FOR INFORMATION ONLY

April 2, 2020

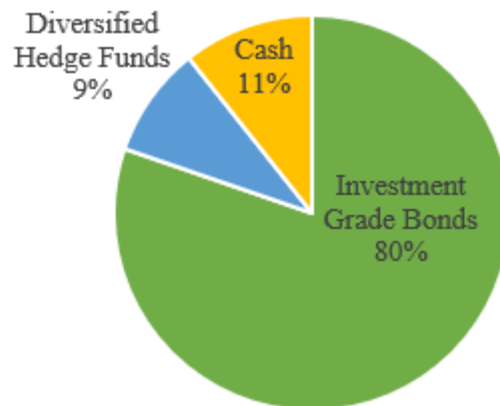
TO: Trustees – Board of Investments

FROM: Jonathan Grabel
Chief Investment Officer

SUBJECT: **Functional Asset Category Update – Risk Reduction and Mitigation Investments**

The Investment Division will be providing periodic updates on the functional asset categories. Below is the update on the Risk Reduction and Mitigation asset category, which includes Investment Grade Bonds, Hedge Funds, and Cash.

The objective of Risk Reduction and Mitigation is to produce modest returns with a low level of volatility and a low correlation to growth assets. When equity prices decline, this asset category is largely a source of liquidity for benefit payments and for rebalancing. As of March 31, 2020, Risk Reduction and Mitigation represented approximately 27.1% of the Total Fund, which is above the 24% target allocation, but well within its target range of 18% to 30%. A breakdown of the components within Risk Reduction and Mitigation, as of March end, is shown below:



(as percentage of Risk Reduction and Mitigation)

Concerns over the economic impact of COVID-19 sent a shockwave through all financial markets in February and March. In addition to the sharp sell-off in stocks and commodities (most notably oil), Treasury yields reached historic lows, volatility spiked, and corporate bonds (both investment grade but especially high yield) declined at an unprecedented pace. In an effort to alleviate the market disruptions, the Federal Reserve, U.S. Treasury, and the U.S. Congress introduced various programs intended to help consumers, businesses, investors, and markets. Among these were purchase programs/facilities intended to alleviate strains and inject liquidity into the bond market.

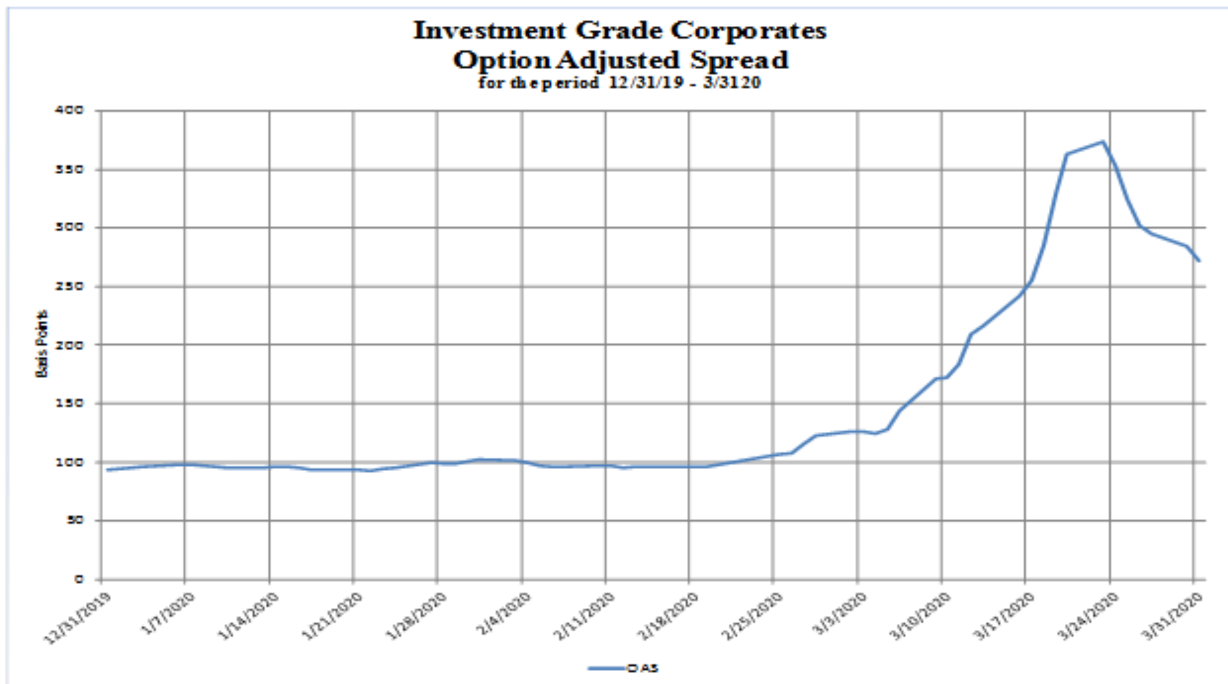
This included purchasing unprecedented amounts of Treasurys, agency mortgage-backed securities (MBS), and various short-term instruments.

Investment Grade Bonds

LACERA's investment grade bond allocation is benchmarked to the Bloomberg Barclays U.S. Aggregate Bond Index which is comprised largely of Treasurys (47%), MBS (27%), and Corporates (24%)—see table below. In times of distress, Treasurys generally outperform Corporates due to the credit risk—the risk of a downgrade or a default—present in corporate bonds. As shown in the table, the two largest sectors, Treasurys and MBS, benefitted from a flight-to-quality and generated positive returns for the quarter: 8.2% and 2.8%, respectively.

As of March 31, 2020			
Index Component	% of Index	March Return	1Q'20 Return
Treasury	40.9%	2.89%	8.20%
Government-Related	5.9%	-3.09%	0.47%
MBS	26.6%	1.06%	2.82%
CMBS	2.1%	-3.13%	1.19%
ABS	0.4%	-2.07%	-0.21%
Investment Grade Corporate	24.1%	-7.09%	-3.63%
Bloomberg Barclays U.S. Aggregate Index	**100.0%**	**-0.59%**	**3.15%**

In contrast, corporate bond prices declined, as the demand shock caused by the pandemic will undoubtedly hurt corporate profitability and cause their financial ratios to deteriorate. As a result, delinquencies and defaults are expected to increase. In response, yield spreads, which represent the incremental yield over comparable maturity Treasurys that investors demand for buying corporate bonds, widened sharply. Markets became severely dislocated in March, causing investors to raise liquidity any way possible. Investors sold what they could, which often meant short-term investment grade corporate bonds. As shown in the following chart, the yield spread offered by corporate bonds widened dramatically, from 100 to over 350 bps, before recovering slightly to just below 300 bps in response to the government programs.



Source: Bloomberg Barclays Live as of March 31, 2020

Despite the poor performance of the corporate sector, overall, the Aggregate index return was 3.15% for the quarter.

LACERA's portfolio has performed as expected in this volatile environment. Approximately 75% of LACERA's bond portfolio is in core bond strategies, and about 60% of this 75% is invested in a U.S. debt index fund. The remaining 25% is in core plus strategies. The index fund has closely tracked the benchmark, performing within a basis point of the index. The core portfolio is up nearly 3.0% for the year, underperforming the index by 16 bps. The core plus strategies have lagged the most, as they have a slightly greater risk profile. The core plus portfolios are down 0.8% for the year, underperforming the index by nearly 400 bps. As a reminder, the structure review approved by the Board in 2019 resulted in a reduction to the target Core Plus allocation from 50% to 20%. We will revisit this allocation in the future and assess its relevance in the risk mitigation portion of the Fund. All combined, the investment grade bond portfolio return for March is -1.5% and +2.0% for the year-to-date.

Hedge Funds

The same liquidity factors that drove credit sectors in investment grade bonds lower in March also affected all liquid markets for risk assets and detracted from hedge funds performance. Most hedged strategies delivered negative returns in March. LACERA's hedge funds program is estimated to have lost 7-8% in March, while the HFRX Global Hedge Fund Index is estimated to have lost 6%.

During March, we had several conference calls with each direct investment manager. Beyond discussing portfolio positioning and markets, we confirmed that each fund had adequate positions of liquidity and that each manager organization was functioning appropriately given the effect of

the health crisis. LACERA has generally not considered the hedge funds portfolio as a source of liquidity during periods of market stress. Even so, LACERA's direct hedge funds have not imposed gates which would prohibit investors from redeeming under their normal schedules. We consider each of the managers in the direct portfolio as an institutional quality firm with established practices in operations and compliance. As a reminder, LACERA's consultant has independently conducted operational due diligence on each of these managers.

As of February month-end, LACERA's hedge funds program had $1.3 billion of capital. It was positioned with five direct managers that collectively made up 71% of the portfolio with the two fund of funds portfolios comprising 29% of LACERA's hedge funds allocation (before the effect of March performance). The two fund of funds portfolios are managed by Grosvenor Capital Management and Goldman Sachs Asset Management. These portfolios are less than one-third of their prior size and are being wound down, as approved by the Board in late 2019.

Four out of five of LACERA's direct portfolio managers had negative performance in March. The positively performing manager invests in a fixed income relative value strategy that tends to exhibit low correlation to global growth risk. The other four direct managers are estimated to have losses that range from 4% and 17%. We estimate that over half of the losses came from securities dislocating from their intrinsic or fundamental value.

Across the hedge funds portfolio, credit-oriented trades detracted the most from performance. These hedged credit positions broadly struggled in March amid economic uncertainty, decreased market liquidity, and hedging levels that were insufficient to protect against the unprecedented market downturn. The expected loss of 10% in the Grosvenor-managed fund of funds portfolio is more severe than the expected losses in the direct and Goldman-managed portfolios, as its remaining fund investments included a high degree of credit-related assets. In the direct portfolio, one manager is estimated to have lost 17%, with the bulk of the losses coming from residential mortgage securities with a modest amount of leverage. The residential mortgage market experienced significant market dislocations from forced selling by more-levered investors during March after economic uncertainty brought into question the continued ability of homeowners to make their mortgage payments. Staff and Albourne are currently considering how best to respond to this manager's performance drawdown as part of the losses are due to true asset impairment while some losses are related to dislocated security market conditions that should improve. This analysis will be shared with the BOI at a future meeting. The liquidity constraints experienced in residential mortgage-backed securities also occurred in other credit areas, namely commercial mortgage-backed securities and structured pools of corporate credit securities where LACERA's hedge funds program has exposure, although to a lesser extent. While the large scale and speed of the credit market drawdown are unprecedented, its impact on hedge fund performance did not align well with the risk mitigation objectives of this asset category.

Other strategies that led to losses in LACERA's hedge funds portfolio include liquidation securities where future cash flows await a judicial proceeding on a company's liquidation, and merger-related equities where a corporate transaction is pending regulatory approval. In this market downturn, even securities with known and highly probable future cash flows with near-term catalysts have decreased in value and have caused the portfolio to appear more market directional than anticipated. While these trade examples are not strongly correlated to the overall direction of equity markets, both these trades and equity markets are highly correlated to liquidity

shocks, similar to those that have occurred. In the past, when these types of event-driven securities have dislocated from fair value, many of them tended to revert to fairer values when liquidity returned and global markets functioned more on pricing fundamentals. Regarding LACERA's portfolio, the direct managers have adequate cash on hand and have not been forced to liquidate these event-driven trades. Their positioning did not include high levels of leverage going into March, so they can weather these price dislocations and selectively take advantage of new market opportunities. LACERA's managers have positioned themselves to be in select merger arbitrage and event-driven liquidation trades that they have underwritten to have a higher likelihood of a favorable outcome. Accordingly, staff and Albourne are considering incremental investments to existing managers with idiosyncratic portfolio positions that have dislocated from fair value, where the manager is well positioned to benefit from the dislocation, and where LACERA's approved structure review allows for additional investment.

The hedge funds portfolio was underweight in March with an actual allocation of 2.1% compared to a 4.0% Total Fund target. Investment grade bonds, that outperformed hedge funds during March, were held to balance the underweight to hedge funds. The hedge funds portfolio is intentionally underweight because the portfolio is in transition after being moved to the Risk Mitigation asset category and having its performance benchmark lowered to 90-day T-bills +2.5% in early 2019. The new benchmark aligns with updated portfolio objectives that are more conservative than the legacy hedge funds portfolio. After a structure review later in 2019, the portfolio has been evolving away from fund of funds portfolios that tend to have higher investment fees and greater market exposures. The hedge funds portfolio is currently under construction and being designed consistent with risk mitigation objectives.

Looking forward, we will look to optimize portfolio construction incorporating data from recent events. We intend to conduct a mid-cycle structure review in the third quarter of 2020. At this juncture, we could address several topics: update on the results of the redemption process in the fund of funds portfolios, building out the direct portfolio, post-event observations from market volatility in 2020, and portfolio adjustments. In the meantime, we continue to implement the structure review approved late last year.

Cash

LACERA's cash portfolio, valued at $1.6 billion as of March 31, is managed by J.P. Morgan and consists primarily of high quality, short-term corporate bonds and money market instruments such as commercial paper and certificates of deposit. In addition, almost 30% of the portfolio is invested in an overnight sweep vehicle managed by an affiliate of LACERA's custodian, State Street Global Advisors (SSGA). This fund offers daily liquidity and invests exclusively in government instruments. During the equity market selloff, J.P. Morgan was instructed to emphasize liquidity over yield by not reinvesting cash inflows; instead, they are letting all inflows (such as coupon income and principal payments) accumulate in the SSGA fund. Therefore, LACERA's balance in the SSGA fund will grow substantially over the course of the next two months, with maturities of approximately $540 million in April, and an additional $360 million in May. As a result, the portfolio has sufficient liquidity prior to any planned rebalancing initiatives.

The cash portfolio has an average life of 0.2 years, meaning that there is very little interest rate risk. However, this portfolio does bear some credit risk. When spreads widened near mid-March,

even high-quality, short-term instruments came under unprecedented pressure as leveraged investors and those with asset/liability mismatches scrambled to raise cash. As a result, yield spreads widened and prices declined. Since then, as the Fed, Treasury, and Congress have taken multiple steps to steady markets and inject liquidity, the money markets have improved substantially, though they have not fully recovered to pre-crisis levels.

The estimated returns for the cash portfolio are: 0.1% in March, and 0.4% in the first quarter.

Next week there will be an update on the Real Asset and Inflation Hedges functional asset category.