



Item 9

DATE: May 23, 2019

TO: Deferred Compensation Management Council

FROM: Brent Petty, NWC, Inc.

SUBJECT: First Quarter Investment Performance Report (Executive Summary)

Capital Markets

Name	YTD (04/30/2019)	Q1 2019	1-Year (04/30/2019)
S&P 500 TR USD	18.25	13.65	13.49
S&P MidCap 400 TR	19.09	14.49	6.99
S&P SmallCap 600 TR USD	15.93	11.61	4.42
MSCI EAFE NR USD	13.07	9.98	-3.22
MSCI EM NR USD	12.23	9.91	-5.04
BBgBarc US Agg Bond TR USD	2.97	2.94	5.29

	4/30/2019	3/29/2019	4/30/2018
10-Year Treasury Yield	2.51%	2.41%	2.95%

First Quarter (Complete Quarterly Investment Report is provided as **Exhibit A**)

- Markets rebounded as the Fed paused interest rate raises, trade talks progressed, and earnings came in better than expected.
- **U.S. equities** were positive across all market caps and styles, with growth outpacing value and small outpacing large-cap.
- **International equities** underperformed the U.S., but both emerging and developed markets posted positive returns with China leading the way.
- In **fixed income**, declining rates and tightening credit spreads drove fixed income higher, with the market focused on the inversion of the 10-year minus 3-month Treasury yield.

Economic Factors

- Fourth quarter GDP grew 2.2% and while Q1 GDP is expected to grow at 2.1%.
- A strong labor market continues with wages growing 3.4% year-over-year and unemployment stable at 3.8%.
- Overall inflation remains manageable as various headline CPI rose 1.5%
- Going forward, the Federal Reserve will be patient in determining future rate adjustments, with zero hikes predicted for the year.

Investments

Hennessy Focus Instl, Oakmark Equity and Income, and Virtus Seix Total Return Bond scored a five, three, and three respectively under our methodology, however all three funds remain on watch due to recent underperformance. All three funds are currently scheduled to be removed from the Plan on June 17, 2019. The remaining investment options are compliant with the County's investment policy performance criteria.

- An updated fund watch report has been included as **Exhibit B**.
- Great-West's Proposed Stable Value IPS has been included as **Exhibit C**.
- A Stable Value Scenario Analysis has been included as **Exhibit D**.

Recommended Actions

Summary of IPS Changes

Great-West Capital Management (GWCM) is proposing alterations to the Investment Policy Statement (IPS) to allow greater allocation flexibility within fixed income sectors and credit quality composition. As a result, GWCM believes the proposed portfolio's balance between interest rate risk and credit risk reaches appropriate harmony. GWCM believes the proposed IPS will give their management team proper flexibility to navigate both current and future market conditions over several rate cycles. Additionally, wider diversification guidelines permit flexibility to determine relative value amongst the various fixed income securities while maintaining prudent guardrails to deter unintended risks. A summary of important IPS proposed changes and our commentary can be found below.

Current	Proposed	Commentary
Average Credit Quality AA or Better	A- or Better	Proper interest rate and credit risk harmonization. Fresno SV RFP response averages ranged between AA- to A-.
A-Rated Securities Limit Limit of 25%	Does not include limit on A-rated securities	Allows relative value flexibility to purchase more A rated corporate bonds where yields are advantageous relative to securitized sectors. Additionally, A-rated corporate bonds are a larger investable universe (vs. AAA or AA), which helps facilitate liquidity.
Corporate Bond Issuer Limit No more than 5% in any one corporate bond issuer	No more than 2% in any one corporate bond issuer	Promotes greater single issuer diversification, which supports loosening overall credit quality
US Gov't Securities Minimum 50% must be invested in Gov't securities	Not included in proposed IPS, thus the minimum is 0%	With the maximum of corporate bonds and non-agency securitized assets at 50% and 20%, respectively, the theoretical Government security minimum becomes 30%. A government security minimum of 0% is consistent with peers, including the most conservative providers.

NWCM believes the proposed changes to the Investment Policy Statement by GWCM are prudent and will allow the management team greater flexibility for various market conditions going forward. **As such, NWCM recommends the DCMC adopts the new investment guidelines.**

Item 9 - Exhibit A

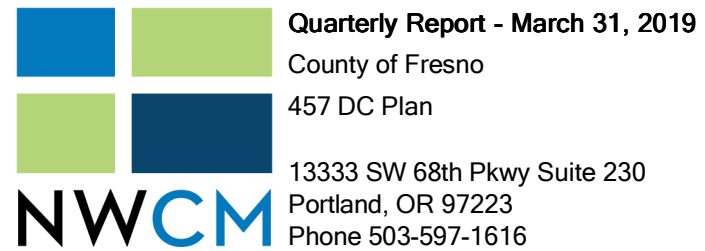


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Market Overview

Market Rebound

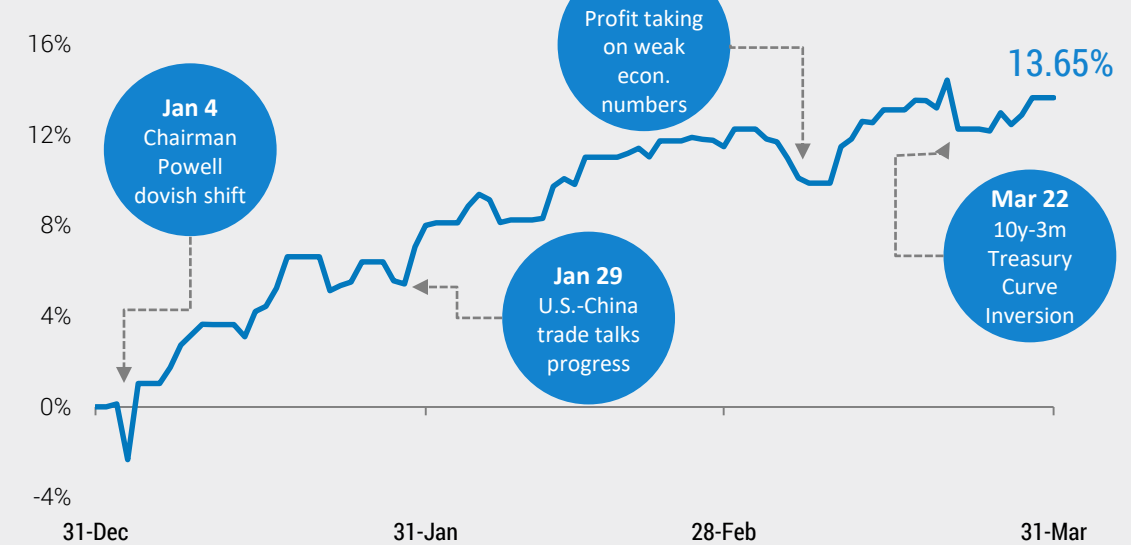
Markets bounced back strongly after many of the fourth quarter headwinds shifted to tailwinds to start the year, including:

1. The Federal Reserve paused raising interest rates for the year as depicted by the median Fed estimate.
2. Positive developments on the trade front, as a U.S.-China agreement appears likely.
3. Better-than-expected/feared corporate earnings season.
4. Optimism that the growth slowdown will bottom around mid-year as consumers respond to labor income gains, low inflation, a rebound of equity markets, the patient Fed, and decreased political risks.

After the worst December since 1931, the S&P 500 had its best first quarter since 1998. This kind of volatility is unusual and was precipitated by a Federal Reserve that appeared too aggressive in December, only to reverse course on its policy perhaps faster than ever witnessed.

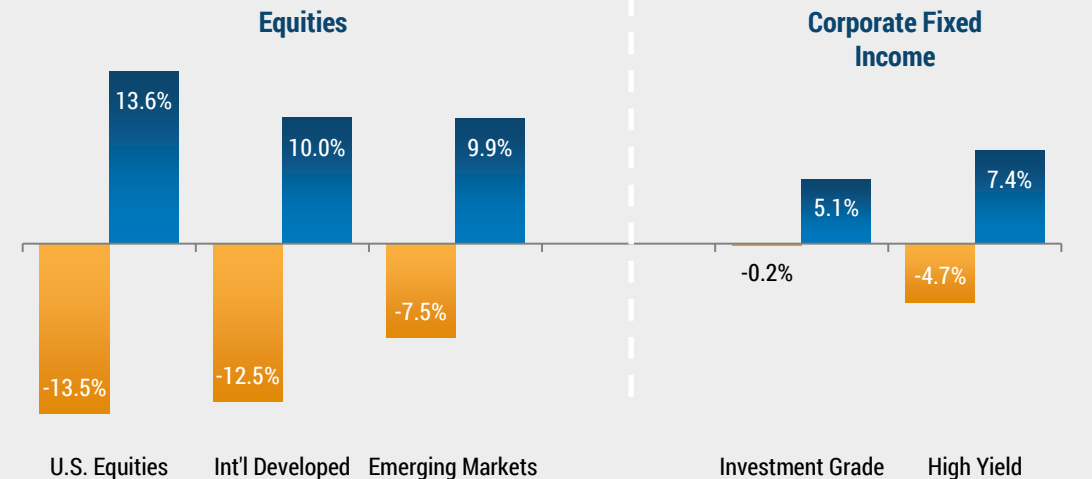
Source: Morningstar Direct as of 31 March 2019. Asset classes are represented by the following benchmarks: U.S. Equities (S&P 500 Index), International Developed (MSCI EAFE), Emerging Markets (MSCI EM), Investment Grade Corporate (BBgBarc US Corporate IG), High Yield (ICE BofAML US High Yield).

S&P 500 Index Cumulative Total Return



Markets Bounced Back After Sharp Decline

Total Return USD



Economy

GDP: Driven by the consumer and inventories, fourth quarter real GDP grew 2.2%. After the government shutdown-related backlog of data became unclogged, the underlying pace of Q1 growth is 2.1% according to the Atlanta Fed GDPNow model.

Labor Market: The labor market continues to be strong as the average job gains for the past 3 months stands at 186,000, wages grew 3.4% year-over-year, and unemployment remains at 3.8%.

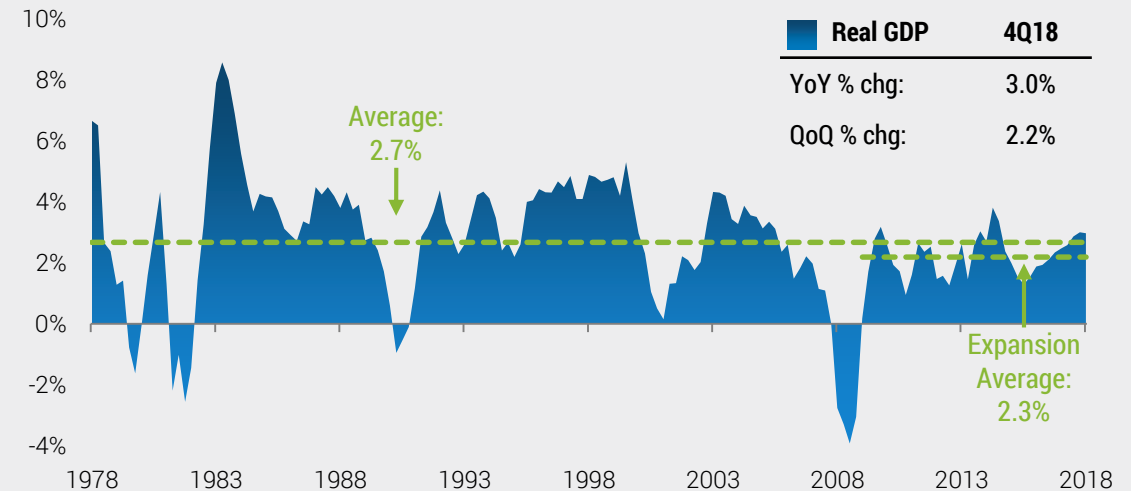
Inflation: Inflation remains manageable, as headline CPI rose 1.5% and core CPI (excluding food and energy) rose 2.1%. The Fed's closely monitored core PCE index rose 1.8% below the Fed's target of 2%.

Fed Speak: A large majority of Federal Reserve (FOMC) participants now expect zero hikes this year, down from a median projection of two hikes in December. The FOMC statement continues to indicate they will be "patient" in determining what future "adjustments" to policy may be needed. The median Committee participant continues to see one hike next year.

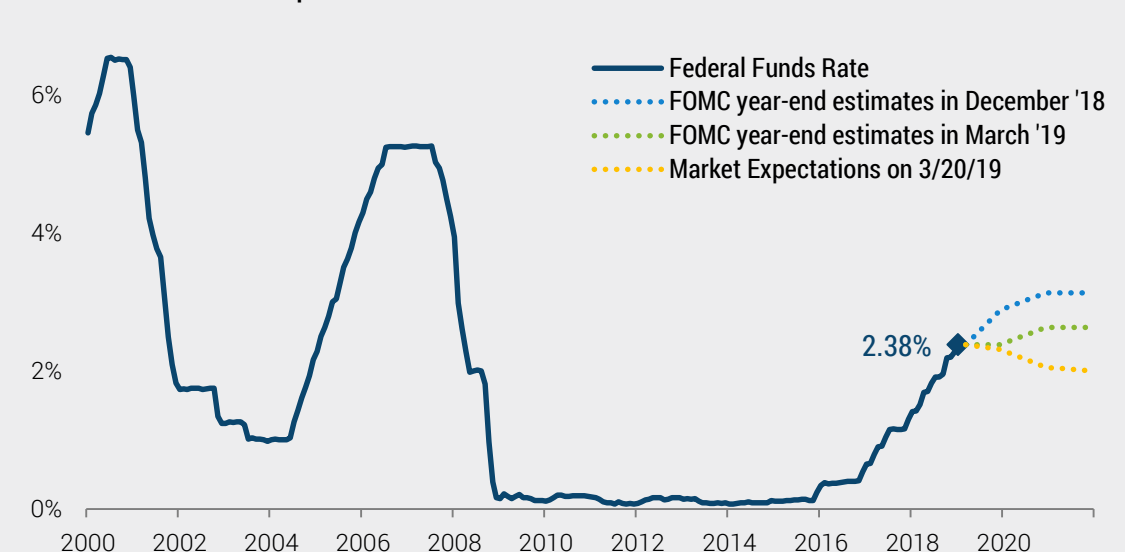
Source: Bloomberg, Federal Reserve. Market expectations are the federal funds rates priced into the fed futures market as of the date of the March 2019 FOMC meeting and are through December 2021. U.S. Data are as of March 31, 2019.

Real GDP

Year-over-year % change



Federal Funds Rate Expectations



Asset Class Performance

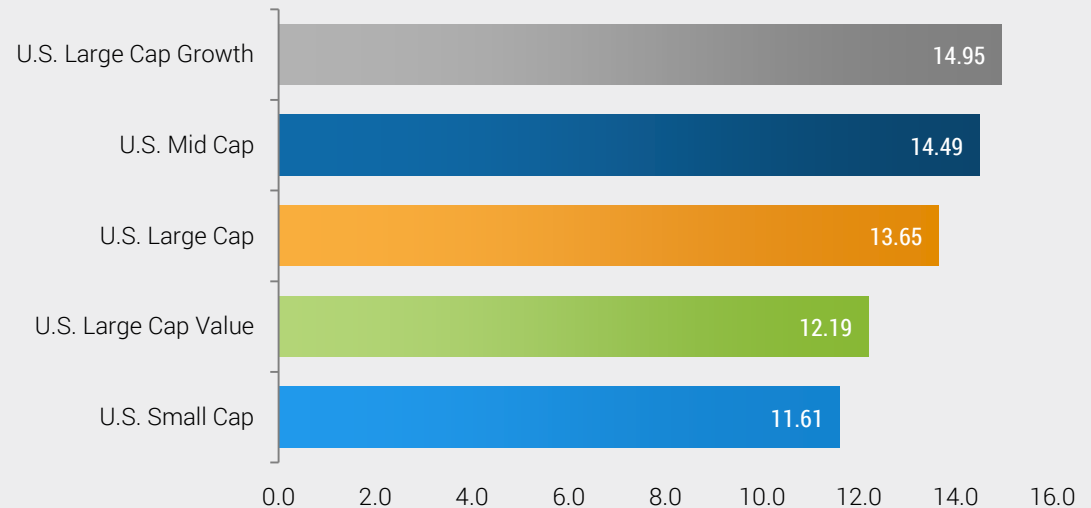
U.S. Equities: Domestic equity markets were positive across market capitalizations and styles in the first quarter. Growth resumed to dominate value this quarter, as the S&P 500 Growth Index rallied 14.95% thanks to Microsoft, Amazon, and Facebook. Small Cap stocks lead the charge through mid-February, after which the index largely treaded water.

International Equities: International equities underperformed the U.S. this quarter. Developed markets, rose 10% with Japan, Germany, and Spain being the laggards. The overhang of auto-tariffs, Brexit, slowing economic data contributed to the relative underperformance. The standout performer for the Emerging markets was China, which rallied 18% thanks to government stimulus, better economic data, and improved trade negotiations.

Fixed Income: The combination of declining interest rates and tightening credit spreads drove fixed income markets higher across the board in the first quarter. The decline in Federal funds rate expectations drove demand for U.S. Treasury bonds. The U.S. 10-Year Treasury rate ended the quarter 24bps lower. This directed the markets attention to the 10-Year minus 3-Month Treasury yield spread which inverted in March. Investors will keep a watchful eye on the inversion, which has been an accurate predictor of recessions.

Source: Morningstar Direct as of 31 March 2019. Asset classes are represented by the following benchmarks: U.S. Equities (S&P 1500 Index), Intl. Developed Equity (MSCI EAFE), Intl Emerging Equity (MSCI EM), U.S. Large Cap (S&P 500), U.S. Large Cap Growth (S&P 500 Growth), U.S. Large Cap Value (S&P 500 Value), U.S. Mid Cap (S&P MidCap 400), U.S. Small Cap (S&P SmallCap 600), U.S. Fixed Income (BBgBarc US Agg Bond), Intl. Fixed Income (BBgBarc Gbl Agg Ex USD Hdg USD), Cash (ICE BofAML 0-3 M US Trsy Bill). Total Return in USD.

U.S. Equity Quarterly Performance



Trailing Returns



Legislative and Regulatory Update



Retirement Security and Savings Act of 2019

On May 14, Senators Rob Portman and Ben Cardin introduced the Retirement Security and Savings Act of 2019. The bill includes a number of provisions which are NAGDCA legislative priorities and are intended to make plans easier for state and local governments to administer. The main provisions are below:

- Eliminate the “first day of the month” rule for 457(b) plans.
- Allow non-spousal beneficiaries of inherited IRA assets to roll these assets into their employer-sponsored governmental defined contribution, deferred compensation plans.
- Enable use of collective investment trusts by 403(b) plans.
- Improve the functionality of Roth accounts in deferred contribution plans.
- Exempt designated Roth contributions in governmental deferred contribution plans from required minimum distribution (RMD) rules
- Permit 457(b), 401(a), 401(k), and 403(b) plan participants to make qualifying charitable distributions (QCDs).¹

* Updated as of 5/14/2019

2019 Q2 Compliance Calendar



April 1st - Initial age 70^{1/2} Required Minimum Distributions (RMDs) due to inactive participants who turned age 70^{1/2} during previous year.

April 15th - Deadline for processing corrective distributions for previous plan year 402(g) excess deferral amounts.

May - No key deadlines

June 30th - Deadline for processing corrective distributions for failed ADP/ACP test for plans with EACA (Eligible Automatic Contribution Arrangement) without 10% excise tax.



Did you know?

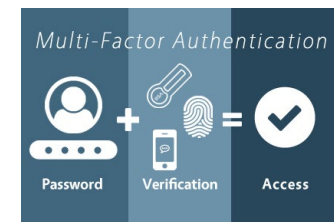
Security provided by a single password can be breached by modern technology. To protect plan data and to maintain compliance, many recordkeepers are enhancing security precautions on their websites through the addition of multi-factor authentication (MFA).

What is Multi-Factor Authentication (MFA)?

- MFA is a security mechanism in which individuals are authenticated through more than one required security & validation procedure

What does this mean for me?

- Make sure your contact information is up to date as you may be prompted to receive an email, text, or phone call with a verification code upon login.
- If you save your login information in your browser, make sure you are the only one with access to the computer or mobile device used to login to the secure site.



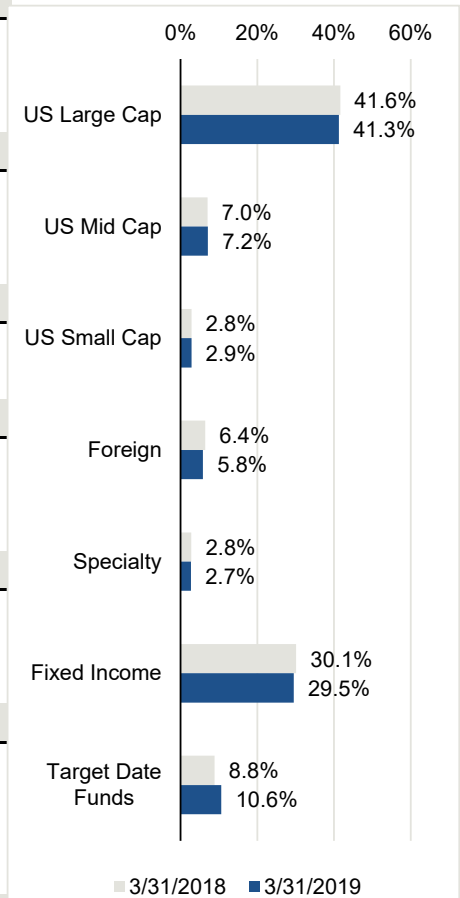
¹“Senators Portman and Cardin Reinintroduce Retirement Legislation, Include NAGDCA Priorities.” NAGDCA, 14 May 2019

County of Fresno 457 DC Plan

Summary of Assets

As of 03/31/2019

Asset Class	Ticker	%	3/31/2018	Net Increases/Decreases	3/31/2019	%
US Large Cap		41.64%	\$100,472,744	\$4,346,440	\$104,819,184	41.30%
BlackRock Equity Index - Collective M	02cff1	18.55%	\$44,772,234	\$2,497,429	\$47,269,663	18.63%
Alger Spectra Z	aspzx	17.63%	\$42,555,221	\$1,251,204	\$43,806,425	17.26%
Columbia Dividend Income Inst3	cddyx	5.45%	\$13,145,289	\$597,807	\$13,743,096	5.42%
US Mid Cap		7.04%	\$16,977,123	\$1,185,662	\$18,162,785	7.16%
BlackRock Russell 2000 Index Coll M	03cff3	1.45%	\$3,489,944	\$568,929	\$4,058,873	1.60%
BlackRock MidCap Idx - Collective M	03cff2	3.50%	\$8,437,411	\$268,121	\$8,705,531	3.43%
Hennessy Focus Institutional	hfcix	2.09%	\$5,049,769	\$348,612	\$5,398,381	2.13%
US Small Cap		2.84%	\$6,847,630	\$393,213	\$7,240,844	2.85%
Nicholas Limited Edition I	nclex	2.31%	\$5,579,440	\$333,975	\$5,913,415	2.33%
Janus Henderson Small Cap Value N	jdsnx	0.53%	\$1,268,191	\$59,238	\$1,327,429	0.52%
Foreign		6.42%	\$15,488,874	-\$668,058	\$14,820,815	5.84%
BlackRock EAFE Equity Index Coll F	10cff5	1.35%	\$3,264,395	\$227,737	\$3,492,132	1.38%
Ivy International Core Equity N	iincx	4.27%	\$10,297,214	(\$1,114,053)	\$9,183,161	3.62%
Oppenheimer Developing Markets I	odvix	0.80%	\$1,927,264	\$218,258	\$2,145,523	0.85%
Specialty		2.82%	\$6,808,250	\$79,148	\$6,887,398	2.71%
Fidelity Advisor Real Estate Income I	frirx	0.42%	\$1,022,317	(\$55,722)	\$966,595	0.38%
Franklin Utilities R6	fufrx	1.48%	\$3,571,590	\$247,482	\$3,819,072	1.50%
Oakmark Equity And Income Investor	oakbx	0.92%	\$2,214,343	(\$112,611)	\$2,101,732	0.83%
Fixed Income		30.12%	\$72,678,384	\$2,189,352	\$74,867,736	29.50%
BlackRock US Debt Index Fund Coll W	04cff4	1.77%	\$4,266,284	\$984,790	\$5,251,075	2.07%
Virtus Seix Total Return Bond R6	samzx	1.42%	\$3,435,034	\$646,661	\$4,081,695	1.61%
Templeton Global Bond R6	fbnrx	0.62%	\$1,487,066	\$193,537	\$1,680,603	0.66%
Fresno County Stable Value	fressv	26.31%	\$63,490,000	\$364,364	\$63,854,364	25.16%
Target Date Funds		8.84%	\$22,040,092	\$4,949,640	\$26,989,733	10.63%
Great-West Lifetime 2015 Trust	grwl15	1.12%	\$3,409,073	(\$38,581)	\$3,370,492	1.33%
Great-West Lifetime 2025 Trust	grwl25	2.91%	\$7,013,248	\$2,102,316	\$9,115,564	3.59%
Great-West Lifetime 2035 Trust	grwl35	2.06%	\$4,982,414	\$1,109,911	\$6,092,324	2.40%
Great-West Lifetime 2045 Trust	grwl45	1.94%	\$4,680,070	\$767,737	\$5,447,807	2.15%
Great-West Lifetime 2055 Trust	grwl55	0.81%	\$1,955,287	\$1,008,258	\$2,963,545	1.17%
Total		100.0%	\$241,313,098	\$12,475,398	\$253,788,496	100.0%



County of Fresno 457 DC Plan

Investment Summary

As of 3/31/2019

Passively-Managed and Cash Funds

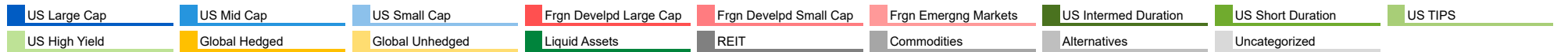
Managed and Cash Funds		Equities						Fixed Income						Liquid	Other												
		US			Foreign			US			Foreign																
		L	M	S	L	S	E	I	S	T	Y	H	U		C	R	C	A	U	Exp	Qtr	YTD	1 Yr	2 Yr	3 Yr	4 Yr	5 Yr
Investment	Ticker																										
BlackRock Equity Index - Collective M	02cff1	100																	0.02	13.69	13.69	9.60	11.82	13.59	10.54	10.98	16.01
BlackRock MidCap Idx - Collective M	03cff2		100																0.03	14.48	14.48	2.66	6.72	11.07	7.13	8.14	16.21
BlackRock Russell 2000 Index Coll M	03cff3			100															0.03	14.65	14.65	2.18	6.99	13.13	7.00	7.29	15.61
BlackRock EAFE Equity Index Coll F	10cff5				100														0.10	10.09	10.09	-3.66	5.49	7.66	3.51	2.64	9.26
BlackRock US Debt Index Fund Coll W	04cff4							100											0.04	2.97	2.97	4.55	2.90	2.10	2.15	2.88	

Actively-Managed Funds

Style	Investment	Ticker	L	M	S	L	S	E	I	S	T	Y	H	U	C	R	C	A	U	Exp	Qtr	YTD	1 Yr	2 Yr	3 Yr	4 Yr	5 Yr	10 Yr
Income	Columbia Dividend Income Inst3	CDDYX	91	3		2									3	1				0.58	12.03	12.03	9.38	11.10	12.56	10.49	10.45	14.59
Growth	Alger Spectra Z	ASPZX	87	8				1							3	1				0.94	15.41	15.41	11.51	16.53	16.18	11.32	12.75	18.45
Utilities	Franklin Utilities R6	FUFRX	68	25		5									2					0.50	12.61	12.61	20.55	9.93	9.73	10.00	10.22	13.22
Growth	Hennessy Focus Institutional	HFCIX	41	29	13	12	2								2				1	1.10	14.05	14.05	4.91	8.32	8.94	6.65	8.94	16.01
Balanced	Oakmark Equity And Income Investor	OAKBX	40	12	1	7			10	7	11	2			7	1			2	0.78	8.78	8.78	1.35	4.68	7.91	4.60	4.88	9.42
Blend	Janus Henderson Small Cap Value N	JDSNX		34	54	2	4								2				4	0.81	12.22	12.22	0.75	4.08	10.36	7.18	7.49	13.87
Growth	Nicholas Limited Edition I	NCLEX		38	52	2	3								5					0.86	13.49	13.49	12.54	12.67	14.90	9.14	9.26	15.66
Global Blend	Ivy International Core Equity N	IINCX	4			77		8							5				6	0.79	10.17	10.17	-8.11	1.82	5.98	1.87	2.56	9.44
Emerging Gr	Oppenheimer Developing Markets I	ODVIX				27		65							2				6	0.87	12.42	12.42	-3.75	9.92	11.81	5.94	3.88	11.54
Intermediate	Virtus Seix Total Return Bond R6	SAMZX							65	13		1		2	19					0.31	2.50	2.50	3.97	2.00	1.86	1.77	2.52	3.89
Global Bond	Templeton Global Bond R6	FBNRX							1				71		37				2	0.56	2.01	2.01	2.19	0.86	4.33	2.18	2.03	5.60
Stable Value	Fresno County Stable Value	fressv													100					0.35	0.55	0.55	2.12	2.06	2.06	2.08	2.10	
Real Estate	Fidelity Advisor Real Estate Income I	FRIRX							9	1		28		1	7	31		23		0.75	8.35	8.35	11.05	6.04	7.32	6.03	6.75	12.71









Target-Date Funds

Style	Investment	Ticker	L	M	S	L	S	E	I	S	T	Y	H	U	C	R	C	A	U	Exp	Qtr	YTD	1 Yr	2 Yr	3 Yr	4 Yr	5 Yr	10 Yr
Target Date	Great-West Lifetime 2015 Trust	GRWL15	17	8	4	10		3	20	8	13	5	5		4	3				0.40	7.27	7.27	4.02	5.88	6.89	5.02	5.32	
Target Date	Great-West Lifetime 2025 Trust	GRWL25	22	9	6	14		5	19	5	6	5	4		2	3				0.40	8.80	8.80	4.38	7.07	8.40	5.96	6.26	
Target Date	Great-West Lifetime 2035 Trust	GRWL35	29	12	8	21		7	11	1	2	2	2		1	4				0.41	10.88	10.88	4.43	8.52	10.22	7.01	6.89	
Target Date	Great-West Lifetime 2045 Trust	GRWL45	31	13	10	24		10	6			1	1			4				0.41	12.03	12.03	4.03	9.06	10.95	7.38	7.54	
Target Date	Great-West Lifetime 2055 Trust	GRWL55	29	13	11	25		11	5			1	1			4				0.42	12.07	12.07	3.57	8.94	10.94	7.26	7.40	



CALCULATION METHODOLOGY OF OVERALL FUND

1 (Worst) — 10 (Best)

Factor	Weight	Explanation		Score Calculation	
<div><div>RETURNS</div><div>Summary compliance report shows the average peer group quartile rank for all time periods (no credit for bottom quartile performance)</div></div>	<div><div>40% Overall</div></div>	<div>Absolute Returns</div> <div>Peer Group Percentile Rankings: 3,5,10 Year Periods</div>		<div>Proportional Score</div> <div>Ranks in the top 75% of Peer Group</div>	<div>No Score</div> <div>Ranks in the bottom 25% of Peer Group</div>
<div><div>RISK ADJUSTED RETURNS</div><div>Summary compliance report shows the average peer group quartile rank for all time periods (no credit for bottom quartile performance)</div></div>	<div><div>20% Overall</div></div>	<div>Sharpe Ratio</div> <div>Peer Group Percentile Rankings: 3,5,10 Year Periods</div>		<div>Proportional Score</div> <div>Ranks in top 75% of Peer Group</div>	<div>No Score</div> <div>Ranks in bottom 25% of Peer Group</div>
<div><div>RISK</div><div>Summary compliance report shows the average peer group quartile rank for all time periods (no credit for bottom quartile performance)</div></div>	<div><div>30% Overall</div></div>	<div><div>10% Overall</div></div>	<div>Standard Deviation</div> <div>Peer Group Percentile Rankings: 3,5,10 Year Periods</div>	<div>Proportional Score</div> <div>Ranks in top 75% of Peer Group</div>	<div>No Score</div> <div>Ranks in bottom 25% of Peer Group</div>
		<div><div>20% Overall</div></div>	<div>Upside/Downside Capture</div> <div>Peer Group Percentile Rankings: 3,5,10 Year Periods</div>	<div>Proportional Score</div> <div>Ranks in top 75% of Peer Group</div>	<div>No Score</div> <div>Ranks in bottom 25% of Peer Group</div>
<div><div>OTHER</div><div>Fund expense quartile rank Manager tenure is greater than 3 years</div></div>	<div><div>10% Overall</div></div>	<div><div>5% Overall</div></div>	<div>Expense Ratio</div> <div>For current period</div>	<div>Proportional Score</div> <div>Ranks in top 75% of Peer Group</div>	<div>No Score</div> <div>Ranks in bottom 25% of Peer Group</div>
		<div><div>5% Overall</div></div>	<div>Average Tenure</div> <div>Number of years</div>	<div>Full Score</div> <div>Manager Tenure more than 3 years</div>	<div>No Score</div> <div>Manager Tenure less than 3 years</div>

For peer group rankings, a rank of 1-50 indicates the manager performed favorably and ranked in the top half of its peer group for that metric. For example: when measuring risk, a rank of 1 would mean the manager had a very low standard deviation compared to its peer group, whereas when measuring return, a rank of 1 would mean the manager had a very high return compared to its peer group.

County of Fresno 457 DC Plan

Fund Policy Compliance

As of 3/31/2019

Summary of Fund Compliance

Passively-Managed and Cash Funds

Type	Assets %	Fund Name	Ticker
LC Index	18.63%	BlackRock Equity Index - Collective M	02cff1
MC Index	3.43%	BlackRock MidCap Idx - Collective M	03cff2
SC Index	1.60%	BlackRock Russell 2000 Index Coll M	03cff3
Global	1.38%	BlackRock EAFE Equity Index Coll F	10cff5
US Debt	2.07%	BlackRock US Debt Index Fund Coll W	04cff4

Actively-Managed Funds

Status	Assets %	Fund Name	Ticker	Return (40%)	Risk Adjusted Return (20%)	Risk (30%)	Expense (5%)	Tenure (5%)
Pass	5.42%	Columbia Dividend Income Inst3	CDDYX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	17.26%	Alger Spectra Z	ASPZX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	1.50%	Franklin Utilities R6	FUFRX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Watch	2.13%	Hennessy Focus Institutional	HFCIX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Watch	0.83%	Oakmark Equity And Income Investor	OAKBX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	0.52%	Janus Henderson Small Cap Value N	JDSNX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	2.33%	Nicholas Limited Edition I	NCLEX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	3.62%	Ivy International Core Equity N	IINCX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	0.85%	Oppenheimer Developing Markets I	ODVIX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Watch	1.61%	Virtus Seix Total Return Bond R6	SAMZX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	0.66%	Templeton Global Bond R6	FBNRX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	25.16%	Fresno County Stable Value	fressv	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	0.38%	Fidelity Advisor Real Estate Income I	FRIRX	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>

Target-Date Funds

Status	Assets %	Fund Name	Ticker	Return (40%)	Risk Adjusted Return (20%)	Risk (30%)	Expense (5%)	Tenure (5%)
Pass	1.33%	Great-West Lifetime 2015 Trust	GRWL15	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	3.59%	Great-West Lifetime 2025 Trust	GRWL25	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	2.40%	Great-West Lifetime 2035 Trust	GRWL35	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	2.15%	Great-West Lifetime 2045 Trust	GRWL45	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Pass	1.17%	Great-West Lifetime 2055 Trust	GRWL55	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>

Passively-Managed and Cash Funds

Type of Fund	Assets %	Ticker	Fund Name	Return vs Peer Group (40%)			Risk Adjusted Return Sharpe (20%)			Standard Deviation			Risk (30%) Up Capture			Down Capture			Other (10%) Expense Tenure	
				3Y	5Y	10Y	3Y	5Y	10Y	3Y	5Y	10Y	3Y	5Y	10Y	3Y	5Y	10Y	Peer Rank %	Avg Yrs
LC Index	18.63%	02cff1	BlackRock Equity Index - Collective M	11	6	10	11	7	6	35	37	30	17	9	28	37	26	21	2	5
MC Index	3.43%	03cff2	BlackRock MidCap Idx - Collective M	27	16	15	34	23	20	64	64	64	9	7	10	77	69	63	1	5
SC Index	1.60%	03cff3	BlackRock Russell 2000 Index Coll M	9	22	29	16	26	41	62	84	68	9	4	11	49	78	83	2	5
Global	1.38%	10cff5	BlackRock EAFE Equity Index Coll F	18	28	23	17	29	24	30	52	51	29	36	24	33	42	51	4	5
US Debt	2.07%	04cff4	BlackRock US Debt Index Fund Coll W	1	1		8	22		89	85		5	8		47	49		1	5

Actively-Managed Funds

Overall Fund Score	Assets %	Ticker	Fund Name	Return vs Peer Group (40%)			Risk Adjusted Return Sharpe (20%)			Standard Deviation			Risk (30%) Up Capture			Down Capture			Other (10%) Expense Tenure	
				3Y	5Y	10Y	3Y	5Y	10Y	3Y	5Y	10Y	3Y	5Y	10Y	3Y	5Y	10Y	Peer Rank %	Avg Yrs
9	5.42%	CDDYX	Columbia Dividend Income Inst3	5	1	19	3	2	4	11	11	8	60	48	83	5	6	9	16	10
6	17.26%	ASPZX	Alger Spectra Z	37	29	7	48	38	10	71	68	70	23	19	7	90	70	71	45	9
7	1.50%	FUFRX	Franklin Utilities R6	38	16	27	49	12	20	78	73	22	7	10	42	74	62	25	13	15
5	2.13%	HFCIX	Hennessy Focus Institutional	94	61	48	88	31	30	4	8	29	98	88	94	27	12	3	48	10
3	0.83%	OAKBX	Oakmark Equity And Income Investor	34	63	68	80	79	79	93	93	80	13	20	53	95	93	71	29	12
8	0.52%	JDSNX	Janus Henderson Small Cap Value N	16	3	55	3	1	3	3	5	4	88	77	91	3	2	2	12	6
6	2.33%	NCLEX	Nicholas Limited Edition I	59	39	68	24	15	9	1	2	2	89	85	95	6	6	6	17	14
6	3.62%	IINCX	Ivy International Core Equity N	65	30	19	71	34	22	84	79	61	34	17	24	80	70	47	29	8
8	0.85%	ODVIX	Oppenheimer Developing Markets I	18	27	4	10	27	6	25	41	28	57	55	49	13	33	17	13	12
3	1.61%	SAMZX	Virtus Seix Total Return Bond R6	73	53	76	79	66	80	82	84	47	66	38	74	72	66	68	8	10
6	0.66%	FBNRX	Templeton Global Bond R6	9	31	29	36	41	45	69	74	82	97	92	88	2	2	3	13	9
9	25.16%	fressv	Fresno County Stable Value	1	1		1	1		1	1		1	1		n/a	1		43	6
6	0.38%	FRIRX	Fidelity Advisor Real Estate Income I	17	86	94	4	1	1	2	1	2	94	98	97	5	1	1	18	8

Target-Date Funds

Overall Fund Score	Assets %	Ticker	Fund Name	Return vs Peer Group (40%)			Risk Adjusted Return Sharpe (20%)			Standard Deviation			Risk (30%) Up Capture			Down Capture			Other (10%) Expense Tenure	
				3Y	5Y	10Y	3Y	5Y	10Y	3Y	5Y	10Y	3Y	5Y	10Y	3Y	5Y	10Y	Peer Rank %	Avg Yrs
8	1.33%	GRWL15	Great-West Lifetime 2015 Trust	23	6		29	6		54	34		19	30		54	29		22	5
9	3.59%	GRWL25	Great-West Lifetime 2025 Trust	15	2		9	1		44	38		26	35		27	21		17	5
8	2.40%	GRWL35	Great-West Lifetime 2035 Trust	12	14		10	9		52	32		17	41		49	16		18	5
8	2.15%	GRWL45	Great-West Lifetime 2045 Trust	9	6		13	8		61	48		4	8		52	33		18	5
8	1.17%	GRWL55	Great-West Lifetime 2055 Trust	11	12		15	13		60	50		6	8		58	45		18	5

All data except for 'Tenure - Average Years' are listed as a peer rank percentage

All Funds remain in compliance with Investment Policy and no action need be taken other than indicated in the Fund Compliance Commentary section of this report.



Northwest Capital Management, Inc. 04/30/2019

This report, along with more detailed performance data on Plan Investment Options, was reviewed by the Plan's Trustee and/or Investment Committee.

Trustee / Committee Member Date

BlackRock Equity Index - Collective M (02cff1)

Fund Type: LC Index

US Large Cap

The fund seeks to replicate the performance of U.S. Large Cap Stocks

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
02cff1	13.69%	9.60%	13.59%	10.98%	16.01%
S&P 500 TR USD	13.64%	9.48%	13.51%	10.91%	15.92%
Out/(Under) Performing	0.05%	0.12%	0.08%	0.07%	0.09%
Peer Group Ranking	26	17	11	6	10

BlackRock MidCap Idx - Collective M (03cff2)

Fund Type: MC Index

US Mid Cap

The fund seeks to replicate the performance of U.S. Mid Cap Stocks

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
03cff2	14.48%	2.66%	11.07%	8.14%	16.21%
S&P MidCap 400 TR	14.49%	2.57%	11.24%	8.28%	16.28%
Out/(Under) Performing	-0.01%	0.10%	-0.16%	-0.15%	-0.06%
Peer Group Ranking	49	46	27	16	15

BlackRock Russell 2000 Index Coll M (03cff3)

Fund Type: SC Index

US Small Cap

The fund seeks to replicate the performance of U.S. Small Cap Stocks

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
03cff3	14.65%	2.18%	13.13%	7.29%	15.61%
Russell 2000 TR USD	14.59%	2.04%	12.92%	7.05%	15.36%
Out/(Under) Performing	0.06%	0.14%	0.21%	0.24%	0.25%
Peer Group Ranking	29	24	9	22	29

BlackRock EAFE Equity Index Coll F (10cff5)

Fund Type: Global

Frng Develpd Large Cap

The fund seeks to replicate performance of Foreign stock represented by the MSCI EAFE Index

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
10cff5	10.09%	-3.66%	7.66%	2.64%	9.26%
MSCI ACWI Ex USA NR USD	10.32%	-4.20%	8.09%	2.57%	8.85%
Out/(Under) Performing	-0.23%	0.54%	-0.43%	0.07%	0.41%
Peer Group Ranking	55	22	18	28	23

BlackRock US Debt Index Fund Coll W (04cff4)

Fund Type: US Debt

US Intermed Duration

The fund seeks to replicate the performance of the U.S. Bond Market

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
04cff4	2.97%	4.55%	2.10%	2.88%	
BBgBarc US Govt Interm TR USD	1.58%	3.78%	0.97%	1.65%	2.00%
Out/(Under) Performing	1.39%	0.77%	1.13%	1.23%	
Peer Group Ranking	1	5	1	1	

Columbia Dividend Income Inst3 (CDDYX)

Fund Score: 9 (Status: Pass)

US Large Cap

The investment seeks total return, consisting of current income and capital appreciation.

The fund invests at least 80% of its net assets (including the amount of any borrowings for investment purposes) in a diversified portfolio of income-producing (dividend-paying) equity securities, which will consist primarily of common stocks but also may include preferred stocks and convertible securities. It invests principally in securities of companies believed to be undervalued but also may invest in securities of companies believed to have the potential for long-term growth. The fund may invest in companies that have market capitalizations of any size.

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
CDDYX	12.03%	9.38%	12.56%	10.45%	14.59%
S&P 500 Value TR USD	12.19%	5.92%	10.62%	8.04%	14.49%
Out/(Under) Performing	-0.16%	3.46%	1.94%	2.41%	0.11%
Peer Group Ranking	27	8	5	1	19

Alger Spectra Z (ASPZX)

Fund Score: 6 (Status: Pass)

US Large Cap

The investment seeks long-term capital appreciation.

The fund invests primarily in the equity securities of companies of any size that the manager believes demonstrate promising growth potential. Equity securities include common or preferred stocks that are listed on U.S. or foreign exchanges. It may invest a significant portion of its assets in securities of companies conducting business within a single sector, including the information technology, consumer discretionary, and health care sectors.

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
ASPZX	15.41%	11.51%	16.18%	12.75%	18.45%
S&P 500 Growth TR USD	14.96%	12.78%	15.92%	13.37%	17.17%
Out/(Under) Performing	0.44%	-1.27%	0.26%	-0.62%	1.28%
Peer Group Ranking	59	44	37	29	7

Alger Spectra returned 15.4% in Q1 2019 compared to 15.0% for its benchmark (S&P 500 Growth). For the trailing 12 months, the fund returned 11.5% compared to 12.8% for the benchmark. An underweight to energy was the primary tailwind on Q1 performance relative to the benchmark, as this sector underperformed the broader market. Additionally, security selection in the technology sector boosted performance, with Salesforce and Amazon among the top contributors. A short position in AbbieVie also helped performance as the company's first earnings miss in five years caused its share price to decline. The fund currently scores a 6 under our methodology. Its returns rank in the top half relative to peers for the trailing three- and five-year periods, and in the top decile for the trailing ten-year period.

Franklin Utilities R6 (FUFRX)
Fund Score: 7 (Status: Pass)

The investment seeks capital appreciation and current income.
The fund normally invests at least 80% of its net assets in the securities of public utilities companies. These are companies that provide electricity, natural gas, water, and communications services to the public and companies that provide services to public utilities companies. It concentrates (invests more than 25% of its total assets) in companies operating in the utilities industry. The fund invests primarily in equity securities, which consist mainly of common stocks.

US Large Cap

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
FUFRX	12.61%	20.55%	9.73%	10.22%	13.22%
MSCI World/Utilities NR USD	10.01%	14.14%	7.56%	6.05%	7.48%
Out/(Under) Performing	2.60%	6.41%	2.17%	4.17%	5.74%
Peer Group Ranking	11	7	38	16	27

Hennessy Focus Institutional (HFCIX)
Fund Score: 5 (Status: Watch)

The investment seeks capital appreciation.
The fund invests primarily in domestic companies listed on U.S. national securities exchanges. It may also invest in (i) foreign companies listed on U.S. national securities exchanges, (ii) foreign companies through American Depositary Receipts or other types of depositary receipts, which are U.S. dollar-denominated securities of foreign issuers listed on U.S. national securities exchanges and, (iii) foreign companies traded on foreign exchanges. The fund is non-diversified.

US Mid Cap

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
HFCIX	14.05%	4.91%	8.94%	8.94%	16.01%
S&P MidCap 400 Growth TR USD	14.95%	1.69%	11.90%	8.80%	16.64%
Out/(Under) Performing	-0.90%	3.22%	-2.96%	0.14%	-0.63%
Peer Group Ranking	92	79	94	61	48

Hennessy Focus returned 14.1% over the trailing quarter, compared to 15% from its benchmark (S&P Mid-Cap 400 Growth). Over the trailing year, the fund returned 4.9%, while the benchmark posted a 1.7% return. The highly concentrated portfolio exposes the fund to idiosyncratic risk and its relatively high fees leave it little margin for error. The fund has a large overweight in the financial services sector and positions in this sector, such as Metro Bank and Markel Corp were the main detractors on performance for the quarter. Under our scoring methodology, the fund continues to score a 5 out of 10 but will remain on watch for recent underperformance. Based on risk-adjusted returns, the fund ranks in the bottom quartile over the trailing three-year period and the top half of its peer group over the trailing five- and ten-year periods.

Oakmark Equity And Income Investor (OAKBX)

Fund Score: 3 (Status: Watch)

Uncategorized

The investment seeks income and preservation and growth of capital.

The fund invests primarily in a diversified portfolio of U.S. equity and debt securities (although the fund may invest up to 35% of its total assets in equity and debt securities of non-U.S. issuers). It is intended to present a balanced investment program between growth and income by investing approximately 40-75% of its total assets in common stock, including securities convertible into common stock, and up to 60% of its total assets in debt securities issued by U.S. or non-U.S. governments and corporate entities rated at the time of purchase within the two highest grades.

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
OAKBX	8.78%	1.35%	7.91%	4.88%	9.42%
DJ Moderate TR USD	8.78%	3.09%	7.67%	5.48%	9.84%
Out/(Under) Performing	0.00%	-1.74%	0.24%	-0.59%	-0.42%
Peer Group Ranking	56	87	34	63	68

Oakmark Equity and Income Yield returned 8.8% for Q1 2019, underperforming its benchmark by 1 bp. For the year, the fund returned 1.4% compared to 3.1% for its benchmark. Underperformance in the quarter and underperformance YTD is primarily attributed to the fund's overweight of value, and underweight of growth. Growth has far outperformed value over the past several years. Additionally, less interest rate sensitivity (duration) detracted as longer-term yields fell on the back of the dovish Fed. The fund ended the quarter with 61% in equities and 39% in fixed income. Looking ahead, management increased their allocation to corporate credit and increased duration to slightly above two years. For our part, the fund continues to be unidirectional for rising rates by being overweight financials and underweight real estate, and on the fixed income side having a much shorter duration relative to peers. This has largely detracted from performance over the years. We continue to question managements inability to be evolutionary by evaluating processes and implementing enhancements. The fund scores a 3 under our scoring methodology and remains on watch. Trailing returns rank in the bottom half of peers over the trailing 5- and 10-year periods.

Janus Henderson Small Cap Value N (JDSNX)

Fund Score: 8 (Status: Pass)

US Small Cap

The investment seeks capital appreciation.

The fund pursues its investment objective by investing primarily in the common stocks of small companies whose stock prices are believed to be undervalued by the fund's portfolio managers. It invests, under normal circumstances, at least 80% of its net assets (plus any borrowings for investment purposes) in equity securities of small companies whose market capitalization, at the time of initial purchase, is less than the 12-month average of the maximum market capitalization for companies included in the Russell 2000 Value Index. The fund may invest up to 20% of its net assets in cash or similar investments.

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
JDSNX	12.22%	0.75%	10.36%	7.49%	13.87%
Russell 2000 Value TR USD	11.94%	0.18%	10.86%	5.60%	14.12%
Out/(Under) Performing	0.28%	0.57%	-0.50%	1.90%	-0.25%
Peer Group Ranking	48	15	16	3	55

Nicholas Limited Edition I (NCLEX)

Fund Score: 6 (Status: Pass)

US Small Cap

The investment seeks to increase the value of the investment over the long-term.

The fund primarily invests in common stocks of domestic corporations with small- and medium-sized market capitalizations believed to have growth potential. The advisor believes a company's annual sales volume and market capitalization are the factors most illustrative of a company's size. The advisor generally considers companies with market capitalizations up to \$3 billion as "small", between \$3 billion and \$25 billion as "medium," and greater than \$25 billion as "large."

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
NCLEX	13.49%	12.54%	14.90%	9.26%	15.66%
Russell 2000 Growth TR USD	17.15%	3.87%	14.88%	8.41%	16.52%
Out/(Under) Performing	-3.66%	8.67%	0.02%	0.84%	-0.86%
Peer Group Ranking	87	21	59	39	68

Nicholas Limited Edition returned 13.5% compared to 17.1% for its benchmark (Russell 2000 Growth) over the trailing quarter. For the trailing year, the fund returned 12.5% outperforming its benchmark which returned 3.9%. Stock selection in the technology and healthcare sectors were major headwinds, as positions in health technology stocks Evolent Health Inc, Vocera Comm. and Healthcare Services Group significantly detracted from overall performance. For our part, we are satisfied with the fund's effective conservative philosophy as it has continued to perform over the long-term. Under our scoring methodology, the fund scores a 6 and ranks in the top quartile of its peer group for the three-, five- and ten-year periods, based off risk-adjusted returns.

Ivy International Core Equity N (IINCX)

Fund Score: 6 (Status: Pass)

Frgn Developd Large Cap

The investment seeks to provide capital growth and appreciation.

The fund invests, under normal circumstances, at least 80% of its net assets in equity securities of companies primarily located in, or principally traded in, developed European and Asian/Pacific Basin markets. In seeking to enhance potential return, it also may invest in issuers located or doing business in emerging market countries. The fund may invest up to 100% of its total assets in foreign securities.

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
IINCX	10.17%	-8.11%	5.98%	2.56%	9.44%
MSCI ACWI Ex USA NR USD	10.32%	-4.20%	8.09%	2.57%	8.85%
Out/(Under) Performing	-0.15%	-3.91%	-2.11%	-0.01%	0.59%
Peer Group Ranking	51	79	65	30	19

Oppenheimer Developing Markets I (ODVIX)

Fund Score: 8 (Status: Pass)

Frng Emergng Markets

The investment seeks capital appreciation.

The fund mainly invests in common stocks of issuers in developing and emerging markets throughout the world and at times it may invest up to 100% of its total assets in foreign securities. Under normal market conditions, it will invest at least 80% of its net assets, plus borrowings for investment purposes, in equity securities of issuers whose principal activities are in a developing market, i.e. are in a developing market or are economically tied to a developing market country. The fund will invest in at least three developing markets.

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
ODVIX	12.42%	-3.75%	11.81%	3.88%	11.54%
MSCI EM NR USD	9.92%	-7.40%	10.69%	3.68%	8.95%
Out/(Under) Performing	2.49%	3.66%	1.12%	0.20%	2.60%
Peer Group Ranking	26	9	18	27	4

Oppenheimer Developing Markets returned 12.4% in Q1 2019 compared to 9.9% for its benchmark (MSCI Emerging Markets). For the trailing 12 months, the fund returned -3.8% compared to -7.4% for the benchmark. An overweight position to France was the primary tailwind on Q1 performance relative to the benchmark, as the region outperformed the broader market. Additionally, stock selection in China and an underweight to South Korea enhanced performance relative to the benchmark. Alibaba, Jiangsu Hengrui, and Huazhu were the top performing stocks on an absolute basis. Management maintains a positive outlook on emerging market equities and seeks investment opportunities across the developing world. The fund currently scores an 8 under our methodology. Its risk-adjusted returns rank in the top quartile relative to peers for the trailing three- and ten-year periods, and in the top half for the trailing five-year period.

Virtus Seix Total Return Bond R6 (SAMZX)

Fund Score: 3 (Status: Watch)

US Intermed Duration

The investment seeks to maximize long term total return through a combination of current income and capital appreciation, consistent with capital preservation.

The fund invests in various types of income-producing debt securities including mortgage- and asset-backed securities, government and agency obligations, corporate obligations and floating rate loans. It normally invests at least 80% of its net assets (plus any borrowings for investment purposes) in fixed income securities. The fund may invest up to 20% of its net assets in below investment grade, high yield debt obligations.

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
SAMZX	2.50%	3.97%	1.86%	2.52%	3.89%
BBgBarc US Agg Bond TR USD	2.94%	4.48%	2.03%	2.74%	3.77%
Out/(Under) Performing	-0.44%	-0.51%	-0.17%	-0.23%	0.12%
Peer Group Ranking	84	53	73	53	76

The Virtus Seix Total Return Bond fund returned +2.5% in the quarter, underperforming the Bloomberg Barclays Aggregate Index return of +2.9%. The fund's corporate bond underweight was the primary detractor to relative performance for the quarter as spreads tightened during the risk market rally. This underweight funded a Treasury overweight, which further detracted from performance with spread sector carry prevailing. Looking forward, management maintains their safe income at a reasonable price theme, and are overweight high quality Commercial Mortgage Backed Securities (CMBS) and Asset Back Securities (ABS). Duration positioning remains neutral relative to bench with bias toward the back-end (30-year) portion of the curve. The fund scores a 3 under our scoring methodology and remains on watch. Trailing performance ranks in the bottom half of peers over the trailing three-, five-, and ten-year periods, respectively.

Templeton Global Bond R6 (FBNRX)

Fund Score: 6 (Status: Pass)

Global Hedged

The investment seeks current income with capital appreciation and growth of income.

Under normal market conditions, the fund invests at least 80% of its net assets in "bonds." Bonds include debt obligations of any maturity, such as bonds, notes, bills and debentures. It invests predominantly in bonds issued by governments, government-related entities and government agencies located around the world. The fund may invest up to 25% of its total assets in bonds that are rated below investment grade or, if unrated determined by the investment manager to be of comparable quality. It is non-diversified.

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
FBNRX	2.01%	2.19%	4.33%	2.03%	5.60%
BBgBarc Global Aggregate TR Hdg USD	2.99%	4.93%	2.81%	3.64%	4.08%
Out/(Under) Performing	-0.98%	-2.74%	1.52%	-1.61%	1.52%
Peer Group Ranking	77	36	9	31	29

Fresno County Stable Value (fressv)

Fund Score: 9 (Status: Pass)

Liquid Assets

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
fressv	0.55%	2.12%	2.06%	2.10%	
ICE BofAML 0-3 M US Trsy Bill TR USD	0.60%	2.09%	1.14%	0.70%	0.39%
Out/(Under) Performing	-0.05%	0.03%	0.91%	1.40%	
Peer Group Ranking	31	9	1	1	

Fidelity Advisor Real Estate Income I (FRIRX)

Fund Score: 6 (Status: Pass)

REIT

The investment seeks higher than average income; and capital growth is the secondary objective.

The fund normally invests primarily in preferred and common stocks of REITs; debt securities of real estate entities; and commercial and other mortgage-backed securities, with an emphasis on lower-quality debt securities (those of less than investment-grade quality, also referred to as high yield debt securities or junk bonds). It invests at least 80% of assets in securities of companies principally engaged in the real estate industry and other real estate related investments. The fund invests in domestic and foreign issuers.

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
FRIRX	8.35%	11.05%	7.32%	6.75%	12.71%
FTSE Nareit Equity REITs TR USD	16.34%	20.33%	5.97%	9.02%	18.23%
Out/(Under) Performing	-7.98%	-9.28%	1.35%	-2.28%	-5.52%
Peer Group Ranking	92	91	17	86	94

Fidelity Advisor Real Estate Income returned 8.4% for the quarter, while its benchmark (FTSE Nareit Equity REITs) posted a 16.3% return. For the trailing year, the fund posted an 11.1% return, while the benchmark returned 20.3%. However, the benchmark is 100% invested in equity REITS, while the fund contains both preferred and common stock of REITS, debt securities of real estate entities and various mortgage-backed securities to dampen volatility over the long-term. REITS excelled during the quarter, while the fund's debt positions and 7% cash allocation dragged on overall performance relative to the benchmark. On March 2019, William Maclay was promoted to comanager. He will assist current manager Mark Snyderman with the fixed-income portion of the portfolio. Overall the fund scores a 6 under our methodology and ranks in the top decile over the three-, five- and ten-year periods, based off risk-adjusted returns.

Great-West Lifetime 2015 Trust (GRWL15)
Fund Score: 8 (Status: Pass)

Uncategorized

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
GRWL15	7.27%	4.02%	6.89%	5.32%	
DJ Target 2015 TR USD	4.01%	2.53%	3.70%	3.20%	6.70%
Out/(Under) Performing	3.25%	1.48%	3.19%	2.12%	
Peer Group Ranking	34	25	23	6	

Great-West Lifetime 2045 Trust (GRWL45)
Fund Score: 8 (Status: Pass)

Uncategorized

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
GRWL45	12.03%	4.03%	10.95%	7.54%	
DJ Target 2045 TR USD	11.86%	3.24%	10.42%	6.85%	13.02%
Out/(Under) Performing	0.17%	0.79%	0.53%	0.70%	
Peer Group Ranking	24	17	9	6	

Great-West Lifetime 2025 Trust (GRWL25)
Fund Score: 9 (Status: Pass)

Uncategorized

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
GRWL25	8.80%	4.38%	8.40%	6.26%	
DJ Target 2025 TR USD	6.40%	2.86%	6.03%	4.59%	9.44%
Out/(Under) Performing	2.40%	1.52%	2.37%	1.68%	
Peer Group Ranking	27	11	15	2	

Great-West Lifetime 2055 Trust (GRWL55)
Fund Score: 8 (Status: Pass)

Uncategorized

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
GRWL55	12.07%	3.57%	10.94%	7.40%	
DJ Target 2055 TR USD	12.49%	3.20%	10.73%	7.00%	13.11%
Out/(Under) Performing	-0.42%	0.36%	0.22%	0.40%	
Peer Group Ranking	30	27	11	12	

Great-West Lifetime 2035 Trust (GRWL35)
Fund Score: 8 (Status: Pass)

Uncategorized

Trailing Returns	1 Qtr	1 Yr	3 Yr	5 Yr	10 Yr
GRWL35	10.88%	4.43%	10.22%	6.89%	
DJ Target 2035 TR USD	9.53%	3.19%	8.72%	6.02%	11.89%
Out/(Under) Performing	1.35%	1.24%	1.51%	0.87%	
Peer Group Ranking	26	13	12	14	

County of Fresno 457 DC Plan

Expense Ratio Report

As of 3/31/2019

Passively-Managed and Cash Funds

Investment		Ticker	Expense Ratio▲	Peer Rank	Range of Peer Group Expense Ratios						
					0%	0.5%	1%	1.5%	2%	2.5%	3%
47,269,663	BlackRock Equity Index - Collective M	02cff1	0.02%	2	▲						
8,705,531	BlackRock MidCap Idx - Collective M	03cff2	0.03%	1	▲						
4,058,873	BlackRock Russell 2000 Index Coll M	03cff3	0.03%	2	▲						
3,492,132	BlackRock EAFE Equity Index Coll F	10cff5	0.10%	4	▲						
5,251,075	BlackRock US Debt Index Fund Coll W	04cff4	0.04%	1	▲						

Actively-Managed Funds

13,743,096	Columbia Dividend Income Inst3	CDDYX	0.58%	16		▲					
43,806,425	Alger Spectra Z	ASPZX	0.94%	45			▲				
3,819,072	Franklin Utilities R6	FUFRX	0.50%	13		▲					
5,398,381	Hennessy Focus Institutional	HFCIX	1.10%	48			▲				
2,101,732	Oakmark Equity And Income Investor	OAKBX	0.78%	29		▲					
1,327,429	Janus Henderson Small Cap Value N	JDSNX	0.81%	12		▲					
5,913,415	Nicholas Limited Edition I	NCLEX	0.86%	17		▲					
9,183,161	Ivy International Core Equity N	IINCX	0.79%	29		▲					
2,145,523	Oppenheimer Developing Markets I	ODVIX	0.87%	13		▲					
4,081,695	Virtus Seix Total Return Bond R6	SAMZX	0.31%	8	▲						
1,680,603	Templeton Global Bond R6	FBNRX	0.56%	13		▲					
63,854,364	Fresno County Stable Value	fressv	0.35%	43	▲						
966,595	Fidelity Advisor Real Estate Income I	FRIRX	0.75%	18		▲					

Target-Date Funds

3,370,492	Great-West Lifetime 2015 Trust	GRWL15	0.40%	22		▲					
9,115,564	Great-West Lifetime 2025 Trust	GRWL25	0.40%	17		▲					
6,092,324	Great-West Lifetime 2035 Trust	GRWL35	0.41%	18		▲					
5,447,807	Great-West Lifetime 2045 Trust	GRWL45	0.41%	18		▲					
2,963,545	Great-West Lifetime 2055 Trust	GRWL55	0.42%	18		▲					

253,788,496

Expense Ratio Averages

0.50%

18

Weighted Average Gross Expense Ratio: 0.44%

Your Plan

	Bal Weighted Avg	1st Quartile	2nd Quartile	3rd Quartile	4th Quartile
Expense Ratio	0.44%	78.3%(18)	21.7%(5)	-	-

County of Fresno 457 DC Plan

As of: 3/31/2019

Target Date Review

Retirement Date	Investment	3-Mo	1 Yr	2 Yr *	3 Yr *	5 Yr *	Expense Ratio
2015							
	Great-West Lifetime 2015 Trust	7.27	4.02	5.88	6.89	5.32	0.40
	Morningstar Lifetime Mod 2015 TR USD	7.44	4.41	5.86	6.42	4.62	
	Benchmark +/-	-0.17	-0.39	0.02	0.47	0.70	
2025							
	Great-West Lifetime 2025 Trust	8.80	4.38	7.07	8.40	6.26	0.40
	Morningstar Lifetime Mod 2025 TR USD	8.96	4.52	6.89	7.95	5.47	
	Benchmark +/-	-0.16	-0.14	0.18	0.45	0.79	
2035							
	Great-West Lifetime 2035 Trust	10.88	4.43	8.52	10.22	6.89	0.41
	Morningstar Lifetime Mod 2035 TR USD	10.88	4.18	8.00	9.88	6.33	
	Benchmark +/-	0.00	0.25	0.52	0.34	0.56	
2045							
	Great-West Lifetime 2045 Trust	12.03	4.03	9.06	10.95	7.54	0.41
	Morningstar Lifetime Mod 2045 TR USD	11.92	3.59	8.35	10.65	6.53	
	Benchmark +/-	0.11	0.44	0.71	0.30	1.01	
2055							
	Great-West Lifetime 2055 Trust	12.07	3.57	8.94	10.94	7.40	0.42
	Morningstar Lifetime Mod 2055 TR USD	12.01	3.22	8.28	10.66	6.38	
	Benchmark +/-	0.06	0.35	0.66	0.28	1.02	

*Returns are annualized after 1 year

**Great West Lifetime Trust Series replaced Great West Lifetime Trust Series II in June 2016. Return data prior to June 2016 reflects Great West Lifetime Trust Series II

*** Great West Lifetime Trust Series expense ratios were reduced to 0.40%-0.42% in Q1 2019

Current Lineup Status

Asset Class		Current Status	Placed On Watch	Asset Class		Current Status	Placed On Watch
US Large Cap				Fixed Income			
02cff1	BlackRock Equity Index - Collective M	Pass	-	04cff4	BlackRock US Debt Index Fund Coll W	Pass	-
ASPZX	Alger Spectra Z	Pass	-	FBNRX	Templeton Global Bond R6	Pass	-
CDDYX	Columbia Dividend Income Inst3	Pass	-	SAMZX	Virtus Seix Total Return Bond R6	Watch	2018 - Q3
US Mid Cap				fressv	Fresno County Stable Value	Pass	-
03cff2	BlackRock MidCap Idx - Collective M	Pass	-	Target Date Funds			
03cff3	BlackRock Russell 2000 Index Coll M	Pass	-	GRWL15	Great-West Lifetime 2015 Trust	Pass	-
HFCIX	Hennessy Focus Institutional	Watch	2018 - Q3	GRWL25	Great-West Lifetime 2025 Trust	Pass	-
US Small Cap				GRWL35	Great-West Lifetime 2035 Trust	Pass	-
NCLEX	Nicholas Limited Edition I	Pass	-	GRWL45	Great-West Lifetime 2045 Trust	Pass	-
JDSNX	Janus Henderson Small Cap Value N	Pass	-	GRWL55	Great-West Lifetime 2055 Trust	Pass	-
Foreign							
10cff5	BlackRock EAFE Equity Index Coll F	Pass	-				
IINCX	Ivy International Core Equity N	Pass	-				
ODVIX	Oppenheimer Developing Markets I	Pass	-				
Specialty							
FRIRX	Fidelity Advisor Real Estate Income I	Pass	-				
FUFRX	Franklin Utilities R6	Pass	-				
OAKBX	Oakmark Equity And Income Investor	Watch	2018 - Q3				

Watch List History

		Status	Most Recent Time on Watch		Previous Time on Watch		Previous Time on Watch	
			Placed	Removed	Placed	Removed	Placed	Removed
HFCIX	Hennessy Focus Institutional	In Plan	2018 - Q3	-				
OAKBX	Oakmark Equity and Income Investor	In Plan	2018 - Q3	-	2012 - Q1	2012 - Q3		
SAMZX	Virtus Seix Total Return Bond R6	In Plan	2018 - Q3	-	2013 - Q4	2015 - Q2		
FRESSV	County Of Fresno Stable Value Fund	In Plan	2017 - Q1	2018 - Q1				
GRWL15	Great-West Lifetime 2015 Trust	In Plan	2017 - Q1	2018 - Q1				
GRWL25	Great-West Lifetime 2025 Trust	In Plan	2017 - Q1	2018 - Q1				
GRWL35	Great-West Lifetime 2035 Trust	In Plan	2017 - Q1	2018 - Q1				
GRWL45	Great-West Lifetime 2045 Trust	In Plan	2017 - Q1	2018 - Q1				
GRWL55	Great-West Lifetime 2055 Trust	In Plan	2017 - Q1	2018 - Q1				
FBNRX	Templeton Global Bond R6	In Plan	2016 - Q2	2017 - Q1				
NCLEX	Nicholas Limited Edition N	In Plan	2013 - Q4	2015 - Q2				
CDDYX	Columbia Dividend Income Z	In Plan	2013 - Q4	2014 - Q4				
SEGSX	Sentinel Government Securities A	Removed	2014 - Q2	2015 - Q2				
MSIIX	MainStay International Equity I	Removed	2012 - Q4	2015 - Q2				
PAXIX	Pax Balanced Institutional	Removed	2012 - Q4	2013 - Q2				
GTAVX	Invesco Mid Cap Core Equity R5	Removed	2012 - Q1	2013 - Q2				
NBGX	Neuberger Berman Genesis Inv	Removed	2012 - Q1	2012 - Q3				
SDGTX	Deutsche Capital Growth I	Removed	2012 - Q1	2012 - Q3				
CHTVX	Invesco Charter Fund R5	Removed	2012 - Q1	2012 - Q3				

* Watch List History displays all funds that have been on watch in the plan since 2012

Item 9 - Exhibit C

Government/Corporate Securities Investment Guidelines (BBB Minimum Rating)

Investment Guidelines for the ~~County of~~ Fresno ~~Deferred Compensation Plan~~ County Stable Asset Fund (Separate Account)

Attachment A

Investment Objectives

Within the parameters as stated below, the objectives of the fund are to:

- ~~1. Earn a high level of return consistent with the other objectives of the fund~~
- ~~1. Preserve principal~~
2. Provide sufficient liquidity to pay plan benefits
3. Provide stable and predictable returns.
- ~~4. Preservation of principal~~
- ~~4. Earn a high level of return relative to other objectives of the fund~~

Credited Rate Benchmark Index

The ~~returns~~ interest rates provided to participants after investment management fees will be compared to the ~~returns~~ yield of three-year treasury notes, on a constant maturity basis.

Types of Investments

Subject to the Quality and Diversification Guidelines, Great-West may invest the assets of the Stable Asset Fund in any or all of the following:

- A. United States Treasury Securities including Treasury Bills, Notes, Bonds, and Strips.
- B. United States Agency ~~securities~~ or Government Sponsored Enterprises (GSE's) Securities including ~~FDIC-guaranteed bank debt~~
 - 1) U.S. Agency or GSE Asset-Backed Securities and Commercial Mortgage-Backed Securities; and
 - 2) Other U.S. Agency Securities.
- C. Mortgage-Backed securities issued by GNMA, FNMA, FHLMC, FHLB, VA Vendee, or other ~~government agencies~~ United States Agency or GSE's.
- D. Collateralized Mortgage Obligations (CMO's) secured by GNMA, FNMA, FHLMC, FHLB, VA Vendee, or other ~~government agencies~~ United States Agency or GSE's.
- E. Instruments of Commercial Banks ~~domiciled in, U.S. money market mutual funds, or repurchase agreements fully collateralized by United States. All money deposited into these Banks must be 100% guaranteed by the FDIC~~ Government, Agency, or GSE securities.
- F. Commercial Paper rated AA1, P1, or PF1, as rated by S&P, ~~Fitch, or~~ Moody's or Fitch.
- G. Corporate and Government Related Bonds rated "A-/A3BBB-/Baa3" or better as rated by S&P, ~~Fitch, or~~

Moody's, Fitch or other nationally recognized rating agency at time of purchase. All securities must be U.S. dollar denominated. Government Related Bonds include:

- 1) Foreign Sovereigns,
- 2) Supranationals,
- 3) U.S. and Foreign Local Governments, and
- 4) Foreign Agencies.

- H. Non-agency Securities: Asset-Backed Securities, Mortgage-Backed Securities, and Commercial Mortgage-Backed Securities rated "A-/A3" or better as rated by S&P, Fitch or Moody's, Fitch or other nationally recognized rating agency at time of purchase, including CMO's backed by non-agency collateral. No purchases of mezzanine or subordinated structured securities are allowed.
- I. Each investment must be in all respects denominated in U.S. Dollars.

Short-Term Investments

All money ~~received by Great West~~ for deposit to the Stable Asset Fund will be invested the same day it is received. Whenever possible these monies will be invested in the type of investments indicated above. However, if the monies are received at a time of the day which makes this impractical, then the monies will be invested in an interest bearing account at a commercial bank. ~~The following business day the money will then be~~ invested according to the above guidelines on a timely basis, and in the best interest of the participants.

Quality & Diversification Guidelines

- A. A ~~minimum~~maximum of ~~50~~100% of the account assets ~~are to may~~ be invested in U.S. Treasury debt, Agency Mortgage-Backed US Government Securities or Collateralized Mortgage Obligations secured by GNMA, FNMA, FHLMC, securities.
- B. A maximum of 50% of the account assets may be invested in Corporate Bonds or Asset-Backed Securities and Government Related Bonds as described in "G" of Types of Investments.
- B-C. A maximum of 20% of the account assets may be invested in non-agency Asset-Backed Securities, Mortgage-Backed Securities, and Commercial Mortgage-Backed Securities as described in "H" of TypeTypes of SecuritiesInvestments.
- ~~C.D.~~ Weighted average quality of AAA-/A3 or better.
- ~~D.E.~~ No more than 10% of the account may be invested in "A'BBB" (includes securities rated BBB+ and BBB-) rated securities or lower.
- F. ~~No~~For "G" of Types of Investments, no more than 2% of the portfolio may be invested in any one issuer.
- ~~E.G.~~ For "H" of Types of Investments, no more than 5% of the portfolio may be invested in any one corporate issuer (including asset backed securities) issuer. For purposes of diversification, each non-agency Asset-Backed or non-agency mortgage backed, Mortgage- Backed or Commercial-Mortgage-Backed trust will be treated as a separate issuer.

Split Ratings

Each security must be rated by at least one nationally recognized rating agency (including, but not limited to, S&P, Moody's or Fitch). In the event of split ratings, the highest rating shall be used to determine compliance with these investment guidelines.

Duration of Investments

The portfolio's average duration will not exceed ~~five~~four years.

Reporting

- A. On a quarterly basis, ~~the manager~~Investment Manager will provide a statement to the Plan showing the market value of each security, the sector diversification within the portfolio, and the duration, quality and yield of the portfolio.
- B. On a quarterly basis, ~~the manager~~Investment Manager will provide to the Plan a book value statement showing the book value of the total portfolio and ~~describingshowing~~ the methodology and assumptions used to reset the crediting rate of the Stable Asset Fund.
- C. On an annual basis, a senior representative of ~~Great West~~GWCM will be made available to the Plan to present to the Plan a verbal and written review of the investment decisions, and the rationale associated with these decisions for the previous 12-month's activity.

Trading Authority

Within the Investment Guidelines as stated in this Exhibit, ~~Great West~~GWCM has the authority to buy and sell any securities in this separate account that it judges to be in the best long-term interest of the separate account and the participants that utilize the account: provided, however, that it is understood that Investment Manager may raise cash by selling assets to provide liquidity to pay benefits and withdrawals.

Changes to Investment Guidelines

The ~~Plan may modify the investment~~ guidelines (including duration) for investment of assets of the fund may be modified at any time, with the consent of the Plan Sponsor, Great-West as the group annuity contract issuer and wrap provider and the Investment Manager, providing that these modifications will not affect the funds ability to provide benefits ~~at~~ book value.

Amortization of Trading Gains/Losses

The general policy of the fund will be a 'buy and hold' strategy. However, to the extent that realized gains or losses occur, these gains/losses will be amortized over the expected average duration of the portfolio.

Fresno County

May 13, 2019

Jack Brown, CFA

SVP, U.S. CIO & Lead Portfolio Manager



Portfolio Comparison & Scenario Analysis

Portfolio Comparison

4/30/19	Core			Duration		
	Fresno	Model	Difference	Fresno	Model	Difference
Sector Weightings:						
Treasury	0.4%	0.0%	-0.4%	4.9	0.0	-4.9
Agency	0.4%	0.0%	-0.4%	2.9	0.0	-2.9
MBS	45.2%	32.3%	-12.9%	3.4	3.7	0.3
30 year	8.0%	0.0%	-8.0%	3.8	0.0	-3.8
20 year	7.4%	0.0%	-7.4%	3.7	0.0	-3.7
15 year	25.0%	26.7%	1.7%	3.3	3.9	0.6
10 year	4.9%	5.6%	0.7%	2.6	2.7	0.1
CMO	6.0%	0.0%	-6.0%	3.4	0.0	-3.4
CMO Agency	3.5%	0.0%	-3.5%	3.1	0.0	-3.1
CMO Non-Agency	2.6%	0.0%	-2.6%	3.9	0.0	-3.9
Corporate Bonds	36.0%	45.6%	9.6%	3.0	3.1	0.0
Finance	13.6%	17.1%	3.5%	3.1	3.2	0.1
Banks	10.0%	10.6%	0.6%	3.3	3.3	0.1
REITs	0.0%	1.0%	1.0%	0.0	3.0	3.0
Other	3.6%	5.5%	2.0%	2.5	2.9	0.4
Industrial	20.8%	26.9%	6.1%	3.0	3.0	0.0
Communication	2.6%	2.0%	-0.5%	4.0	2.3	-1.7
Consumer Cyclical	1.3%	2.0%	0.7%	4.4	3.7	-0.7
Consumer Non Cyclical	8.1%	7.8%	-0.2%	2.9	2.7	-0.2
Energy	1.6%	4.0%	2.4%	2.3	3.6	1.2
Industrial	2.0%	3.5%	1.6%	2.5	2.8	0.3
Materials	2.8%	4.6%	1.7%	2.9	2.9	0.1
Technology	1.5%	2.0%	0.5%	2.3	3.7	1.3
Transportation	1.1%	1.0%	-0.1%	3.2	3.3	0.1
Utility	1.6%	1.5%	-0.1%	2.9	2.6	-0.3
CMBS	5.3%	5.2%	-0.2%	2.8	3.8	1.0
CMBS Agency	2.7%	2.5%	-0.1%	2.6	3.4	0.8
CMBS Non-Agency	2.7%	2.6%	0.0%	3.0	4.1	1.1
ABS	6.2%	16.9%	10.7%	1.9	1.4	-0.4
Auto	0.0%	5.2%	5.2%	0.0	1.4	1.4
CLO	1.6%	4.9%	3.3%	0.2	0.2	0.0
Other	4.5%	6.8%	2.3%	2.5	2.4	-0.1
Cash	0.4%	0.0%	-0.4%	0.0	0.0	0.0

	Fresno	Core Model	Difference
Credit Quality	AA	AA	
Weighted Average Life	3.8	4.1	0.3
Effective Duration	3.1	3.0	-0.1
Effective Convexity	-0.2	-0.2	0.0
Yield To Maturity	2.89	2.96	0.1
OAS	52	58	6.0
Total AUM	\$63,710,532		

- Current IPS restricts A rated Corporate bonds to a maximum of 25%
- Current IPS restricts Corporate Bonds or Asset Back Securities to a maximum of 50%
- Proposed IPS removes restriction on A rated investments and adds separate restrictions on Corporate Bonds and Asset Back Securities
- Rationale for removing restriction:
 - Improved flexibility for longer term asset allocation decisions
 - Credit risk can be managed through sector weightings and individual security selection
 - Credit risk tends to be negatively correlated with interest rate risk
 - AAA and AA rated Corporate bonds are a small investable universe and typically don't offer compelling yield versus ABS and CMBS. Therefore, it is mechanically difficult to maximize allocation to credit risk with current IPS restriction
- Implementation of change:
 - Near term focus on strategic reduction to 30/20 Year MBS while minimizing disruption to the Credited Rate
 - Pay downs from 30/20 Year MBS will be redeployed into shorter term MBS and/or other asset classes
 - Evaluate 30/20 Year MBS that have unrealized gains as potential swap candidates into other asset classes

Interest Rate Scenarios

	Current Fresno Portfolio								
	-100	-50	+0	+50	+100	Bear Steep	Bull Steep	Bear Flat	Bull Flat
Book Yield	2.84%	2.84%	2.84%	2.84%	2.84%	2.84%	2.84%	2.84%	2.84%
Market Yield	1.92%	2.41%	2.90%	3.38%	3.86%	3.06%	2.57%	3.22%	2.75%
Duration	2.8	3.0	3.1	3.2	3.3	3.3	3.1	3.1	3.0
Convexity	-0.2	-0.3	-0.2	-0.1	0.0	-0.1	-0.2	-0.1	-0.2
Market Value / Book Value	102.80%	101.32%	99.78%	98.19%	96.58%	99.17%	100.77%	98.79%	100.32%
Credited Rate	2.28%	2.29%	2.30%	2.30%	2.30%	2.30%	2.30%	2.30%	2.29%
Credited Rate Change	-0.02%	-0.01%	0.00%	0.01%	0.01%	0.01%	0.00%	0.00%	-0.01%
Market to Book Change	3.0	1.5	0.0	-1.6	-3.2	-0.6	1.0	-1.0	0.5

	Model Portfolio								
	-100	-50	+0	+50	+100	Bear Steep	Bull Steep	Bear Flat	Bull Flat
Book Yield	2.96%	2.96%	2.96%	2.96%	2.96%	2.96%	2.96%	2.96%	2.96%
Market Yield	2.05%	2.52%	2.97%	3.42%	3.88%	3.10%	2.65%	3.28%	2.84%
Duration	2.6	2.8	3.0	3.1	3.2	3.3	3.1	3.1	3.0
Convexity	-0.3	-0.4	-0.2	-0.1	0.0	-0.1	-0.3	-0.2	-0.3
Market Value / Book Value	102.65%	101.26%	99.78%	98.25%	96.69%	99.24%	100.25%	99.24%	99.71%
Credited Rate	2.48%	2.48%	2.49%	2.49%	2.49%	2.48%	2.48%	2.49%	2.49%
Credited Rate Change	-0.01%	-0.01%	0.00%	0.00%	0.00%	-0.01%	-0.01%	0.00%	0.00%
Market to Book Change	2.9	1.5	0.0	-1.5	-3.1	-0.5	0.5	-0.5	-0.1

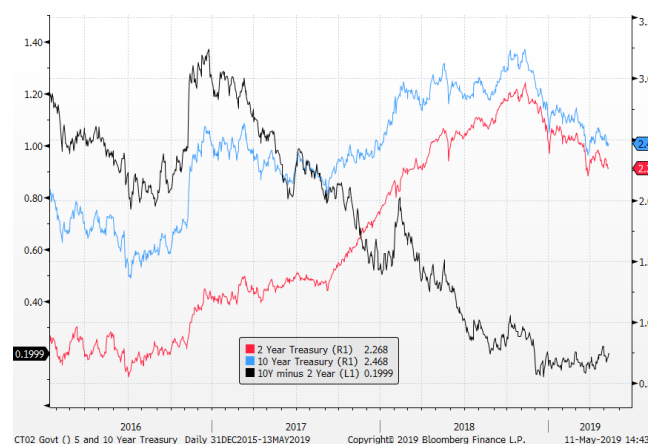
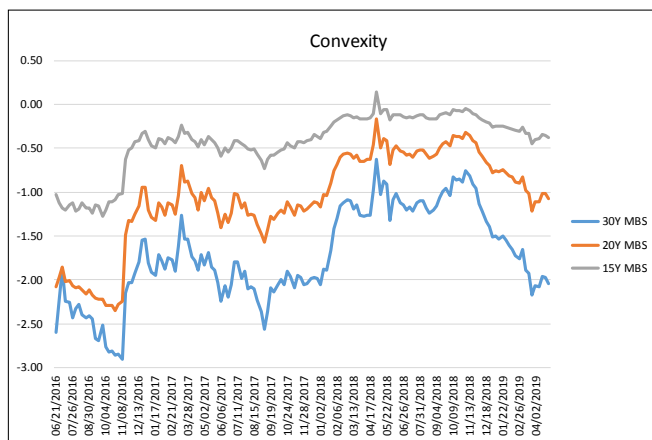
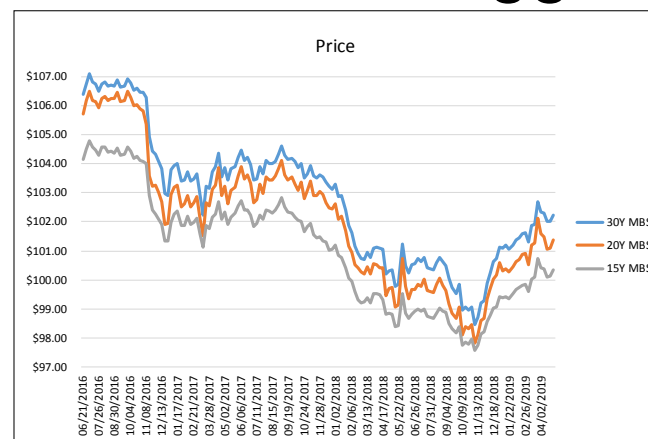
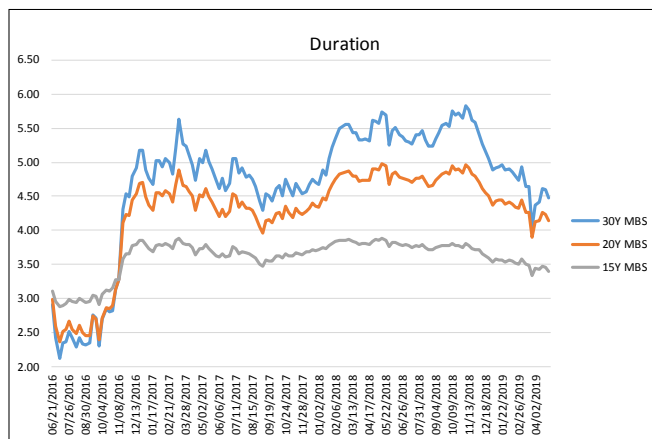
*Does not capture the impact of changes in spreads.

- Credited Rate Formula amortizes realized gains and losses over the duration of the portfolio. Therefore, changes in the market value of securities has minimal impact on the crediting rate. Market to book would reflect changes in unrealized gains and losses.

Interest Rate Scenario Assumptions

- Bear Steepener: Immediate +50 basis point shift upward in 10 Year Treasury. All other tenors constant.
- Bull Steepener: Immediate -50 basis point shift downward in 2 Year Treasury. All other tenors constant.
- Bear Flattener: Immediate +50 basis point shift upward in 2 Year Treasury. All other tenors constant.
- Bull Flattener: Immediate -50 basis point downward in 10 Year Treasury. All other tenors constant.
- All other scenarios are parallel shifts in rates by number of basis points.

Characteristics of MBS in Intermediate Agg Index



- Duration profile of 15 Year MBS is more stable than 20 and 30 Year MBS due to lower convexity.
- As a result, inclusion of 20/30 Year MBS in stable value portfolios increases the volatility of Market-to-Book ratios in periods of high interest rate volatility.

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