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FY 2020 Annual Investment Plan

Introduction

It is with pleasure that we present the fiscal year 2020 Annual Investment Plan. This year's plan is the eighth iteration of investment plans written since fiscal year 2013.

The investment plan uses a 7-10 year forward horizon in the development of the outlook for the economy, financial markets, and for the development of longer term investment themes and strategies. It is written with a ranging readership in mind. We focus discussion on the largest of economic and financial market variables -- economic growth, inflation, interest rates and the basic investment markets of stocks and bonds -- with as little industry terminology and jargon as possible. Financial analysis is limited to the two large permanent funds, the Land Grant Permanent Fund and the Severance Tax Permanent Fund, and data is simplified into easy-to-read tables. Investment plans for the individual asset classes are presented in a structured format, to ease understanding of expected investment activity across the full portfolio for the fiscal year.

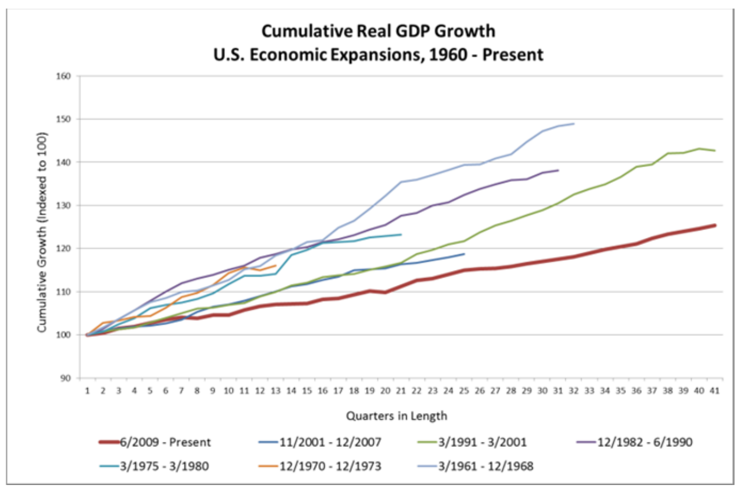
This work is the organized accumulation of investment knowledge, thought and input across as many fund fiduciaries as possible: the Council, the Council investment committee, the investment office management group and investment staff, external investment consultants and external investment managers. It has the purpose of transparency of our investment process as a lead objective, and seeks to be informative, and educational where possible.

Part I: *Expected Economic & Investment Environment and Broad Investment Strategy*

Macroeconomic Environment

The Council continues to believe that the next 7-10 year period will be characterized by slower-than-long-term-average economic growth and modest interest rates and inflation. We have held this basic view since our inaugural 2013 Annual Investment Plan (written in late calendar year 2012), and have generally been correct in our thinking since that time. The current U.S. economic expansion will soon become the longest recorded in our country's history, but it has also been one of the slowest. Inflation, as measured by the Consumer Price Index, has also been remarkably tame in this expansion, and is a variable most forecasters missed over the past few years. While both growth and inflation have picked up lately as the economy has moved in to the Late Cycle portion of this economic cycle, it is very likely that this expansion will end as the slowest on record since the Great Depression.

Considering the forward 7-10 year period from here encourages us to raise our sights on growth and inflation slightly, however, chiefly due to our current position in this economic cycle. Growth and inflation tend to be at their peaks for a cycle in the late stages, and we think the next 7-10 year timeframe will capture what's left of the current business cycle and likely most if not all of the latter portion of the next. Our updated assumptions can be found in the Main Forecasts and Assumptions table in the forward pages, and remain on the diminutive side of the long term historical range of results.

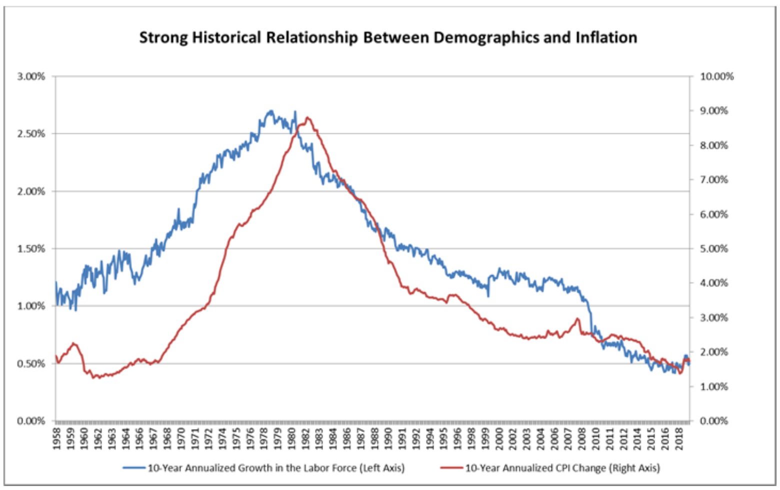


Growth—As of our May 2019 writing, the current U.S. economic cycle continues to trudge along, rarely hurried in its pace since the expansion's June 2009 beginning. This, despite extraordinary monetary and fiscal stimulus efforts by the U.S. Fed, other global central banks, the U.S. government and the other major foreign governments of the world. The chart to the right shows the cumulative growth of the last six economic cycles and highlights both the duration and the sluggishness of the current cycle. Economists debate vigorously why growth has been so anemic this cycle and why the monetary and fiscal stimulus applied seemed to have muted effect. Unfortunately, many of the answers revolve around structural and tenacious issues including the debt load on economies globally—consumers, corporations and governments; weak labor force growth and the aging of the labor force; and low contribution from productivity. To this list we could add more transient concerns including the current condition of unusually high wealth and income inequality and lingering effects of the deep 2008-2009 financial crisis and recession.

We expect that economic growth will continue to be challenged on the forward investment horizon. International Monetary Fund (IMF) economic growth estimates through 2024 anticipate that global growth will sputter along at less than three percent annually, with the U.S. and other developed economies stuck in low gear at 0.50%-2.00% per annum, depending on country (U.S. toward the high end). Council resource Macroeconomic Advisors' (MA) 10-year view isn't much rosier; their forecast for

U.S. growth is similar through 2025 and 1.90%-2.00% in the 2025-2028 period. Further, based upon long history, we can expect a recession over the next 7-10 years, and likely toward the first half of that period. The IMF and MA estimates may account for a mild recession in their estimates, but there appears to be little to no room in the numbers for a deep or protracted recession or serious crisis.

This base case seems somewhat gloomy, but there is potential for a brighter picture. While the unemployment rate in the U.S. is quite low, so too is the labor participation rate of the general population. Scarce labor has started to feed wage growth, which in turn could induce a higher percentage of the population to find a job. Productivity growth has been in a funk for quite some time, and a trend change in this metric back toward average combined with labor force growth through a higher participation rate could bring a higher-than-expected rate of economic growth. We're not sure how to assess this in terms of probabilities, but intend to be diligent in watching for the possibility.



Inflation—Conspicuously absent in this cycle has been any significant CPI inflation pressures. While we've seen significant price inflation in investment assets of nearly all types, broad inflation in the economy as measured by CPI has been quite tame.

Over the next 7-10 year investment horizon, we are expecting CPI inflation to firm but remain moderate. Our main basis is the observation in the chart to the left. There exists a quite strong relationship between long term growth in the labor force and long term consumer price inflation. The blue line represents 10 year annualized growth of the labor force in the U.S., and the red line is 10 year annualized change in the CPI index. Our country's population will continue to age in the forward 7-10 year investment horizon, and while labor force participation is relatively low at present and has the potential to improve, we think it's reasonable to assume that labor force growth will remain toward the low end of history.

Consistent with the foregoing analysis, a quantification of past 10 year and the forward 7-10 year investment horizons is tabulated on the next page.

Historical Backdrop and Main Forecasts & Assumptions

	Last 10 Years (3.31.2019)		Long Run	Strategy Group Expectations (7-10 Years Fwd)	
	Compound	Range*	Historical	Compound	Range*
U.S. GDP (Real)	2.24%	0.00%-2.57%	2.50-4.50%	1.50%-2.50%	0.00%-3.25%
U.S. Inflation (CPI)	1.81%	0.00%-3.93%	2.00-6.00%	2.00%-2.50%	1.00%-4.00%
U.S. GDP (Nominal)	3.87%	1.18%-4.67%	5.00-9.00%	3.75%-5.00%	2.00%-6.00%
U.S. Stocks	15.91%		9-11%	~5.50%	
U.S. Bonds	3.77%		4-7%	~3.00%	
65/35 Stocks/Bonds Return	11.66%		~8.50%	~4.65%	
Median Public Fund ($1 Billion+)	10.57%		20 Yrs=6.38% 30 Yrs=8.62%	~5.50%	

* "Range" refers to observations based upon a time series of quarterly moving, three year compounded growth rates

The first set of columns in the table quantify the ten year period ending March 2019. This was a period of low growth, low inflation, low volatility of economic conditions, and well above average investment returns, primarily due to the "starting point" of March 2009 – very near the bottom of the 55% sell-off in the equites market in the Great Financial Crisis. The median return of public funds with $1 billion or more under management, as defined by Wilshire, compounded at an excellent rate of more than 10.5%. In comparison, the middle column includes the long run averages while the last two columns indicate what the Council expects for the next 7-10 years.

The environment the Council expects for the forward investment horizon is not an easy one. While we are expecting somewhat better economic growth and stronger inflation than the last ten years, we are also expecting a recession in the period—and perhaps as early as next year. The characteristics of that recession could be different than the typical recession of the past couple of decades. The coming recession could be more shallow, as readily-identified excesses have not built up in the system as they have in prior cycles, but be extended relative to history as both monetary and fiscal policy may be more limited in scope than in prior recessions.

Our bonds return expectation reflects a bond portfolio constructed similar to the Bloomberg Barclay's Universal Index. Most public funds will likely earn more with their bond portfolios due to higher allocations to credit than the index, which is what we expect of the Council's fixed income investments.

There is some risk with the stock market expectation – and not particularly "upside risk". The 5.50% return expectation seems low at first glance, particularly when compared to long run historical returns. The stock market has been living the past few years on speculation and momentum, and at present finds itself at exceptionally high valuation. Future valuation change is usually very difficult to estimate, even in longer periods, but when valuations are at extremes (either high or low) valuation change probabilities become quite skewed. Lowly-valued markets get more expensive and provide higher returns; highly-valued markets cheapen and produce lower returns.

Broad Investment Strategy

Last year, we wrote the following:
"As reviewed, the upcoming investment environment is expected to be one of lower returns than earned in both recent and longer term history. Our starting point is defined by low interest rates, rich asset valuations, late-cycle economic activity, and high levels of debt across the economy. The traditional tools of policy-makers to fight poor economic conditions or financial market crisis are limited at present as they have been in great part exhausted trying to pull the global economy out of the GFC and get it back on a growth track over the last ten years. Significant amounts of the financial liquidity and the "easy" money provided by the Fed and global central banks during and after the GFC have found their way into the financial markets driving most asset prices to near record levels. The reverse--including rising rates, tightening financial conditions and tempering asset valuations—can reasonably be expected to restrain NMSIC investment returns."

We don't think we should change a thing to that outlook. Stock returns since that was written one year ago near the end of May 2018 have been a paltry 3.77% and LGPF returns will likely be in the 2.25%-2.50% range for the year ending May 2019 when they are calculated by consultant RVK. Stock market valuations are somewhat better as earnings have risen faster than price but remain expensive. Our primary measure of liquidity, the Chicago Federal Reserve National Financial Conditions Index, has tightened over the year, though remains in fairly loose in overall terms. Economic conditions have been deteriorating since the first of the year, according to the Chicago Fed's National Activity Index, and the Fed has begun to talk about potential interest rates cuts.

Chicago Fed National Activity Index							
CFNAI Index		Average		Slope		Indicator	
Date	PX_LAST	3Mo	1 Yr	3 Mo	1 Yr	Level	Trend
4/30/2019	-0.45	-0.32	0.00	-0.0010	-0.0015	**Weak**	**Weakening**
3/31/2019	0.05	-0.24	0.07	-0.0043	-0.0015	**Weak**	**Weakening**
2/28/2019	-0.57	-0.26	0.09	-0.0058	-0.0011	**Weak**	**Weakening**
1/31/2019	-0.21	0.01	0.19	-0.0016	-0.0005	Average	Weakening
12/31/2018	0.00	0.08	0.19	-0.0018	-0.0001	Strong	Stable
11/30/2018	0.25	0.11	0.20	-0.0027	-0.0003	Strong	Stable
10/31/2018	0.00	0.19	0.21	-0.0033	-0.0004	Strong	Stable
9/30/2018	0.09	0.28	0.28	0.0030	-0.0003	Strong	Stable
8/31/2018	0.49	0.40	0.29	0.0040	0.0000	Strong	Stable
7/31/2018	0.26	0.10	0.24	-0.0002	0.0001	Strong	Stable
6/30/2018	0.44	0.15	0.20	-0.0053	0.0006	Strong	Stable
5/31/2018	-0.41	0.11	0.18	-0.0022	0.0006	Strong	Stable

The current cycle is extended by historical compare, but relatively easy financial conditions continue to exist. Most economists do not see a downturn in activity on the immediate horizon. Of course economists rarely, enmass, see a recession until it is upon us or we are already in one. It is, however, widely recognized that we are in the late stage of the current cycle, and therefore some of the principles of late-cycle investing apply:

1. *Reduce publicly-traded equity exposure*—publicly-traded equity exposure has been significantly reduced over the course of this economic cycle, particularly since the fall of 2017. The Council presently targets 40%, down from a peak of 67% in the last economic cycle. This exposure has been diversified into investments which produce higher rates of income and have histories of much greater price stability.

2. *Raise and structure liquidity, build flexibility*—In 2018, the Council restructured the fixed income portfolio in order to enhance liquidity availability to the broad portfolio. The fixed income portfolio was separated into core and non-core divisions, with the core portion constructed with much reduced duration, higher credit quality and higher liquidity. The core division increases the broad portfolio's ability to respond to a wide range of adverse scenarios and is expected to be liquidated in the next serious market downturn to rebalance and gain additional exposure to risk assets.

3. *Generate income*—Since 2014, the portfolio's asset allocation has been shifted significantly to assets which produce higher rates of income—real estate, real assets and credit. Income production is significantly higher than a baseline 65%/35% mix of stocks and core bonds, while maintain a higher expected return profile.

Part II: *Outlook for the Land Grant and Severance Tax Permanent Funds*

The Land Grant Permanent Fund

Portfolio Value

The financial model developed by the Council and consultant RVK for the Land Grant Permanent Fund (LGPF) projects the LGPF will grow by roughly $4.2 billion over the 7-10 year investment horizon, an annualized increase of 2.0%. This projection is based upon the long-term assumptions for investment return, New Mexico State Land Office contributions and the distribution policy used in the 25-year Intergenerational Equity model for the LGPF. There are two "howevers" though. Recently, contributions from the Land Office have been significantly better than longer-term assumptions. This represents potential upside over our base case. The other "however" is that we expect investment returns over the 7-10 year timeframe could disappoint relative to the "long term" assumptions embedded in the modeling, pressuring growth potential.

Projected Fund Market Value by Percentile for Next Ten (10 Years)										
LGPF	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
25th Percentile NAV	$17.4 B	$17.4 B	$17.4 B	$17.4 B	$17.4 B	$17.5 B	$17.4 B	$17.6 B	$17.7 B	$17.8 B
50th Percentile NAV	$18.8 B	$19.4 B	$19.9 B	$20.4 B	$20.9 B	$21.4 B	$21.8 B	$22.2 B	$22.7 B	$23.0 B
75th Percentile NAV	$20.1 B	$21.4 B	$22.6 B	$23.5 B	$24.5 B	$25.7 B	$26.5 B	$27.5 B	$28.5 B	$29.4 B

Distributions

Using the same long-term (25-year Intergenerational Equity model) assumptions, annual distributions from the LGPF are expected to rise to just over one billion dollars by the end of the 7-10 year investment horizon. This equates to an annualized growth rate of 2.89%. Again, the "howevers" from above apply. On base case assumptions, the distribution has a better than 50% chance of beating our inflation assumption of 2.25% on average, a good result for the beneficiaries.

Projected Fund Distributions by Percentile for Next Ten (10 Years)										
LGPF	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
25th Percentile	$0.84 B	$0.87 B	$0.88 B	$0.89 B	$0.89 B	$0.89 B	$0.89 B	$0.89 B	$0.89 B	$0.89 B
50th Percentile	$0.85 B	$0.90 B	$0.94 B	$0.96 B	$0.99 B	$1.02 B	$1.05 B	$1.07 B	$1.10 B	$1.13 B
75th Percentile	$0.86 B	$0.93 B	$0.99 B	$1.05 B	$1.11 B	$1.16 B	$1.22 B	$1.27 B	$1.32 B	$1.41 B

The Severance Tax Permanent Fund

Portfolio Value

The Severance Tax Permanent Fund (STPF) is also modeled in this manner, but the results are less encouraging. The STPF is projected to grow by roughly $400 million over the investment horizon, an annualized increase of 0.7%. This projection is based upon the long-term assumptions for investment return, inflows from severance tax receipts, and the distribution policy used in the 25-year Intergenerational Equity model for the STPF.

Like the LGPF, we believe that economic and financial market performance could underperform our long-term base case in the shorter 7-10 year investment horizon and cause the STPF value to fall short of the projected value. Buffering that is increased attention and potential legislation to increase the inflows to this fund.

Projected Fund Market Value by Percentile for Next Ten (10 Years)

STPF	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
25th Percentile NAV	$4.9 B	$4.8 B	$4.7 B	$4.6 B	$4.5 B	$4.5 B	$4.4 B	$4.4 B	$4.3 B	$4.3 B
50th Percentile NAV	$5.3 B	$5.4 B	$5.4 B	$5.4 B	$5.5 B	$5.5 B	$5.6 B	$5.6 B	$5.7 B	$5.7 B
75th Percentile NAV	$5.7 B	$5.9 B	$6.1 B	$6.3 B	$6.5 B	$6.7 B	$6.9 B	$7.0 B	$7.3 B	$7.4 B

Distributions

Using the same long-term (25-year Intergenerational Equity model) assumptions, distributions from the STPF are expected to rise to $260 million by the end of the 7-10 year investment horizon. Again, we expect that investment performance during this investment horizon could underperform our long-term assumptions, causing distributions to fall somewhere between the base case and the pessimistic case of $210 million.

Projected Fund Distributions by Percentile for Next Ten (10 Years)

STPF	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
25th Percentile	$0.23 B	$0.23 B	$0.23 B	$0.23 B	$0.22 B	$0.22 B	$0.22 B	$0.21 B	$0.21 B	$0.21 B
50th Percentile	$0.24 B	$0.24 B	$0.25 B	$0.25 B	$0.25 B	$0.26 B	$0.26 B	$0.26 B	$0.26 B	$0.26 B
75th Percentile	$0.24 B	$0.25 B	$0.26 B	$0.27 B	$0.28 B	$0.29 B	$0.30 B	$0.31 B	$0.32 B	$0.33 B

Part III: *Asset Class Plans*

Public Markets: Equity

Asset Class Summary—The publicly traded equity portfolio is the cornerstone investment of the Permanent Funds and the most liquid of the major allocations within the Funds. The role of this portfolio is to generate meaningful real returns through long-term capital appreciation and dividend income.

Equity exposure is achieved through a combination of low-cost passive investment, factor-driven strategies, and targeted active management. In more efficient markets, such as U.S. large cap stocks, the focus is increasingly on capturing market returns through the use of low-cost index or factor-driven strategies. In less efficient markets, such as emerging markets and small cap stocks, greater focus is given to identifying skilled active managers that we believe can achieve above-benchmark returns.

The public equity asset class has a target allocation of 40% of Land Grant Permanent Fund and Severance Tax Permanent Fund total assets, with current U.S. and non-U.S. target allocations of 20% each, or 50% of public equity assets each. The Council's 50% U.S. target allocation is 4.7% lower than the global equity benchmark MSCI ACWI IM Index of 54.7% U.S. and 45.3% non-U.S. As of March 31, 2019 our current public equity allocation was roughly 52.4% U.S. and 47.6% non-U.S., a 2.4% overweight to the U.S. target allocation and a 2.3% underweight to domestic stocks compared to the global equity benchmark.

The table below shows the current and target allocations of the public equity portfolio.

		% of Public Equity Asset Class (3/31/2019)				
	Sub-Asset Class	**Target (%)**	**Actual (%)**	**Target ($m)**	**Actual ($m)**	**Strategies (#)**
Global					**$10,860**	
US		**50.0%**	**52.4%**	**$5,430**	**$5,687**	
	Active	13.4%	14.4%	1,452	1,567	5
	Factor Based	23.6%	22.5%	2,566	2,442	4
	Market-cap Passive	13.0%	15.4%	1,412	1,677	1
Non-US		**50.0%**	**47.6%**	**$5,430**	**$5,173**	
	Active	31.0%	29.7%	3,366	3,220	7
	Factor Based	10.0%	9.5%	1,086	1,030	2
	Market-cap Passive	9.0%	8.5%	977	923	1

Portfolio strategy, markets, and recent performance—The publicly traded equity portfolio is primarily constructed to possess an asset mix that will allow it to capture most of the upside in positive markets while mitigating downside risk during volatile periods. Over time this should result in a portfolio that exhibits less volatility than its benchmarks and thus superior geometric returns over a market cycle. This is accomplished by allocating a portion of the portfolio to strategies with investment frameworks constructed to perform relatively better in weak equity markets. These investment managers are paired with strategies designed to provide more idiosyncratic excess returns in both up and down markets.

This generally results in a portfolio with:
1. Relatively low tracking error;
2. Relatively low volatility, particularly on the downside;
3. Relatively low fees;
4. Ability to generate long-term excess returns of 2x fees; and
5. Favorable performance against peer equity portfolios.

At present, portfolio volatility, fees, tracking error, and performance against peers are in line with expectations. The previous 12 months to March 31, 2019, have encompassed divergent U.S. and non-U.S. equity returns, with the broad U.S. market, as measured by the Russell 3000 Index, up 8.77% and the non-U.S. market, as measured by the MSCI ACWI ex-U.S. IM Index, posting a return of -4.96%. More volatile emerging markets were down further at -7.41%. The U.S. equity portfolio struggled to keep pace with the market-cap weighted index in the strong market and underperformed the Russell 3000 Index by 118 basis points. The non-U.S. equity portfolio was roughly flat against its benchmark.

Underperformance of the relatively cheaper and less volatile U.S. equity portfolio was primarily due to the continued strong performance of large cap growth stocks, which returned 12.55% for the year, as measured by the Russell 1000 Growth Index. This compares to a return of 5.31% for the Russell 1000 Value Index. Performance of the publicly traded equity portfolio also suffered due to disappointing results from two active small- and mid-cap managers. While U.S. equity portfolio performance over the one-year period has been disappointing, the portfolio is within one standard deviation of its long-term tracking error of 1.21 and is performing in-line with expectations given the current market environment.

Against peers, the Council's domestic equity portfolio has performed in the second quartile over the past year and just below median over the three- and five-year periods. The non-U.S. portfolio was restructured in the fourth quarter of 2015 and has performed in the top third of its peer group over the three-year period.

Portfolio activity and forward-looking strategy—During fiscal year 2019, the only allocation change in the publicly traded equity portfolio was the termination of one U.S. mid-cap manager. As sustainable alpha has become more difficult to source in domestic equity strategies, factor-based strategies have come to form a larger component of the portfolio. When effectively constructed, factor-based strategies result in portfolios that exhibit lower tracking error and volatility, for lower fees, than active managers. While these strategies, which tend to favor reasonable valuations, quality, and lower volatility, have been out of favor more recently, they are expected to outperform market-cap weighted indexes over time.

During fiscal year 2019, the U.S. equity portfolio strategy was reviewed by the Council Investment Committee. The focus of the review was 1) the net of fees underperformance of most U.S. active managers in the eVestment database over, at a minimum, the previous 15 years, 2) the increased allocation to factor-based strategies in the SIC's portfolio, and 3) the importance of investing in active and factor-based strategies with a time horizon that encompasses a full market cycle – as much as 15 years. As of March 31, 2019, factor-based strategies have a target allocation of 47.3% in the U.S. equity portfolio, with market-cap passive and traditional active strategies at 26.8% and 26.0%, respectively. Additionally, two U.S. active managers provided fee reductions and one active manager was terminated.

Equity markets outside the U.S. tend to be less informationally efficient, with a larger proportion of active managers historically showing the ability to generate excess returns. As such, the non-U.S. equity portfolio possesses a higher target allocation to active managers, at 62.0%. Target allocations for factor-based and market-cap passive strategies stand at 20.0% and 18.0%, respectively. During the year considerable focus was given to gaining exposure to markets in which the SIC is not currently registered to trade, such as India, where significant economic growth is occurring and benchmark allocations are increasing. Securing access to these markets will continue to be a focus in fiscal year 2020.

Investment staff and software resources were added to the public equity group in the first half of calendar year 2019. These are expected to have a positive impact on fiscal year 2020 goals, which include a review of the U.S. and non-U.S. structures and developing a global equity portfolio strategy suitable for a post-recession expansionary period. Such a strategy would likely result in the adoption of incrementally more risk in the portfolio, assuming a more favorable balance of risk and reward in equity valuations.

Public Markets: Fixed Income

Asset Class Summary— The fixed income asset class invests in a variety of government, corporate, and asset-backed securities. The primary objectives and traditional role of the portfolio are to preserve capital, produce income, and protect against the volatility of equities and other risk assets.

The portfolio was split into Core and Non-Core sectors in the 2017 Asset Allocation Study. The Core allocation is a highly-liquid, highly-rated portfolio with the primary objective of serving in the traditional role of a fixed income portfolio while providing liquidity in the event of a severe market disruption. The Non-Core allocation's primary objective will be to produce yield and generate returns above those available in publicly traded securities by capturing liquidity and complexity premiums. Funds in the Non-Core portfolio typically hold private assets that have a contractual yield component, are secured by an asset such as property or a company and are infrequently traded.

The Core fixed income long-term target allocations are 10% for the LGPF and 12% for the STPF. The Non-Core long-term target allocation is 15% for the LGPF and 12% for the STPF. Below is a table showing past and current allocations to the various strategies within the fixed income asset class:

Sub-Sector Strategy	Allocation 3.31.2018	Allocation 3.31.2019	Long-Term Target	Primary Purpose
Core Fixed Income Portfolio				
Core Bonds Pool	35.30%	38.50%	25%	Interest rate exposure
Core Bonds Plus Pool	52.00%	35.80%	55%	Interest rate & credit exposure
Short Duration Pool	12.70%	25.70%	20%	Liquidity/Duration mgmt
Non-Core Fixed Income Portfolio				
Lending Strategies	14.70%	25.50%	20% - 40%	Credit exposure
Distressed & Other	21.70%	32.10%	20% - 40%	Credit/Alpha exposure
Structured Credit	31.40%	27.80%	20% - 40%	Credit exposure
Unconstrained	32.20%	14.60%	20% - 40%	Duration mgmt/Alpha exposure

Recent performance, markets and portfolio strategy—Over the one-year period ended in March, there was a significant shift in perception of Federal Reserve interest rate policy. In December of 2018, Fed Chairman Powell expressed a willingness to pause the policy of gradually increasing the Federal Funds rate, which had been in place since December of 2015. Currently the market sees no further increases, and in fact, Fed Fund futures imply that the next change in rates would be a reduction. This change in market sentiment has led to a decrease in longer-term rates as well, with the 10 Year USTN declining 33 basis points over the year, and 80 basis points from the November high. The benchmark for the Fixed Income portfolio is the Bloomberg U.S. Universal bond index which produced a 4.53% rate of return for the year.

The Core portion of SIC's portfolio performed in-line at 4.58%. The Non-Core underperformed, as its larger exposure to credit risk hurt performance with the spread-widening that occurred in the 4Q of 2018.

In recognition of the late-cycle nature of the current economic environment, the Core Fixed Income portfolio is positioned conservatively. Relative to long-term targets, there is an underweight to the Core Plus allocation, with its higher exposure to credit risk. This leaves the Core portion, which is skewed to U.S. Treasury holdings, and the Short Duration sub-strategy, which lowers the interest rate risk exposure, overweight relative to long-term targets. The risk profile of the Non-Core portion of the Fixed Income portfolio is also being reduced, and recent Fund additions have diversified its main risk of corporate credit exposure.

Forward-looking strategy and recent activity— The strategy is to continue to look for opportunities to reduce both credit and interest rate risk in the portfolio as the current economic cycle becomes further extended, while also structuring the portfolio to be positioned to take advantage of a more favorable return environment some time in the future. The SIC recently approved the PIMCO Private Income Fund, with its focus on commercial and residential real estate lending, specialty finance, and structured credit. Also approved was the GIP Spectrum Fund, an infrastructure debt fund. Looking forward to the next possible phase of the economic cycle, the TSSP TAO Contingent Fund was also added to the portfolio in the previous year, which will be deployed in the case of an economic dislocation and into a likely more favorable return environment.

Private Markets: Real Estate

Real Estate Sectors	% of Real Estate Portfolio		Value ($MM)
	NFI-ODCE*	Actual	NAV
Apartment	25.3%	20.2%	$ 427
Office	33.9%	24.7%	$ 521
Industrial	18.1%	21.8%	$ 460
Retail	18.6%	16.6%	$ 351
Hotel	0.3%	2.8%	$ 59
Other	3.8%	14.0%	$ 296
Total Real Estate	100.0%	100.0%	$ 2,113

Note: NMSIC Real Estate Sector Range is +/- 15% of the NFI-ODCE Index. By example, the range for Office is 21.0% to 51.0%. Total Committed Value is ~$3.4B

Asset Class Summary— The Council's Real Estate portfolio has a target allocation of 12% of the Fund. As of CYE 2018, the Real Estate Portfolio represents approximately 9.6% of the Fund on a NAV basis. The Real Estate Portfolio is well diversified by property type, risk characteristics and geography. Relative to property type diversification, the portfolio is guided by the diversification of the National Council of Real Estate Investment Fiduciaries (NCREIF) Fund Index for Open-ended, Diversified, Core Equity (NFI-ODCE), but with a 15% plus or minus allocation relative to that index. In consultation with the Real Estate Consultant, staff tactically over- or under-weights by property type. The property type composition of the Real Estate portfolio is summarized in the table above.

Recent performance, markets and portfolio strategy— The Real Estate portfolio turned in another strong year both in absolute and relative performance. For the year ended December 31, 2018, the total Real Estate portfolio generated an 8.0% net time weighted return, exceeding the NCREIF/Townsend Index by 70 bps. Legacy investments continue to weigh on performance numbers, but their negative impact continues to diminish as the legacy portfolio now represents less than 4% of the total Real Estate NAV.

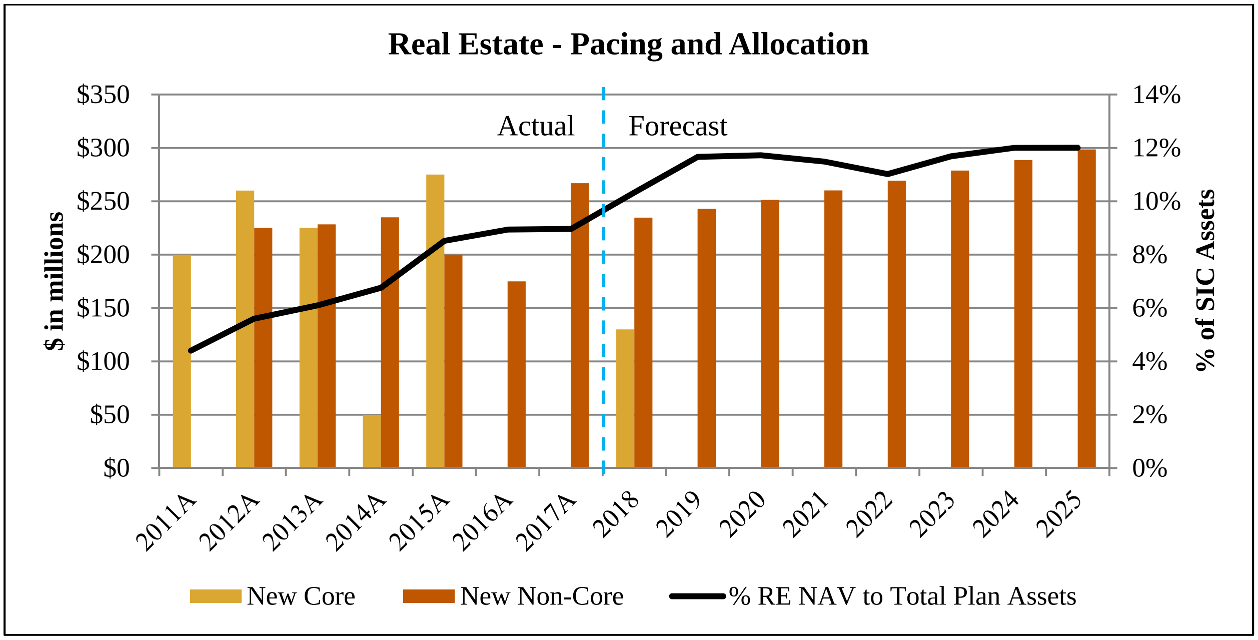
Valuations continue to remain at historical highs in the U.S. real estate markets, particularly in the core real estate space. The Council's consultant Townsend sees continued favorable investment performance, but not the double-digit rates of return enjoyed over the last few years. During 2018, capitalization ("cap") rates were effectively flat, and the modest capital appreciation gains in 2018 were driven largely by rent growth. However, with the recent drop in 10-Year U.S. Treasuries, yield spreads (the difference between Core cap rates and 10-year treasuries) remain within normal ranges and there is evidence that significant foreign and domestic capital continues to compete for real estate acquisitions. These factors provide something of a cushion against the possibility of notable cap rate expansion. Per Townsend, expected U.S. Core total returns in the next three years are 5.8%, primarily driven by income as opposed to appreciation. The total core return estimate is generally consistent with feedback from NMSIC's core fund managers, which generally project total returns in 2019 in the range of 4.5% to 8.0%.

In the year ended December 31, 2018, the NAV of the Real Estate portfolio increased by $134 MM. Three new commitments were made:

1. $75 MM to Almanac Realty Securities VIII, a value-add real estate fund focused on debt and equity investment in real estate operating companies;
2. $92 MM to Europe Ares European Real Estate V, a European opportunistic fund; and
3. $75 MM to KKR Real Estate Partners Americas IV, a thematically-driven opportunistic strategy.

With the Core/Core Plus component of the Real Estate portfolio largely built-out, the focus for new commitments is in the Value Add and Opportunistic spaces. In addition, a planned $300 MM special allocation to core real estate due to rebalancing activities will gradually be redeemed and redeployed into Value Add and Opportunistic closed end funds over the coming years.

Recent activity and forward-looking strategy— At year-end 2018, the total NAV of the Real Estate portfolio represented 9.6% of total Fund assets. Including NAV plus unfunded commitments, the Real Estate portfolio represented 14.1% of total Fund assets, against a target allocation of 12%. This level of over-commitment is required to compensate for the drawdown and distribution profiles of closed end funds. The focus of new commitments in the near term will be towards Non-Core investments, as shown in the Townsend pacing model below:



Source: The Townsend Group

NMSIC expects to continue to expand its exposure to Europe from the current level of 9.4% to a target range of 10-15%. While the near outlook is for weak economic growth in Europe, the existing building stock is very old and there are good opportunities to upgrade existing buildings to modern standards. Additionally, managers have identified opportunities in under-served specialty sectors such as student housing, storage, and multi-family. Relative to Asia/Pacific, NMSIC intends to maintain its existing exposure of +/- 10%.

Consistent with the main themes set forth in this FY 2020 Annual Investment Plan, NMSIC's Real Estate portfolio is designed to have a significant income return component. We expect the Core portfolio to generate income in the 3.5% to 5% range in the medium term. In addition, components of the Non-Core portfolio will also have a material income component.

Private Markets: Real Return

Asset Class Summary—The Council's Real Return portfolio is a multi-asset, multi-market portfolio constructed to generate returns based on factors different than those that drive returns of publicly-traded equity and traditional fixed income investments. Total return is focused on income generation. These assets are expected to be advantaged over equities and bonds in an economic and financial market environment where growth is a little slower than average and inflation and interest rates are rising.

The Real Return asset class has an allocation of 12% within the broad LGPF and STPF portfolios. Within that 12% Real Return allocation, 80% is targeted towards Real Assets and 20% to Financial Assets. Starting from scratch in 2011, the Council began building investments in Real Assets of timberland, energy, farmland and infrastructure; and in financial assets via Master Limited Partnerships (MLPs). MLPs are companies that invest in oil & gas pipelines and related energy infrastructure and are similar to REITs in structure. Real estate and real asset debt strategies and liquid real assets may also be considered within the financial assets allocation. The table below shows the current allocations of the Real Return portfolio:

Category Sub-Sector	% of Category		Value ($MM)		# of Commitments
	Target	Actual	Committed	NAV	
Financial Assets					
MLP's			N/A	$ 407	1
Real Estate Debt			$ 75	$ -	1
Real Assets					
Agriculture	0-15%	14.5%	$ 375	$ 221	4
Commodities	0-10%	0.0%	$ -	$ -	0
Energy	0-50%	28.7%	$ 845	$ 437	13
Infrastructure	0-50%	36.5%	$ 807	$ 556	9
Timberland	0-20%	17.8%	$ 310	$ 270	4
Other	0-15%	2.5%	$ 50	$ 38	2
Total		100.0%	$ 2,462	$ 1,930	34

Note: Invested Value (NAV) is based on year end 2018 number as provided by Harvest for Financial Assets and Townsend for Real Assets. % of Category means the percent of the total Financial Asset NAV (2.4%) or the percent of the total Real Asset NAV (9.6)%

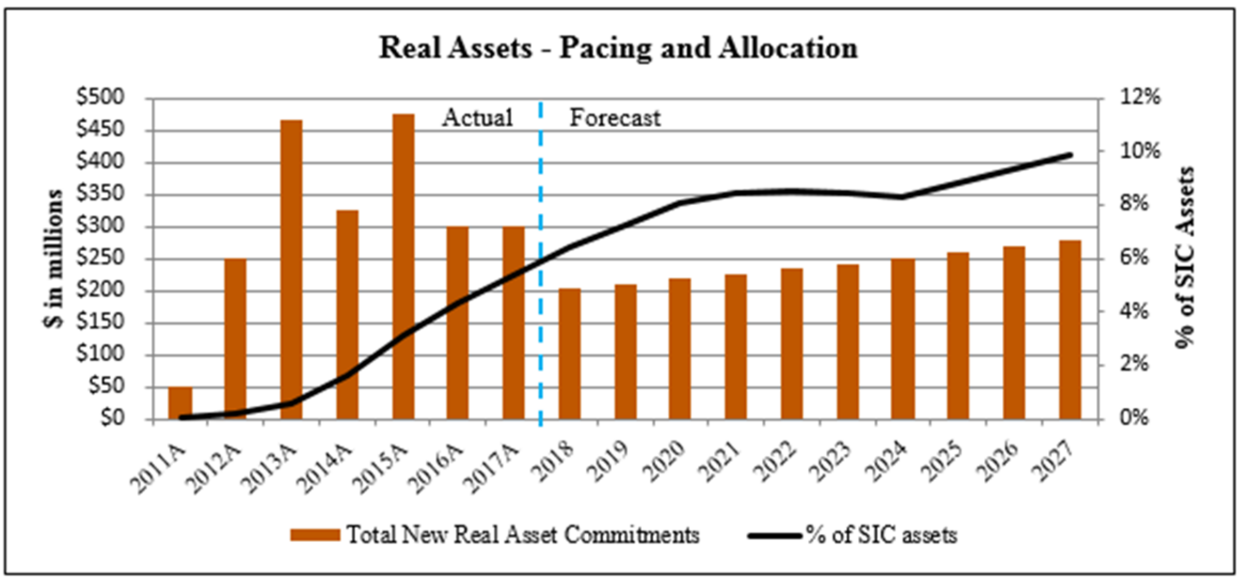
Recent performance, markets and portfolio strategy— During 2018, the Real Asset portfolio generated a 4.3% net time weighted return (TWR). The infrastructure portfolio showed continued strong performance (10.0% one-year TWR), however, total Real Asset returns were adversely impacted by -7.0% TWR in the Agriculture portfolio and relatively weak performance in both Timber (3.5% TWR) and Energy (4.5% TWR).

Since year-end 2017, the NAV of the Real Asset portfolio increased by $220 MM to finish 2018 at $1,522 MM. Total commitments at year-end 2018 stood at $2,386.8 MM.

Four new 2018 commitments were made totaling $350 MM:

1. $100 MM to Blackstone Energy Partners III, allocated within the Real Assets category, which seeks control-oriented investments in energy and natural resources;
2. $100 MM to Blackstone Infrastructure Partners, a US infrastructure strategy allocated within the Real Assets category;
3. $75 MM to Asia Macquarie Asia Infrastructure Fund II allocated within the Real Assets category; and
4. $75 MM to Brookfield Senior Mezzanine Real Estate Finance Fund, allocated within the Financial Assets category.

Recent activity and forward-looking strategy-- The Real Return pacing model incorporates just the Real Assets component, which is 9.6% of the broad portfolio (12% x 80% = 9.6%). As shown below, the pacing model shows approximately $200 MM of commitments in 2019 and 2020 in order to continue to push the invested NAV of the Real Return portfolio toward the long-term target allocation. *Note that there will be some spikes in commitment levels relative to the pacing model based on the timing of new offerings.*



Source: The Townsend Group

Commitments within the real asset space are carefully chosen so as to manage risk, as well as to provide diversification by strategy and geography. With the agriculture and timber portfolios fully built-out, the focus for the near term will be to make commitments in the energy and infrastructure sectors.

Private Markets: Private Equity

Asset Class Summary--The Private Equity portfolio, which consists of four categories – Buyout, Growth, Special Situations and Venture Capital, continues to serve an important role in enhancing overall portfolio return generation and diversification. This asset class, although correlated to public equity markets, often benefits as private equity managers are afforded additional flexibility to pursue operational excellence and improvement in their investment companies without the harsh spotlight of public market scrutiny. In addition, private equity adds exposure to the long-term growth potential of private companies, which will likely result in an illiquidity premium in this asset class.

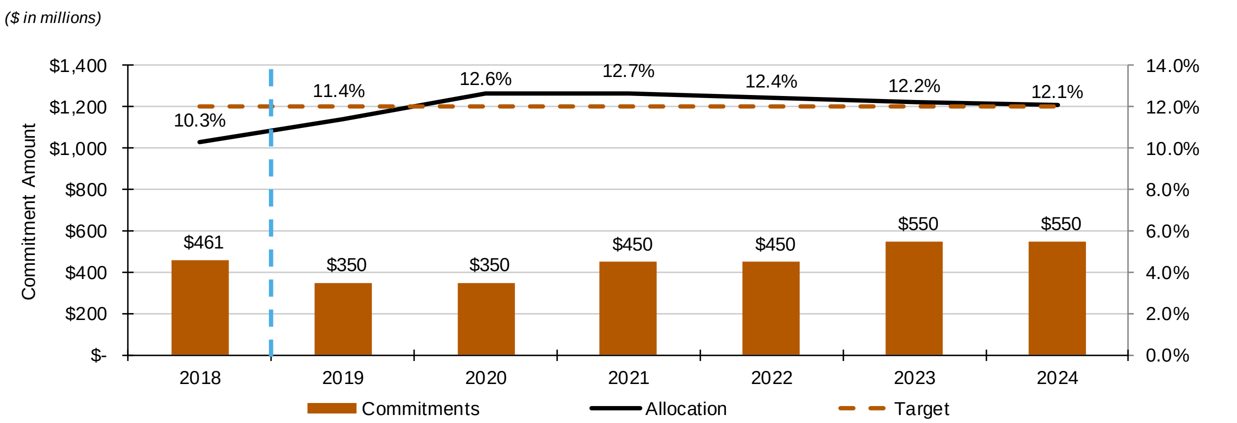
Recent performance, markets and portfolio strategy--Private equity investments have one of the highest return expectations of all the asset classes and for the 12 months through March 2019 (one quarter lagged), the private equity portfolio gained over 10.6%. This performance was better than both the median peer fund private equity portfolio return of 9.6%, and the 10.3% increase in the Burgiss US All Private Markets Index. Private equity performance has been impacted by poor performance of many funds in the pre-2011 vintage years, where poor manager/fund selection was likely impacted by pay-to-play considerations. Since 2011, the private equity portfolio has targeted larger fund commitments of $75 million-$100 million, compared to the previous $20 million-$50 million, so the performance drag from all of the older funds will continue to diminish. Since inception performance of the 2011 and after vintage years as of December 31, 2018 is 15.3%.

Portfolio strategy continues to focus on identifying a set of "core managers" to build longer term relationships for our private equity program. Larger commitments to successful core managers will *eventually* result in a decrease in the number of GP relationships/fund commitments and will be very beneficial in terms of 1) portfolio monitoring and 2) reducing the administrative burden of a large number of relationships. A material reduction in the number of private equity funds (currently 114), in the absence of a secondary sales option, will take a considerable amount of time. But as the portfolio continues to grow and approach the 12% target, the overall effect of the non-core relationships will recede.

Recent activity and forward-looking strategy--Private equity consultant Mercer (formerly Pavilion Alternatives Group) utilizes a pacing model to help guide the target range of annual commitments for our private equity program. The pacing model serves two main functions: 1) it ensures adequate vintage year diversification and 2) models a 3-5 year time frame, given its assumptions, to maintain our long-term target of 12% of total assets. At this time, the pacing model projects annual commitments of approximately $350 million would be adequate to reach our target in that time frame and the model is re-evaluated annually for potential enhancements.

Progress towards the 12% target has taken years due to a number of factors. The continued strength of the public equity markets has resulted in total plan assets increasing at a faster rate than the pacing model assumption. In addition, this market resilience has resulted in an accelerated pace of investment realizations and cash distributions from the funds, which has most directly pressured net contributed capital. In fact, the private equity program experienced about $700 million in net distributions (distributions exceeding contributions) in the time period 2011 to 2015. Despite continued strength in distributions, the last two years have seen a bit of a reversal, as net contributions turned positive for fiscal year 2016 by $70 million and net distributions were greater by $2.2 million for fiscal year 2017. Although favorable exit markets have lengthened the original time frame to reach the 12% target, markets that make it easier for managers to successfully and profitably exit their private company investments will always be welcome.

National Private Equity Commitments and Allocation Forecast



Source: Mercer.

Each year's private equity commitments are based on a predetermined amount. Model assumes overall portfolio returns of 1.75% (net of all contributions and distributions) and private equity returns of 13%. Different return assumptions may result in a different pacing target. Pacing targets should be evaluated on a regular basis. Aggregate vintage year performance can differ by year and increasing commitments during a lower performing vintage year could lead to lower portfolio performance.

Note that 2018 includes approximately $230 million of commitments that had been approved prior to 2018, but had first drawn capital in 2018, in addition to those commitments approved in 2018.

Private equity allocation for 2018 reflects as of 12/31/18 while 2019 and thereafter reflect end of fiscal year on June 30 of each year.