% }	{ 33.6% }	{ 56% }	{ 45% }	{ 70% }		No
{ Baird }	{ 725.7 }						(4.5)		{ 724.0 }		{ 15.6% }						No
{ IR&M }	{ 609.6 }						(1.7)		{ 610.3 }		{ 13.1% }						No
Commercial Mortgages:																	
Prima	431.6						(9.2)		422.4		9.1%	8%	6%	14%		Yes	
High Yield/Bank Loan:																	
{ Oaktree HY }	{ 258.4 }						5.5		{ 263.9 }		{ 5.7% }						Yes
{ Bain Capital Credit Bank Loans }	{ 163.1 }						0.8		{ 163.9 }		{ 3.5% }						Yes
High Yield CMBS:																	
Pyramis	209.2						1.2		210.4		4.5%	5%	3%	10%		Yes	
Emerging Market Debt:																	
{ GMO }	{ 307.8 }						(16.2)		{ 297.2 }		{ 6.4% }						Yes
{ PIMCO }	{ 160.1 }						3.3		{ 163.4 }		{ 3.5% }						Yes
Opportunistic Fixed Income Portfolio	335.2		11.9				(5.8)		346.6		7.5%	0%	0%	10%		Yes	
Monthly MV % Change for Fixed Income									-3.0%		100%						
Investment Cash (D)	<u>179.1</u>		<u>1,148.4</u>		<u>(973.1)</u>		<u>0.0</u>		<u>354.4</u>		<u>1.7%</u>	<u>0%</u>	<u>0%</u>	<u>1%</u>		<u>No</u>	
Dedicated Cash - Benefits	96.2		85.5				(84.0)		97.7								Yes
							Benefit Pymi										
Total Capital Preservation/Risk Reduction (C) + (D)	<u>4,962.7</u>		<u>1,460.3</u>		<u>(1,435.4)</u>		<u>8.7</u>		<u>4,996.3</u>		<u>23.9%</u>	<u>20%</u>	<u>20%</u>	<u>30%</u>		<u>Yes</u>	
Monthly MV % Change									0.7%								
Total Portfolio	<u>20,670.1</u>		<u>2,125.0</u>		<u>(2,208.2)</u>		<u>400.8</u>		<u>20,987.7</u>								
Monthly MV % Change									1.5%								
Total Investment Portfolio (excl Ded Cash)	<u>20,574.0</u>						<u>400.8</u>		<u>20,890.0</u>		<u>100.0%</u>	<u>100%</u>					
Monthly MV % Change									1.5%								
	<u>0.0</u>		<u>(176.0)</u>		<u>20,511.7</u>												
	<u>(150.0)</u>		<u>0.0</u>		<u>20,440.0</u>												

San Francisco City and County Employees' Retirement System
Cash Activities and Projections
As of December 31, 2016
Investment Cash Account (In \$ Million)

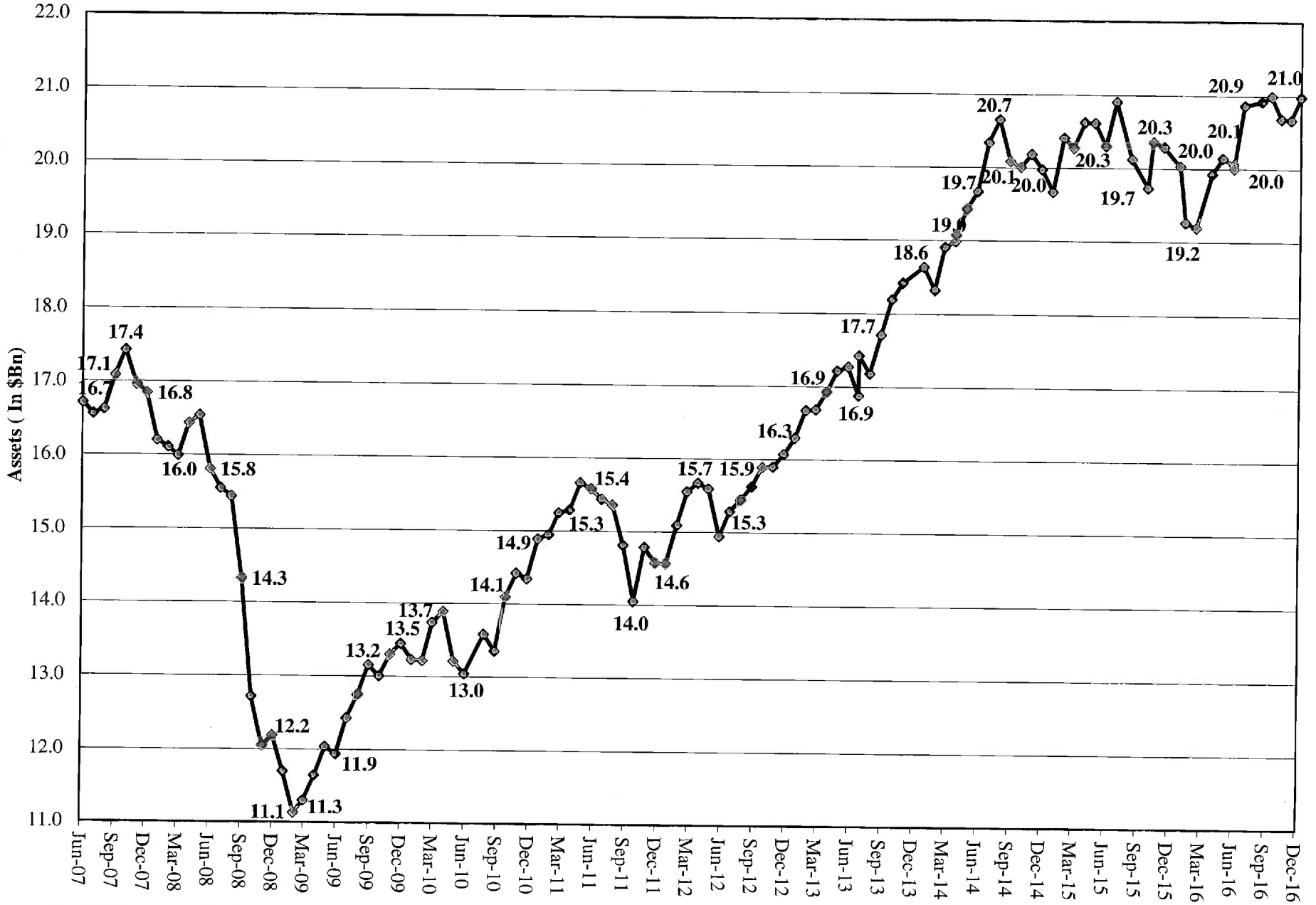
Beginning Balance as of 12/01/16		<u>\$179.1</u>
Private Equity Net Funding		(\$4.2)
Real Asset Net Funding		(\$53.4)
Absolute Return Net Funding		(\$250.0)
<u>Equity/Fixed Income Activities</u>		
<i>Net transfers to and from Public Equity</i>	\$414.0	
<i>Net transfers to and from Public Fixed Income</i>	\$156.3	
<i>Opportunistic Fixed Income Net Funding</i>	(\$6.1)	
Equity/Fixed Income Net Funding		\$564.2
Funds T'd to Ded Cash		(\$82.0)
Misc. Cash Receipts		\$0.0
Funds R'd from Accrual Account		(\$0.1)
Income R'd		\$0.3
Securities Lending Earnings		\$0.5
Ending Balance as of 12/31/16		<u>\$354.4</u>
<u>Projected Cash Transactions</u>		
	<u>Next 2 Months</u>	<u>Next 6 Months</u>
Private Equity Net Funding	\$48.2	\$103.8
Real Assets Net Funding	\$36.3	\$128.0
Opportunistic Fixed Income Net Funding	\$3.8	\$46.6
Absolute Return Net Funding	\$0.0	\$0.0
Equity/Fixed Income Net Funding	\$4.9	\$4.9
T'd to Ded Cash	\$150.0	\$150.0
Total Net Use (-)/ Receipt (+) of Funds	<u>\$243.2</u>	<u>\$433.2</u>
Projected Ending Balance	<u>\$111.2</u>	<u>(\$78.8)</u>

Dedicated (Benefit Payment) Cash Account

Beginning Balance as of 12/01/16	<u>\$96.2</u>
Benefit Payment for December 2016	(\$84.0)
Income R'd from Domestic Equity and Fixed Income	\$3.4
R'd from Inv Cash	\$82.0
Income R'd	\$0.1
Ending Balance as of 12/31/16	<u>\$97.7</u>
<u>Projected Cash Transactions</u>	
	<u>Next 2 Months</u>
Benefit Payment Reserve for January 2017 & February 2017	(\$178.0)
Income R'd from Domestic Equity and Fixed Income	\$2.0
R'd from Inv Cash	\$150.0
Total Net Use (-)/ Receipt (+) of Funds	(\$26.0)
Projected Ending Balance	<u>\$71.7</u>

Positive sign = Cash inflow to the cash account; Negative sign = Cash outflow from the cash account.

SFERS Monthly Net Assets
June 2007 - December 2016



December 2016 figure is preliminary



**San Francisco City and County
Employees' Retirement System
Chief Investment Officer**

William J. Coaker Jr., CFA, MBA

Memorandum

DATE: January 11, 2017
TO: Members of the Retirement Board
THROUGH: Jay Huish *JH*
Executive Director
FROM: William J. Coaker Jr. – CFA, CFP, MBA *WJC*
Chief Investment Officer
SUBJECT: CIO Report Memorandum

1 – Investment Returns

December 2016:

In December our investments gained 1.15%. U.S. and International stocks both did well, earning 1.67% and 2.05%, respectively. Our Fixed Income portfolio gained 0.60%, while Private Equity and Real Assets returned 0.26% and 0.81%, respectively.

Fiscal Year:

For the first six months of the fiscal year, our portfolio has gained 4.75%. U.S. stocks have returned 9.32%, while International stocks have gained 5.39%. Private Equity has earned 4.95%, while Real Assets have gained 4.43%. After the tough bond market in November, our Fixed Income portfolio is up just 0.30% fiscal year to date.

Calendar Year:

On a calendar year basis, preliminary estimates are that our portfolio gained 7.46% in 2016. U.S. stocks gained a solid 11.33% in 2016, while International stocks gained just 4.21%. Fixed Income returned 5.35%, thanks to good returns earned in the first half of the year. Private Equity and Real Assets returned approximately 7.94% and 10.96% in 2016.

To provide a sense of the returns in different markets in both stocks and bonds, below is a summary of returns in the fourth quarter and in 2016 for certain major indices. In short, U.S. stocks earned double digit returns in 2016, while International equity indices had a mixed year, with Latin America and Emerging Markets earning strong returns while China and Europe were barely positive for the year.

In the fourth quarter, while U.S. stocks performed very well, all the other indices highlighted here earned negative returns, with long duration bonds recording a double digit loss during the quarter.

Description	Index	QTD	YTD
U.S. Large Cap Index	S&P 500	3.82	11.96
U.S. Small Cap Index	Russell 2000	8.83	21.31
U.S. Equity Index	Russell 3000	4.21	12.74
International Equity Index	MSCI ACWI ex USA GD	-1.20	5.01
Emerging Market Equity Index	MSCI Emerging Markets GD	-4.08	11.60
European Stocks	MSCI Europe GD	-0.36	0.22
Latin American Equity Index	MSCI EM Latin America GD	-0.77	31.47
China Equity Index	MSCI China GD	-7.07	1.11
U.S. Bond Index	BC U.S. Aggregate	-2.98	2.65
High Yield Global Index	BC Global High Yield	-0.19	14.27
Emerging Market Bond Index	JP GBI EM Broad Index	-4.04	6.79
Treasury Short Duration Index	BC US Treasury 1-5 Years	-1.18	1.02
Treasury Long Duration Index	BC US Treasury 25+ Years	-12.65	1.42

2 – Himalaya Capital Investors, L.P.

At its meeting on December 14, 2016, the Retirement Board approved in closed session an investment of up to \$200 million in Himalaya Capital Investors, L.P.

The investment was approved by the following vote:

Ayes: Commissioners Bridges, Cohen, Driscoll, Makras, and Meiberger
Absence: Paskin-Jordan and Stansbury

SFERS' investment of \$150 million in Himalaya Capital Investors, L.P. closed on December 28, 2016. SFERS will look to deploy the remaining \$50 million as additional opportunities arise in the Fund.

Himalaya is classified as an opportunistic global value manager within SFERS' public equity portfolio.

More information about Himalaya is available on <http://www.himalayacapital.com>

3 - MBK Partners IV, L.P.

At its meeting on November 9, 2016, the Retirement Board approved in closed session an investment of up to \$50 million in MBK Partners IV, L.P.

The investments were approved by the following vote:

Ayes: Commissioners Bridges, Paskin-Jordan, Meiberger, Stansbury and Makras
Absence: Commissioners Driscoll and Cohen

SFERS' investment of \$42.5 million in MBK Partners IV, L.P. closed on December 30, 2016.

MBK Partners IV, L.P. is classified as a large buyout investment within SFERS' private equity portfolio.

More information about MBK Partners is available on <http://www.mbkpartnerslp.com>

4 - Vista Foundation Fund III, L.P.

At its meeting on March 9, 2016, the Retirement Board approved in closed session an investment of up to \$125 million in Vista Foundation Fund III, L.P.

The investment was approved by the following vote:

Ayes: Commissioners Makras, Bridges, Driscoll, Paskin-Jordan, Meiberger and Stansbury

Absence: Commissioner Cohen

SFERS' investment of \$50 million in Vista Foundation Fund III, L.P. closed on May 19, 2016. The General Partner further agreed to accept an additional \$75 MM from SFERS on December 29, 2016, increasing SFERS' total commitment to Vista Foundation Fund III, L.P. to \$125 MM.

Vista Foundation Fund III, L.P. is classified as a medium buyout investment within SFERS' private equity portfolio.

More information about Vista is available on www.vistaequitypartners.com

5 – Personnel

We have one personnel updates to announce. Jeremy Gurewitz, Analyst on our Real Assets team, resigned after two months at SFERS to take a position with a locally based start-up. Mr. Art Wang plans to take the recruitment for this position at a measured pace.

6 – Investment Committee Meetings

The remaining IC meetings for this year are scheduled as follows:

- February 15, 2017;
- TBD

7 – Asset Allocation

Asset Allocation is reviewed by the Board a minimum of every three years. The process for asset allocation was last initiated in February 2014. We plan to follow the same type of process and timing for asset allocation this year as has been done in prior reviews, as follows:

- February 2017 Investment Committee: Review the Asset Liability Process

- May 2017 Investment Committee: Review potential asset classes, capital market assumptions, and several asset allocation mixes

- June 2017 Board Meeting: Investment Committee will report on the May Investment Committee meeting to the full board
- August 2017: Review and seek direction on Asset Allocation policy
- September 2017: Board approval of Asset Allocation policy
- October 2017: Board approval of Revised Investment Policy Statement

8 – Amount of our Outstanding Commitments

The dollar amount of our capital commitments outstanding in private equity, real asset, and private debt managers is now \$5.0 billion, or nearly 25% of plan assets. Three years ago that total was \$1.7 billion, which was just under 9% of plan assets. We have increased the monitoring of our commitments and our liquidity position. The next section shows that we are in strong position to meet our commitments.

9 – Liquidity to meet our Capital Commitments

In 2017 Cambridge Associates projects capital calls (cash outflows) will total about \$1.67 billion, while distributions (cash in-flows) will be approximately \$1.03 billion, equaling a net outflow of about \$640 million. In the first two or three quarters of this year we also expect to fund the remaining \$500 million of the Absolute Return program. In total, in 2017 we expect cash flows into our private equity, real assets, private debt, and absolute return portfolios will total about \$1.14 billion.

Sources of liquidity to fund these investments total \$6.2 billion, including the following:

- U.S. passive and enhanced index investments totaling \$3.2 billion, as follows: S&P 500 Index, \$1.2 billion; Enhanced S&P 500 Index managed by QMA, \$760 million; U.S. Large Value passive index from Blackrock, \$1.1 billion; Russell 2000 Growth passive index from Russell, \$200 million;
- International passive equity investments totaling \$260 million;
- Passive bond investments in treasuries and the Barclay's Aggregate U.S. Debt Index totaling \$1.2 billion;
- High quality bonds managed by Baird, Investment Research & Management (IRM), and the AFL-CIO totaling \$1.5 billion.

As noted above, Cambridge is anticipating cash inflows of about \$1 billion. One reason for the strong number is that there are several highly anticipated potential IPO's including AirBnB, Didi Chuxing, DropBox, Palantir, Pinterest, Snap, Spotify, Vice Media, and Uber.

10 – J-Curve Effect

Since our outstanding commitments to fund our private equity, real estate, natural resources, and private debt portfolios now total \$5.0 billion, the J-curve effect will reduce the returns for our portfolio as a whole by about 0.35% annualized. Over the long-term we expect to earn higher returns of several multiples than the impact of the J-curve.

11 – Shrinking Public Equity

The January 5, 2017 edition of the Wall Street Journal discussed the shrinkage in the number of publicly traded U.S. companies. Today there are fewer than 5,800 publicly traded stocks. That's the lowest number in nearly four decades, during which time the U.S. economy has doubled in size. It's also down sharply from the 9,100 publicly traded companies in 1997, a reduction of nearly 35% in two decades.

Jerry Davis, a professor at the University of Michigan's Ross School of Business, states that executives of private companies are worried about going public due to investor's emphasis on short term returns, increased regulatory costs and disclosure requirements on public companies, and because providing increased information to the public can be valuable to their competitors.

The article quotes Bill Gates as seeing a bubble in private market valuations. Mr. Gates predicts that investors will lose significant amounts of money in privately held businesses valued at \$1 billion or more, which currently total 154 such companies. A shrinking public equity market also reduces liquidity.

12 – Absolute Return Portfolio

\$250 million was invested October 1st in twelve different funds for Class A (BAAM discretionary share class) of the San Francisco Absolute Return Investors limited partnership.

In the first two months in October and November, the Absolute Return portfolio returned 1.31%, outperforming the Hedge Fund Research Index which inched up four basis points and the MSCI ACWI Global Equity Index and the Barclays Aggregate U.S. Bond Index which fell -1.19% and -3.11%, respectively. In other words, in the first two months of the Absolute Return program, while our public equity and fixed income portfolios declined, the Absolute Return program earned positive returns.

	SFERS Absolute Return	HFRI FoF Index	MSCI ACWI	S&P 500	Barclays U.S. Aggregate Bond Index
Oct 2016	0.09%	-0.25%	-1.77%	-1.82%	-0.76%
Nov 2016	1.20%	0.30%	0.59%	3.70%	-2.37%
Total	1.31%	0.04%	-1.19%	1.81%	-3.11%

Staff funded another \$250 million on December 31, 2016 to the discretionary program managed by Blackstone. Some of the addition increased our allocation to existing managers while the majority was invested in six funds that were added to the portfolio. This completes the funding of the discretionary component of the program managed by Blackstone.

Staff is in the process of evaluating prospective managers for the direct component of the program and on track to present its initial recommendation by the end of Q1 2017.

13 – Update on Custodial Change

In October the Board approved a change in custodians from Northern Trust to BNY Mellon. The legal teams at Mellon and SFERS are continuing their work to finalize an agreement.

14 – Update on Risk Initiative

We finalized a subscription agreement with Caissa as our risk management platform. Caissa is an award-winning data analytics provider used by pension plans, endowments, foundations, and sovereign wealth funds.

On Caissa’s website, the Director of Investments at Virginia Tech is quoted as stating that “Caissa has changed our day to day operations by dramatically improving our efficiency and process by allowing us to look at the entire portfolio on one system from both performance and risk perspectives. The Caissa team has worked tirelessly to improve our work flow and has given us confidence in the accuracy of our analysis.”

Sean Warrington, Associate Director of the Alfred I. DuPont Testamentary Trust, stated that “Thanks to Caissa, we have more confidence in our analytical capabilities and more conviction in the results of our analysis. It is now easier to understand our portfolio’s exposures and quantify the risk factors affecting our investments. As a result of the platform’s dynamic interface, analysis that took hours in Excel is presented quickly and efficiently in the Caissa Platform.”

Marita Wein, Managing Director of the Alternative Investment Group, stated that “Caissa has been leveraged throughout our organization, from portfolio construction through investor reporting. It has been invaluable in making our data aggregation, management and monitoring more efficient and timely. As a risk manager, Caissa gives me one place to analyze both the manager’s portfolios as well as our own. Caissa has been a great investment for our firm.”

Our own due diligence, which included several site visits, many meetings with Caissa, and multiple reference checks, confirmed Caissa’s expertise in risk analytics.

We held our initial on-boarding meeting with Caissa together with Director Ellen Brownell and Managing Director Bob Shaw plus several other members of our team, on January 3rd. We expect to begin generating regular risk analytics for the quarter ended March 31, 2017, probably in the May or June 2017 board package.

Caissa has offices in both San Francisco and New York. For more information on Caissa please visit caissallc.com.

15 – Asset Class and Portfolio Updates

Next month we will provide a year-end review of our investment actions in 2016 as well as a summary of our planned research initiatives for 2017.