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FY 2021 Annual Investment Plan

Introduction

It is with prudence and care that we present the fiscal year 2021 Annual Investment Plan. This year's plan is the ninth iteration of investment plans written since fiscal year 2013, and we find ourselves writing this year's offering during one of the most uncertain economic and social environments that we can remember over 30+ years--and maybe one of the most uncertain in the last century. Inasmuch, we offer our analyses, forecasts, conclusions and commentary with a healthy dose of reserve, and we ask our readers to accept expanded margins of error around our forecasts and allow us generous discernment regarding conclusions. The range of potential economic and financial market outcomes for the forward period is quite wide at the moment.

Consistent with prior years, the 2021 Annual Investment Plan uses a 7-10 year forward horizon in the development of the outlook for the economy, financial markets, for the development of longer term investment themes and strategies and for the financial analysis of the Permanent funds. It is written with a wide-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 Macroeconomic & Investment Environment and Broad Investment Strategy*

Macroeconomic and Investment Environment

We find ourselves writing this year's Annual Investment Plan in an environment as uncertain as any in the past 30 years, and perhaps as uncertain as any over the last century. Government and societal response to COVID-19—a global pandemic which made itself widely known in early 2020—sent the global economy reeling in the first half of this year. Simultaneous with the pandemic—and particularly in the United States--social unrest emerged, with initial manifestations several seasoned social observers have likened to those characteristic of the 1960s in the United States.

Here in the third quarter of 2020, a temperate economic rebound is underway in the U.S. and globally, restrained by the on-going fight against the pandemic and growing concern over swelling social unrest. The econometric models that guide us in the nearer-term—none of which are particularly well-tuned for pandemic-and-social-unrest-driven economic data inputs--currently predict a 5% decline in real U.S. GDP for the calendar year 2020. The cadre of economists that we follow seem roughly centered on the first or second quarter of 2021 as the timeframe for the economy to be back into expansion mode (Early Cycle). We take that loose consensus with an appropriately large grain of salt. If these forecasts do materialize however, the present downturn will be one of the nastiest U.S. and global recessions on record. Our guess is that full recovery could take until the back half of 2022 or into 2023.

One might reasonably expect the financial markets to show some caution in this uncertain environment, but that is not been the case. Equity markets took a serious tumble in the first quarter, briefly touching crisis market territory (-35%+), and liquidity dried up in the fixed income markets on par with the Great Financial Crisis (GFC) of 2008-2009. Markets roared back in the second quarter however, recovering in record time. Here in the third quarter, particularly in the U.S., stock indexes are forging new highs and risk markets are fully-valued to over-valued, as if the economy were back in Late Cycle enjoying solid, sustained economic growth; rising inflation; rising interest rates; very low unemployment; and burgeoning corporate profits and consumer incomes. But as previously described, the current economy is in Recession and moving toward Early Cycle--nothing at all like a typical Late Cycle economy.

Sitting in the gap between recessionary economic performance and booming, fully-valued financial markets are two massive economic agents—the global central banks and deficit-spending governments. This economic duo has been on a Keynesian rampage—flooding the global economy with enormous amounts of liquidity and massive deficit-spending. While these two collaborators might describe their actions as "stimulus", it is expressly not that at all. It is nothing other than a bold initiative to substitute central bank demand in financial markets and deficit-spend government demand in the real economy for that of consumers and businesses, who are presently restrained by the pandemic response and social concerns.

Theoretically, the global central banks could continue to create money with which to buy securities to support markets and provide bank reserves, along with forcing negative real interest rates to support borrowing and liquidity ad infinitum, or at least until the pandemic passes and social unrest eases. Likewise, theoretically, governments could continue to expand and feed the social safety net for quite some time by selling bonds to the central banks, which in turn create the money to buy them out of thin air. A watered-down version of this has been going on in Japan for decades. From a more practical standpoint however, the activities we have been witnessing from the global central banks and governments have limits, both in

volume and duration. Sharply raising the ratio of money supply to the value of goods and services produced typically brings price inflation at some point; and economies loaded down with debt—particularly government debt—routinely struggle to produce growth.

The implications of all of this for our 7-10 year forward time horizon are significant. The following analysis will focus on the U.S., but many of the factors and trends that we will address generally apply to the larger global economies such as Europe and China, and in turn, globally.

Economic Implications

Growth--The Council continues to expect low rates of economic growth in the U.S. and globally, with limited potential to surprise to the upside and worrisome potential to surprise to the downside.

The current economic cycle, now ending in recession, featured the longest expansion ever in the U.S.—126 months. As forecasted and chronicled in previous Annual Investment Plans, it was also one of the weakest on record. Inflation, too, was among the tamest in U.S. history, during the expansion. The sluggishness of the cycle was significantly impacted by two things: tough demographics, and relative weakness in productivity growth.

For the forward 7-10 year horizon, the demographics issue will continue to be a negative economic factor in the U.S. and globally. In the U.S., the massive Baby Boom generation (roughly ages 56 to 80 years old) will continue to retire for about ten more years, further eroding that large generation's economic punch. The Millennials—a generation which tops the Boomers in size—is now out of their college years (roughly 22 to 38 years old), but the midpoint of that generation is still 15 years from their prime earning years. In the middle between the Boomers and the Millennials is Generation X. While the Gen X'ers are the prime economic generation today (aged around 39 to 55 years) and will be over the forward horizon, they are a small generation who generally have, as a group, economically under-punched their weight relative to their Boomer parents.

As the large Millennial generation marches toward their economic prime as a group, they do so with significant economic wind in their face. They are more weighed-down with debt (those student loans!) than the Boomers were and face higher (relative to income) housing, healthcare and other basic living costs. They almost assuredly will face higher tax burdens, not only from income-bracket creep, but also if Social Security and public employee retirement systems are to be maintained and if public debt racked up by deficit-spending governments over the last 20 years (and particularly now) is to be managed and reduced. We are forecasting that interest rates will be on the rise in the forward period making credit more expensive and interest burdens larger, and as will be discussed shortly, financial market returns to capital over the coming 7-10 year horizon are forecasted to be materially lower than the Boomers enjoyed for most of their active economic lives.

Clearly there are many other variables that affect economic growth, particularly on a cyclical basis (over the period of a single economic cycle). From 2009 through the present we witnessed governments and monetary authorities use a variety of tools to boost growth, as detailed above. But in a secular sense (longer-term; multi-cycles), economic growth comes down to growth in the labor force, and the productivity of that labor force. Demographics materially determine the size of the labor force and to a degree the productivity of that labor force.

While the demographic picture won't become significantly more attractive for another 10 years or so, the other factor in economic growth—productivity—offers opportunity. Productivity tends to move in jumps and stalls, and we've been in a stall for several years. Opposite our feeling that economic growth as a whole offers greater risks of disappointment than upside surprise, we feel the productivity component of economic growth offers greater upside surprise potential than downside disappointment potential over the coming horizon.

Inflation--Expectations around the second economic factor with which we concern ourselves—inflation—have become a wild card. After the U.S. Federal Reserve (the Fed) and other global central banks introduced 'quantitative easing' (QE) as a monetary policy tool in 2008-2009 to help pull the global economy out of the GFC, economists and financial market participants became concerned about the potential of sparking consumer price inflation. QE, of course, is essentially the Fed and other global central banks creating money and using it to purchase securities (primarily government bonds and mortgages, but now is being applied to a growing list of securities). The purpose is multi-faceted—to inject cash into the financial system, to backstop markets in deep sell-offs, to control/lower interest rates beyond cash rates which the central banks already directly control, to spur credit creation, and other, liquidity-related, purposes. The Fed raised the ante in 2011-2014 with QE2, QE3, Operation Twist and QE4—all efforts to spur greater economic growth after the economy emerged from the GFC—and further still with QE-like market operations in 2018-2019. Other central banks followed with their own versions of extended QE.

Today, in fighting the economic effects of the pandemic response, the Fed and other central banks are on tilt, with operations that make the previous QE programs look puny individually.

For a variety of reasons, the consumer price inflation spark many economists and financial market participants became concerned about has not transpired. For certain there has been financial asset price inflation as cash injections and other market support flowed into financial assets, pushing up prices. But the massive increase in the monetary base globally relative to the size of the economy has not manifested in higher consumer prices. With respect to the forward 7-10 year horizon however, the potential for this has grown significantly.

At present, the global central banks and governments are fighting the deflationary forces of the recession. The probabilities that this could be extended have risen, too. Over-indebtedness in an economy can lead to debt default and in turn, falling asset and consumer prices. The global economy was at the top of the credit/debt cycle for the mid-2009 to end-2019 expansion when COVID-19 hit, and arguably we are near the end of a much longer secular (multi-cycle) credit/debt cycle, meaning the global central banks could be fighting a secular debt/deflation problem in addition to the ending of the current cyclical credit/debt cycle.

These opposing forces—high money supply relative to economic output due to the massive QE programs since 2009 on the inflation side and the current recession's pressure on secularly overly-indebted economies on the deflation side—leads us to think that for the coming 7-10 year horizon, potential inflation/deflation outcomes are wider in distribution than normal with a lower probability of "normal" outcomes and greater probability of "tail"—more extreme—outcomes than usual. Inflation in the U.S., excepting the 1930s (Great Depression deflation) and the 1970s (the Great Inflation), typically runs between 1% and 5% annually with a median around 3% annually. Imagine the "bell-shaped curve" centered around 3% and depicting high probability of outcomes that range from 1% to 5% annually, and the "tails" (the far left side and the far right side of the bell-shaped curve) of annual outcomes of less than 1% and greater than 5%. That picture would be a rough guide to the history of annual inflation in the U.S. Now imagine pressing

on the top of the curve--flattening it—spreading the range out further and "fattening" the tails--increasing the probabilities of outcomes outside of 1% and 5% relative to those between 1% and 5%. We think this flatter curve with "fatter" tails better reflects inflation probabilities going forward than the more "normal" probability distribution of the last 100 years. Hence, inflation/deflation has become more of a wildcard and of greater concern than it has been for quite some time.

Interest Rates—Technically, interest rates are a "financial market" but we upgrade them to "economic factor" due to their pervasive effects on many other financial markets and the economy as a whole.

We expect interest rates to rise modestly over the horizon, but with a very much back-end loaded pattern. The Fed in particular has pledged low/zero short term rates for at least the next couple of years, and has plans for "yield curve control" (YCC) through QE methods should longer term rates begin to rise before the Fed is comfortable with economic recovery, output levels and inflation levels. Other central banks are of like mind. Inflationary forces could overcome the global central banks' ability to fully control rates and force rates up higher or sooner (or both) than we expect, or deflationary forces could squash any chance of higher rates—we pointed out these two increased risks earlier—but the probabilities are mostly on the side of the Fed and other central banks getting their way of very low rates now with some let-up in 3-4 years.

Financial Market Implications

We follow several firms who routinely produce detailed, longer-term financial market return expectations (Capital Market Assumptions, or CMAs), including our general investment consultant RVK. CMA revisions, since about 2014, have mainly been in one direction—down. Increasingly, highly valued equity markets and low and falling bond yields force the financial models used to create CMAs to lower and lower forecasts.

Our highest-probability scenario is that weak economic results will be the main deterrent to achieving historically normal or above-normal market return results over the forecast period. Very low government bond yields will anchor cash yields from all investment types at below-average levels, though we do expect some widening of credit spreads from present levels, which if realized, may ease the pain to a degree over the period. The lack of ability for interest rates to fall much further will likely limit multiple expansion in the equity markets, which has been a primary driver of equity returns since around 2014. Once interest rates do start to move up—forecasted toward the later part of the forecast period, equity multiples are likely to run into trouble, along with equity prices and returns.

Institutional investors and other market participants and observers have talked of a "low return environment" since around the time of the GFC. This has been roughly true since the equity market peak in 2007 prior to the GFC, as investment returns have been somewhat below longer-term average since. But the economic headwinds as described, today's near-zero interest rates across the yield curve, and historically stratospheric equity valuations undeniably paint the picture of a low return environment for the coming forecast period.

Broad Investment Strategy

Last year, in the thick of a Late Cycle economy and markets, we were concerned with the following (excerpt from last year's Plan written in June 2019):

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 maintaining a higher expected return profile.*

Historically, economic recessions in the U.S. have mostly been triggered by one of two things: aggressive interest rate increases by the Fed (typically fighting inflation in Late Cycle), or an unexpected event that knocks the economy off its rails. The recession we're enduring today was, obviously, triggered by the latter. Our investment process, which significantly incorporates a top-down macro component that keeps our investment positioning in tune with the economic cycle and accompanying financial market conditions, had us prepared for this inevitable downturn through the actions detailed above from last year's Annual Investment Plan.

We find ourselves in an interesting situation at the present.

Typically, and particularly with the "surprise"-induced recessions, financial markets crater as the economy turns down. At some point, markets find a bottom as fear subsides; weaker, short-term, or over-leveraged participants are shaken out; valuations become cheap; liquidity returns; and generally then, markets bounce upward. The economy follows a similar pattern, though spread across more time, as the Fed and other global central banks step in with rate cuts and other supportive measures and governments deficit-spend through established social safety nets to support consumers. Eventually the economy takes hold (Early Cycle) and begins to grow again. The old highs in economic output and market price levels are achieved and exceeded (Mid-Cycle), the economy continues to mature and markets become fully- to over-priced (Late Cycle) and eventually the new economic and market cycle ends with another recession and we begin again. Readers will recognize this general pattern from recent history: the 2008-2009 recession (surprise-induced—housing bubble collapse) followed by the 2009-2019 expansion; the 2000-2002 recession (surprise-induced—bursting of the dot-com bubble) followed by the 2002-2007 expansion; the 1990-1991 recession (Fed-induced—aggressive interest rate increase to combat inflation) followed by the 1991-2000 expansion. This pattern extends far back into history.

But in this recession, we've broken from old patterns. While the depth of this recession has been a little worse than typical and our initial guesses at the length of the recession and the time to full recovery are roughly on par with historical averages, the financial markets—particularly the U.S. equity market—are a whole different story. Stocks in the U.S. fell 35% in a mere 34 days, and then recovered all of it in just 149 days more--and have continued to new highs. The market mood--greed-to-fear-back-to-greed--happened in a relative flash. Stocks never became cheap compared to traditionally "cheap" valuations. Weak/overleveraged players were hardly shaken out. The Fed backstopped markets with zero percent interest rates and trillions in liquidity almost instantly.

Market participants and observers explain all of this in a number of ways. One narrative is that the stock market views the COVID-19 induced recession as not a "real" recession, where corporate profits nosedive and built-up excesses are corrected over several months (the average duration of the last 10 recessions was around 11 months), and corporate profits and the broader economy build back to their previous levels over several quarters. The narrative is that the economy is essentially "on pause" and as soon as the pandemic is dealt with, everyone will go back to work and the economy will pick up where it left off in Late Cycle. Another narrative is that the financial markets are now completely controlled by the Federal Reserve (at least for now) and are divorced from economic realities.

Whatever the explanation, we have the odd confluence of Late Cycle financial markets and an economy in Recession.

Investment strategy, in light of our odd current situation and facing the fundamentals as detailed earlier for the coming 7-10 year planning horizon should be a rough continuance of the present strategy:

1. ***Continue to be cautious of the U.S. stock market and risk assets generally***. Valuations are clearly very high and seemingly dependent on Fed liquidity and ultra-low interest rates to support earnings multiples. A recessionary economy is not supportive of present valuations and the outlook for growth over the next 7-10 year period is muted. The fundamentals that support sustainably higher stock prices generally are:
    a. Strong economic growth/corporate profit growth
    b. Stable inflation in the 2-4% range
    c. Low and stable or falling interest rates
    d. Tax cuts, deregulation
    e. Loose monetary conditions

   Of this list we are expecting only low and (relatively) stable interest rates and loose monetary conditions. Over the full 7-10 year horizon, the remainder we would suggest have a low probability of occurring.
2. ***Liquidity and flexibility remain important***. Risk markets are priced for Late Cycle/strong fundamentals, and could change to reflect fundamental reality at any time.
3. ***In a low (ultra-low at present) interest rate environment, income has increased value***. Assets which produce little to no income are at much higher risk of price volatility than are assets which produce significant income as a percentage of their total rate of return.
4. ***Strategy shift: reduce "core" fixed income assets when appropriate.*** At present levels of interest rates, core fixed income assets—generally government bonds and high-grade corporate bonds—have little attractiveness relative to other income-producing assets. The magnitude of reduction needs to be balanced against item #2 above, liquidity provision. "When appropriate" might ideally mean in a risk market sell-off.

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 $5.6 billion over the 7-10 year investment horizon, an annualized increase of 3.3%. This projection is based upon the long-term assumptions for investment return, assumptions about New Mexico State Land Office contributions and the constitutional distribution policy used in the 25-year Intergenerational Equity model for the LGPF. Given the increased uncertainty in the economy and the financial markets, these figures should only be used as a guide.

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	$18.5 B	$18.8 B	$19.0 B	$19.3 B	$19.5 B	$19.8 B	$20.1 B	$20.7 B	$21.0 B	$21.4 B
50th Percentile NAV	$19.9 B	$20.9 B	$21.8 B	$22.7 B	$23.3 B	$24.2 B	$24.8 B	$25.7 B	$26.4 B	$27.3 B
75th Percentile NAV	$20.4 B	$23.1B	$24.7 B	$26.2 B	$27.5 B	$29.0 B	$30.4 B	$31.7 B	$33.2 B	$34.5 B

Distributions

Using the same long-term (25-year Intergenerational Equity model) assumptions, annual distributions from the LGPF are expected to rise to roughly $1.2 billion dollars by the end of the 7-10 year investment horizon. This equates to an annualized growth rate of about 4.6%. Again, the same cautions as above apply.

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	$0.86 B	$0.90 B	$0.93 B	$0.94 B	$0.96 B	$0.97 B	$0.98 B	$0.99 B	$1.01 B	$1.03 B
50th Percentile	$0.86 B	$0.91 B	$0.96 B	$1.00 B	$1.04 B	$1.09 B	$1.13 B	$1.17 B	$1.21 B	$1.25 B
75th Percentile	$0.86 B	$0.93 B	$0.99 B	$1.06 B	$1.13 B	$1.21 B	$1.29 B	$1.36 B	$1.43 B	$1.50 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 $500 million over the investment horizon, an annualized increase of roughly 1%. 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. Given the increased uncertainty in the economy and the financial markets, these figures should only be used a s a guide.

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	$5.0 B	$5.0 B	$4.9 B	$4.9 B	$4.8 B	$4.8 B	$4.8 B	$4.8 B	$4.8 B	$4.8 B
50th Percentile NAV	$5.4 B	$5.5 B	$5.5 B	$5.6 B	$5.7 B	$5.8 B	$5.8 B	$5.9 B	$6.0 B	$6.1 B
75th Percentile NAV	$5.7 B	$6.0 B	$6.2 B	$6.5 B	$6.7 B	$6.9 B	$7.1B	$7.2 B	$7.5 B	$7.6 B

Distributions

Using the same long-term (25-year Intergenerational Equity model) assumptions, distributions from the STPF are expected to rise to $280 million by the end of the 7-10 year investment horizon. Again, the same cautions as above apply.

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	$0.24 B	$0.24 B	$0.24 B	$0.24 B	$0.24 B	$0.23 B	$0.23 B	$0.31 B	$0.23 B	$0.23 B
50th Percentile	$0.24 B	$0.24 B	$0.25 B	$0.25 B	$0.26 B	$0.26 B	$0.27 B	$0.27 B	$0.27 B	$0.28 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. 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 US 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 ex-US markets and small cap stocks, greater focus is given to identifying skilled active managers that we believe can achieve superior risk-adjusted 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 US and ex-US target allocations of 20% each, or 50% of public equity assets each. The Council's 50% US target allocation is 6.9% lower than the global equity benchmark MSCI ACWI IM Index of 56.9% US and 43.1% ex-US. As of June 30, 2020, the current public equity allocation was roughly 50.3% US and 49.7% ex-US, resulting in a 0.3% overweight to the US target allocation and a 6.6% underweight to the global equity benchmark.

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

	% of Public Equity Asset Class (6/30/2020)					
	Sub-Asset Class	**Target (%)**	**Actual (%)**	**Target ($m)**	**Actual ($m)**	**Strategies (#)**
Global					**$10,035**	
US		**50.0%**	**50.3%**	**$5,017**	**$5,048**	
	Active	12.4%	14.9%	1,242	1,496	4
	Factor Based	23.6%	20.1%	2,371	2,018	4
	Market-cap Passive	14.0%	15.3%	1,405	1,534	1
Non-US		**50.0%**	**49.7%**	**$5,017**	**$4,987**	
	Active	31.0%	31.6%	3,111	3,176	7
	Factor Based	10.0%	10.2%	1,003	1,028	2
	Market-cap Passive	9.0%	7.8%	903	783	1

Portfolio strategy, markets, and recent performance— The publicly traded equity portfolio is primarily constructed to match the market sensitivity of the benchmark while focusing on the efficient deployment of active risk. In-depth studies have been undertaken by staff with the assistance of the general consultant to identify market segments in which managers can more reliably generate long-term excess returns, with market-cap passive and factor-based strategies receiving higher allocations in more informationally efficient segments.

Active risk strategies have been evaluated and selected in the context of their respective US or ex-US composites, with the objective of maintaining idiosyncratic stock exposures, managing tracking error and

avoiding compounding factor risks. Individual active risk managers are expected to maintain portfolio exposures consistent with their mandates and established risk budgets, while generating positive excess returns against their respective benchmarks, both on the upside and downside. This should result in balanced exposures across size, style and geographic categories, allowing the publicly traded equity composite to consistently generate excess returns in all types of market environments.

As of this writing, portfolio volatility, tracking error, fees and relative performance are in line with peers and largely consistent with expectations. The twelve months to June 30, 2020, have encompassed both a record-breaking drawdown and recovery in public equity prices. In February and March the S&P 500 witnessed a 34% drawdown in 24 trading days and has since bested its previous all-time high, while the MSCI ACWI ex-US IMI has risen 35% above its March 23 low. The continued dominance of large tech firms, aided by extraordinary monetary and fiscal support, has allowed the US to again outpace ex-US markets, with a 12-month return of 6.53% for the Russell 3000. This represents a performance differential of more than 1100 basis points compared to the MSCI ACWI ex-US IMI return of -4.74%. Over longer periods this dispersion is even more pronounced, with the Russell 3000 outperforming its ex-US counterpart by 197 percentage points cumulatively over the past ten years.

Due to a combination of manager underperformance, a defensive posture in a strong market, and an increased allocation to cash in the second quarter of 2020, the US composite underperformed its benchmark by 299 basis points and ended the fiscal year in the 62nd percentile of its peer group. The ex-US composite fared better, adding 148 basis points of excess return to end the period in the 42nd percentile of its peer group. Peer group percentile ranks for the US and ex-US composites over the five-year period are 50 and 44, respectively.

Portfolio activity and forward-looking strategy— Fiscal year 2020 saw the completion of a regular three-year study of the US portfolio structure, which was presented to the State Investment Council for approval in June. This new structure was approved unanimously, with the objective of correcting exposures to underperforming managers and style imbalances that were partly responsible for historical underperformance. This entailed the termination of two active and two factor-based managers, with the proceeds from these terminations directed to the Russell 1000 market cap passive index strategy and to the remaining small cap active strategy. This also served to better align value and small cap exposures in the US composite with the broad benchmark. Estimated portfolio fees were reduced by half, from 16 basis points to eight basis points.

Staff evaluated transition management proposals from three Council-approved transition managers and elected to engage Citi Global Markets Inc. for the public equity portfolio transitions. The US trading took place in early August within three public equity pools and across eight managers. Assets transitioned equaled approximately $2.3 billion, with $1 billion of this being overlapping securities that were not traded, reducing transaction costs and helping to mitigate risk. Total costs for the transition were moderate and within expectations.

Although an ex-US portfolio structure study was presented for the Council Investment Committee's review in March, transaction costs were significantly elevated due to adverse markets conditions, and further discussion was postponed. This study was presented to the State Investment Council in August, at which point its recommendations were unanimously approved. This study recommended only refinements to the existing ex-US portfolio structure, with the objective to more effectively allocate capital to active risk strategies that staff believe can generate positive excess returns over time, while keeping fees constant.

The ex-US transition is scheduled to take place in early October across three public equity pools and ten managers. Total trading is expected to be approximately $821 million, with an additional estimated $172 million in overlapping securities transferred, serving to reduce costs and mitigate risk.

Public equity capabilities that were added in fiscal year 2019 continued to be built out and further utilized in fiscal year 2020. Staff transitioned to work from home in March and continue to work remotely as of this writing. Prior investments in staff, IT resources, and the FactSet analytics platform were indispensable in enabling a seamless transition to remote work. A significant amount of two-way dialogue and ongoing due diligence took place with external public equity managers and the general consultant, particularly during the most volatile months of March, April and May. These managers also successfully transitioned to remote work and continue to perform in line with or above expectations.

The public equity group is scheduled to transition to the BlackRock Aladdin platform in late calendar year 2020, in coordination with the entire State Investment Office. Preparations continue to advance on schedule and have not been adversely affected by the work from home environment. Additional staff resources have enabled the group to increase collaboration and sharing of best practices with public fund peers and more thoroughly evaluate excess return opportunities in the US and ex-US small-cap spaces, among other valuable activities.

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, protect against the volatility of equities and other risk assets, and provide diversification benefits to the total portfolio.

The portfolio is divided into Core and Non-Core components. The Core allocation is a highly liquid, highly rated portfolio with the primary objective of serving the traditional role of a fixed income portfolio while providing liquidity in the event of a severe market dislocation. The Non-Core allocation's primary objective is 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 real property or a business and are infrequently traded.

A couple of minor changes were made to the portfolio in the 2020 Fixed Income Structure Study. The "Unconstrained" sub-sector strategy within Non-Core Fixed Income was renamed "Public Market Strategies." The Core Fixed Income sub-sector strategy long-term targets were changed to ranges from single-point estimates. Lastly, a short duration high yield fund was moved from Core to Non-Core Fixed Income to better match existing benchmarks and provide a more liquid option for capital call management and opportunistic investing.

The Core Fixed Income long-term target allocations are 10% for the LGPF and 12% for the STPF. The Non-Core Fixed Income 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 6.30.2019	Allocation 6.30.2020	Long-Term Target	Primary Purpose
Core Fixed Income Portfolio				
Core Bonds Pool	38.80%	51.80%	20% - 40%	Interest rate exposure
Core Bonds Plus Pool	35.90%	40.60%	25% - 65%	Interest rate & credit exposure
Short Duration Pool	25.30%	7.60%	10% - 30%	Liquidity/Duration mgmt
Non-Core Fixed Income Portfolio				
Lending Strategies	27.50%	22.90%	20% - 40%	Credit exposure
Distressed & Other	28.30%	22.70%	20% - 40%	Credit/Alpha exposure
Structured Credit	32.60%	29.40%	20% - 40%	Credit exposure
Public Market Strategies	11.60%	25.00%	20% - 40%	Duration mgmt/Alpha exposure

Recent performance, markets, and portfolio strategy— The global spread of COVID-19 and the unprecedented shutdown of large parts of the global economy during Q1 2020 caused global yields to decline to record lows in March and they remained there through the second quarter. The 10-year U.S. Treasury yield declined 126 bps in 1H 2020, ending at 0.65% after falling to an all-time low of 0.50% in March. Most debt assets reached spreads not seen since 2008 (high yield spreads reached 1,100 bps

compared to the historical average of 550 bps). The VIX reached its highest level ever (83) in mid-March, and it averaged 33 in 1H 2020 (versus the long-term average of 19). The second quarter credit market rally was broadly supported by central bank action, which was critical to boosting sentiment, particularly in the investment grade and higher quality high yield markets (as the Federal Reserve stepped in to provide meaningful quantitative easing via the initiation of large index / bond buying programs). Federal Reserve chairman Jay Powell indicated that the Fed is unlikely to make changes to the current near zero overnight interest rate band until at least the end of 2022. The benchmark for the Fixed Income portfolio is the Bloomberg U.S. Universal Bond Index which produced a 7.88% rate of return for the year. The Core portion of the portfolio performed in-line at 8.06%. The Non-Core portion underperformed, as its larger exposure to credit risk hurt performance with the spread-widening and credit market dislocations that occurred at the end of Q1 and in the 2Q of 2020.

The Core Fixed Income portfolio continues to be conservatively positioned. Relative to long-term targets, there is an overweight to Core Bonds, which is skewed to U.S. Treasury holdings and is the primary source of diversification, liquidity, and capital preservation to the overall portfolio. The Short-Duration sub-strategy, which lowers the interest rate exposure, is slightly underweight while the Core Plus allocation is within the long-term target range. Recent fund commitments in the Non-Core Fixed Income portfolio have further reduced the main risk component of the strategy (credit exposure), and have increased the diversification benefit and added to the downside protection of the overall portfolio.

Forward-looking strategy and recent activity— The Fixed Income portfolio is well-positioned to take advantage of the opportunities arising in the aftermath of Q1 and Q2 of 2020. A surge in convertible bond new issuance and its attractive pricing led to the SIC approval of an allocation to a convertible strategy with Linden Advisors. Also approved by the SIC was Silver Point Specialty Fund II, with its focus on special situations and rescue lending, and their expertise in identifying mispriced secondary opportunities. To take advantage of the broader opportunity set created by the dislocations, the SIC approved allocations to One William Street Credit Opportunity Fund and Oaktree Distressed Debt Fund. Looking forward to the continuation of central banks' swift and expansive fiscal and monetary response to the crisis, the next phase of economic recovery from COVID-19, and the low interest rate environment, the SIC will continue to work on constructing a resilient Fixed Income portfolio with favorable risk return characteristics.

Private Markets: Real Estate

Asset Class Summary— The Council's Real Estate portfolio has a target allocation of 12% of the Fund. As of CYE 2019 the Real Estate Portfolio represented approximately 10.7% 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.

Real Estate Sectors	% of Real Estate Portfolio		Value ($MM)
	NFI-ODCE*	Actual	NAV
Apartment	25.7%	20.9%	$ 581
Office	33.4%	25.8%	$ 717
Industrial	20.3%	26.8%	$ 745
Retail	16.1%	16.2%	$ 450
Hotel	0.1%	2.3%	$ 64
Other	4.3%	8.0%	$ 222
Total Real Estate	100%	100%	$ 2,780

Note: NMSIC Real Estate Sector Range is +/- 15% of the NFI-ODCE Index. By example, the range for Office is 18.4% to 48.4%.

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, 2019, the total Real Estate portfolio generated 6.3% net time weighted return, exceeding the NCREIF ODCE Index by 190 bps. Legacy investments continue to weigh on performance numbers, but their negative impact continues to diminish as the legacy portfolio now represents less than 2.3% of the total Real Estate NAV.

U.S. real estate valuations through year end 2019 generally continued to achieve historical highs, particularly in the core real estate space. However, the COVID-19 economic crisis which struck the U.S. in March, 2020 is expected to have wide-ranging impacts across the various property types. One respected data source, Green Street, estimates that overall commercial real estate values have declined by ~10% since the crisis struck. Industrial and logistics values have held up well as the ongoing shift from bricks and mortar to on-line retail accelerated through the lockdowns. Also holding up relatively well is the multi-family sector, however, the expiration of various forms of stimulus payments is expected to have a negative impact on rent and occupancy levels. There is also uncertainty in the office sector, as participants speculate on the opposing forces of higher space per employee ratios against declining space requirements as companies and employees embrace the Work-From-Home movement. Retail and hotel sectors have been the hardest hit with values down by 15-25% as occupancy and rent levels have fallen precipitously.
In terms of capital markets activity, during 2019, capitalization ("cap") rates were flat to marginally down, and the modest capital appreciation gains in 2019 were driven largely by rent growth. However, the COVID-19 crisis brought investment sales activity to a standstill, thus creating great uncertainty about valuations. Future cash flow, financing cost and discount rate assumptions have been cast into doubt and appraisers gave qualified opinions of value, generally only adjusting for known impacts on current rent while leaving discount rates unchanged.

The Open End Core Diversified Fund index, which is the benchmark for SIC's Real Estate portfolio and consists of stable properties with low leverage, generated gross returns of 0.98% and -1.56% in Q1 and Q2 of 2020, respectively as appraisers attempted to update their valuation assumptions to reflect a new reality.

Many ODCE funds suspended redemption activity to preserve liquidity and out of unwillingness to return or accept investor capital with uncertain pricing.

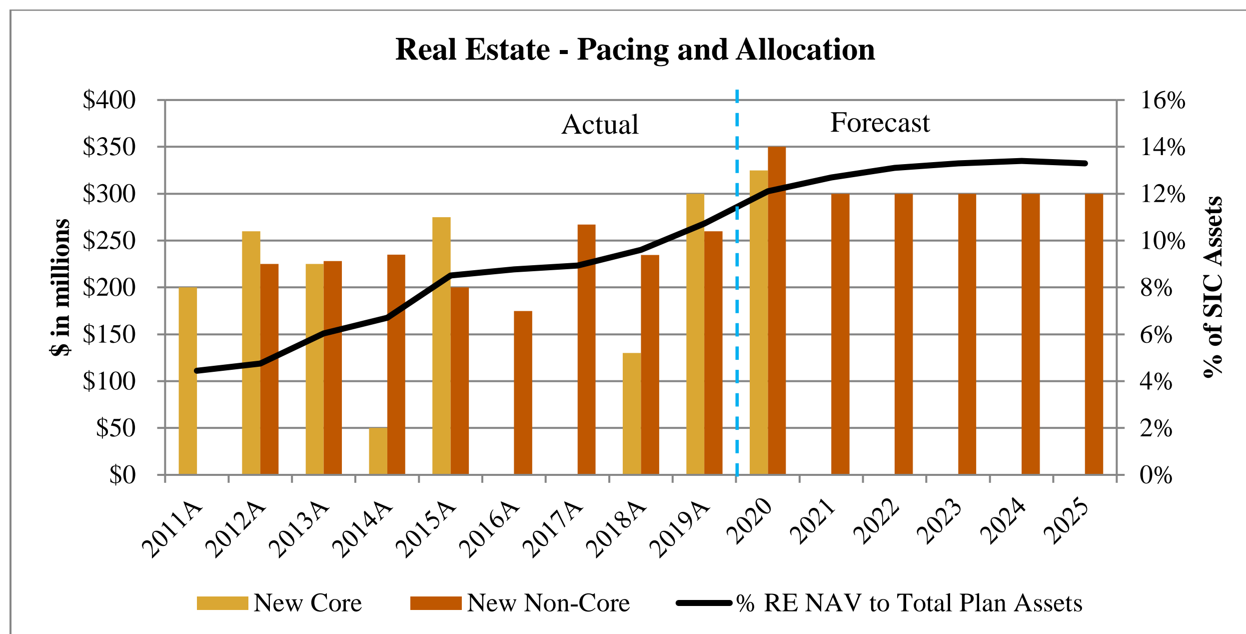
As 10-Year U.S. Treasury yields have fallen due to the Federal Reserve Bank's accommodative monetary policy response to COVID-19, yield spreads (the difference between Core cap rates and 10-year treasuries) have widened, making stabilized real estate an attractive investment alternative. This could cause further cap rate compression, particularly for industrial and multi-family sectors, once there is more certainty around future cash flows. In the meantime, there is a significant amount of capital sitting on the sidelines looking for distress in the real estate debt and equity markets. Many expect that the first property type to manifest distress will be hotels, which are experiencing severely depressed revenue and occupancy along with traditionally high operating leverage. Retail is another property that will show signs of distress, although there is little conviction around the long-term prospects for traditional retail, even in a post-COVID world.

In the year ended December 31, 2019, the NAV of the Real Estate portfolio increased by $666 MM. Four new commitments were made totaling $525MM:

1. $300MM PRISA (Core);
2. €75MM Aermont Capital Real Estate Fund IV (Non-Core);
3. $75MM Asana Partners II (Non-Core); and
4. $75MM Blackstone Real Estate Partners IX (Non-Core).

At year-end 2019, the core component of the SIC real estate portfolio represents 67% of the total portfolio against a target of 55%. This over-allocation to core has been beneficial as higher risk (non-core) properties have been more negatively impacted by the COVID-19 crisis. However, it is expected that the crisis will result in significant dislocation in commercial real estate markets globally. Hence, the focus for new commitments in 2021 is in the Value Add and Opportunistic spaces. Balancing vintage risk with the expected scale of disruption, planned annual redemption activity out of core and into non-core (Value Add and Opportunistic) may be increased in order to make more capital available for non-core commitments.

Recent activity and forward-looking strategy— At year-end 2019, the total NAV of the Real Estate portfolio represented 10.7% of total Fund assets. Including NAV plus unfunded commitments, the Real Estate portfolio represented 13.9% 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 SIC staff pacing model below:



Note: Outstanding core redemptions as of 12/31/2019 equaled $174MM
Source: SIC Staff

SIC expects to continue to expand its exposure to Europe from the current level of 9.0% to a target range of 10-15%. While the near-term 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 2021 Annual Investment Plan, SIC's Real Estate portfolio is designed to have a significant income return component. Once the COVID-19 crisis is stabilized, it is expected that the Core portfolio will generate income in the 3.0% to 4.0% 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. Income generation is expected to be a notable part of the total return. 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. As of CYE 2019 the Portfolio represented approximately 7.2% of the Fund on a NAV basis. Within that 12% Real Return allocation, 80% is targeted towards Real Assets and 20% to Financial Assets. Starting 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 and 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 Sector	% of Category		Value ($MM)
	Target	Actual	NAV
Financial Assets	**10-30%***	**18.4%**	**$ 408**
MLP's	NA	93.3%	$ 381
Real Estate Debt	NA	6.7%	$ 28
Real Assets	**70-90%***	**81.6%**	**$ 1,813**
Agriculture	0-15%	12.9%	$ 234
Commodities	0-10%	0.0%	$ -
Energy	0-50%	30.0%	$ 544
Infrastructure	0-50%	41.3%	$ 748
Timberland	0-20%	14.1%	$ 256
Other	0-15%	1.7%	$ 31
Total		**100%**	**$ 2,222**

Note: Invested Value (NAV) is as of 12.31.2019.
**Target Weights for Financial Assets & Real Assets are reflective of target %'s of the entire Real Return Portfolio. Real Asset Sub-Sectors %'s reflect target and actual %'s of Real Assets only.*

Recent performance, markets and portfolio strategy— During 2019, the Real Return portfolio generated a 6.1% net time weighted return (TWR) while the Real Asset component generated a 4.4% net TWR. Stronger returns in the broader Real Return portfolio were driven by a 12.8% net return from the MLP portfolio which makes up the vast majority of the Financial Assets component or the Real Return portfolio.

Within the Real Asset portfolio, the infrastructure portfolio showed continued strong performance (9.8% one-year TWR), followed by Energy at 2.7% net TWR; Timber at 2.0% net TWR and Agriculture at -7.6% net TWR. Agriculture investment returns were impaired by J-curve (most evident in development strategies), currency fluctuations and trade conflict.

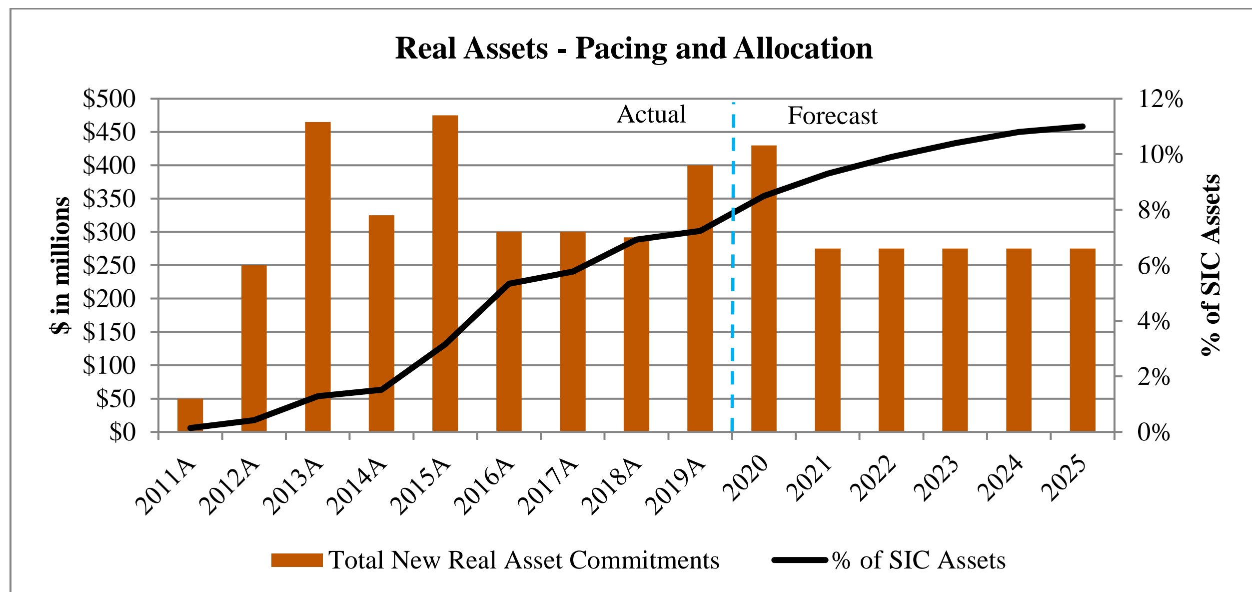
Since year-end 2018, the NAV of the Real Return portfolio increased by $362 MM to finish 2019 at $2,222 MM.

Five new Real Return 2019 commitments were approved totaling $400 MM:

1. $100MM Blackrock Global Energy & Power Infrastructure Fund III (Real Assets / Energy);
2. $50MM Blackrock Global Energy & Power Infrastructure Fund III Co-Invest (Real Assets / Energy);
3. $100MM Brookfield Infrastructure Fund IV (Real Assets / Infrastructure)
4. $75MM Ares Real Estate Enhanced Income Fund (Financial Assets / Real Estate Debt); and
5. $75MM Brookfield Senior Mezzanine Real Estate Finance Fund (Financial Assets / Real Estate Debt).

Post year-end 2019, the COVID-19 crisis hit and the Real Return portfolio has been significantly impacted. The value of the MLP portfolio fell by -32% from 12/31/2019 to 6/30/2020 and the energy component of the Real Asset portfolio has been similarly impacted as global demand for oil and electric energy fell sharply. Infrastructure has held up relatively well led by communications and digital infrastructure. However, the transport sector (ports, airports, toll roads and the like) suffered as vehicle and air travel fell. Even agriculture has been hurt by supply chain mismatches (as consumers shifted from eating out to eating at home) and lower demand for ethanol.

Recent activity and forward-looking strategy-- The Real Return pacing model incorporates just the Real Assets component, which is targeted at 9.6% of the broad portfolio (12% x 80% = 9.6%). As shown below, the pacing model shows approximately $275 MM of commitments going forward 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: SIC Staff

Beginning in 2018, SIC launched a co-investment program within the Real Asset portfolio. The principal benefit of co-investments to the limited partner is a reduced fee structure: generally no management fee and no carried interest. This reduced fee serves to enhance SIC's net returns on the underlying investment, potentially several hundred basis points on high-returning investments. Co-investments are predominately made where SIC is an LP in the main fund. The downside of the co-investment structure is greater exposure to single investment risk, since the LP will have exposure to the investment through both the main fund and the co-investment. To manage this risk, SIC typically secures opt-out rights in the event of portfolio concentration concerns and places certain restrictions on co-investments such as a cap on how much co-investment capital can be allocated to a single investment.

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 infrastructure sector as well as the renewable energy space within the energy sector.

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 company investments 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 long-term return expectations of all the asset classes and for the 12 months through March 2020 (one quarter lagged), the private equity portfolio gained over 13.7%. This performance was significantly better than the median peer fund private equity portfolio return of 8.9%, and slightly less than the 13.9% increase in the Cambridge US Private Equity (Legacy) 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 $50 million-$100 million to “core managers”, compared to the previous $20 million-$50 million, so the performance drag from these older funds will continue to diminish. Also, since inception performance (net IRR) of the five largest GP exposures as of December 31, 2019 is 16.0%.

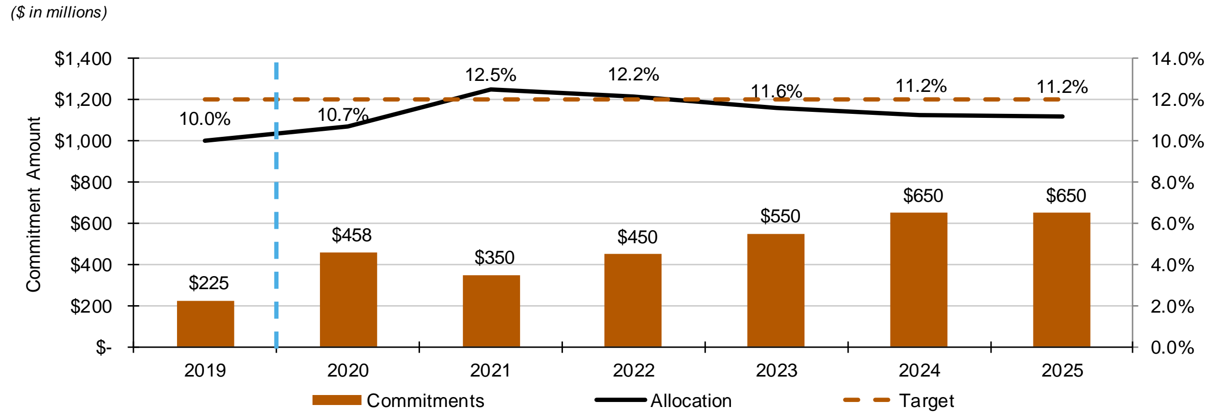
Portfolio strategy continues to focus on identifying a set of “core managers” to build longer term relationships for our private equity program. Larger commitments to successful core managers will *eventually* result in a decrease in the number of GP relationships/fund commitments and will be very beneficial for 1) portfolio monitoring and 2) reducing the administrative burden of a large number of relationships. The number of private equity funds (currently 108), in the absence of a secondary sales option, will continue to gradually decrease. But as the portfolio continues to grow and approach the 12% target, the overall effect of the non-core relationships has continued to recede.

Recent activity and forward-looking strategy--Private equity consultant Mercer 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 for the portfolio 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 a number of years due to different 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. For perspective, 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 the years 2018-2019. 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. It should be noted that the COVID-19 pandemic, at least in the near-term, may negatively impact the overall level of distributions for the next 12-24 months. Since we

do not expect contributions to be materially reduced, a spike in net contributed capital would accelerate progress towards the target allocation.

National Private Equity Commitments and Allocation Forecast



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.

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 2020 includes approximately $185 million of commitments that had been approved prior to 2020, but had first drawn capital in 2020, in addition to those commitments approved in 2020.

Private equity allocation for 2019 reflects as of 12/31/19 while 2020 and thereafter reflect end of fiscal year on June 30 of each year.