

Adversity-> Adaptation->

Advancement

Reinforced Cybersecurity and Infrastructure



With the shift to a largely remote workforce, LACERA invested in vital equipment to ensure that staff members could work efficiently and securely offsite. In addition to new mobile equipment and software, we reinforced our cybersecurity and technology infrastructure to keep member data protected.



September 21, 2020

Board of Investments
Los Angeles County Employees Retirement Association
Gateway Plaza
300 North Lake Avenue, Suite 850
Pasadena, CA 92101



Dear Board Members:

LACERA's stated mission is to produce, protect, and provide the promised benefits. LACERA strives to align the portfolio's asset allocation, investments, and other related decisions with the goals of the overall organization. Meketa Investment Group, LACERA's general investment consultant, works in concert with StepStone Group, The Townsend Group, and Albourne Partners to provide guidance to LACERA's Board of Investments (Board), and assist the Board with performance evaluation, asset allocation, manager selection, and other industry best practices.

This letter reviews the investment performance of LACERA for the fiscal year ending June 30, 2020.

Fiscal Year 2020 Calendar Year in Review

The past year has seen remarkable shifts in economic and financial market performance. We entered fiscal year 2020 facing considerable uncertainty regarding the path of fiscal and monetary policies, elevated valuations, declining growth in China, a general slowdown in global growth, the potential for additional trade issues, and political uncertainty in Europe (Italy, Greece, Brexit). All of these concerns weighed heavily on most investors' minds. Fast forward to where we sit today at the close of the 2020 fiscal year and much has changed in the world.

The start of the fiscal year was characterized by widespread concerns regarding slowing global growth. This backdrop of uncertainty prompted major central banks to continue their pivot toward more accommodative policies. Here in the U.S., ongoing concerns regarding a decline in growth and the trade standoff between the U.S. and China played a key role in the Federal Reserve's decision to cut rates several times, and eventually settle at a range of 1.50-1.75 percent by December 2019. Considering that the Fed had previously embarked on what was characterized as a fairly aggressive rate-hiking cycle until late 2018 given improvements in the economy, this represented a stark reversal of course. Fed Chairman Jerome Powell indicated that these so-called "insurance cuts" were to combat recent weakness in the economy and were not necessarily a part of a longer cycle of interest rate cuts.

Outside of the U.S., major central banks, notably the European Central Bank (ECB) and the Bank of Japan, affirmed similar accommodative policy stances. ECB President Mario Draghi, in one of his last formal acts as President, re-initiated the ECB's quantitative easing program, prior to being succeeded by Christine Lagarde in November 2019. Continued monetary accommodation and increasing whispers of more formal fiscal support, set the stage for strong performance in global equities and other risk assets at the end of 2019.

Calendar year 2019 finished strong as a result of broadly accommodative policy stances, coupled with optimism about the pass-through of easier monetary policy to better economic prospects. U.S. equities led the way in the second half of the year, with the Russell 3000 Index posting a return of 10.4 percent, followed by emerging market equities (MSCI Emerging Markets Index) producing a return of 7.1 percent, and developed international markets (MSCI EAFE Index) generating a return of 7.0 percent. With interest rates declining towards multi-decade lows, spread sectors within bond markets enjoyed strong performance as well. Local currency emerging markets debt, U.S. investment grade corporate debt, and U.S. high yield debt led the way; the JP Morgan GBI-EM Global Diversified, Bloomberg Barclays U.S. Corporate Investment Grade, and Bloomberg Barclays U.S. Corporate High Yield indices generated total returns of 4.4 percent, 4.3 percent, and 4.0 percent, respectively in the second half of 2019. The VIX Index (a measure of volatility expectations), which saw a jump in Q4 2018 above 30.0 before ending the year at 25.4, fell markedly as the year came to a close, ending 2019 at an extremely benign level of 13.8. Gold ended the year with a reasonably strong gain, trading at \$1,519.50 at the end of 2019, up from \$1,278.30 at the end of 2018. WTI Crude ended 2019 at \$61.10, an increase from its year-end 2018 level of \$45.15.

By most accounts, global financial markets entered 2020 on relatively strong footing. Equity markets continued their march higher early in the year, despite elevated valuations, as investors increasingly began to price in a reflationary growth impulse, as suggested by leading economic indicators in global developed and emerging markets. However, a relatively optimistic backdrop underwent a remarkably rapid shift over the course of just a few weeks.

In January, the first COVID-19 case was acknowledged by Chinese authorities, reportedly originating in Wuhan, China. The actual timeline of the spread of the virus and its origination continue to be the subject of much speculation. With limited historical precedent, market participants leaned on China's relative success in containing SARS as indicative of the path of COVID-19. By March, the virus began to spread globally, particularly in Europe, with Italy and Spain reporting massive spikes in infections and, sadly, mortality rates. Clearly, where SARS was quickly contained, COVID-19's infection rate had exploded globally. By virtue of greater freedom of travel and 21st century globalization, the virus spread far more quickly than was initially expected based on previous viral outbreaks. In March, in an effort to contain the spread, countries responded by enacting stringent lockdown, or "stay at home" orders, leading to an abrupt halt in production and consumption. Layoffs expanded dramatically and swiftly, as businesses were forced to close down in an effort to stop the disease from spreading.

The impact on financial markets was extreme. Global equity markets rapidly entered bear market territory, and continued their path downward throughout the month of March, as market participants attempted to price in the impact of a cessation of a large portion of global economic activity. With limited data on COVID-19, the pendulum clearly swung towards pessimism regarding the virus's impact and the likely path of activity going forward. After ending the year 2019 below 14, the VIX spiked above its prior peak during the Global Financial Crisis, briefly breaching 80 in early March. In the U.S., circuit breakers were triggered at the New York Stock Exchange, with markets opening limit down, on March 9 and March 16. At the depth of the drawdown from January 1, 2020 to March 23, 2020, the Russell 3000 Index was down -31.6 percent, the MSCI EAFE Index (developed market equities) was down -33.2 percent, and the MSCI Emerging Markets Index (emerging market equities) was down -31.8 percent. The perception of acute stress in credit markets, both in the U.S. and abroad, led to solvency fears; the Barclays High Yield index fell -19.8 percent. Investors universally fled risk assets, in all forms, during the selloff in favor of perceived safer assets like U.S. Treasuries.



Over this same time period, the spread between large cap stocks, which went into the shock with stronger financial positions and have tended to experience less volatility in drawdowns, and small cap stocks, which are more pro-cyclical and volatile, widened during the selloff. Whereas the Russell 1000 Index fell by 31.1 percent, the Russell 2000 Index fell by 39.7 percent, a spread of nearly 10 percentage points. Going further, the ever-widening performance gap between growth and value, which we have highlighted in past CAFR reviews, persisted. The spread between large cap growth and small cap value expanded during the selloff, with the Russell 1000 Growth Index declining 25.1 percent and the Russell 2000 Value Index falling 44.3 percent, for a spread of nearly 20 percentage points.

The rapid unwind of risk in early 2020, one of the fastest market selloffs in modern financial history, reinforced the importance of diversification. While equity and credit markets fell precipitously, investment grade bonds provided an offset for investors. The Bloomberg Barclays U.S. Aggregate generated a return of 1.0 percent over the course of the drawdown noted above, and long-term treasuries, measured by the Bloomberg Barclays Long U.S. Government index, generated a return of 20.2 percent.

The volatility of the pandemic was exacerbated by volatility in oil prices, which experienced a rapid collapse early in the year. The COVID-19 related restrictions weighed heavily on demand, with Saudi Arabia's untimely decision to flood the market with oil to gain market share creating further stress on prices. Oil futures briefly traded at negative price levels during the depths of the crisis, as demand collapsed and storage capacity dwindled. The May WTI futures contract briefly exchanged hands at nearly -\$40 per barrel. Commodity and natural resource asset classes both participated in the broader market selloff; the Bloomberg Commodity Index and the S&P Global Natural Resources Index were down -23.4 percent and -44.6 percent at the trough, respectively. While the futures curve has since normalized, the oil supply/demand dynamic remains in flux. OPEC+ (inclusive of additional key producers such as Russia) reached a supply cut agreement in April that supported prices and stabilized the market.

To combat the expected significant decline in economic activity, fiscal and monetary authorities globally responded with immediate and historic stimulus measures. The Federal Reserve, in the midst of the March drawdown, immediately cut the Fed Funds Target Rate effectively to zero, and subsequently introduced aggressive stimulus measures, including backstop liquidity, funding programs, and trillions of dollars in promised asset purchases. Meanwhile, fiscal authorities released over \$2.4 trillion in targeted stimulus, with the promise of additional measures in the future. Importantly, both the speed of the response and the breadth of the response made the joint monetary/fiscal stimulus unprecedented.

In Japan and Europe, similarly aggressive monetary and fiscal measures were implemented, although it should be noted that they entered the crisis with no room to cut policy rates, so their focus was on quantitative easing and fiscal measures.

Robust stimulus across global developed and emerging economies, coupled with incremental positive news regarding the spread of COVID-19 and economies slowly reopening, set the stage for a relatively rapid rebound in risk assets in the second quarter. While the pace of the deceleration in economic activity was rapid, and data for the second quarter has been relatively dire in absolute terms, market participants are largely taking a longer-term view with expectations for a recovery in economic activity later this year and into 2021. In the second quarter of 2020, the

Russell 3000 (U.S. equities), the MSCI EAFE, (developed market equities), and the MSCI Emerging Markets (emerging market equities) Indices generated total returns of 22.0 percent, 14.9 percent, and 18.1 percent, respectively. Given support from the Federal Reserve and increased risk appetite, credit recovered rapidly as well, with the Bloomberg Barclays U.S. High Yield index generating a return of 10.2 percent. The broader fixed income market, as measured by the Bloomberg Barclays U.S. Aggregate, benefitted from monetary stimulus, producing a 2.9 percent total return. While the VIX remained elevated relative to its pre-crisis levels at 30.4 as of June 2020, it had fallen significantly since the peak of the crisis in the first quarter. Equally, bond market volatility as measured by the MOVE Index, fell to nearly a record low.

An investor who had not been following current events over the past year and only chose to look at U.S. equity market performance could be forgiven for thinking that little had changed regarding the prevailing market regime. Despite a massive risk-off event in the first quarter of 2020 associated with a global pandemic, risk assets have, in some cases, posted moderately positive returns over the past fiscal year. U.S. equities, as represented by the Russell 3000 Index, finished the fiscal year with a 6.5 percent return. Emerging markets (MSCI Emerging Markets) delivered -3.4 percent for the year. The MSCI EAFE Index was the worst performer among the headline global regions, posting a total return of -5.1 percent.

Several important trends underneath the headline results merit emphasis. In the U.S., the spread between large cap stocks and small cap stocks remains extremely wide. The Russell 1000 Index produced a total return of 7.5 percent over the fiscal year, whereas the Russell 2000 Index generated a total return of -6.6 percent.

The spread between growth and value also remains stubbornly wide; the Russell 1000 Growth's return of 23.3 percent during the fiscal year far outpaced the Russell 1000 Value's total return of -8.8 percent. Key to the persistent spread between value and growth has been the sector composition of the Value and Growth indices. The Russell 1000 Value's large financials and utilities overweights, coupled with large information technology and consumer discretionary underweights, relative to the Russell 1000 Growth, were key contributors. The two benchmarks' relative allocations to financials and information technology alone generated a performance spread of 14.1 percent in favor of the growth index. An even starker contrast can be observed between large cap growth (Russell 1000 Growth at 23.3 percent) and small cap value (Russell 2000 Value at -17.5 percent) where the total return spread was a massive 40.8 percent.

Within international developed markets, the MSCI EAFE opportunity set, of which Japan, the U.K., and the Eurozone are featured most heavily, underperformed relative to the U.S. and emerging markets. This can largely be attributed to the weak footing on which they entered the crisis to begin with, the robust spread of COVID-19, and the stringency of lockdowns in many of these economies. Within emerging markets, an extremely wide spread between countries that were able to manage the virus' spread and deployed aggressive countermeasures (e.g., China: 9.9 percent return) relative to countries facing already dire economic circumstances (e.g., Brazil: -33.4 percent, Mexico: -25.2 percent, and South Africa: -24.9 percent) was relatively extreme.

The same style regime observed in the U.S., with growth outperforming value, persisted in both developed and emerging international markets. Again, the relative performance of financials, information technology, and consumer stocks were key drivers of the spread between value and growth indices.

Fixed income markets generated relatively strong results, due to a collapse in global yield curves coupled with a robust liquidity backstop from central banks. The Bloomberg Barclays U.S. Aggregate produced a total return of 8.7 percent over the past year. High yield bonds retraced their earlier losses, with the Bloomberg Barclays U.S. High Yield index finishing flat over the fiscal year. However, the standout performer within fixed income has been long-maturity treasuries, with the Bloomberg Barclays Long U.S. Government index gaining an impressive 25.1 percent over the past year.

While equities—and especially large cap growth equities, as well as fixed income—produced relatively strong results despite the COVID-19 shock, we have seen mixed results from other asset classes. While energy prices recovered to some extent, with WTI Crude Oil trading at \$39.28 at the end of the fiscal year, the current level still represents a significant drawdown relative to even a year ago, when it traded at \$58.20. Natural resource stocks and commodities, on account of uncertainty regarding supply gluts, especially in the oil market, and the uncertainty regarding the recovery of demand, produced weak total returns. The S&P Global Natural Resources Index returned -16.8 percent while the Bloomberg Commodity Index returned -17.4 percent. One of the hardest hit asset classes in markets in 2020 has been real estate, where fears regarding utilization rates in commercial real estate have prevented the asset class from participating in the recovery to the same extent as other asset classes. The MSCI U.S. REIT Index returned -12.9 percent.

2021 Outlook

Looking ahead, we acknowledge the wide breadth of new issues being presented by the pandemic, amongst those are: 1) economies opening up too soon from virus-related restrictions, and ultimately having to retract and close down again, 2) consumers permanently, or for an extended time, changing economic behaviors, 3) persistently high unemployment due to a significant number of companies not surviving the economic downturn, 4) virus-related fears negatively impacting the future of globalization, 5) an increase in sovereign debt risk due to the record issuance by governments; and 6) knock-on effects of unprecedented central bank intervention, including overextended equity markets and the risk of unexpected inflation.

Globally, countries continue to tentatively ease their lockdown measures, as politicians face increasing pressure to get economic growth and employment back on track after a rapid and severe disruption. As a result, local outbreaks of the virus have arisen in the U.S. and abroad, forcing local restrictive measures in harder-hit areas. The continued need for careful management of the spread of the virus is likely to prompt additional volatility in financial markets. Since market participants remain focused on developments regarding COVID-19, its trajectory will be a key driver of market volatility in the near-term.

> We have already observed a rapid change in consumption preferences in the U.S. in the wake of the initial COVID-19 shock. The U.S. savings rate spiked to an unprecedented level, and remains elevated when compared to historical trends. This represents a potential opportunity, as it could represent pent-up demand and, eventually dissaving to increase consumption. However, consumer confidence has not fully recovered, and without certainty regarding the path of the virus, survey data suggest that most in the U.S. have chosen to build cash as a defense against further issues with COVID-19, rather than spend aggressively. Importantly, survey data also suggest that stimulus checks were not used for durable goods purchases, and instead were either saved or spent on necessary staples. Until consumers build more confidence in the path of COVID-19, the testing regime improves, and the outlook for a

vaccine becomes less opaque, it is likely that consumer confidence, and thus consumption itself, will remain muted relative to pre-crisis levels, placing a damper on the prospective economic recovery.

Unemployment, despite a gradual reopening of the U.S. economy over the past quarter, remains stubbornly high after spiking to a post-World War II record. Unemployment as of the end of the fiscal year remained at 11.1 percent. The Bureau of Labor Statistics has also cautioned that considerable uncertainty exists around data quality; the actual numbers could be far better than reported, or far worse. A continued decline in unemployment from its current level will follow an easing of COVID-19 related restrictions, especially in the hard-hit service sector, as well as additional fiscal support. Conversely, companies continue to right-size their workforces to cope with a collapse in their top-lines and increasing solvency risk. The longer that uncertainty regarding the virus persists and leads to measures that are likely to stifle economic activity, the weaker business confidence will continue to be. This increases the risk that many layoffs, which might have been perceived as temporary, could become permanent, resulting in a higher equilibrium rate of unemployment.

COVID-19 has had a meaningful impact on the already tapering long-term trend towards globalization in the 21st century. In some cases, local trade conflicts have arisen and have been resolved, but the trend towards the re-localization of supply chains is likely to accelerate in the wake of the crisis. The most obvious example of this trend is the continued, protracted conflict between the U.S. and China. While the conflict was set aside in the early stages of COVID-19, it has been rekindled in recent months. The current U.S. presidential administration's foreign policy approach has increasingly shifted towards a more aggressive anti-China stance. COVID-19 also exposed the reliance of some countries on chokepoints in global supply chains that they will undoubtedly seek to address going forward. Global policymakers, such as ECB President Christine Lagarde, have acknowledged that deglobalization is likely to persist in the wake of the virus, beyond the U.S./China conflict. The risk is most severe for countries that have become reliant on foreign investment and export-driven growth. If global economies increasingly focus on domestic products, export-oriented economies are likely to suffer inordinately in this type of environment.

Historically, crisis periods have often witnessed concurrent periods of either voluntary or involuntary deleveraging, at the sovereign, corporate, and consumer levels. In 2008, for example, the U.S. experienced a rapid deleveraging in the mortgage market, which quickly spread out to corporates and consumers.

In 2020, while consumers entered the crisis in a reasonable financial position, corporates and sovereigns did not. In the U.S., for example, corporate solvency was a meaningful source of uncertainty even prior to the crisis, as debt built up in the U.S. corporate debt market. With the COVID-19 shock, fears that an economic crisis would become a financial crisis, where in the GFC the opposite had been the case, gripped the markets in March. The Federal Reserve, seeking to prevent this outcome, chose to intervene by essentially backstopping corporate credit. As a result, corporate leverage has rapidly increased, where the opposite was true in previous cycles. Alongside this trend, the U.S. government has massively increased the size of the fiscal deficit in order to support those facing temporary income loss due to unemployment. Suddenly, the U.S. faces the need to finance a widening budget deficit; a large slate of debt issuance will test global investors' willingness to finance a weakening U.S. fiscal position, which could have considerable knock-on effects for interest rates and thus global risk assets. The U.S., within both the corporate and sovereign sector, continues to push the boundary of investors' appetite for debt.



The evolution of economic growth and inflation bears close monitoring going forward. In addition to widening deficits, unprecedented asset purchases by central banks run the risk of creating longer-term distortions in markets. There can be little doubt that the Federal Reserve's actions have boosted market confidence, and thus asset prices, in recent months. While they execute these policies in the hope of creating a virtuous feedback loop in order to stimulate growth, the pass-through is indirect, at best.

The Fed is increasingly facing a tightrope walk, backstopping market risk while trying not to lose the market's confidence in its ability to do so with an increasingly narrow set of policy tools. Given that interest rates are probably near a lower bound, at least for now, that leaves them with quantitative easing, which might increasingly become permanent rather than temporary. As evidenced by the path of nominal interest rates across the yield curve, growth expectations remain incredibly weak, while inflation expectations have begun to tick higher, resulting in a collapse in real interest rates. In addition, the Fed has increasingly signaled that it is likely to revise its inflation target, in the interest of allowing inflation to "run hot" in order to focus on achieving growth and full employment, with the added benefit of reducing the U.S. sovereign debt burden. The potential for unexpected inflation within this regime means that asset allocation care is warranted; assets with low yields, like U.S. Treasuries, could experience diminished long-term return prospects, requiring shifts in allocation decisions.

We will continue to monitor these issues and others, as they arise.

Even since the end of the fiscal year, global markets have evolved significantly. The impact of COVID-19 and the extraordinary policy response have engendered profound changes in financial markets that have continued to play out since the end of the fiscal year. The evolution of COVID-19, with respect to its spread and the prospect for an eventual definitive healthcare solution, will continue to impact markets going forward.

LACERA Investment Results¹

Los Angeles County Employees Retirement Association (LACERA) provides defined retirement plan benefits and other post-employment benefits for employees of the County of Los Angeles (County), the Los Angeles Superior Court (Court), and various outside districts. LACERA is responsible for the administration and investment of two separate funds (Funds): the LACERA defined benefit retirement plan (Pension Plan or Plan), whose assets provide retirement benefits for employees of the County and outside districts, and the LACERA Other Post-Employment Benefit Master Trust Fund (OPEB Master Trust), whose assets provide other post-employment benefits such as retiree healthcare for employees of the County, LACERA, and the Court.

LACERA had approximately \$58.2 billion in assets at the end of the 2020 fiscal year. For the fiscal year, LACERA returned 1.8 percent net of fees, underperforming the Total Fund Policy Benchmark return of 2.0 percent and its assumed actuarial rate of return of 7 percent. For the fiscal year, LACERA had good performance relative to peers, ranking in the 36th percentile of the peer universe (1st percentile is best and 100th is worst). Over the trailing three- and five-year periods, the LACERA Pension Plan portfolio returned 5.7 percent and 6.1 percent, respectively. For the trailing three years, LACERA was in the 25th percentile compared to peers, and over the trailing five years, LACERA was in the 24th percentile compared to peers. For the fiscal year, the OPEB Master Trust returned -0.1 percent, outperforming the Custom OPEB Master Trust BM by 70 basis points. The OPEB Master Trust stood at \$1.5 billion at the end of June.

During fiscal year 2020, LACERA completed transitioning into the final target weights for the Pension Plan in the fourth quarter. In addition, LACERA completed structure reviews for Global Equities, Credit, Real Assets, Hedge Funds, and Private Equity. For the upcoming year, our primary goal will be working closely with staff to conduct a full asset allocation study, which we expect will be completed by the end of the fiscal year. We continue to believe that the Funds are well diversified and look forward to collaborating with the Board and Staff to meet the mission of producing, protecting, and providing the promised benefits.

If you have any questions, please contact us at (760) 795-3450.



Leandro Festino, CFA, CAIA
Managing Principal



Stephen P. McCourt, CFA
Managing Principal

SPM/LAF/TF/AY/jls

¹LACERA's Pension Plan and OPEB Trust returns are calculated based on a time-weighted rate of return.

Dear LACERA members:

It is my privilege to present the Investment Section of LACERA's Comprehensive Annual Financial Report for Fiscal Year 2020. LACERA oversees two funds (the Funds) for the County of Los Angeles, the defined benefit retirement plan (the Pension Plan) and the LACERA Other Post-Employment Benefit Master Trust (the OPEB Trust).¹ This section



Jonathan Grabel
Chief Investment Officer

presents the investment performance of the Pension Plan and the OPEB Trust as well as an overview of the investment portfolio.

Since early March, the spread of the COVID-19 pandemic and the resulting contraction in economic activity have created unprecedented challenges, volatility, and uncertainty around the world. Although the global equity markets materially recovered as of the end of the fiscal year from the losses experienced during the first calendar quarter of 2020, the broader economy tells a different story with pervasive joblessness and a staggering decline in economic growth worldwide. In these challenging times, we recognize that LACERA's mission is as critical as ever. We remain committed to maintaining a

consistent, long-term strategy to uphold LACERA's mission to produce, protect, and provide the promised benefits to the employees of Los Angeles County and their beneficiaries.

Performance Summary

The Pension Plan returned 1.8 percent during the fiscal year, while the OPEB Trust lost 0.1 percent during the same period.² LACERA aims to meet or exceed the Pension Plan's and the OPEB Trust's respective benchmarks over a full market cycle and their respective actuarial expected return assumptions over the long term. As illustrated below, the Pension Plan's return was slightly below its policy benchmark for the past fiscal year, and the three-, five-, and seven-year periods. However, over the 10-year period, the Pension Plan is ahead of its benchmark's return of 8.1 percent and its actuarial expected return of 7.0 percent.³ The OPEB Trust exceeded its policy benchmark's return during the past fiscal year and for the three-, five-, and seven-year periods, and, over the five- and seven-year periods, met or exceeded its actuarial expected return of 6.0 percent.⁴

¹LACERA is responsible for the administration and investment of two separate funds: the County of Los Angeles (the County) defined benefit retirement plan, whose assets provide retirement benefits for employees of the County and outside districts, and the LACERA Other Post-Employment Benefit Master Trust, whose assets are held in trust to provide post-employment healthcare benefits for retirees of the County, LACERA, and the Superior Court of California, County of Los Angeles.

²The Pension Plan and OPEB Trust returns are calculated based on a time-weighted rate of return. All returns are net of fees unless otherwise noted.

³The Pension Plan's actuarial expected return for the period ending June 30, 2020.

⁴The OPEB Trust's actuarial expected return for the period ending June 30, 2020.

Annualized Total Returns (Net of Fees)

Fiscal Year Ended June 30, 2020

	1 Year	3 Years	5 Years	7 Years	10 Years
Pension Plan	1.8%	5.7%	6.1%	7.2%	8.2%
Policy Benchmark	2.0	6.1	6.3	7.3	8.1
OPEB Trust ⁵	-0.1	5.1	6.6	6.0	n/a
Policy Benchmark	-0.8	4.5	5.0	4.8	n/a

⁵Performance inception for the OPEB Trust is February 1, 2013.

Asset Allocation

LACERA's Board of Investments (the Board) adopts separate Investment Policy Statements to guide the Pension Plan's and the OPEB Trust's investments. Each Investment Policy Statement defines a strategic asset allocation that aims to

maximize long-term growth while ensuring that LACERA meets its current and future obligations. To that end, LACERA expects the Funds' strategic asset allocations to be the core drivers of risk-adjusted returns over the long term.

The Pension Plan's and the OPEB Trust's strategic asset allocations apportion investment dollars among functional categories and sub-asset classes based on long-term risk and return objectives and short-term liquidity needs. A table detailing the functional categories, sub-asset classes, and the role each is expected to fulfill in LACERA's investment portfolios is presented below:⁶

Functional Category	Sub-Asset Classes	Role in Portfolio
Growth	Global Equity Private Equity Opportunistic Real Estate	Primary driver of long-term total returns
Credit	High Yield Bonds Bank Loans Emerging Market Debt Illiquid Credit-Oriented Fixed Income	Produce current income and moderate long-term total returns with lower risk than growth assets
Real Assets and Inflation Hedges	Core and Value-Added Real Estate Natural Resources/Commodities Infrastructure Treasury Inflation Protected Securities	Provide income and hedge against inflation
Risk Reduction and Mitigation	Investment Grade Bonds Diversified Hedge Funds Cash	Provide current income and a modest level of return while reducing total portfolio risk

LACERA's Board reviews the Pension Plan's and the OPEB Trust's strategic asset allocations every three to five years or more often if needed to ensure that both portfolios are aligned with anticipated risks and opportunities. Asset allocation studies consider a number of factors including, but not limited to: the Funds' current and projected funded status, liabilities, and liquidity requirements; the long-term risk, return, and correlation expectations for individual asset categories; and an assessment of future economic conditions. LACERA's Board last approved the strategic asset allocations for the Pension Plan in 2018 and the OPEB Trust in 2017. LACERA will work with its general investment consultant to perform the next asset allocation study for the Pension Plan and OPEB Trust in 2021.

During the fiscal year, LACERA completed the implementation of the Pension Plan's transition towards its new strategic asset allocation target weights. The Pension Plan's June 30, 2020 actual and target asset allocation are shown below.⁷

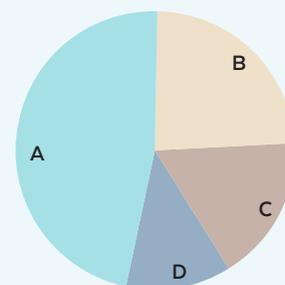
Pension Plan Actual Asset Allocation

- A** Growth 48%
- B** Overlay Composite 1%
- C** Risk Reduction and Mitigation 25%
- D** Real Assets and Inflation Hedges 16%
- E** Credit 10%



Pension Plan Target Asset Allocation

- A** Growth 47%
- B** Risk Reduction and Mitigation 24%
- C** Real Assets and Inflation Hedges 17%
- D** Credit 12%



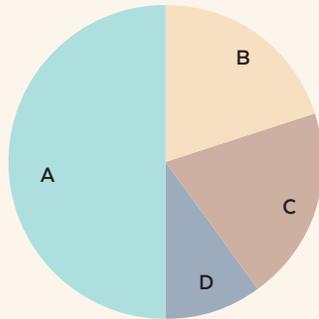
⁶The functional frameworks of the Pension Plan and the OPEB Trust differ slightly as the OPEB Trust does not invest in private assets.

⁷The Pension Plan's actual asset allocation includes an overlay composite which invests LACERA's excess cash (cash in excess of the target allocation of 1 percent of the Pension Plan's total assets) in synthetic securities that provide similar investment exposure to the Pension Plan.

Based on its own liquidity needs and funding status, the OPEB Trust's strategic asset allocation differs from that of the Pension Plan. The OPEB Trust's transition to its target asset allocation was fully implemented by the end of fiscal year 2018. Its fiscal year-end and target allocations are illustrated below.

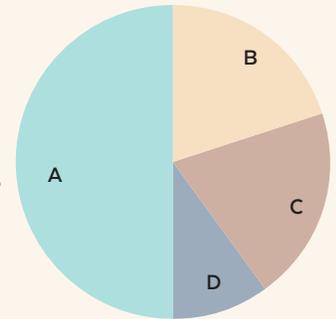
OPEB Trust Actual Asset Allocation

- A** Growth 50%
- B** Credit 20%
- C** Real Assets and Inflation Hedges 20%
- D** Risk Reduction & Mitigation 10%



OPEB Trust Target Asset Allocation

- A** Growth 50%
- B** Credit 20%
- C** Real Assets and Inflation Hedges 20%
- D** Risk Reduction & Mitigation 10%



Both Funds were in compliance with their policy target allocation ranges as of fiscal year-end.

Core Performance Drivers

LACERA's portfolio was carefully designed and implemented with the core objective to pay benefits over an indefinite time horizon, including the near term. In the past several years, LACERA took proactive steps to build a more resilient, diversified and risk-mitigating portfolio in preparation for changing economic conditions. While no one could have predicted the scope and depth of the economic disruption created by the COVID-19 induced pandemic, LACERA is better positioned to weather this storm than it was one year ago. The revised strategic asset allocations were designed to dampen the impact of volatility and enable LACERA to navigate both positive and negative market environments.

In a year that has been marked by heightened volatility in markets, the growth asset category produced modest positive gains, with each of the global equity, private equity, and opportunistic real estate sub-asset classes contributing to the positive performance. Notably, LACERA's risk reduction and mitigation asset category realized strong positive returns during this period, functioning in its intended role in the portfolio to preserve capital and provide an important source of return during periods of market volatility. Some of the gains realized in the growth and risk reduction and mitigation categories were offset by the negative returns in the credit and real assets categories. Each of LACERA's functional asset classes work together in concert to enhance diversification and provide the portfolio with the ability to endure market shocks, while also being able to benefit from long-term market growth.

The accompanying letter from Meketa Investment Group, LACERA's general investment consultant, discusses the market environment that shaped and influenced the Funds' performance during the fiscal year. Continued economic and market uncertainty underscore the importance of LACERA's balanced approach with its focus on long-term, sustainable performance.

Looking Forward

We are navigating in an increasingly complex and constantly changing environment, and the economic effects of the COVID-19 pandemic will be felt for years to come. LACERA's strategic asset allocations were designed to enhance the Funds' resiliency and enable LACERA to meet its obligations to current and future members regardless of current economic conditions. We remain focused on our fiduciary role to LACERA members, steadfast in diligently monitoring investment risks, and proactive in the face of challenges and opportunities. As always, we strive to best serve the interests of LACERA members.

Respectfully submitted,

Jonathan Grabel

Jonathan Grabel
Chief Investment Officer

Investment Summary – Pension Plan¹

For the Fiscal Year Ended June 30, 2020

(Dollars in Thousands)

Type of Investment	Fair Value	Percent of Total Fair Value
Growth	\$27,848,472	
Global Equity	20,799,372	35.7%
Private Equity	6,361,422	10.9%
Opportunistic Real Estate	687,678	1.2%
Credit	\$5,864,307	
Bank Loans	2,110,385	3.6%
High Yield	1,895,477	3.3%
Emerging Market Debt	799,051	1.4%
Illiquid Credit	1,057,167	1.8%
Credit Transition Account	2,227	0.0%
Real Assets and Inflation Hedges	\$9,502,965	
Core and Value Added Real Estate	4,688,395	8.1%
Natural Resources & Commodities	2,052,423	3.5%
Infrastructure	1,674,529	2.9%
Treasury Inflation-Protected Securities (TIPS)	1,087,618	1.9%
Risk Reduction and Mitigation	\$14,446,551	
Investment Grade Bonds	11,553,403	19.8%
Diversified Hedge Fund Portfolio	1,949,618	3.3%
Cash	943,531	1.6%
Overlay Composite	\$560,359	1.0%
Total Investments – Pension Plan	\$58,222,654	100.0%

¹Differences between fair values in the Statement of Fiduciary Net Position and this schedule are due to the differences between Investment Book of Record and Accounting Book of Record.



Investment Summary – OPEB Master Trust¹

For the Fiscal Year Ended June 30, 2020

(Dollars in Thousands)

Type of Investment	Fair Value	Percent of Total Fair Value
Growth	\$754,901	
Global Equity	754,901	50.6%
Credit	\$294,903	
Bank Loans	147,703	9.9%
High Yield	87,978	5.9%
EM Local Currency Bonds	59,222	4.0%
Real Assets and Inflation Hedges	\$292,509	
Real Estate (REITs)	142,730	9.6%
Commodities	60,071	4.0%
Treasury Inflation-Protected Securities (TIPS)	89,708	6.0%
Risk Reduction & Mitigation	\$150,060	
Investment Grade Bonds	125,572	8.4%
Cash Equivalents	24,488	1.6%
Uninvested Cash	\$279	0.0%
Total Investments – OPEB Master Trust	\$1,492,652	100.0%

Investment Summary – OPEB Custodial Fund¹

For the Fiscal Year Ended June 30, 2020

(Dollars in Thousands)

Type of Investment	Fair Value	Percent of Total Fair Value
Cash and Cash Equivalents	\$17,520	11.9%
Fixed Income	129,560	88.1%
Total Investments – OPEB Custodial Fund	\$147,080	100.0%

¹Differences between fair values in the Statement of Fiduciary Net Position and this schedule are due to the differences between Investment Book of Record and Accounting Book of Record.

Investment Results Based on Fair Value^{1,2} – Pension Plan*

As of June 30, 2020

	Annualized (Net-of-Fees)				
	Quarter End June 30, 2020	One-Year	Three-year	Five-year	Ten-year
Growth	12.3%	2.1%			
<i>Growth Custom BM</i>	9.2%	(0.4)%			
Global Equity	19.8%	1.4%			
<i>Global Equity Custom BM</i>	19.8%	1.2%			
Private Equity – Growth	(5.6)%	3.5%			
<i>Private Equity – Growth Custom BM</i>	(22.0)%	(11.0)%			
Opportunistic Real Estate	(0.9)%	8.2%	10.5%	12.4%	6.2%
<i>Opportunistic Real Estate Custom BM</i>	1.5%	7.0%	9.0%	10.7%	13.7%
Credit	5.2%	(2.9)%			
<i>Credit Custom BM</i>	8.2%	2.4%			
High Yield	9.4%	(3.1)%			
<i>High Yield Custom BM</i>	10.2%	0.0%			
Bank Loans	4.8%	3.7%			
<i>Credit Suisse Leveraged Loans</i>	9.7%	(2.3)%			
Emerging Market Debt	13.7%	(6.3)%	0.7%		
<i>EMD Custom BM</i>	11.4%	0.5%	3.3%		
Illiquid Credit	(5.8)%	(1.7)%			
<i>Illiquid Credit Custom BM</i>	2.3%	12.1%			
Real Assets & Inflation Hedges	4.0%	(4.5)%			
<i>Real Assets & Inflation Hedges Custom BM</i>	6.3%	(1.3)%			
Core & Value-Added Real Estate	(0.7)%	(0.6)%	5.0%	6.7%	8.1%
<i>Core & Value-Added Real Estate Custom BM</i>	0.9%	4.4%	6.4%	8.0%	11.0%
Natural Resources & Commodities	9.4%	(19.1)%	(5.9)%	(7.0)%	(4.6)%
<i>Natural Resources & Commodities Custom BM</i>	13.3%	(16.5)%	(5.3)%	(7.2)%	(5.6)%
Infrastructure	12.0%	(2.2)%			
<i>DJ Brookfield Global Infrastructure TR</i>	11.9%	(5.2)%			
TIPS	4.2%	8.3%			
<i>BBG BC TIPS</i>	4.2%	8.3%			
Risk Reduction & Mitigation	2.9%	7.5%			
<i>Risk Reduction & Mitigation Custom BM</i>	2.4%	7.7%			
Investment Grade Bonds	4.0%	8.9%	5.5%	4.8%	4.6%
<i>Bloomberg Barclays U.S. Aggregate BM</i>	2.9%	8.7%	5.3%	4.3%	3.8%
Diversified Hedge Funds	(2.8)%	1.2%			
<i>Diversified Hedge Funds Custom BM</i>	0.9%	4.3%			
Cash	0.3%	1.8%	2.0%	1.5%	1.0%
<i>Cash Custom BM</i>	0.1%	1.6%	1.7%	1.2%	0.7%
Total Fund	7.9%	1.8%	5.7%	6.1%	8.1%
Total Fund Custom Policy Benchmark	7.0%	2.0%	6.1%	6.3%	8.1%

*A complete list of custom benchmark definitions is available upon request.

¹Functional asset category returns are calculated based on time-weighted rates of return, net of manager fees; Total Fund performance is calculated based on the weighted average returns of the functional asset categories, net of manager fees. The second calendar quarter of 2019 was the inaugural reporting period for which the functional asset allocation adopted by the Board of Investments (BOI) in June 2018 were presented.

²Some asset categories and their benchmarks are reported with a one- or three-month lag.

Investment Results Based on Fair Value¹ – OPEB Master Trust*

As of June 30, 2020

	Annualized (Net-of-Fees)			
	Quarter End June 30, 2020	One-Year	Three-year	Five-year
Growth	19.9%	1.5%	5.9%	
Global Equity	19.9%	1.5%	5.9%	6.4%
MSCI ACWI IMI Net	19.8%	1.2%	5.6%	6.1%
Credit	8.8%	(1.7)%		
OPEB Master Trust Credit Custom BM	9.9%	(1.5)%		
Bank Loans	8.2%	(1.3)%		
S&P/LSTA Leveraged Loan Index	9.7%	(2.0)%		
High Yield	9.3%	(1.4)%		
BC High Yield Index	10.2%	0.0%		
EM Local Currency Bonds	9.7%	(3.4)%		
JPM GBI-EM Global Diversified Index	9.8%	(2.8)%		
Real Assets & Inflation Hedges	7.0%	(9.5)%		
OPEB Master Trust Real Asset & Inflation Hedges Custom BM	6.9%	(9.8)%		
Real Estate (REITs)	9.1%	(18.0)%		
DJ US Select Real Estate Sec Index	9.1%	(17.7)%		
Commodities	5.2%	(17.4)%		
Bloomberg Commodity Index (Total Return)	5.1%	(17.4)%		
Treasury Inflation-Protected Securities (TIPS)	4.4%	8.4%		
Bloomberg Barclays U.S. TIPS Index	4.2%	8.3%		
Risk Reduction & Mitigation	2.5%	7.5%	5.4%	
OPEB Master Trust Risk Reduction & Mitigation Custom BM	2.4%	7.3%	5.1%	
Investment Grade Bonds	3.0%	8.8%		
Bloomberg Barclays U.S. Aggregate	2.9%	8.7%		
Enhanced Cash	0.9%	2.4%	2.4%	1.7%
FTSE 6 M T-Bill Index	0.3%	1.8%	1.8%	1.3%
Total OPEB Master Trust	13.9%	(0.1)%	5.1%	6.6%
Total OPEB Master Trust Policy Benchmark	13.4%	(0.8)%	4.5%	5.0%

*A complete list of custom benchmark definitions is available upon request.

¹Functional asset category returns are calculated based on time-weighted rates of return, net of manager fees; Total OPEB Master Trust performance is calculated based on the weighted average returns of the asset classes, net of manager fees.

Total Investment Rates of Return – Pension Plan

For the Last 10 Fiscal Years Ended June 30

(Dollars in Thousands)

Fiscal Year End	Total Investment Portfolio Fair Value	Total Fund Time- Weighted Return (net of fees) ¹	Total Fund Money-Weighted Return (net of fees) ²	Return on Smoothed Valuation Assets (net of fees) ³	Actuarial Assumed Rate of Return ⁴	Actuarial Funded Ratio ⁵
2011	\$39,770,032	20.2%	– %	3.3%	7.70%	80.6%
2012	38,627,163	0.0%	–%	1.8%	7.60%	76.8%
2013	42,285,906	11.9%	–%	5.4%	7.50%	75.0%
2014	49,033,365	16.5%	17.5%	11.8%	7.50%	79.5%
2015	47,990,447	4.1%	4.1%	10.5%	7.50%	83.3%
2016	47,898,667	0.8%	0.7%	6.5%	7.25%	79.4%
2017	52,225,457	12.7%	12.7%	8.2%	7.25%	79.9%
2018	55,443,060	9.0%	9.0%	8.1%	7.25%	80.6%
2019	57,976,436	6.4%	5.5%	6.5%	7.00%	77.2%
2020⁶	\$56,574,410	1.8%	1.4%			

¹**Total Fund – Time-Weighted Rate of Return** is the aggregate increase or decrease in the value of the portfolio resulting from the net appreciation or depreciation of the principal of the fund, plus or minus the net income or loss experienced by the fund during the period. The returns are presented net of investment management fees.

²**Total Fund – Money-Weighted Rate of Return** is a measurement of investment performance, net of investment expenses, adjusted for the changing amounts actually invested. The returns are presented net of investment management fees.

³**Return on Smoothed Valuation Assets** consists of, annual investment income in excess or shortfall of the expected rate of return on a valuation (actuarial) basis smoothed over a specified period with a portion of the year's asset gains or losses being recognized each year beginning with the current year

⁴**Actuarial Assumed Rate of Return** is the future investment earnings of the assets which are assumed to accrue at an annual rate, compounded annually, net of both investment and administrative expenses. The Actuarial Assumed Rate of Return is 7.25 percent as adopted by the Board of Investments based on the results of the Actuarial Investigation of Experience completed in December 2016. For Fiscal Year 2018–2019, interest crediting and operating tables applied the 7.25 percent Actuarial Assumed Rate of Return.

⁵**Actuarial Funded Ratio** is a measurement of the funded status of the fund calculated by dividing the valuation assets by the actuarial accrued liability.

⁶**Actuarial Valuation report** for June 30, 2020 not yet available at publication.

Largest Equity Holdings – Pension Plan¹

As of June 30, 2020

(Dollars in Thousands)

Shares	Description	Fair Value
6,450,556	Apple Inc.	\$588,291
2,714,803	Microsoft Corporation	552,490
156,370	Amazon.com, Inc.	431,397
887,676	Facebook, Inc. Class A	201,565
115,473	Alphabet Inc. Class C	163,234
108,228	Alphabet Inc. Class A	153,473
978,191	Johnson & Johnson	137,563
1,155,523	Nestle S.A.	127,729
630,100	Visa Inc. Class A	121,716
537,690	Alibaba Group Holding Ltd. Sponsored ADR	115,980

Note: A complete list of portfolio holdings is available upon request.

¹Reflects the global equity exposure of assets held in custody as well as certain commingled funds.

Largest Fixed Income Holdings – Pension Plan¹

As of June 30, 2020

(Dollars in Thousands)

Par	Description	Fair Value
160,190,000	Federal National Mortgage Association 2.500% 20490201	\$166,156
71,375,362	Dresdner Funding Trust I 8.151% 20310630	96,015
95,301,287	United States Treasury 0.375% 20220331	95,721
79,600,000	Federal National Mortgage Association 3.000% 20490101	83,925
54,256,387	Standard Chartered Plc 7.014% 20991231	59,871
51,962,655	United States Treasury 1.750% 20291115	57,422
54,429,530	Federal National Mortgage Association 3.000% 20491101	57,373
41,897,453	United States Treasury 2.750% 20421115	53,601
48,290,000	Federal National Mortgage Association 3.500% 20480101	51,005
46,435,282	United States Treasury 1.625% 20290815	50,895

Note: A complete list of portfolio holdings is available upon request.

¹Reflects fixed income exposure of assets held in custody as well as certain commingled funds.

Schedule of Investment Management Fees

For the Fiscal Years Ended June 30, 2020 and 2019

(Dollars in Thousands)

	Pension Plan		OPEB Trust		OPEB Custodial Fund	
	2020	2019	2020	2019	2020	2019
Cash and Short-Term Managers	\$818	\$644	\$12	\$10	\$22	\$20
Commodity Managers	3,813	4,640	77	62	—	—
Global Equity Managers	48,077	47,146	133	177	—	—
Fixed Income Managers	27,687	37,950	1,014	808	74	68
Hedge Fund Managers	49,768	42,177	—	—	—	—
Private Equity Managers	165,842	153,753	—	—	—	—
Real Estate Managers	54,571	54,375	71	79	—	—
Total Investment Management Fees¹	\$350,576	\$340,685	\$1,307	\$1,136	\$96	\$88

¹Difference in expenses from investing activities in the Statement of Changes in Fiduciary Net Position is due to the inclusion of incentive fees, carry allocations, and operating expenses in the above schedule. These incentive fees, carry allocations, and operating expenses are deducted from investment income in the Statement of Changes in Fiduciary Net Position.

GROWTH Global Equity

Acadian Asset Management, LLC
 BlackRock Institutional Trust Company, N.A.
 Capital International, Inc.
 Cevian Capital LTD
 CornerCap Investment Counsel
 Frontier Capital Management Company, LLC
 Genesis Investment Management, LLP
 Global Alpha Capital Management, LTD
 JANA Partners, LLC
 J.P. Morgan Investment Management Inc.
 Lazard Asset Management, LLC
 Matarin Capital Management, LLC
 Quantitative Management Associates, LLC
 State Street Global Advisors
 Symphony Financial Partners
 Systematic Financial Management, LP

Opportunistic Real Estate

Aermont Capital Management, S.a.r.l
 Angelo, Gordon & Company, LP
 Capri Capital Advisors, LLC
 CityView Management Services, LLC
 Europa Capital, LLP
 Invesco Advisers, Inc.
 Realty Associates Advisors, LLC (TA)
 RREEF America, LLC
 Starwood Capital Group
 Stockbridge Capital Group
 The Carlyle Group
 TPG Capital

Private Equity¹

J.P. Morgan Investment Management, Inc.
 Morgan Stanley Alternative Investments, LLC
 Pathway Capital Management, LP

CREDIT High Yield

Beach Point Capital Management, LP
 BlackRock Institutional Trust Company, N.A.
 Brigade Capital Management, LLC

Bank Loans

Bain Capital Credit, LP
 Credit Suisse Asset Management, LLC
 Crescent Capital Group, LP
 Tennenbaum Capital Partners, LLC

Emerging Market Debt

Aberdeen Asset Management, Inc.
 Ashmore Investment Management LTD

Illiquid Credit

Barings, LLC
 Beach Point Capital Management, LP
 Grosvenor Capital Management, LP
 Napier Park Global Capital
 Quadrant Real Estate Advisors, LLC

REAL ASSETS and INFLATION HEDGES

Core and Value Added Real Estate

AEW Capital Management, LP
 Avison Young - Southern California, LTD
 Bain Capital, LP
 Barings, LLC

¹A complete list of Private Equity Investment Managers by functional category is available upon request.

CapMan, PLC
 Capri Capital Advisors, LLC
 CB Richard Ellis Global Investors, LLC
 CityView Management Services, LLC
 Clarion Partners, LLC
 Heitman Capital Management, LLC
 Hunt Investment Management, LLC
 IDR Investment Management, LLC
 Invesco Advisers, Inc.
 Prologis Management II, S.a.r.l
 Realty Associates Advisors, LLC (TA)
 RREEF America, LLC
 Stockbridge Capital Group
 IDR Investment Management, LLC

Natural Resources & Commodities

Credit Suisse Asset Management, LLC
 Gresham Investment Management, LLC
 Neuberger Berman Fixed Income, LLC
 Pacific Investment Management Company, LLC (PIMCO)
 RREEF America, LLC

Infrastructure

RREEF America, LLC

Treasury Inflation-Protected Securities

BlackRock Institutional Trust Company, N.A.

RISK REDUCTION and MITIGATION Investment Grade Bonds

BlackRock Institutional Trust Company, N.A.
 Dodge & Cox, Inc.
 Pacific Investment Management Company, LLC (PIMCO)
 Pugh Capital Management, Inc.
 Wells Capital Management, Inc.
 Western Asset Management Company

Diversified Hedge Funds

AQR Capital Management
 Capula Investment Management
 Davidson Kempner Institutional Partners, LP
 Goldman Sachs Hedge Fund Strategies, LLC
 Grosvenor Capital Management, LP
 HBK Capital Management
 Hudson Bay Capital Management
 Pacific Investment Management Company, LLC (PIMCO)
 Polar Asset Management Partners

Cash

J.P. Morgan Investment Management, Inc.

Mortgage Loan Servicer

Ocwen Loan Servicing, LLC

Securities Lending Program

Goldman Sachs Agency Lending (GSAL)
 State Street Bank & Trust Company
 State Street Global Advisors

Health Reserve Program

Standish Mellon Asset Management Company, LLC

Other Post-Employment Benefits Trust

BlackRock Institutional Trust Company, N.A.
 J.P. Morgan Investment Management, Inc.

Overlay Program

Parametric Portfolio Associates, LLC