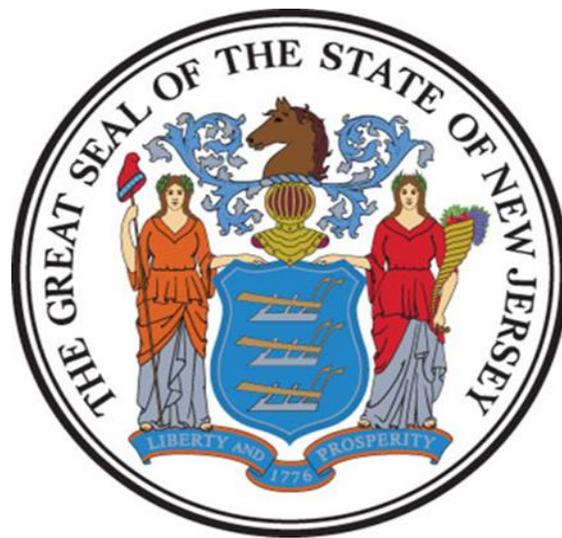


2020 ANNUAL REPORT

NEW JERSEY STATE

INVESTMENT COUNCIL



FOR FISCAL YEAR 2020

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**New Jersey State Investment Council
50 West State Street, 9th Floor
P.O. Box 290
Trenton, N.J. 08625**

January 27, 2021

To the Honorable Governor, Legislature, State Treasurer and the residents of New Jersey:

As Chair of the State Investment Council, it is my privilege to present the Fiscal Year 2020 Annual Report on behalf of the Council and the New Jersey Division of Investment.

None of us could have expected the volatility experienced by both the markets and the global economy during this past year. In last year's report, I closed out my introductory letter with a word of caution as equity markets reached all-time highs at the end of the 2019 calendar year. However, the global pandemic and the resulting economic shutdown brought a shockingly abrupt end to the longest U.S. economic expansion and equity bull market on record. Equally shocking, we witnessed both the fastest decline into a bear market and the fastest return to a bull market ever recorded.

As a result of this market volatility, the Pension Fund returned a modest +1.2% (net of all fees) for FY 2020, falling short of our long-term objectives. The primary factors influencing these returns were good performances in the domestic equity and investment grade debt markets, offset by a subpar performance in private market investments, particularly in real estate and certain private credit strategies. It is important to note that these private market investments have been among the best performing asset classes for the Pension Fund in past years, and we are confident that they will add to our returns over the long term. Despite this challenging fiscal year, the ten-year annualized return for the Pension Fund is 8%.

As of June 30, 2020, the net asset value of the Pension Fund was \$76.7 billion. While the performance numbers for the first half of Fiscal Year 2021 (second half of calendar year 2020) are yet to be finalized, we believe the final results will show that the Pension Fund realized strong double-digit investment returns over this most recent time period.

Faced with the challenges of a volatile investment landscape, the Council and the Division worked together to implement a new asset allocation that was better aligned with the realities of the capital markets in the wake of the pandemic. We also remained focused on the liquidity of the Pension Fund to protect our promise to retirees and to ensure that we have adequate resources to distribute to the pension systems for the payment of benefits to plan participants.

In an environment of elevated equity valuations and exceptionally low interest rates, we increased the allocation to private markets in equity, credit and real estate. This will allow us to capitalize on market dislocations, mispriced assets, and competitive advantages in those markets. We also modestly increased our exposure to non-U.S. developed public market equities to reflect their more attractive valuations and the near-term anticipation of a weaker U.S. dollar.

The size and complexity of Pension Fund investments warrant sophisticated technology infrastructure to support the analytical and data management tools necessary to sufficiently measure and monitor risk, returns, and capital deployment. The Council recognizes this reality and has been a strong advocate for bolstering both the Division's infrastructure and its team of professionals. To that end, the Division has

undergone a comprehensive assessment of its investment technology needs and anticipates implementing a new information system platform in 2021.

In terms of staffing, the Division made substantial progress in expanding its senior investment team this year, including filling some long-standing vacancies and creating several new positions that will support the policy and investment philosophies adopted by the Council in recent years. We are pleased to welcome Shoaib Khan as the Division's new Deputy Director, Eddie Ramos as the Division's first Diversity Portfolio Manager, Bill Connors as the Head of Fixed Income, and Niraj Agarwal as the Head of Real Assets. Additionally, Suzanne Hannigan has been named to the newly created position of Sustainable Investing Portfolio Manager. We also anticipate additional hires during the first half of 2021 that will strengthen the Division's investment operations and better position the Division to meet its long-term investment objectives.

We are also pleased to report steady progress on two important Division initiatives designed to enhance financial outcomes and lead to better risk-adjusted investment returns: the incorporation of Environmental, Social, and Governance (ESG) analysis into the Division's investment decision-making process and the expansion of opportunities for Minority-Owned and Women-Owned Business Enterprises (MWBE) at the Division.

In implementing the Council's ESG Policy, the Division has advocated, through proxy voting and direct engagement, for better financial disclosure of climate-related risks because we believe it is important for investors to be able to monitor these risks and build them into the evaluation of investment opportunities over the long-term. The Division, led by its newly appointed Sustainable Investing Portfolio Manager, is in the early stages of developing a framework to evaluate the risks of climate change on the Pension Fund portfolio as a whole. The Division has also advocated for improved governance, including greater diversity in the leadership and boards of the companies in which the Pension Fund invests.

In a similar vein, the Division, led by its newly appointed Diversity Portfolio Manager, and in collaboration with the Council and the State Treasurer's Office, continues to build upon efforts to expand the utilization of MWBEs as broker/dealers, investment consultants, investment advisers, and alternative investment fund managers. Recent efforts have substantially boosted the amount of new capital invested in MWBE-managed firms. Still, we recognize that there is more work to be done.

Before I close, I would like to take this opportunity to thank my fellow Council members, the Treasurer's Office, and the Governor's Office for all of their support and help during the turbulence of the past year, particularly for remaining committed to increasing the State's contributions to the Pension Fund in a year filled with uncertainty over revenue collections.

While the year certainly presented unexpected challenges for us all, our mission has remained constant. We seek to employ the highest fiduciary standards to achieve the best possible financial returns, at an acceptable level of risk, for the beneficiaries of the Pension Fund and other funds entrusted to the Division. With the aforementioned senior staff expansion and the ongoing technology improvements, I am confident that the Division will be stronger and better positioned to carry out our shared mission and meet its long-term objectives on behalf of its beneficiaries.

Respectfully,



Deepak D. Raj, Chair

INTRODUCTION TO THE COUNCIL AND N.J. DIVISION OF INVESTMENT

DIVISION STAFF

Director:
Corey Amon

THE STATE INVESTMENT COUNCIL

The State Investment Council (the “Council”) was created by the New Jersey Legislature in 1950 to formulate policies governing the investment of funds by the Director of the Division of Investment (the “Division”), as well as to consult with the Director with respect to the work of the Division.

The Council conducts meetings to discuss major investment policy issues, review Pension Fund performance and accept comments from members of the public. Other investment programs and returns are reviewed annually or when needed.

Council meetings are open to the public. Agendas, meeting times and locations are available on the Division’s website, www.nj.gov/treasury/doinvest under the State Investment Council tab.

Mailing Address:
PO Box 290, Trenton, NJ 08625-0290
Email Address:
doi@treas.nj.gov

COUNCIL MEMBERSHIP:

Council Chair:
Deepak D. Raj
Founder, Raj Associates

Council Vice-Chair:
Adam Liebttag
New Jersey State AFL-CIO Nominee

Council Members:
Theodore Aronson
Partner – AJO

Wasseem Boraie
Principal, Boraie Development LLC

Thomas Bruno, Jr.
Public Employees’ Retirement System Designee

Michael Cleary
New Jersey State AFL-CIO Nominee

Vaughn E. Crowe
Managing Director, Wesray Social Investments LP

Andrew Michael Greaney
State Troopers Fraternal Association Nominee

James E. Hanson II
CEO, Hampshire Real Estate Company

Timothy McGuckin
New Jersey Education Association Nominee

Samir Pandiri
President, Broadridge International

Eric E. Richard
Senate President and Assembly Speaker Joint Appointee

Jerome M. St. John, J.A.D. (retired)
Retired Judges Association of New Jersey,
designated by Chief Justice of the New Jersey
Supreme Court

Edward Yarusinsky
Teachers’ Pension and Annuity Fund Designee

COUNCIL MEMBERSHIP

The Council is comprised of sixteen (16) members pursuant to N.J.S.A. 52:18A-83¹. Nine members are appointed by the Governor for five year terms, and are drawn traditionally from the professional investment community. Of those nine appointments, eight are made with the advice and consent of the State Senate. One appointment is made from nominees submitted jointly by the President of the Senate and Speaker of the Assembly. The statute requires that at least seven of the nine gubernatorial appointments shall be qualified by training and experience in the direct management, analysis, supervision or investment of assets, which training and experience shall have been acquired through academic training or through actual employment in those fields.

Four members are appointed by the Governor from nominees submitted by various employee organizations. Two of the four members are appointed for five year terms from nominees submitted by the New Jersey State AFL-CIO. One of the four members is appointed for a three year term from nominees submitted by the New Jersey Education Association. The fourth member is appointed by the Governor for a three year term from nominees submitted by the State Troopers Fraternal Association. The statute requires that these four appointments shall be qualified by training, experience or long-term interest in the direct management, analysis, supervision or investment of assets and this training, experience or long-term interest shall have been supplemented by academic training in the fields of economics, business, law, finance or actuarial science or by actual employment in those fields.

Two members, representing the Public Employees' Retirement System (PERS), and the Teachers' Pension and Annuity Fund (TPAF), are designated from members of the respective pension system's board of trustees and serve three-year terms. One member is designated by the Chief Justice of the New Jersey Supreme Court from members of the Retired Judges Association of New Jersey.

All members serve until reappointed or a successor is named and has qualified.

THE DIVISION OF INVESTMENT

The Division, under the Council's supervision, is the 20th largest U.S. pension fund manager². The Pension Fund supports the retirement plans of approximately 800,000 members in seven public pension systems: the Consolidated Police & Firemen's Pension Fund, the Judicial Retirement System, the Police & Firemen's Retirement System, the Prison Officers' Pension Fund, the Public Employees' Retirement System, the State Police Retirement System and the Teachers' Pension & Annuity Fund (collectively referred to in this report as the "Pension Fund"). Approximately 51% of the members are still working and contributing to the pension plans while 43% are retired. The remaining 6% represent inactive members who are not currently contributing to the pension plans. Pension Fund assets are primarily managed through common trust funds ("Common Pension Funds").

The net asset value of the Pension Fund assets managed by the Division was \$76.7 billion as of June 30, 2020 compared to \$80 billion as of June 30, 2019. The Pension Fund investment return³ for Fiscal Year 2020 was 1.21% (net of all fees) and approximately \$11.7 billion was paid to plan beneficiaries. The Pension Fund received contributions of \$3.8 billion from the State (including net lottery proceeds and receivables of \$975 million), \$2.2 billion from local employers, and \$2.2 billion from employees.

¹ As of January 27, 2021, there were 14 Council members, with 2 vacant positions.

² Measured by assets as of September 30, 2019. Reported by P&I on February 10, 2020.

³ Pension Fund returns cited throughout this Annual Report exclude the Police and Fire Mortgage Program. The mortgages are considered a receivable under GASB 72. All investment returns are reported net of all fees.

The Division also manages the State of New Jersey Cash Management Fund, Supplemental Annuity Collective Trust (a 403b plan), a portion of the NJBEST Fund (a 529 college savings plan) as well as several funds under the New Jersey State Employees Deferred Compensation Plan (a 457 plan).

STATUTORY AUTHORITY AND HISTORY OF THE DIVISION

The Division was created in 1950 by the New Jersey Legislature (P.L. 1950, c.270) to centralize all functions relating to the purchase, sale or exchange of securities for the State's diverse funds under experienced and professional management. The statute also established a State Investment Council to formulate policies that govern the methods, practices or procedures for investment, reinvestment, sale or exchange transactions to be followed by the Director of the Division. The statute vests investment authority in the Director of the Division, who is appointed by the State Treasurer from a list of qualified candidates submitted by the Council.

On July 3, 2018, the Governor signed P.L. 2018, c. 55 (the "PFRS Act") which, among other changes, transferred certain investment authority and duties relating to the assets of the Police and Firemen's Retirement System ("PFRS") to a newly constituted PFRS Board of Trustees (the "PFRS Board"). The Division continues to work with the PFRS Board and PFRS staff to implement the provisions of the PFRS Act.

INVESTMENT PARAMETERS

All investments must conform to the heightened "prudent person" standard set by the New Jersey Legislature (P.L. 1997, c.26). This standard requires the Director "to manage and invest the portfolio solely in the interests of the beneficiaries of the portfolio and for the exclusive purpose of providing financial benefits to the beneficiaries of the portfolio."

The mission of the Division is to achieve the best possible return at an acceptable level of risk utilizing the highest fiduciary standards.

COUNCIL REGULATIONS AND STRUCTURE

In addition to investment guidelines established by law, the Council is authorized by statute to establish investment policies that govern the methods, practices or procedures for investment, reinvestment, sale or exchange transactions (N.J.S.A. 52:18A-91).

Proposed regulations and amendments are filed upon approval of the Council with the Office of Administrative Law for publication in *The New Jersey Register*, followed by a 60-day public comment period. After the public comment period, each proposal is returned to the Council for adoption, along with any comments received. The adopted regulations of the Council are published in the New Jersey Administrative Code (N.J.A.C. 17:16), and are available for viewing online at <http://www.lexisnexis.com/njoal>.

Proposed amendments to the Council regulations were published in *The New Jersey Register* on January 6, 2020 and no comments were received. On July 6, 2020, the proposed amendments to the Council's regulations governing investments in private equity and real estate became effective. The amendments provide for an increase in the limitation of real estate investments from nine to 10 percent of the Pension and Annuity Fund assets, and provide for an increase in the limitation of private equity investments from 12 to 15 percent of the Pension and Annuity Fund assets. An additional adopted amendment, necessary to the implementation of the PFRS Act, provides clarification that the five percent limitation on commitments or investments to any one partnership or investment shall be applied to the pension and annuity funds under the supervision of the Council.

COUNCIL ORGANIZATIONAL CHANGES DURING FISCAL YEAR 2020

The Council underwent the following organizational changes during Fiscal Year 2020:

- The Council elected Deepak Raj as Chair and Adam Liebtag as Vice-Chair for one-year terms.
- Honorable Jerome St. John was designated by the Chief Justice of the New Jersey Supreme Court from members of the Retired Judges Association of New Jersey on January 27, 2020.

LEGISLATIVE UPDATE

PROHIBITED INVESTMENTS

The Division maintains a list of companies ineligible for investment under three State laws: a Sudan divestiture law (P.L. 2005, c. 162), an Iran divestiture law (P.L. 2007, c. 250), and a law requiring divestment of companies boycotting Israel (P.L. 2016, c. 24). The Division uses an independent research firm to assist it in complying with the provisions of the statutes. Reports are filed with the Legislature in accordance with each of the statutes.

Divestitures pose three primary fiscal challenges to the Pension Fund: 1) the requirement of the identification and sale of holdings on a timetable that may not consider market conditions; 2) the impact on risk and return for the Pension Fund; and 3) the reduction of the investment universe available to the Pension Fund. Collectively, the divestiture laws reduced the market capitalization of the investable universe as of June 30, 2020 by approximately 1.84% for the international developed markets and 2.46% for the international emerging markets relative to their respective benchmarks.

NORTHERN IRELAND REPORT

The Division has been required since 1987 (P.L. 1987, c. 177) to report annually to the Legislature regarding the adherence of U.S. companies and their subsidiaries doing business in Northern Ireland, in which the assets of any state pension or annuity fund are invested, to the “MacBride Principles.” “MacBride Principles” refers to a body of employment laws aimed at reducing employment discrimination in Northern Ireland. The report is filed each year by January 15th in accordance with the statute.

NET ASSETS UNDER MANAGEMENT

NET ASSETS IN MILLIONS

	June 30, 2020	June 30, 2019
PENSION FUND ⁽¹⁾	\$76,717	\$79,992
The Pension Fund includes pension assets contributed by participants, Lottery contributions, and State and local employers for participants in seven statewide retirement plans.		
Public Employees' Retirement System	27,582	28,646
Police & Firemen's Retirement System	26,034	26,595
Teachers' Pension & Annuity Fund	21,248	22,789
State Police Retirement System	1,706	1,796
Judicial Retirement System	141	160
Prison Officers' Pension Fund	5	5
Consolidated Police & Firemen's Pension Fund	1	1
<i>Note: Total may not equal sum of components due to rounding</i>		
CASH MANAGEMENT FUND⁽²⁾	\$18,480	\$15,131
This fund includes the cash balances of State government funds and other non-state government entities (counties, municipalities, school districts and the agencies or authorities created by any of these).		
SUPPLEMENTAL ANNUITY COLLECTIVE TRUST	\$226	\$230
This fund includes voluntary investments by employees for retirement income separate from, and in addition to, their basic pension plan.		

⁽¹⁾ The net assets of the Pension Fund include the net assets managed by the Division through the Common Pension Funds and exclude certain direct assets and liabilities of the seven underlying pension plans. Year over year change in net assets is impacted by a variety of factors including performance, plan funding and plan design.

⁽²⁾ The total for the Cash Management Fund includes \$5 billion on June 30, 2020 (\$4 billion on June 30, 2019) held for and included in the totals for the Pension Fund, the Supplemental Annuity Collective Trust, Trustees for the Support of Public Schools Fund, the NJBEST Fund and Deferred Compensation Program.

NJBEST FUND

The Division manages a portion of the State's tax-advantaged 529 college savings program. On June 30, 2020, the Division-managed portion of this fund had a market value of \$210 million compared with \$264 million on June 30, 2019. The year-over-year decline in market value is attributable to net redemptions.

DEFERRED COMPENSATION PLAN

The Division manages several funds that are included in the New Jersey State Employees Deferred Compensation Plan. Prudential Retirement, a business of Prudential Financial, serves as the third-party administrator for this plan. The Division manages the Equity Fund and Small Capitalization Equity Fund. As of June 30, 2020, these funds had a combined market value of \$549 million compared with \$571 million as of June 30, 2019. The year-over-year decline in market value is primarily attributable to net redemptions.

TRUSTEES FOR THE SUPPORT OF PUBLIC SCHOOLS FUND

The Division manages the fund reserve required to support the rating of school bonds issued for the maintenance and support of the State's public schools. As of June 30, 2020, the portfolio had a market value of \$160 million compared with \$158 million as of June 30, 2019.

20-YEAR PENSION FUND FINANCIAL SUMMARY

FISCAL YEAR	NET ASSETS (\$ billions)	RATE OF RETURN % (net of all fees)	GROSS PENSION PAYMENTS (\$ billions)
2020	76.7	1.21	11.7
2019	80.0	6.27	11.2
2018	78.2	9.06	10.8
2017	76.0	13.07	10.4
2016	72.9	(0.93)	10.0
5-YEAR ANNUALIZED RETURN		5.61	
2015	79.0	4.09	9.6
2014	81.2	16.79	9.1
2013	74.4	11.72	8.7
2012	70.1	2.47	8.3
2011	73.7	17.97	7.7
10-YEAR ANNUALIZED RETURN		7.99	
2010	66.8	13.34	7.0
2009	62.9	(15.49)	6.6
2008	78.6	(2.61)	6.1
2007	82.5	17.14	5.6
2006	73.1	9.79	5.2
15-YEAR ANNUALIZED RETURN		6.54	
2005	69.8	8.77	4.8
2004	67.8	14.16	4.4
2003	62.6	3.31	4.1
2002	63.3	(8.61)	3.6
2001	72.2	(9.80)	3.2
20-YEAR ANNUALIZED RETURN		5.16	

During Fiscal Year 2020, net transfers of approximately \$5.76 billion were made from the Common Pension Funds to the following pension plans: \$19.7 million to the Judicial Retirement System, \$1,282.3 million to the Police & Firemen's Retirement System, \$1,808.3 million to the Public Employees' Retirement System, \$106.6 million to the State Police Retirement System and \$2,540.1 million to the Teachers' Pension & Annuity Fund. Included within the transfers are contributions totaling \$982 million to the investment account of Common Pension Fund L in accordance with the Lottery Enterprise Contribution Act (P.L. 2017, c. 98) on behalf of the following pension plans: \$11.8 million for the Police & Firemen's Retirement System, \$206.4 million for the Public Employees' Retirement System, and \$763.8 million for the Teachers' Pension & Annuity Fund. Net transfers are the difference between total contributions to the pensions plans and liabilities (primarily benefit payments) paid by the pension plans.

PENSION FUND ASSET ALLOCATION

The Council reviews, approves, and adopts an investment plan that includes a targeted asset allocation, as well as allowable ranges for asset classes. The Council's key objective in setting the targeted asset allocation is to provide for a well-diversified portfolio designed to achieve the best possible return at an acceptable level of risk utilizing the highest fiduciary standards.

ACTUAL ALLOCATION AS OF JUNE 30, 2020 VS. TARGETED ASSET ALLOCATION

	Actual Allocation %	Target %	Difference %	Allocation (\$ millions)
U.S. Equity	27.38	28.00	(0.62)	21,004.92
Non-U.S. Developed Markets Equity	11.85	12.50	(0.65)	9,093.80
Emerging Markets Equity	6.39	6.50	(0.11)	4,905.89
Equity Oriented Hedge Funds	0.07	0.00	0.07	49.95
Private Equity	11.05	12.00	(0.95)	8,476.09
Global Growth	56.74	59.00	(2.26)	43,530.64
Real Estate	6.26	7.50	(1.24)	4,804.31
Real Assets	2.20	2.50	(0.30)	1,688.71
Real Return	8.46	10.00	(1.54)	6,493.02
High Yield	1.34	2.00	(0.66)	1,031.30
Private Credit	7.42	6.00	1.42)	5,688.71
Investment Grade Credit	8.89	10.00	(1.11)	6,818.64
Income	17.65	18.00	(0.35)	13,538.66
Cash Equivalents	6.74	5.00	1.74	5,174.51
U.S. Treasuries	4.71	5.00	(0.29)	3,613.35
Risk Mitigation Strategies	3.17	3.00	0.17	2,434.24
Defensive	14.63	13.00	1.63	11,222.10
Opportunistic Private Equity	0.63	0.00	0.63	482.86
Other	0.22	0.00	0.22	170.56
Police & Fire Retirement System Mortgage Program ⁽¹⁾	1.67	0.00	1.67	1,279.16
Total Pension Fund	100.00	100.00	0.00	76,716.98

Total may not equal sum of components due to rounding

(1) For financial reporting, the Police & Fire Mortgage Program is considered a receivable under GASB 72. Only the Police & Firemen's Retirement System has exposure to the program.

The Council adopted a new investment plan including a new targeted asset allocation and allowable ranges for asset classes during its July 2020 meeting. The new investment plan became effective on October 1, 2020.

The new investment plan includes modest adjustments to prior targeted allocations and reflects a gradual shift toward a global equity allocation more aligned with the opportunity set, as well as an increased allocation to private market assets that are expected to realize attractive risk-adjusted

returns over time. The new investment plan also includes a reduced allocation to public fixed income investments and cash equivalents reflecting, in part, historically low interest rates.

The allocation to U.S. Equities was reduced by 1%. The allocation to Non-U.S. Developed Markets Equity was increased by 1%, while the allocation to Emerging Markets Equity was reduced by 1%.

The shift toward a global equity allocation follows an extended period in which the Pension Fund benefited from a pronounced home country bias. The historical tilt in favor of U.S. Equities has added value to the Pension Fund as U.S. equities outperformed the broader global equity market since the market trough amid the 2008-2009 financial crisis. Key tailwinds that drove strong absolute and relative returns for U.S. equities, including favorable sector exposures, more attractive beginning valuations, a weakening U.S. dollar, and more aggressive monetary and fiscal policies may be less impactful over the next decade.

The allocations to Private Equity and Private Credit were increased by 1% and 2%, respectively. The allocation to Real Return Assets (Real Estate and Real Assets) was increased by 1%. These increased allocations are expected to be implemented over time, consistent with the longer-term structure of private market investment vehicles and the Division's objective to maintain a disciplined due diligence process and a prudent approach to vintage year diversification.

The increased allocation to private market assets reflects expectations that private markets will realize a return advantage, resulting from certain competitive advantages including value-added expertise and support via improved operations and synergies, as well as access to a larger pool of faster growing companies. These competitive advantages are tempered by higher fees and expenses, increased investment complexity, greater use of financial leverage, and reduced liquidity.

The allocations to Investment Grade Credit and Cash Equivalents were reduced by 2% and 1%, respectively. This shift coincides with record low yields for investment grade corporate bonds and short-term borrowing instruments.

The new investment plan, including the targeted allocation and allowable ranges is shown below.

TARGETED ASSET ALLOCATION AND ALLOWABLE RANGES (effective October 1, 2020)

Asset Class	Target %	Allowable Ranges ⁽¹⁾
GLOBAL GROWTH	59.00%	
U.S. Equity	27.00%	22-32%
Non-U.S. Developed Market Equity	13.50%	11-16%
Emerging Market Equity	5.50%	3-8%
Private Equity	13.00%	10-16%
REAL RETURN	11.00%	
Real Estate	8.00%	5-11%
Real Assets	3.00%	1-5%
INCOME	18.00%	
High Yield	2.00%	1-5%
Private Credit	8.00%	5-11%
Investment Grade Credit	8.00%	5-11%
DEFENSIVE	12.00%	
Cash Equivalents	4.00%	3-7%
US Treasuries	5.00%	3-8%
Risk Mitigation Strategies	3.00%	1-6%

(1) Investments are subject to limitations as set forth in the Council Regulations

MARKET OVERVIEW FOR FISCAL YEAR 2020

During Fiscal Year 2020, the global economy experienced both the sharpest recession and the fastest rebound on record in the midst of the COVID-19 pandemic and the concurrent monetary and fiscal response to the pandemic. In parallel fashion, the global equity markets entered into a bear market and then rebounded into a bull market, both at the fastest pace on record. After U.S. equities reached all-time highs on February 19, 2020, global stocks, as measured by the MSCI All Country World Index (ACWI) declined -33.64% through late March. From the March 23, 2020 trough through June 30, 2020, global stocks rebounded sharply, up +37.50%.

For the twelve months ended June 30, 2020, U.S. equities outperformed the broader global market by 12.49%, as the MSCI USA Index returned +7.79% versus -4.80% for the MSCI ACWI ex-USA Index. Favorable U.S. equity returns were dependent upon a narrow breadth of leaders, with large cap stocks significantly outperforming small cap stocks. Non-U.S. Developed Markets Equities underperformed, with the MSCI EAFE & Canada Index returning -5.42% over the same horizon. The MSCI Emerging Markets Index returned -3.39%, with a wide dispersion of returns across geographic regions. China, for example, is the largest component of the Emerging Markets Index (greater than 40%) and realized strong returns (+13.13%).

Fixed income investments realized strong returns as interest rates declined to record lows. The Bloomberg Barclays US Aggregate Bond Index, a broad measure of the U.S. fixed income market, was up +8.74% during Fiscal Year 2020. Within fixed income, U.S. Treasuries outperformed in a flight to quality, returning +10.45% as yields declined across the curve. U.S. Treasuries also benefited from Federal Reserve purchases as part of extraordinary monetary policy and government intervention to support the broader economy while the Federal Reserve's balance sheet expanded to \$7 trillion.

These government actions also triggered a sharp rebound in the credit markets. During Fiscal Year 2020, the Bloomberg Barclays U.S. Credit Index, a broad measure of investment grade (IG) corporate bonds, returned +9.07% while the Bloomberg High Yield Index was essentially flat (+0.03%). Both investment grade and high yield (HY) bonds rebounded from lows in late March alongside the global equity market, with IG and HY up +14.89% and +19.92%, respectively, from March 23, 2020 through June 30, 2020.

The Cambridge Associates Private Credit Index was down -2.13% during Fiscal Year 2020. The private credit markets were adversely impacted by severe dislocations during late March and early April as public equity and credit markets reached lows. Less liquid and more highly levered investments underperformed, and private credit more broadly has taken longer than public fixed income to recover, particularly in light of vast government stimulus afforded to the public fixed income markets. Notwithstanding this, private credit followed a similar sell-off and subsequent path to recovery that was experienced by global equities, as well as the investment grade and public high yield markets. By way of example, the S&P/LSTA Leveraged Loan Index, a proxy for liquid, below-investment-grade floating rate debt, declined -20.62% from peak to trough and subsequently rallied (+19.35%) from March 23 to June 30, 2020.

Real Estate marked its eleventh consecutive fiscal year of positive returns, demonstrating the resiliency of assets that produce stable, long-term income. Notwithstanding this, the NCREIF ODCE Real Estate Index (ODCE), a broad measure of the private real estate market, realized its first negative quarter since 2009 during the March quarter (-1.56%) in the midst of the pandemic. During Fiscal Year 2020, the ODCE Index returned +2.22%, as cash flow distributions from income (+4.07%) more than offset a relatively modest decline in valuations (-1.79%). Industrial assets continued to have solid performance as companies streamline their logistics and distribution networks to satisfy both business and consumer demand. Retail properties, in contrast, realized negative returns during the fiscal year as consumers shifted to online purchases at an accelerating speed.

Private equity outperformed broadly diversified public equity indices. The period was marked by severe volatility as the Cambridge Associates Private Equity and Venture Capital Index was down -7.44% during the March quarter but rebounded sharply (+10.49%) during the June quarter. During Fiscal Year 2020, Venture Capital (+14.97%) was the best performing strategy, led by Late/Expansion Stage Venture (+20.56%), with Buyout (+5.77%) lagging. Within Buyout, Mega Cap (+7.66%) outperformed Large, Mid and Small Cap. Geographically, Asia/Pacific (+13.08%), led by China (+24.25%), was the best performing geography, while Latin America and the Caribbean (-14.56%) was the worst performing geography. The United States, by far the largest geographical component of the index, was up 9.73%.

PENSION FUND RETURN VS. BENCHMARK

	Annualized Returns (%)					
	FY20	3 Years	5 Years	10 Years	20 Years	25 Years
Pension Fund	1.21	5.46	5.61	7.99	5.16	7.56
<i>Pension Fund Benchmark⁽¹⁾</i>	4.13	6.60	6.56	7.87	5.10	*

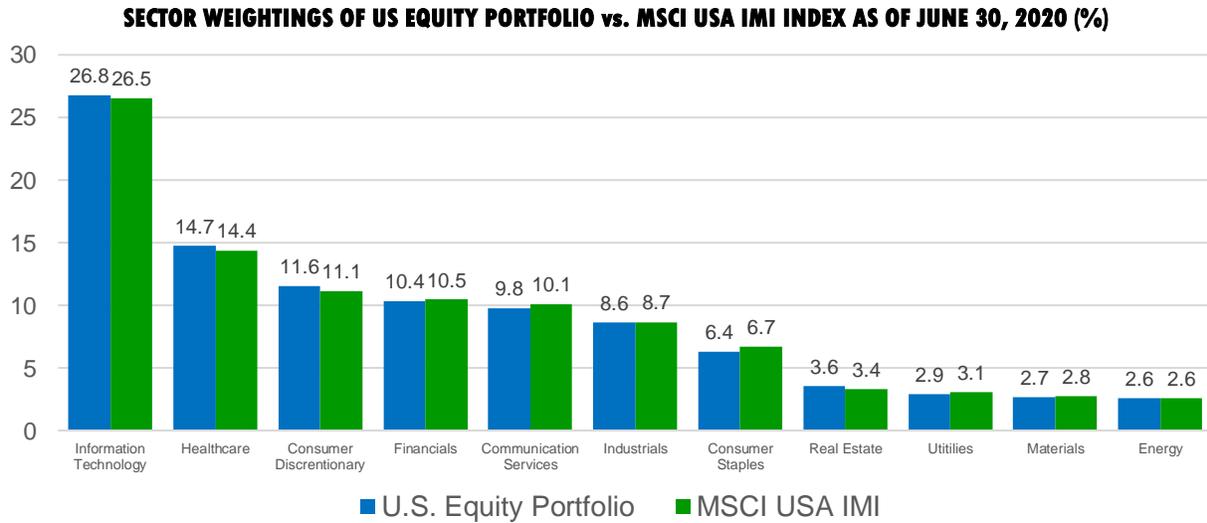
⁽¹⁾ Benchmark is a weighted composite of index returns in each asset class
* Benchmark return not available for 25 year period

- During Fiscal Year 2020, the Pension Fund returned +1.21%, falling short of the Division and Council's long-term shared objectives and reflecting a challenging global economic and investment environment that was amplified by volatility.
- Fiscal year returns were impacted by certain private market investments which are inherently longer-term strategies. Investments in real estate, real assets, and certain private credit strategies, for example, were meaningful detractors to overall returns. Private equity also underperformed its benchmark during Fiscal Year 2020.
- Many of these same private market investments are among the best performing portfolios for the Pension Fund over longer-term periods.
- Global equity returns also adversely impacted relative performance. The U.S. Equity portfolio detracted from relative returns until the portfolio was transitioned from an actively managed strategy to a passive strategy during the fiscal year. Non-U.S. Developed Market Equities outperformed the benchmark, while Emerging Market Equities underperformed the benchmark. The Fixed Income portfolio added value, driven by strong absolute and relative returns in U.S. Treasuries and Investment Grade Credit.

U.S. EQUITY HIGHLIGHTS OF FISCAL YEAR 2020

	Annualized Returns (%)			
	FY20	3 Years	5 Years	10 Years
U.S. Equity Only (Ex Cash and hedges)	6.02	8.85	8.74	13.26
Blended Benchmark	7.05	10.24	10.40	13.86

- During Fiscal Year 2020, the Division transitioned the U.S. Equity portfolio to a passively managed strategy. The passive strategy has met its objectives and the U.S. Equity portfolio has performed in line with its new policy benchmark, the MSCI USA IMI Index, since implementation.
- Consistent with the passive strategy, the U.S. Equity portfolio remained broadly diversified by economic sector, with over 1,400 publicly traded stocks as of June 30, 2020.
- During Fiscal Year 2020, the U.S. Equity Portfolio returned +6.02% versus +7.05% for the blended benchmark index. The U.S. Equity benchmark changed from the S&P 1500 to the MSCI USA IMI Index on October 1, 2019. Relative performance reflects an overweight allocation to value stocks and small cap stocks during the first three months of the fiscal year and ahead of the implementation of a passive investment strategy.



The top 10 holdings (including related receivables) in the U.S. Equity portfolio represent 23.63% of the total U.S. Equity Portfolio.

TOP HOLDINGS IN U.S. EQUITY PORTFOLIO AS OF JUNE 30, 2020

Security Name	% of Portfolio
APPLE INC	5.22
MICROSOFT CORP	4.81
AMAZON.COM INC	3.82
ALPHABET INC	2.82
FACEBOOK INC	1.79
JOHNSON & JOHNSON	1.22
VISA INC	1.08
PROCTOR & GAMBLE COMPANY	0.97
JPMORGAN CHASE	0.94
UNITEDHEALTH GROUP INC	0.92

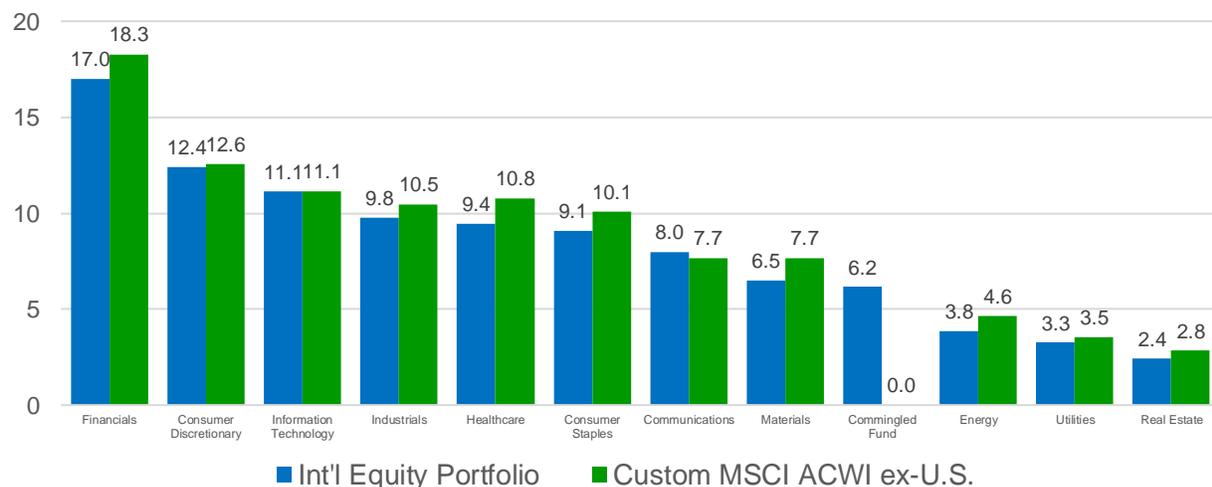
INTERNATIONAL EQUITY HIGHLIGHTS OF FISCAL YEAR 2020

	Annualized Returns (%)			
	FY20	3 Years	5 Years	10 Years
International Equity with Cash, Hedges, Miscellaneous	(4.36)	1.32	2.31	4.06
Custom International Equity Markets Benchmark ⁽¹⁾	(4.53)	1.32	2.46	
MSCI All Country World Index (ex U.S.)	(4.80)	1.13	2.26	4.97
Developed Markets Equity	(4.09)	1.63	2.46	5.17
Custom International Developed Markets Benchmark ⁽¹⁾	(5.51)	0.79	1.97	
Emerging Markets Equity	(4.67)	0.95	2.39	2.80
Custom International Emerging Markets Benchmark ⁽¹⁾	(3.01)	1.99	3.04	

⁽¹⁾ Source: MSCI. Each benchmark is a custom index calculated by MSCI for, and as requested by the Division, based on screening criteria defined by the Division. These benchmarks exclude those securities deemed ineligible for investment under the State statutes governing investments in Iran, Sudan and companies that boycott Israel. The MSCI data is for internal use only and may not be redistributed or used in connection with creating or offering any securities, financial products or indices. Neither MSCI nor any other third party involved in or related to compiling, computing or creating the MSCI data (the "MSCI Parties") makes any express or implied warranties or representations with respect to such data (or the results to be obtained by the use thereof), and the MSCI Parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to such data. Without limiting any of the foregoing, in no event shall any of the MSCI Parties have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

- The International Equity portfolio is broadly diversified with investments in approximately 2,700 publicly traded stocks across more than 50 countries. The International Equity portfolio includes both Developed Market (DM) equities and Emerging Market (EM) equities. The DM portfolio is primarily managed passively, but the portfolio also includes an actively managed allocation to small cap equities. The EM portfolio includes both passively and actively managed strategies.
- During Fiscal Year 2020, the International Equity Portfolio returned -4.36% versus -4.53% for the benchmark index. The DM portfolio outperformed its benchmark by 142 basis points (-4.09% vs. -5.51%), driven largely by favorable security selection within the actively managed small cap equity portfolio.
- The EM portfolio returned -4.67% versus -3.01% for the benchmark index. The key factor impacting relative returns was the EM portfolio's allocation to value strategies as growth strategies outperformed. There was a wide dispersion of returns across geographic regions, with all countries realizing negative returns, except for Taiwan and China, which benefited from exposure to the technology sector and a faster rebound in economic growth following the onset of the pandemic.

SECTOR WEIGHTINGS OF INTERNATIONAL EQUITY PORTFOLIO vs. BENCHMARK INDEX AS OF JUNE 30, 2020 (%)



The top 10 holdings (including related receivables) in the International Equity portfolio represent 14.85% of the portfolio.

TOP HOLDINGS IN INTERNATIONAL EQUITY PORTFOLIO AS OF JUNE 30, 2020	
SECURITY NAME	% OF PORTFOLIO
TENCENT HOLDINGS LTD	2.26
ALIBABA GROUP HOLDINGS SP ADR	2.21
ISHARES MSCI TAIWAN ETF	2.08
ISHARES MSCI INDIA ETF	1.82
NESTLE SA	1.37
SAMSUNG ELECTRONICS CO LTD	1.35
TAIWAN SEMICONDUCTOR SP ADR	1.32
ROCHE HOLDING AG	1.02
NOVARTIS AG	0.78
ASML HOLDING NV	0.64

FIXED INCOME HIGHLIGHTS OF FISCAL YEAR 2020

	Annualized Returns (%)			
	FY20	3 Years	5 Years	10 Years
Fixed Income	9.49	6.05	5.05	
Fixed Income Blended Benchmark	8.86	5.71	5.09	
U.S. Treasuries	10.67	5.44	3.56	4.34
Custom Government Benchmark	10.45	5.57	3.99	3.79
Investment Grade Credit	10.46	6.49	5.32	5.56
Custom Investment Grade Credit Benchmark	9.92	6.09	5.34	4.90
High Yield	(0.92)	2.82	4.73	
Custom High Yield Benchmark	0.00	3.32	4.78	

- The Fixed Income portfolio is comprised of the U.S. Treasuries portfolio, the Investment Grade (IG) Credit portfolio, and the Public High Yield (HY) portfolio. The IG and HY portfolios are broadly diversified across economic sectors.
- During Fiscal Year 2020, the Fixed Income Portfolio returned +9.49% versus +8.86% for the benchmark index. The key driver of relative returns was the outperformance of the IG Portfolio which represents the majority of the total Fixed Income Portfolio. The IG portfolio realized strong absolute and relative returns, outperforming the benchmark by 54 basis points. The portfolio benefitted from favorable yield curve, sector, and security selection.
- Within the U.S. Treasuries portfolio, returns were buoyed by a sharp move to lower interest rates, with modest duration tilts and yield curve positioning benefiting relative returns.
- The HY portfolio underperformed on a relative basis. Returns within the HY portfolio were negatively impacted by exposures to economically sensitive sectors in the midst of the COVID-19 pandemic.

PRIVATE EQUITY HIGHLIGHTS OF FISCAL YEAR 2020

	Annualized Returns (%)			
	FY20	3 Years	5 Years	10 Years
Private Equity	0.22	8.70	8.99	12.60
Custom Cambridge Associates Blended Benchmark ⁽¹⁾	1.42	11.16	10.10	12.70

(1) Reported on a one-quarter lag. Effective October 1, 2019, the benchmark is Cambridge Associates Buyouts, Growth, Distressed for Control, Subordinated Debt and Credit Custom Benchmark.

- As of June 30, 2020, the Private Equity portfolio had a current market value of \$8.5 billion and consisted of 121 commingled funds or separate account vehicles. The Pension Fund committed a total of \$450 million to four new Private Equity partnerships during Fiscal Year 2020.
- The Private Equity portfolio is broadly diversified across strategy, sector, vintage year, manager, and geography. Private equity investment agreements specify the investment horizon, with a wide range of possible time periods. The typical investment horizon identified in private equity investment agreements is 10-12 years.
- During Fiscal Year 2020, the Private Equity portfolio returned 0.22%, underperforming the Custom Cambridge Associates Blended Benchmark by 1.20%. Key factors impacting relative returns included vintage year concentrations and sector strategy weights.
- As of June 30, 2020, the Total Value Multiple for the existing investments in the Private Equity portfolio was 1.50x. The Total Value Multiple measures the portfolio's current market value plus distributions, divided by contributions. The current value of the existing investments in the Private Equity portfolio plus all distributions received through June 30, 2020 exceeds contributions by \$7.9 billion.
- The Private Equity portfolio continues to generate significant distributions. During Fiscal Year 2020, the Private Equity portfolio was net cash flow positive by \$295 million, with distributions of \$1.44 billion versus contributions of \$1.15 billion. Since the start of Fiscal Year 2013, the Private Equity portfolio is net cash flow positive by \$3.65 billion.

PRIVATE CREDIT HIGHLIGHTS OF FISCAL YEAR 2020

	Annualized Returns (%)		
	FY20	3 Years	5 Years
Private Credit ⁽¹⁾	(3.64)	3.72	6.07
Custom Benchmark ⁽²⁾	2.33	4.07	5.31

(1) Effective October 1, 2019, certain legacy hedge funds are included in the performance of Private Credit

(2) Reported on a one-month lag. Effective October 1, 2019, the Custom Benchmark is the Bloomberg Barclays U.S. Corporate High Yield index plus 100 bps compounded monthly.

- As of June 30, 2020, the Private Credit portfolio had a market value of \$5.7 billion and consisted of investments in 18 core private credit commingled funds or separate account vehicles (together the “Private Credit Funds”), a portfolio of legacy hedge fund strategies, as well as publicly traded Business Development Companies (“BDCs”). The BDC investments are generally comprised of direct lending strategies. The Pension Fund made no new commitments to Private Credit during Fiscal Year 2020.
- The Private Credit portfolio is diversified across strategy, sector, vintage year, manager, and geography. Private Credit investment agreements specify the investment horizon, with a wide range of possible time horizons and liquidation periods. The typical investment horizon identified in private credit investment agreements is 5-10 years.
- During Fiscal Year 2020, the Private Credit portfolio returned -3.64%, underperforming the Custom Benchmark by 5.97%. While the Private Credit portfolio is predominantly a duration neutral portfolio, the portfolio is benchmarked relative to a public fixed income index that benefited from falling interest rates and direct U.S. government monetary support. The publicly traded BDCs realized mark-to-market losses during the March quarter. Certain legacy hedge funds within the Private Credit portfolio were also adversely impacted by market dislocations. Certain strategies within the Private Credit portfolio also utilize leverage, which served to magnify losses.
- As of June 30, 2020, the Total Value Multiple for the Private Credit Funds, which represent over 82% of total Private Credit market value on June 30, 2020, was 1.35x. The Total Value Multiple measures the portfolio’s current market value plus distributions, divided by contributions. The current value of the Private Credit Funds plus all distributions received through June 30, 2020 exceeds contributions by \$2.1 billion.
- During Fiscal Year 2020, the Private Credit portfolio was net cash flow negative by \$320 million, with distributions of \$1.85 billion versus contributions of \$2.17 billion. As a result of market dislocations attributable to the COVID-19 pandemic, the Private Credit portfolio sought to opportunistically deploy capital in the midst of market turmoil, with net cash outflows of \$427 million during the first half of calendar year 2020.

REAL ESTATE AND REAL ASSET HIGHLIGHTS OF FISCAL YEAR 2020

	Annualized Returns (%)		
	FY20	3 Years	5 Years
Real Estate	(3.42)	5.73	7.56
Real Estate Index ⁽¹⁾	3.93	5.85	7.48
Real Assets	(19.41)	(3.13)	(1.67)
Custom Cambridge Real Asset Benchmark ⁽¹⁾	(20.07)	(5.12)	(3.20)

(1) Reported on a one-quarter lag.

- As of June 30, 2020, the Real Estate portfolio had a market value of \$4.8 billion and consisted of debt and equity investments in 56 commingled funds or separate account vehicles, as well as investments in publicly traded Real Estate Investment Trusts (REITs). During Fiscal Year 2020, the Pension Fund committed \$100 million to one new Real Estate partnership.
- The Real Estate portfolio is diversified across strategy, sector, vintage year, manager, and geography within private, closed and open-end, limited partnership vehicles. Real estate investment agreements specify the investment horizon, with a wide range of possible time periods. The typical investment horizon identified in real estate investment agreements is 10-12 years.
- During Fiscal Year 2020, the Real Estate portfolio returned -3.42% versus +3.93% for the benchmark index. The Pension Fund's investment in non-core strategies and public REITs were the key drivers of relative returns. While the Real Estate portfolio is predominantly comprised of non-core strategies, the benchmark is comprised of core strategy funds. The publicly traded REITs realized mark-to-market losses during the March quarter.
- As of June 30, 2020, the Total Value Multiple (TVM) for the private Real Estate Portfolio was 1.43x. The TVM measures the portfolio's current market value plus distributions, divided by contributions. The current value of the remaining Real Estate investments plus all distributions received to date exceeds contributions by \$2.9 billion.
- The limited partnerships in the Real Estate portfolio continue to generate significant distributions. During Fiscal Year 2020, this portion of the portfolio was net cash flow positive by \$202 million, with distributions of \$625 million versus contributions of \$423 million. Since the start of Fiscal Year 2013, the Real Estate portfolio is net cash flow positive by \$1.79 billion.
- The Real Asset portfolio is comprised of private real assets including energy, infrastructure, power, mining, and agriculture, as well as investments in publicly traded Master Limited Partnerships (MLPs). As of June 30, 2020, the Real Assets portfolio had a market value of \$1.7 billion and consisted of investments in 17 private limited partnership vehicles, as well as investments in publicly traded MLPs. The Pension Fund made no new commitments to Real Assets during Fiscal Year 2020.
- During Fiscal Year 2020, the Real Assets portfolio returned -19.41% versus -20.07% for the benchmark index. Negative returns were attributable to legacy investments in upstream energy assets, as demand for all forms of energy dropped sharply in the midst of an economic shutdown. The publicly traded MLPs realized mark-to-market losses during the March quarter.

RISK MITIGATION STRATEGIES HIGHLIGHTS OF FISCAL YEAR 2020

	Annualized Returns (%)		
	FY20	3 Years	5 Years
Risk Mitigation Strategies	1.68	3.91	2.55
T-Bill + 300BP	4.74	4.86	4.27

- As of June 30, 2020, the Risk Mitigation Strategies (RMS) portfolio had a market value of \$2.4 billion and consisted of investments in 12 limited partnerships. The Pension Fund made no new commitments to Risk Mitigation Strategies during Fiscal Year 2020.
- The Risk Mitigation Strategies portfolio is comprised of limited partnership vehicles with a range of subscription terms. The RMS portfolio is intended to provide downside protection against equity market drawdowns, liquidity in the event of a drawdown, and returns with low or negative correlation to equities. The RMS portfolio includes various investment strategies, including discretionary macro and market neutral strategies.
- During Fiscal Year 2020, the RMS portfolio returned +1.68% versus +4.74% for the benchmark index. Key factors impacting relative returns included underperformance of higher beta equity long/short exposures, negative returns for macro-systematic strategies, and security selection within certain Fund of Fund (FoF) strategies. Macro-systematic strategies experienced losses in the midst of sharp equity market reversals. Favorable returns for market neutral strategies added value.
- During the second half of fiscal year 2020, the RMS portfolio mitigated losses that impacted the global equity portfolio, as the RMS portfolio returned +0.05% versus -6.25% for the MSCI ACWI. Over the same period, the HFRI FoF Conservative Index, a proxy of similar strategies, returned -2.03%.
- During Fiscal Year 2020, the Pension Fund redeemed approximately \$1 billion from the RMS portfolio as the Pension Fund continues to receive proceeds from legacy and non-core fund relationships as part of its redemption and rebalancing program.

CASH MANAGEMENT FUND

	Annual Returns (%) ⁽¹⁾		
	FY20	3 Years	5 Years
Cash Mgt. Fund – State Participants	1.57	1.74	1.23
Cash Mgt. Fund – Non-State Participants	1.51	1.68	1.17
91 Day U.S. Treasury Bills (Daily)	1.63	1.77	1.19

⁽¹⁾ Returns represent the annual rate for the period based on the average daily rate of return.

- The Cash Management Fund (CMF) is the Local Government Investment Pool (LGIP) utilized by the Pension Fund, the State of New Jersey and local towns, municipalities, school districts, agencies, and authorities for its cash management needs. Participation is voluntary. As of June 30, 2020, the net asset value of the Cash Management Fund was \$18.5 billion.
- The CMF primarily invests in U.S. Treasury and Agency obligations, highly-rated commercial paper and short-term corporate obligations, other highly-rated government debt, and certificates of deposit.
- The CMF's current yield declined sharply in Fiscal Year 2020 as short-term interest rates reached record lows in the midst of a global pandemic, the resultant economic shock, and extraordinary monetary policies and government interventions intended to stabilize the credit markets. The Division also re-allocated a larger portion of the CMF portfolio to investments backed by the full faith and credit of the U.S. government.
- The Non-State Participants' return is reduced by an Administrative Expense Fund Fee (0.05% per year) and a Reserve Fund Fee (0.01% per year). The Administrative Expense Fund Fee is used to reimburse the State of New Jersey for administrative and custodial fees of the CMF. The Reserve Fund fees are reinvested and participate in the CMF.

CASH MANAGEMENT FUND PORTFOLIO⁽¹⁾ DETAIL AS OF JUNE 30, 2020

	Percentage	(\$ millions)
US TREASURY BILLS	70.95%	\$13,108.1
CERTIFICATES OF DEPOSIT	19.24%	3,555.1
US TREASURY NOTES	3.79%	699.6
COMMERCIAL PAPER	3.11%	574.8
STATE STREET STIF	1.38%	254.2
CORPORATE BONDS	1.13%	208.2
GOVERNMENT AGENCY	0.41%	75.0
TOTAL	100.00%	\$18,475.0

Sum of components may not equal total due to rounding

(1) Excludes receivables and payables

COSTS OF MANAGEMENT

All investment returns for the Pension Fund and the various asset classes are reported net of external fees and expenses associated with investing the assets. The Division strives to minimize costs, with the key objective to realize attractive risk-adjusted net returns. The Division continues to utilize internal resources to minimize costs, with the Pension Fund representing one of the highest percentages of internally managed plans amongst public pension funds.

The Division utilizes external advisers and fund managers for strategies that require greater resources than are currently available internally. Most of the fees and expenses within the Pension Fund are incurred by the \$22.1 billion Alternative Investment Program (AIP) that includes private equity funds, real estate funds, real asset funds, opportunistic funds, hedge funds, and private credit funds. The Division paid \$332.6 million in management fees and expenses in Fiscal Year 2020 to fund managers within the AIP.

While more costly, the AIP provides important investment benefits for the Pension Fund, including an expected long-term performance advantage (net of all fees) on both an absolute and risk-adjusted basis, enhanced portfolio diversification, and better downside protection. Moreover, certain strategies within the AIP provide exposure to rapidly growing segments of the global market which are not investable in the public market.

The Division paid an additional \$21.6 million to advisers with respect to its emerging market equity, international small cap equity and high-yield fixed income portfolios in Fiscal Year 2020. Investments in these portfolios totaled \$6.5 billion as of June 30, 2020.

Operating expenses for staff compensation, overhead and equipment were \$10.4 million for the Fiscal Year and represent approximately 2.8% of fees and expenses or 0.01% of \$91.3 billion in total assets under management.

Fees for consulting services, custodial banking, and legal services were \$6 million for the fiscal year and represent approximately 1.6% of fees and expenses or 0.01% of \$91.3 billion in total assets under management.

In total, costs to manage the portfolios were \$370.6 million, or 0.40% of \$91.3 billion in total assets under management. The following chart summarizes total fees and expenses for Fiscal Year 2020.

Fiscal Year
Ended
June 30, 2020

Fees & Expenses ⁽¹⁾ :	\$ Millions
Private Equity Funds	122.2
Global Diversified Credit Funds	72.9
Real Estate Funds	66.4
Hedge Funds	33.7
Real Asset Funds	30.0
Opportunistic Funds	5.8
Subtotal	330.9
High-Yield, Small Cap and Emerging Market Advisers	21.6
Division Operations	10.4
Custodial Banking Fees	2.8
Consulting Fees	2.5
Legal Fees	0.7
Total	368.9

Total may not equal sum of components due to rounding

(1) Alternative Investment Program fees and expenses are based on information provided by the manager.

PERFORMANCE ALLOCATIONS

The Council also provides detailed information regarding the performance allocation earned by the fund managers within the AIP. By way of background, fund managers may earn a performance allocation or share of the investment profits, also known as carried interest, if certain conditions and objectives are met. Typically, a private equity limited partner (e.g., the Pension Fund) must receive a net minimum return, also known as a hurdle rate or preferred rate, before the fund manager can collect a performance allocation. Other requirements may include prior repayment of contributed capital, management fees, and other expenses to limited partners. The Division is committed to negotiating preferential terms that incentivize strong performance, provide the Division with meaningful governance rights, and ensure alignment of interests.

Total performance allocation may exceed the average hurdle rate of the funds within an asset class (e.g., private equity) since a fund within a given asset class may realize strong returns and, therefore, earn carried interest at the same time another fund within the same asset class may realize negative returns that reduce total asset class profits. There may also be timing mismatches between the crystallization and payment of performance allocation. For example, certain portions of performance allocation paid during Fiscal Year 20 may have crystallized during Fiscal Year 19. Similarly, certain portions of performance allocation that was realized during Fiscal Year 20 may have crystallized at the close of calendar year 2019, following a longer-term period of generally strong investment returns.

The table below summarizes the performance allocation for the AIP for Fiscal Year 2020.

	Profit Allocation		
	Amount	As % of	As % of Profit
	(\$ Millions)	Assets	
Private Equity	113.47	1.30%	45.79%
Real Estate	40.5	1.01%	148.94%
Real Assets	11.4	0.65%	(4.56%)
Opportunistic	0.0	0.00%	0.00%
Hedge Funds	32.5	0.87%	57.86%
Global Diversified Credit	41.8	0.86%	(113.77%)

For Fiscal Year 2020, the AIP earned a net return of -2.82% and generated \$487 million of net losses. Prior to Fiscal Year 2020, the AIP had been a significant driver of favorable returns for the total Pension Fund over longer term periods. For the ten years ended June 30, 2020, the AIP has returned +7.97%, in line with the Total Pension Fund.

The table below summarizes the net returns and profits for the AIP for Fiscal Year 2020.

	Estimated Average Gross Assets (\$ Millions)	Estimated Gross Profit (Loss) (\$ Millions)	Estimated Net Profit (Loss) (\$ Millions)	FY20 Net Return
Private Equity	8,736.29	247.46	11.84	0.22%
Real Estate	4,014.06	27.19	(79.73)	(3.42%)
Real Assets	1,772.93	(252.19)	(293.64)	(19.41%)
Opportunistic	447.19	41.48	35.71	8.19%
Hedge Funds	3,739.06	56.24	(9.97)	(0.44%)
Global Diversified Credit	4,839.47	(36.75)	(151.45)	(2.89%)
Total	23,548.99	83.43	(487.24)	(2.82%)

Total may not equal sum of components due to rounding

Performance allocations were \$8.9 million lower in Fiscal Year 2020 versus Fiscal Year 2019, primarily due to a reduction in performance allocation for Private Equity that was offset by increases in performance allocations for Real Estate and Real Assets. Fees and expenses within the AIP were \$1.64 million lower in Fiscal Year 2020 versus Fiscal Year 2019, driven primarily by a reduction in hedge fund fees. The reduction in hedge fund fees is consistent with the Council's decision to reduce the overall allocation to hedge funds.

The table below summarizes year-over-year changes in AIP fees and expenses, performance allocation, and estimated net profits.

(\$ in Millions)	Fiscal Year 2020	Fiscal Year 2019	Year over Year Reduction*
Fees and Expenses	368.9	372.3	(3.4)
Performance Allocation	239.8	248.6	(8.9)
Estimated Net Profit (Loss)	(487.2)	1,479.1	(1,966.3)

* May not equal difference of components due to rounding

REPORTING STANDARDS AND COMPARISONS TO OTHER FUNDS

Public pension funds do not have a uniform standard for the reporting of investment fees and expenses, including performance allocations. As a result, comparisons to other public funds may not be meaningful because other funds may not provide comparable disclosure. For example, the Council includes performance allocation in this report, whereas other public funds may not include performance allocation in similar reports. Accordingly, it is possible that the Council reports more types of costs and, therefore, *higher* costs than other funds, while the Pension Fund may actually incur *lower* costs than those same funds.

ADDITIONAL INFORMATION REGARDING ALTERNATIVE INVESTMENT PROGRAM FEES AND EXPENSES

The Division and the Council are both committed to demonstrating industry leadership in transparency. As part of this commitment, the Council also includes a report of fees and expenses, along with performance allocation and returns over the past 5 fiscal years, in Appendix 1 of this Annual Report.

In accordance with N.J.S.A. 52:18A-91(b), the Council is also including a schedule of the percentage and amount of fees, expenses and performance allocations that were paid to those AIP fund managers in connection with commitments made from January 1, 2018 through June 30, 2020 in Appendix 2 of this Annual Report.

COMMISSIONS

The Division incurred broker/dealer commission costs totaling \$3.6 million for Fiscal Year 2020. Soft dollar commissions totaling \$2.5 million were used to procure systems and services critical to the Division's trading and research.

The Division purchases and sells certain investments with no involvement by a broker/dealer, including commercial paper, certificates of deposit, foreign currency transactions and investments in alternative investment funds by transacting directly with the issuer, partnership or fund; as a result, no direct commissions are paid.

APPENDIX 1: FIVE YEAR COST COMPARISON

Appendix 1	Fiscal Year Ended June 30, 2020	Fiscal Year Ended June 30, 2019	Fiscal Year Ended June 30, 2018	Fiscal Year Ended June 30, 2017	Fiscal Year Ended June 30, 2016
Fees and Expenses:					
Hedge Funds	\$ 33,669,770	53,588,989	59,513,684.66	99,974,409	126,880,195
Private Equity Funds	122,149,249	113,064,371	134,088,404	135,822,473	132,287,674
Real Estate Funds	66,423,957	57,870,196	56,459,596	67,920,674	50,751,772
Real Asset Funds	29,999,090	31,496,895	29,980,413	33,901,880	26,914,795
Opportunistic Funds	5,775,580	11,770,080	10,765,042	6,082,764	7,019,900
Global Diversified Credit Funds	72,894,329	66,167,004	72,338,858	48,538,827	33,600,719
Division Operations and Internal Mgt (1)	38,028,182	38,333,573	50,831,884	45,578,113	39,675,226
Total Fees and Expenses:	368,940,157	372,291,108	413,977,881	437,819,141	417,130,281
Performance Allocation:					
Hedge Funds	32,538,336	28,913,464	35,961,645	66,331,578	55,307,643
Private Equity Funds	113,469,221	155,890,534	145,675,005	90,228,372	109,485,871
Real Estate Funds	40,496,797	20,247,890	39,998,435	72,966,276	49,204,152
Real Asset Funds	11,446,670	946,262	7,974,099	1,632,938	11,587,460
Opportunistic Funds	-	-	-	-	-
Global Diversified Credit Funds	41,806,274	42,613,549	38,302,254	42,642,060	16,396,283
Total Performance Allocation:	239,757,298	248,611,700	267,911,438	273,801,224	241,981,410
Total Fees, Expenses, Performance Allocation:	\$ 608,697,454	\$ 620,902,808	681,889,319	711,620,365	659,111,691

Performance	FY 2020	FY 2019	FY 2018	FY 2017	FY 2016
Hedge Funds	0.44%	3.04%	6.32%	7.99%	(5.13%)
Private Equity Funds	0.22%	9.06%	17.52%	12.66%	6.27%
Real Estate Funds	(3.42%)	8.52%	11.98%	7.79%	9.86%
Real Asset Funds	(19.41%)	0.54%	12.70%	5.70%	(4.39%)
Opportunistic Funds	8.19%	(3.90%)	11.83%	15.18%	(.92%)
Global Diversified Credit Funds	(2.89%)	5.79%	9.46%	16.46%	3.32%
Total Alternative Investment Program	(2.82%)	6.07%	11.88%	10.12%	1.60%
Total Non-Alternative Investment Portfolio	3.19%	6.42%	7.67%	14.37%	(2.26%)
Alternative Investment Portfolio Net Profit (Loss) (\$)	(487,240,972)	1,479,103,190	2,722,890,897	2,497,253,176	405,411,118
Percentage of Net Assets Internally Managed (2)	76%	74%	73%	74%	72%

(1) Includes costs related to external investment advisers for international small cap, emerging markets equity and high yield, as well as Division operations, consulting fees, legal fees, and custodial banking fees.

(2) International small cap, emerging markets and high yield assets managed with the support of external investment advisers are considered internally managed.

APPENDIX 2: ALTERNATIVE INVESTMENT DISCLOSURES PURSUANT TO N.J.S.A. 52:18A-91(b).

The table below includes the terms of the commitments made by the Pension Fund from January 1, 2018 to June 30, 2020 and the amounts of fees and expenses paid for Fiscal Year 2020.

Investment	Commitment (\$ Millions)	Annual Management Fee %	Performance Fee/Carried Interest	Fees and Expenses Paid	Performance Fee Paid
Aether Real Assets SONJ Fund LP Executed March 2018	\$135	Years 1-5: 0.60% Years 6-12: 0.85% of prior year's fee Years 13-15: 0.1%	4.475% carried interest subject to a 7% return.	\$1,065,750	\$441,367
Aermont Capital Real Estate Fund IV Executed October 2018 (1)	\$112	1.5% of aggregate commitments stepping down to 1.7% of net invested capital during the post investment period.	20% carried interest subject to 9% return	\$1,838,111	\$0
Ardian Buyout Fund VII S.A. Executed March 2020 (2)	\$139	1.5% to total commitments during the investment period; 1.5% of total cost post the investment period.	20% carried interest subject to 8% return.	\$3,295,990	\$0
Blueprint Cap I Executed May 2018	\$300	0.30% on the first \$225 million; 0.25% on the next \$100 million; 0.20% thereafter.	No Performance Fee/No Carried Interest	\$2,975,449	\$0
Brookfield Capital Partners V Executed April 2019	\$100	1.675% during the commitment period; 1.425% in the post commitment period.	20% carried interest subject to 8% return.	\$1,731,008	\$0
CVC Capital Partners VIII Executed June 2020 (3)	\$100	During Investment Period: 1.425% of total commitment. After investment period: 1.25% of unreturned cost.	20% carried interest subject to 6% hurdle.	\$0	\$0
Exeter Core Industrial Club Fund III Executed June 2019	\$100	0.90% on invested capital.	15% carried interest subject to 8% return.	\$38,504	\$0
Homestead Capital USA Farmland Fund III Executed April 2019	\$100	1.5% on committed during investment period (or until successor fund is raised, if earlier), thereafter, 1.5% on invested capital.	15% carried interest subject to 6% compound IRR.	\$1,508,312	\$0

Investment	Commitment (\$ Millions)	Annual Management Fee %	Performance Fee/Carried Interest	Fees and Expenses Paid	Performance Fee Paid
JLL Fund VIII Executed February 2019	\$200	2.0% of commitment during the Investment period; thereafter, 1.5% of actively invested capital.	20% carried interest subject to 8% return.	\$5,238,127	\$0
KSL Capital Partners V Executed February 2019	\$100	1.75% on committed capital during the investment period; 1.25% on invested capital post investment period.	20% carried interest subject to 8% return.	\$1,613,614	\$0
MBK Partners Fund V Executed December 2019	\$100	1.75% on commitments during the commitment period; thereafter, 1.5% on unreturned capital (including any Partnership borrowings).	20% carried interest subject to 8% return.	\$0	\$0

Investment	Commitment (\$ Millions)	Annual Management Fee %	Performance Fee/Carried Interest %	Fees and Expenses Paid	Performance Fees Paid
NB/NJ Custom Investment Fund III Executed April 2018	\$200	0.10% on commitment during the investment period; thereafter, 0.30% on actively invested capital.	10% carried interest subject to 8% return. 15% carried interest subject to 15% return.	\$529,479	\$0
Owl Rock Capital Technology Corp and Owl Rock Capital Technology Holdings LLC Executed November 2018	\$100	Prior to Exchange Listing 0.90 of gross assets above 200% asset coverage, plus 1.5% of unfunded capital commitments. After Exchange Listing 1.5% of gross asset coverage, plus 1.0% of gross assets below 200% asset coverage.	17.5% prior to Exchange Listing subject to 6% hurdle; 17.5% after Exchange Listing subject to 6% hurdle.	\$1,868,652	\$232,052
Sycamore Partners III Executed January 2018	\$150	2% per annum of commitment during the investment period; thereafter, 2% per annum of invested capital.	20% carried interest subject to 8% return.	\$3,107,953	\$0
Rise Fund II Executed March 2019	\$125	1.75% of capital commitment during the commitment period; following the commitment period, 1.25% on actively invested capital. During any extension, 0.50% on actively invested capital.	20% carried interest subject to 8% return.	\$0	\$0
TPG RE Partners III Executed May 2018	\$100	1.5% on first \$50 million of invested capital; 1.25% on next \$150 million. Uninvested equity during the commitment period: 0.80% of blended rate on invested equity.	20% carried interest subject to 8% return.	\$1,534,592	\$0
TSG 8 LP Executed December 2018	\$150	2.0% of commitments during the Investment Period; thereafter, 2.0% of the cost basis of the remaining investments.	20% carried interest subject to 8% return. 25% carried interest subject to a 15% return and a 2.0X Total Value Multiple.	\$2,175,338	\$0

Investment	Commitment (\$ Millions)	Annual Management Fee %	Performance Fee/Carried Interest %	Fees and Expenses Paid	Performance Fees Paid
Vista Equity Partners VII Executed August 2018	\$300	1.5% of commitment during the investment period; thereafter, 1.5% of net invested capital.	20% carried interest subject to net 8% return.	\$4,874,254	\$6,027
Vista Foundation Fund IV Executed February 2020	\$100	2% of capital commitment during the investment period. 2.0% of the cost basis of investment reduced by dispositions and permanent write downs.	20% until cumulative distributions represent a 2.5X multiple. 25% if cumulative distributions equal 2.5X; if the cumulative distribution represent a multiple greater than 2.5X but less than 3.0X, the percentage equal to the product of such multiple (rounded to the nearest tenth) multiplied by 10. 30% if such cumulative distributions represent a multiple of 3.0X or greater. 8% hurdle rate applies.	\$859,890	\$0
Warburg Pincus China SE Asia II Executed June 2019	\$100	1.4% on commitment during the investment term (up to year 6); 1.4% on cost of investments from years 6-8; 1.25% on cost of investments from years 8-10; 1% on cost of investments thereafter.	20% carried interest.	\$1,504,592	\$0
Total	\$2,811			\$35,769,615	\$679,446

(1) Euro 100 Million Commitment converted at 6/30/2020

(2) Euro 125 Million Commitment converted at 6/30/2020

(3) Euro 100 Million Commitment converted at 6/30/2020