2023 ANNUAL REPORT

NEW JERSEY STATE INVESTMENT COUNCIL

FOR FISCAL YEAR 2023

TABLE OF CONTENTS

www.nj.gov/treasury/doinvest

LETTER FROM THE CHAIR

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

January 31, 2024

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

As Chair of the State Investment Council, it is my pleasure to present the Fiscal Year 2023 Annual Report on behalf of the Council and the New Jersey Division of Investment. As fiduciaries for over 820,000 members of the Pension Fund, we are pleased to announce that the Pension Fund had a strong fiscal year. As of June 30, 2023, the net asset value of the Pension Fund was $93.2 billion as compared to $87.5 billion as of June 30, 2022. Full funding of the State's annual pension obligations and strong investment performance enabled this growth of pension assets. The Pension Fund returned +9.1% (net of fees) for Fiscal Year 2023, outperforming its benchmark and the assumed rate of return.

The year was interesting and challenging in many respects as investors kept one eye on world events and the other on the economic front. Higher inflation, central bank actions and concerns surrounding the potential for a hard landing were top of mind for most investors throughout the year. The backdrop of a changing economic landscape accompanied by geopolitical uncertainty created challenges in navigating global markets. To meet these challenges, the Division successfully implemented a number of tactical steps during the year to enable the Pension Fund portfolio to continue its strong performance. These steps included adding exposure to its public REIT portfolio, reducing exposure to global banks to protect capital from the fallout from the failure of Silicon Valley Bank, and adjusting exposure in emerging markets and real estate.

In response to increasing inflation, a number of central banks around the world embarked on a program of consecutive interest rate hikes in order to slow down economic activity and rising prices. The rate hikes led to an increase in the cost of capital, resulting in higher borrowing costs for mortgages, bank loans, and other sources of funding. As interest rates increased, the outlook for cash and cash equivalents became more favorable and, in response, the Pension Fund portfolio increased its exposure to cash equivalents and the credit portion of fixed income markets. Allocating more assets to high yield and floating rate debt products (public and private) provided a significant return to the portfolio. Additionally, the Division acted to reduce the portfolio's overweight exposure to public equities. The objective of these tactical changes was to position the portfolio to capture potential upside returns from public market asset classes while also generating attractive risk-adjusted returns from cash equivalent securities. These steps had the additional benefit of assuming a more favorable risk profile for the portfolio.

During the fiscal year, many institutional investors experienced a "denominator effect," a term commonly used to describe an increase in the percentage of private market asset classes within a portfolio due to a decline in the valuation of the overall portfolio. By staying below its long-term target allocations to private market asset classes, the Pension Fund portfolio was able to avoid the denominator effect in each of the private market asset classes in which it invests. As a result, the portfolio was in the enviable position of being able to benefit from lower valuations as it deployed its cash holdings into promising private market opportunities. For example, the Division was able to make significant investments in venture capital, taking advantage of the rapidly changing technology landscape (including investments in cutting-edge technologies such as artificial intelligence), through highly regarded investment funds.

The Division was also able to expand its private market portfolio to include a wider and more diverse range of fund managers. I am pleased to report that, under the guidance of the Council, the Division expanded its newly established emerging managers program, launching a real estate sleeve to add to the existing private equity sleeve. This program provides the Division with an opportunity to access smaller, emerging managers, including women-owned and diverse-owned investment firms. Continued expansion of this program will position the Pension Fund for further growth and diversification in the future.

Following up on initial work conducted in the previous year, the State Investment Council concluded an asset liability study in order to consider and implement changes to the Pension Fund's long-term asset allocation plan. At the same time, the Council reviewed and approved performance benchmark changes to better reflect and evaluate the portfolio. These changes went into effect as of October 1, 2023.

As we look at the road ahead, recognizing that economic and market uncertainty remains a formidable part of the investment landscape, we will need to be even more attentive to events affecting global markets. For example, as central banks start to pivot away from a tightening monetary policy, we must be alert for indications of whether we will experience a soft or hard landing and the pace at which economic easing will occur. We must also be cognizant of the fact that some global economies (e.g., Europe and China) may lag other economies in the pace of their economic recovery, and therefore it is unlikely that monetary policies around the world will move in a similar direction simultaneously.

Fortunately, during the past year the Division was able to bring in additional leadership with the investment experience and capabilities to navigate these turbulent circumstances. I remain confident that Division leadership and staff will continue to diligently monitor the ever-changing investment landscape and manage the Pension Fund portfolio so that it is well-positioned from both a strategic and tactical perspective.

In closing, I would like to thank my fellow Council members, the Treasurer's Office, and the Governor's Office for their support and assistance throughout the year. I would be remiss if I did not mention the value add to the Pension Fund resulting from the Governor's continued commitment to fully funding the State's annual pension obligations. I would also like to thank Division staff, whose hard work, dedication and focus on producing the best results for the beneficiaries of the Pension Fund contributed significantly to last year's strong investment returns.

Respectfully,

Deepak D. Raj

Deepak D. Raj, Chair

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

DIVISION STAFF

Director:
Shoaib Khan

Deputy Executive Director:
William Connors

Deputy Director:
Lisa Walker

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 Liebtag
New Jersey State AFL-CIO Nominee

Council Members:
Theodore R. Aronson
Partner – AJO Vista

Wasseem Boraie
Principal, Boraie Development LLC

Thomas Bruno, Jr.
Public Employees' Retirement System Designee

Leonard J. Carr
Managing Director, PDT Partners, LLC

Michael Cleary
New Jersey State AFL-CIO Nominee

Vaughn E. Crowe
Managing Partner, Newark Venture Partners

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, Apex Group Ltd.

Eric E. Richard
Senate President and Assembly Speaker Joint Nominee

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-83[1]. 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 and serves a three-year term.

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

THE DIVISION OF INVESTMENT

The Division, under the Council's supervision, is the 22nd largest U.S. pension fund manager[2]. The Pension Fund supports the retirement plans of approximately 823,839 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 46% of the members are still working and contributing to the pension plans while 44% are retired. The remaining 10% represent inactive members who are not currently contributing to the pension plans. Pension Fund assets are primarily managed through three common trust funds ("Common Pension Funds"): Common Pension Fund A, Common Pension Fund D and Common Pension Fund E. Common Pension Fund A and Common Pension Fund E invest in alternative investment funds, while Common Pension Fund D invests in public securities. Common Pension Fund A invests assets of the Judicial Retirement System, the Public Employees' Retirement System, the State Police Retirement System, and the Teachers' Pension and Annuity Fund, while Common Pension Fund D and Common Pension Fund E invest assets of those four funds plus Police & Firemen's Retirement System assets.

The net asset value of the Pension Fund assets managed by the Division was $93.2 billion as of June 30, 2023 compared to $87.5 billion as of June 30, 2022. The Pension Fund investment return[3] for Fiscal Year 2023 was 9.06% (net of all fees) and approximately $12.8 billion was paid to plan beneficiaries. The Pension Fund received contributions of $6.9 billion from the State (including net lottery proceeds and receivables of $1.14 million), $2.6 billion from local employers, and $2.4 billion from employees.

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).

---

[1] As of December 31, 2023, there were 15 Council members, with 1 vacant position.
[2] Measured by assets as of September 30, 2022. Reported by P&I in February 2023.
[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.

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 Council's current regulations may be found in the New Jersey Administrative Code (N.J.A.C. 17:16), and are available for viewing online at New Jersey Administrative Code online link.

During Fiscal Year 2023, the Council re-elected Deepak Raj as Chair and Adam Liebtag as Vice-Chair for one-year terms.

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, 2023 by approximately 1.85% for the international developed markets and 1.06% for the international emerging markets relative to their respective benchmarks.

In March 2022, Governor Phil Murphy signed legislation (P.L. 2022, c.3) that prohibits the State of New Jersey from investing pension or annuity funds in companies identified by the Department of the Treasury as engaging in prohibited activities in Russia or Belarus and requires the divestment of existing holdings in such companies. The Division of Investment has been acting to minimize its exposure to these companies to the extent possible given operational issues in the Russian market, while keeping in mind its overarching fiduciary responsibility to pension fund beneficiaries.

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, 2023	June 30, 2022
PENSION FUND[1]	93,213	87,493
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	33,076	31,225
Police & Firemen's Retirement System	30,918	29,329
Teachers' Pension & Annuity Fund	26,898	24,789
State Police Retirement System	2,102	1,956
Judicial Retirement System	213	188
Prison Officers' Pension Fund	5	5
Consolidated Police & Firemen's Pension Fund	2	2

*Total may not equal sum of components due to rounding

CASH MANAGEMENT FUND[2]	38,985	40,209
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	287	257
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 $8 billion on June 30, 2023 ($8 billion on June 30, 2022) 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.

**The Division managed a separate account totaling approximately $2.2 thousand on behalf of the State of New Jersey as of June 30, 2023.

NJBEST FUND

The Division manages a portion of the State's tax-advantaged 529 college savings program. On June 30, 2023, the Division-managed portion of this fund had a market value of $113 million compared with $133 million on June 30, 2022. The year-over-year decrease 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. Empower Retirement, a business of Great-West Life & Annuity Insurance Company, is the third-party administrator for this plan. The Division manages the Equity Fund and Small Capitalization Equity Fund. As of June 30, 2023, these funds had a combined market value of $725 million compared with $644 million as of June 30, 2022. The year-over-year increase in market value is primarily attributable to market performance.

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, 2023, the portfolio had a market value of $169 million compared with $158 million as of June 30, 2022.

20-YEAR PENSION FUND FINANCIAL SUMMARY

FISCAL YEAR	NET ASSETS ($ billions)	RATE OF RETURN % (net of fees)	GROSS PENSION PAYMENTS ($ billions)
2023	93.2	9.06	12.6
2022	87.5	-7.90	12.4
2021	95.7	28.63	12.0
2020	76.7	1.21	11.7
2019	80.0	6.27	11.2
5-YEAR ANNUALIZED RETURN		6.80	
2018	78.2	9.06	10.8
2017	76.0	13.07	10.4
2016	72.9	-0.93	10.0
2015	79.0	4.09	9.6
2014	81.2	16.79	9.1
10-YEAR ANNUALIZED RETURN		7.51	
2013	74.4	11.72	8.7
2012	70.1	2.47	8.3
2011	73.7	17.97	7.7
2010	66.8	13.34	7.0
2009	62.9	-15.49	6.6
15-YEAR ANNUALIZED RETURN		6.77	
2008	78.6	-2.61	6.1
2007	82.5	17.14	5.6
2006	73.1	9.79	5.2
2005	69.8	8.77	4.8
2004	67.8	14.16	4.4
20-YEAR ANNUALIZED RETURN		7.38	

During Fiscal Year 2023, net transfers of approximately $4.292 billion were paid from the Common Pension Funds to the pension plans. Net transfers to pay pension fund liabilities were: $7.50 million to the Judicial Retirement System, $1,131.96 million to the Police & Firemen's Retirement System, $1,700.91 million to the Public Employees' Retirement System, $37.44 million to the State Police Retirement System and $1,414.19 million to the Teachers' Pension & Annuity Fund. Included within the transfers are contributions totaling $1.167 billion 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: $14.01 million for the Police & Firemen's Retirement System, $245.30 million for the Public Employees' Retirement System, and $907.69 million for the Teachers' Pension & Annuity Fund. Net transfers are the difference between total contributions to the pension 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, 2023 VS. TARGETED ASSET ALLOCATION

Asset Class	Actual Allocation %	Target Allocation %	Difference %	Actual Allocation ($ millions)
U.S. Equity	27.50	27.00	0.50	25,633.12
Non-U.S. Developed Markets Equity	13.02	13.50	(0.48)	12,134.11
Emerging Markets Equity	4.95	5.50	(0.55)	4,615.58
Private Equity	11.95	13.00	(1.05)	11,139.08
Equity Oriented Hedge Funds	0.00	-	0.00	0.62
GLOBAL GROWTH	57.42	59.00	(1.58)	53,522.51
Real Estate	5.68	8.00	(2.32)	5,290.68
Real Assets	2.40	3.00	(0.60)	2,236.89
REAL RETURN	8.08	11.00	(2.92)	7,527.57
High Yield	3.45	4.00	(0.55)	3,216.91
Private Credit	7.14	8.00	(0.86)	6,654.21
Investment Grade Credit	6.80	7.00	(0.20)	6,337.42
INCOME	17.39	19.00	(1.61)	16,208.54
Cash Equivalents	8.43	4.00	4.43	7,853.42
U.S. Treasuries	3.79	4.00	(0.21)	3,529.87
Risk Mitigation Strategies	2.81	3.00	(0.19)	2,618.44
DEFENSIVE	15.02	11.00	4.02	14,001.73
Other	0.13	-	0.13	121.27
Police & Fire Retirement System Mortgage Program[1]	1.96	-	1.96	1,831.57
TOTAL PENSION FUND	100.00	100.00	0.00	93,213.19

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.

Actual allocation as of June 30, 2023 as compared to actual allocation as of June 30, 2022 reflect an increase of 2.32% to U.S. Equity, 1.00% to High Yield and 0.89% to Non-U.S. Developed Markets Equity. However, actual allocation for the same period declined 0.89% for Investment Grade Credit, 0.82% for U. S. Treasury, 0.69% for Real Estate and 0.68% for Private Equity. Furthermore, Cash Equivalents saw a decrease of 0.64%, while allocation to Private Credit and Real Assets declined 0.27% and 0.21%, respectively.

A comparison of actual allocations as of June 30, 2023 as compared to the target allocation on the same date shows most asset classes were underweight their long-term target allocation. Real Estate was underweight 2.32%, Private Equity by 1.05%, Private Credit was below its target by 0.86%, Real Assets by 0.60%, Emerging Markets Equity was underweight 0.55% and High Yield by 0.55%, Additionally, Non-U.S. Developed Markets Equity was underweight 0.48% its target allocation while allocations to U.S. Treasuries and Risk Mitigation Strategies were underweight 0.21% and 0.19%, respectively.

TARGETED ASSET ALLOCATION AND ALLOWABLE RANGES – EFFECTIVE OCTOBER 1, 2023

Asset Class	Target	Allowable Ranges[1]
U.S. Equity	28.00%	22-32%
Non-U.S. Developed Markets Equity	12.75%	10-14 %
International Small Cap Equity	1.25%	0-3%
Emerging Markets Equity	5.50%	3-8%
Private Equity	13.00%	10-16%
GLOBAL GROWTH	60.50%	
Real Estate	8.00%	5-11%
Real Assets	3.00%	1-5%
REAL RETURN	11.00%	
High Yield	4.50%	1–6%
Private Credit	8.00%	5-11%
Investment Grade Credit	7.00%	5-11%
INCOME	19.50%	
Cash Equivalents	2.00%	1-7%
US Treasuries	4.00%	3-8%
Risk Mitigation Strategies	3.00%	1-6%
DEFENSIVE	9.00%	

[1] Investments are subject to additional limitations as set forth in the Council Regulations

As part of a periodic asset allocation review process, the Council adopted a new investment plan including new targeted and allowable asset allocation ranges during its July 2023 meeting. Changes included a decrease of 2% to Cash Equivalents taking that target allocation from 4% to 2%, while increasing 1% to U.S. Equity taking the target from 27% to 28%. Additionally, minor changes were made to the allocation target for High Yield and Non-U.S. Developed Market Equity. For better clarity and benchmarking, a new asset allocation line item of International Small Cap Equity was added where previously these allocations were grouped within Non-U.S. Developed Markets Equity. The new investment plan became effective on October 1, 2023.

MARKET OVERVIEW FOR FISCAL YEAR 2023

TOTAL PENSION FUND

With a backdrop of rising prices, runaway inflation and increasing geopolitical concerns, the year was not without its challenges. Despite challenges, the U.S. economy and consumer sentiment remained resilient, while the Federal Reserve confronted an overheated economy and rising inflation with interest rate hikes. Several other regions around the world also saw central banks respond to rising inflation by raising rates. Irrespective of the less than favorable backdrop, many developed equity markets ended the fiscal year on a strong note.

The MSCI All Country World Index delivered over 16% return for the 12 months ended June 30, 2023. Similarly, the MSCI USA and EAFE Indices closed with a performance close to 20% and 19%, respectively. Growth was in favor over value as positive sentiment around technology names remained consistently strong during the year. Following a strong COVID-19 economic recovery, corporate and consumer balance sheets were relatively strong, resulting in a pattern of strong buying on market dips as well as share buybacks. However, economic and market strength was not similar across the board due to emerging markets remaining challenged as demonstrated by the MSCI Emerging Markets Index closing the fiscal year with a return of only 1.75%. A major drag within emerging markets was the slow economic recovery in China which underperformed during the year as it waits to see its economic engine fully restart post COVID-19.

Fixed income markets were mixed with the Bloomberg Barclays U.S. Treasury and Aggregate Indices ending the fiscal year in slightly negative territory, while high yield closed with strong performance with the Bloomberg Barclays U.S. High Yield Index over 9% for year ended June 30, 2023. Accompanying rising interest rates, real estate activity in general slowed down, while concerns heightened surrounding commercial real estate and specifically, office and retail in the U.S.

The Pension Fund portfolio was well diversified with investments across several public and private market assets classes allowing it to deliver strong performance for the fiscal year. Earlier in the year, exposure to public equities was reduced from an overweight posture, resulting in actual allocations to both, public equities and public fixed income being maintained relatively close to their target allocations. Within private market asset classes, actual allocations to private equity, private credit, real estate, real assets and risk mitigation strategies were below each of their long-term allocation targets. This enabled the Pension Fund portfolio to avoid the “denominator effect” and thereby prevented a need to sell assets at a discount. Cash raised earlier in the year from a reduction of market exposure as well as employer contributions received during the year was invested in cash equivalent securities, allowing the portfolio to benefit from higher interest rates. Return on cash equivalents was 3.66% (CMF) for the year as rates continued to increase throughout the 12-month period ended June 30, 2023. Cash equivalents as an asset class was significantly overweight at 8.43% as compared to its long-term target of 4%.

The Pension Fund portfolio benefited from stellar performance in several asset classes, with U.S. equity delivering the highest return within the portfolio at 19.10%, while non-U.S. developed markets were not too far behind, closing the fiscal year with 16.89%. Both high yield and private credit returned over 9.00%, while emerging markets and private equity provided 6.75% and 5.00%, respectively. The remaining other asset classes in the portfolio were also positive for the year, albeit to a lesser degree as compared to those listed above. The two exceptions to this were returns from real estate and U.S. Treasuries which closed the fiscal year generating a return of –3.58% and –1.91%, respectively. All in all, the outcome of the Pension Fund Portfolio providing a net return of 9.06% allowed it to exceed its long-term assumed rate of return of 7% while at the same time, holding a meaningful amount in cash to be utilized in the future in order to take advantage of new opportunities.

GLOBAL EQUITY MARKETS

Fiscal year 2023 commenced with global markets in a volatile state, as central banks across the world were engaged in raising interest rates to combat inflation.

During the fiscal first quarter ending September 2022, Developed Markets fell -6.19% as the tightening policies of the major banks – the Federal Reserve, the ECB and the Bank of England – added to the uncertainty from Ukraine and Russia tension and the political leadership turmoil in the United Kingdom. Although the Bank of Japan maintained its loose monetary policy, this otherwise favorable situation for equities did not offset a –7.67% decline for the market, a return for the quarter that included the shocking assassination of the former Prime Minister.

The Emerging Markets tumbled -11.57% for the fiscal first quarter, underperforming Developed equities, as the economic struggles of its largest market - China – continued to weigh on returns.

A rebound in markets took hold in October 2022 of the fiscal second quarter and continued through the end of the fiscal year, fueled by the perception that central banks were moving closer to implementing interest rate cuts. Initially, between the October lows and December 2022, gains by Developed Europe 21.41% and Japan 14.17% outperformed the U.S. Market 7.35% as better economic data from the two regions bolstered returns.

But as the second half of the fiscal year unfolded in January 2023, optimism for AI-related stocks fostered a significant narrow concentration of U.S. equities that underpinned a strong market performance. Consequently, the U.S. Market experienced a 17.13% rise versus 11.29% for the Non-U.S. Developed Markets and 4.89% for the Emerging Markets from January 2023 through the June 2023 fiscal year end. This period of positive return momentum offset the earlier losses of the fiscal first quarter, resulting in an overall 16.53% rise for the global equity markets to close out fiscal year 2023.

Note: All market returns reflect performances of the respective MSCI Total Return Gross and Net USD indices.

FIXED INCOME MARKETS

Fixed income investments returns were varied in the fiscal year 2023 due to the 425 basis points of rate increases implemented by the Federal Reserve over the period. Duration exposure was the main reason for negative or underperformance while credit quality exposure was the main reason for positive or outperformance in the fiscal year. Specifically, lower quality credit was the best performer within fixed income as the high carry and low duration were the major factors contributing to the return. Conversely, the highest quality and longest duration (i.e. 30-year treasury bonds) bonds saw the most negative impact from the rising rate environment. The Bloomberg Barclays U.S. Aggregate Bond Index, a broad measure of the U.S. fixed income market, declined 0.94% during Fiscal Year 2023.

Within fixed income, U.S. Treasuries slightly underperformed the overall Aggregate index due to the slightly longer duration exposure when compared to the Aggregate. The Bloomberg Barclays U.S. Corporate Index, a broad measure of investment grade corporate bonds returned 1.55% while the Bloomberg High Yield Index returned 9.06%. High yield bonds were the standout within fixed income as credit spreads moved tighter during the fiscal year and the lower duration of high yield insulated the asset class from the rate move impact.

PRIVATE EQUITY

The decline in public equity markets from last year led to a denominator effect, resulting in a general slowdown in overall private equity fundraising. Secondary fundraising however, has been particularly strong in 2023, with total capital raised in the first half of the year, surpassing total secondary fundraising for 2022. For the past decade, private equity has benefited from an environment of strong growth and low interest rates; the model will need to adapt given the tougher macroeconomic conditions and higher interest rates for longer environment causing market crowding, timelines for raising capital to extend, and various managers falling short of fundraise targets. Deal activity was depressed in the first half of 2023 but may pick up in the second half of the year as both inflation and interest rates stabilize and pressure continues to build for GPs to generate liquidity. The IPO exit window remained largely closed in the first half of 2023, though activity may pick up in the second half of 2023 with several high-profile companies announcing their intent to go public.

PRIVATE CREDIT

During a year with volatile public equity and bond markets, Private Credit showed it is an asset class that can achieve consistent and attractive risk-adjusted returns as a confluence of factors brought attention to the asset class. Turmoil in the banking sector, rising interest rates, recession fears, and geopolitical events put the public leveraged loan and high yield bond markets under significant pressure. As banks and traditional lenders retreated from the credit markets, private lenders filled the void. Additionally, retail investors took note of the steady returns and significant capital flowed into the Private Credit funds.

Private Credit lenders in the new environment had strong demand for their capital and were able to increase the price accordingly. Base rates, typically SOFR (Secured Overnight Finance Rate), increased to more than 5%. This base rate increase coupled with a spread increase from ~550bps to ~650bps, combined to reward investors with equity like returns in senior secured loans. For the year ended June 2023, the Cliffwater Direct Lending Index had a total return for 9.69%.

REAL ESTATE

The National Council of Real Estate Investment Fiduciaries (NCREIF) Open-End Diversified Core Equity (ODCE) Index, a broad measure of the US private real estate fund market, generated a –3.91% return. The real estate benchmark reflects the lagging impact of Federal Reserve action on valuation adjustments. Rising borrowing rates and pullback from traditional real estate lenders has simultaneously resulted in reduced transaction activity to validate appraisals and opened opportunities for non-traditional lenders to earn attractive risk-adjusted returns on select loans. Writedowns in the office sector were the most significant negative return driver. The travel and leisure sector was reported to be the strongest property type with the benefit of continued post-COVID recovery. Fundamentals for industrial properties remain strong due to the demand for last-mile logistics as well as the impetus of re-shoring and near-shoring on supply chains. The outlook for multifamily and other residential property types remains positive due to the shortage of housing units; however, rental growth is slowing in some markets.

REAL ASSETS

Amidst a choppy macroeconomic backdrop, Infrastructure continued to mostly display return resiliency albeit with lower investment activity across underlying sectors and geographies. The Cambridge Associates Natural Resources/Infrastructure Index returned 7.30% LTM as of June 30, 2023. Gains for the 12 months ending June 2023 were largely driven by Infrastructure within the benchmark, which accounts for 52.46% of the index. The Upstream Energy & Royalties component of the Index, which was the strongest performing for the same period last year, returned –0.92% from July 1, 2022 through June 30, 2023. The United States, which represents approximately 67.33% of the Index, returned 6.55% LTM as of June 30, 2023.

PENSION FUND RETURN VS. BENCHMARK

	Annualized Returns (%)					
	FY23	3 Years	5 Years	10 Years	20 Years	25 Years
Pension Fund	9.06	8.92	6.80	7.51	7.38	6.29
Pension Fund Benchmark[1]	8.43	9.40	7.86	7.92	7.12	*

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

- During Fiscal Year 2023, the Pension Fund returned 9.06% versus a benchmark of 8.43%. The outperformance of 0.63% was generated by both, public and private market asset classes. In spite of volatile market conditions, the Pension Fund's public equities portfolio was able to deliver stellar returns with the U.S. Equity allocation producing 19.10%, while Non-U.S. Developed Market Equity and Emerging Market Equity generated 16.89% and 6.75%, respectively. In fixed income, the Pension Fund's High Yield and Investment Grade Credit portfolios closed the fiscal year with 9.04% and 0.44% return, respectively. While the U.S. Treasuries portfolio ended in slightly negative territory, with a return of -1.91%, the portfolio outperformed its benchmark by 0.22%.

- The Pension Fund also benefited from positive performance in private market asset classes with most allocations to this space delivering positive returns. Private Credit was the best performing private market asset class returning 9.01%, followed by Private Equity, Risk Mitigation Strategies and Real Assets returning 5.00%, 3.30%, and 2.65%, respectively. Real Estate was the only asset class within the Pension Fund's private market asset class portfolio to produce negative performance with a return of -3.58%.

U.S. EQUITY HIGHLIGHTS OF FISCAL YEAR 2023

	Annualized Returns (%)			
	FY23	3 Years	5 Years	10 Years
U.S. Equity Only (Ex Cash and hedges)	19.10	14.06	11.16	11.84
Policy Benchmark	19.20	14.09	11.69	12.54

- For fiscal year 2023, the Total U.S. Equity Portfolio[1] returned 19.10% versus 19.20% for the MSCI USA IMI benchmark, an underperformance of -10 basis points.

- The largest component – the Passive Portfolio – returned 19.12% versus 19.20% for the MSCI USA IMI benchmark, an underperformance of –8 basis points.

- The uncertainty of both the Federal Reserve's actions to combat inflation and the ramifications of rising interest rates resulted in shifting economic narratives and notable changes in U.S. Market dynamics over the fiscal year.

- During the fiscal first quarter ending September 2022, the U.S. Market returned -4.70%, reflecting fears of a hard economic landing. This narrative began to reverse in October, as a decline in inflation and relatively strong economic data led to the market embracing the view of the Federal Reserve slowing its pace of policy tightening. Subsequently, the market embarked on a rally that gained momentum at the start of 2023, fueled by an optimistic outlook for a narrow concentration of AI-related, mega-cap technology stocks (the "Magnificent 7"). These securities comprised the largest market cap weighted components of the U.S. Market and dominated the risk and strong performance for the period January 2023 through the end of the fiscal year in June 2023. This was evidenced by the 17.13% return of the market-cap weighted U.S. market versus 8.76% for the equal-weighted index over the 6-month period.

- The U.S. Equity Portfolio is primarily passively managed to closely track the risk and return profile of the benchmark, using a quantitative, optimization methodology. The Portfolio is aligned to the benchmark weighting of the mega-cap securities, but is deliberately underweight small cap. Although this positioning was correct in that small cap underperformed the broader benchmark by -419 basis points, the Portfolio contained certain securities within the space that significantly contributed to the –8 basis points in negative excess return for the fiscal year.

- Consistent with the passive strategy, the U.S. Equity Portfolio remained broadly diversified by economic sector, with over 1,500 publicly traded stocks as of June 30, 2023.

1. The Total Portfolio is comprised largely of a passively managed component and two remaining legacy positions prior to the implementation of the passive strategy.

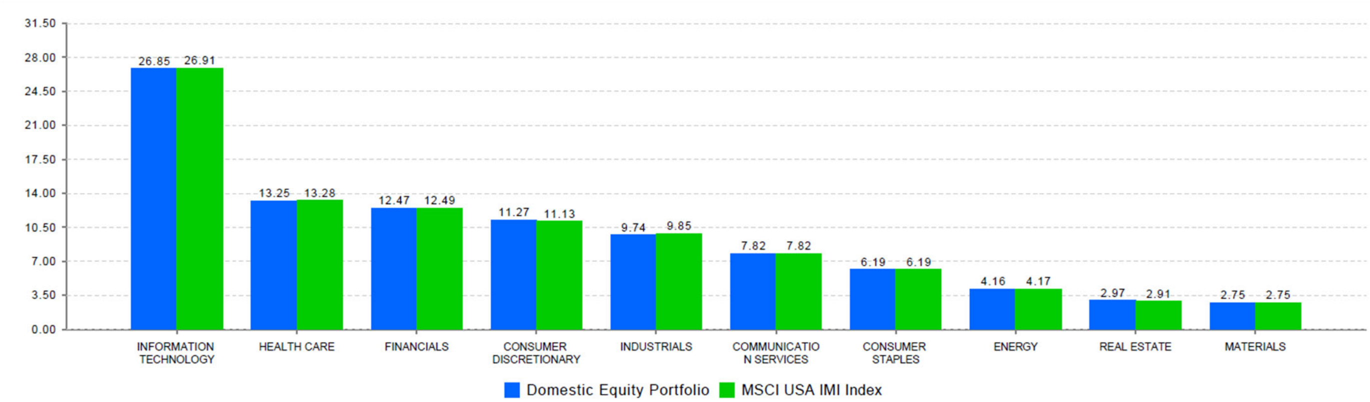
Note: "U.S. Market" reflects the performance of the MSCI USA Gross Total Return index.

The top 10 holdings (including related receivables) in the Total U.S. Equity portfolio represent 26.06% of the Portfolio.

TOP HOLDINGS IN U.S. EQUITY PORTFOLIO AS OF JUNE 30, 2023*

Security Name	% of Portfolio
APPLE INC	7.03
MICROSOFT CORP	5.52
AMAZON.COM INC	2.76
NVIDIA CORP	2.40
TESLA INC	1.71
ALPHABET INC CL A	1.63
ALPHABET INC CL C	1.49
META PLATFORMS INC CLASS A	1.46
UNITEDHEALTH GROUP INC	1.03
BERKSHIRE HATHAWAY INC CL B	1.02

SELECT SECTOR WEIGHTINGS OF US EQUITY PORTFOLIO vs. BENCHMARK INDEX AS OF JUNE 30, 2023 (%) **



*Holdings include accruals
**Index sector weightings reflect the calculations of State Street and may differ from those of MSCI

INTERNATIONAL EQUITY HIGHLIGHTS OF FISCAL YEAR 2023

	Annualized Returns (%)			
	FY23	3 Years	5 Years	10 Years
International Equity with Cash, Hedges, Miscellaneous	13.94	7.92	4.08	4.82
Custom International Equity Markets Benchmark[1]	12.73	7.46	3.75	4.82
MSCI All Country World Index (ex U.S.)	12.72	7.22	3.52	4.75
Non-U.S. Developed Market Equity Portfolio	16.89	9.02	4.68	5.67
Custom International Developed Markets Benchmark[1]	17.16	9.20	4.53	5.38
Emerging Market Equity Portfolio	6.75	4.60	2.23	*
Custom International Emerging Markets Benchmark[1]	1.61	2.23	0.98	*

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.
*Return not available for 10-year period.

- The Total International Equity Portfolio is broadly diversified, with investments in approximately 2,700 publicly traded stocks across more than 50 countries in both the Non-U.S. Developed Markets and Emerging Markets. The Non-U.S. Developed Market Equity (DM) portfolio is primarily managed passively, but includes allocations to actively managed small cap equities, as well as opportunistic Exchange Traded Fund (ETF) positions. The Emerging Market Equity (EM) portfolio includes both passively and actively managed strategies, in addition to opportunistic ETF positions.

- During fiscal year 2023, the Total International Equity Portfolio returned 13.94% versus 12.73% for the benchmark, outperforming by +122 basis points. The strategies within the allocation to Emerging Markets resulted in a strong performance, causing this portfolio to be the largest contributor to the excess return.

- The Non-U.S. Developed Market Equity (DM) portfolio returned 16.89% versus 17.16% for the benchmark, underperforming its benchmark by -27 basis points. The DM portfolio is primarily comprised of:
  - A large/mid cap EAFE+Canada portfolio, which is passively managed using a quantitative optimization methodology to achieve certain risk objectives. This portfolio returned 17.63% versus 17.16% for its respective benchmark, an outperformance of +47 basis points.
  - An International Small Cap portfolio, which is a 9.3% off-benchmark allocation whose performance is measured against the DM large/mid cap benchmark. This portfolio returned 9.97% versus 10.94% for the DM benchmark, a performance which reflected a challenging market environment for the overall small cap asset class.

- The –97 basis point underperformance of the Small Cap portfolio was the primary contributor to the DM portfolio's -27 basis points in excess return for the fiscal year.

- The Emerging Market Equity (EM) portfolio outperformed its benchmark by 514 basis points, returning 6.75% versus 1.61% respectively. Within the EM portfolio, positive security selection and diversified allocation across style strategies allowed for the strong outperformance. As an asset class[2], EM underperformed the U.S. 19.57% and Non-U.S. Developed Markets 17.41% for the fiscal year, impacted primarily by the economic difficulties of China.

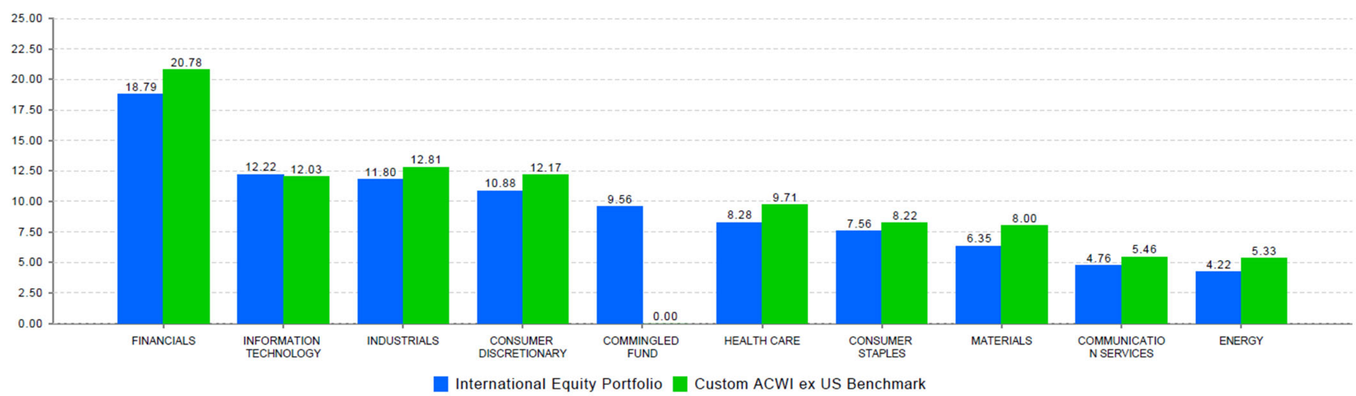
2 Asset Classes US and Non-U.S. Developed Markets reflect the performance of the respective MSCI USA Total Return Gross and Total Return Net EAFE+Canada USD indices.

The top 10 holdings (including related receivables) in the International Equity Portfolio represent 14.80% of the total Portfolio.

TOP HOLDINGS IN INTERNATIONAL EQUITY PORTFOLIO AS OF JUNE 30, 2023*

Security Name	% of Portfolio
ISHARES CORE MSCI EAFE ETF	3.83
ISHARES MSCI EAFE SMALL CAP ETF	1.85
ISHARES MSCI INDIA ETF	1.45
TAIWAN SEMICONDUCTOR SP ADR	1.30
NESTLE SA REG	1.20
SAMSUNG ELECTRONICS CO LTD	1.17
ASML HOLDING NV	1.04
TENCENT HOLDINGS LTD	1.03
ISHARES CORE MSCI EMERGING MARKETS	0.96
NOVO NORDISK A/S B	0.95

SELECT SECTOR WEIGHTINGS OF INTERNATIONAL EQUITY PORTFOLIO vs. BENCHMARK INDEX AS OF JUNE 30, 2023 (%)**



*Holdings include accruals

**Index sector weightings reflect the calculations of State Street

FIXED INCOME HIGHLIGHTS OF FISCAL YEAR 2023

	Annualized Returns (%)			
	FY23	3 Years	5 Years	10 Years
Fixed Income	1.57	-3.19	1.65	*
Fixed Income Blended Benchmark	1.43	-3.05	1.51	*
U.S. Treasuries	-1.91	-4.72	0.43	0.48
Custom Government Benchmark	-2.13	-4.80	0.44	1.12
Investment Grade Credit	0.44	-4.07	1.42	2.27
Custom Investment Grade Credit Benchmark	0.40	-3.93	1.30	2.09
High Yield	9.04	3.37	3.16	*
Custom High Yield Benchmark	9.07	3.12	3.34	*

*Return not available for 10-year period.

- The Fixed Income portfolio is comprised of the U.S. Treasuries portfolio, the Investment Grade Credit portfolio, and the Public High Yield portfolio. The Investment Grade and High Yield portfolios are broadly diversified across economic sectors.
- During the fiscal year, the Fixed Income Portfolio returned 1.57% versus 1.43% for the benchmark. This outperformance was due to the relative performance coming from the Treasury and Investment Grade sectors. Absolute returns were spurred by High Yield.
- Interest rates rose sharply in the fiscal year which caused weak returns for treasuries, especially long maturity treasuries. Low quality bonds outperformed as credit spreads moved tighter.
- Within the Fixed Income portfolio:
    - The U.S. Treasuries portfolio outperformance could be attributed to the portfolio taking tactical duration positioning relative to the benchmark during several periods throughout the year.
    - The Investment Grade portfolio had slight relative outperformance as its credit spreads tightened more than the benchmark. The portfolio benefited from having a slightly short duration position in a rising interest rate environment compared to the benchmark. Credit spreads tightening in the fourth quarter was also a key driver of performance. The portfolio continued to exhibit solid long-term relative performance.
    - The High Yield portfolio performed quite well, posting strong absolute returns and significantly outpacing all other fixed income asset classes, The key driver of very slight relative underperformance of returns compared to the benchmark was the under-performance of the internally managed ETF portfolio as well as outperformance by lower quality (CCC and low single B) of which the high yield portfolio was underweight during most of the fiscal year.

PRIVATE EQUITY HIGHLIGHTS OF FISCAL YEAR 2023

	Annualized Returns (%)			
	FY23	3 Years	5 Years	10 Years
Private Equity	5.00	18.12	12.84	14.57
Custom Cambridge Associates Blended Benchmark[1]	-1.42	22.02	15.55	14.58

[1]Benchmark returns are 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, 2023, the Private Equity portfolio had a current market value of $11.13 billion and consisted of 131 commingled funds or separate account vehicles. The Division closed on approximately $1.1 billion to eight Private Equity partnerships during Fiscal Year 2023. The Private Equity portfolio generated $379.2 million net cash flow during Fiscal Year 2023.
- The Private Equity portfolio, similar to other large institutional US pensions, is broadly diversified across strategy, sector, vintage year, manager, and geography. Private equity investment time horizons are typically 10 to 12 years.
- During Fiscal Year 2023, the Private Equity portfolio returned 5.00%, versus -1.42% for the Custom Cambridge Associates Blended Benchmark. A key driver of difference in performance is a one-quarter reporting lag with benchmark performance presented during April 1, 2022 to March 31, 2023 while Private Equity portfolio returns are from July 1, 2022 to June 30, 2023. Despite a slower exit environment, the Private Equity Portfolio remained cash flow positive with distributions outpacing contributions in FY 2023.
- The Private Equity portfolio's vintage distribution by net asset value is relatively concentrated, with approximately 57.29% of value in 2012 – 2017 vintage funds. In comparison, approximately 19.19% of net asset value is in in 2005 – 2011 vintage funds, while approximately 23.52% is represented in 2018 – 2022 vintage funds. Approximately 0.89% of value is in 2022 and 2023 vintage funds.
- The Private Equity portfolio's largest exposure by strategy is currently Large Buyout at 33.64%, followed by Small/Medium Buyout at 30.45%, Growth and Venture at 17.15%, Distressed Debt at 9.49% and Other at 9.27%.
- The Private Equity portfolio is well diversified in terms of industry with the largest exposures being information technology, consumer discretionary, healthcare, industrials, communications services and financials. Additionally, the Private Equity portfolio has exposure to consumer staples, energy, materials, real estate and utilities.
- Buyouts and Growth Capital, which have both positively contributed to inception to date performance of the Private Equity portfolio, experienced weaker returns over the past fiscal year, but have begun to trend upward more recently. Over the past twelve months, Mezzanine has anomalously experienced strong performance given the current environment.

PRIVATE CREDIT HIGHLIGHTS OF FISCAL YEAR 2023

	Annualized Returns (%)			
	FY23	3 Years	5 Years	10 Years
Private Credit[1]	9.01	10.88	6.81	8.54
Custom Benchmark[2]	1.05	3.93	4.12	5.02

[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.
*Return not available for 10-year period.

- As of June 30, 2023, the Private Credit portfolio had a market value of $6.65 billion, or 7.1% allocation of the portfolio. The allocation consists of investments in more than 25 private credit commingled funds or separate account vehicles, a portfolio of legacy hedge fund strategies, as well as a publicly traded Business Development Company (BDC). The BDC is generally comprised of direct lending investments.
- 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 to 10 years.
- During Fiscal Year 2023, the Private Credit portfolio returned 9.01% versus the 1.05% for the Custom Benchmark. The Private Credit portfolio outperformed the Custom Benchmark due to timing issues as well as the fact that the portfolio is made up of mostly floating rate-based products while the benchmark is a fixed rate product.
- The Division closed on approximately $2.3 billion to nine Private Credit funds specializing in corporate direct lending and opportunistic credit during Fiscal Year 2023. Additionally, portfolio positioning changes included the strategic reduction to structured credit, increasing European exposure, and reducing exposure to legacy hedge fund positions.
- Looking forward to 2024, the Division continues to view Private Credit as an important component of the overall portfolio. Given the increase in base rates and wider spreads during 2023 and 2022, the risk adjusted return profile of the portfolio is compelling.

REAL ESTATE HIGHLIGHTS OF FISCAL YEAR 2023

	Annualized Returns (%)			
	FY23	3 Years	5 Years	10 Years
Real Estate	-3.58	9.20	6.45	9.65
Real Estate Index[1]	-3.91	7.46	6.56	8.47

[1]Benchmark returns are reported on a one-quarter lag. The index is the NCREIF Open End Diversified Core Equity (ODCE).

- As of June 30, 2023, the Real Estate portfolio had a market value of $5.3 billion and consisted of equity and debt-related investments across 54 commingled funds or separate account vehicles, as well as investments in publicly traded Real Estate Investment Trusts (REITs). During Fiscal Year 2023, the Division closed on $300 million to one Real Estate fund investment.
- The Real Estate portfolio is diversified across strategy, sector, vintage year, manager, and geography. 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 to 12 years.
- The Real Estate portfolio is predominately comprised of private real estate funds, including both open-end core and closed-end non-core funds, with a concentration in non-core strategies. The private Real Estate portfolio is also geographically diversified with global real estate exposure comprising approximately 25% of the private real estate portfolio. The benchmark index (NCREIF ODCE) is exclusively comprised of U.S. open-end core funds.
- The overall Real Estate portfolio was impacted by the market disruption and valuation adjustments in the wake of Federal Reserve action. Public REITs comprise 23% of the real estate portfolio and public market volatility further impacted performance. During Fiscal Year 2023, the Real Estate portfolio returned –3.58% versus –3.91% for the NCFEIF ODCE benchmark
- The Real Estate portfolio outperformed the benchmark in Fiscal Year 2023 as well as over the 3- and 10-year time horizons. The portfolio's long-term outperformance is driven by a heavier weight to non-core strategies.
- Since the start of Fiscal Year 2013 the Real Estate portfolio has been cash flow positive. During Fiscal Year 2023, the Real Estate portfolio generated net distributions of $305 million despite a volatile macro environment.

REAL ASSETS HIGHLIGHTS OF FISCAL YEAR 2023

		Annualized Returns (%)		
	FY23	3 Years	5 Years	10 Years
Real Assets	2.65	15.74	4.67	3.45
Custom Cambridge Associates Real Asset Benchmark[1]	7.75	18.55	5.98	3.26

[1]Benchmark returns are reported on a one-quarter lag. Effective October 1, 2019, the benchmark is a custom blend of the Cambridge Associates Natural Resources and Cambridge Associates Infrastructure Indexes.

- As of June 30, 2023, the Real Assets portfolio had a market value of $2.3 billion and consisted of 20 debt and equity investments consummated via commingled funds, co-investments and separate accounts. During Fiscal Year 2023, the Division closed on one $75 million co-investment sidecar vehicle.

- The Real Assets portfolio is generally diversified across strategy, sector, vintage year, manager, and geography. However, a significant portion of the legacy portfolio continues to be invested in select vintages and into the conventional energy and upstream metals & mining strategies/sectors. Investment agreements specify the investment horizon, with a wide range of possible time periods. The typical investment horizon identified in real assets investment agreements is 10 to 12 years.

- During Fiscal Year 2023, the Real Assets portfolio returned 2.65% versus the 7.75% custom Cambridge Associates benchmark. The key drivers of the difference in FY performance between the asset class and the benchmark are the reporting lag between the asset class and the benchmark, the increasing mismatch between the portfolio and the benchmark, and misclassified investments within the portfolio. The portfolio outperformed the benchmark over the 10-year time horizon and underperformed the benchmark over the 3-year and 5-year time horizon, as well as during Fiscal Year 2023.

- Real Assets achieved some outperformance from recent investment closings, however overall performance continues to be driven by Staff's efforts since January 2021 to clean up, actively manage in an institutional manner and turn around Real Assets which has been a legacy, underperforming asset class. Towards that, Staff continue their efforts in building out meaningful infrastructure/energy transition/renewables/sustainability investments instead of deploying capital to legacy conventional energy investments. In light of the Russia-Ukraine conflict, the new Israel-Hamas conflict, the percolating Venezuela-Guyana conflict, other geopolitical trends, as well as elevated inflation levels across the globe, natural resources markets continue to be volatile and have been a source of distributions when prices increase during limited windows. Real Assets delivered net cash flow (distributions less contributions) of $110 million in Fiscal Year 2023 despite overall private market challenges.

RISK MITIGATION STRATEGIES HIGHLIGHTS OF FISCAL YEAR 2023

	Annualized Returns (%)			
	FY23	3 Years	5 Years	10 Years
Risk Mitigation Strategies	3.30	7.26	5.67	3.96
T-Bill + 300 BPS	6.73	4.35	4.63	4.05

- As of June 30, 2023, the Risk Mitigation Strategies portfolio had a market value of $2.6 billion and consisted of investments in 11 limited partnerships. During the Fiscal Year 2023, the Risk Mitigation Strategies portfolio received $169 million of distributions as part of the ongoing restructuring plan for the strategy.
- The Risk Mitigation Strategies portfolio is comprised of limited partnership vehicles with a range of subscription terms. The Risk Mitigation Strategies 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 Risk Mitigation Strategies portfolio includes various investment strategies, including discretionary macro, systematic macro, relative value, and market neutral strategies.
- During Fiscal Year 2023, the Risk Mitigation Strategies portfolio returned 3.30% versus 6.73% for the U.S. Treasury-Bill 300 basis points benchmark, an underperformance of -343 basis points. The Risk Mitigation Strategies portfolio's relative underperformance was reflected as reversals of 2022 themes which led to choppy markets and led to losses in macro strategies. The portfolio outperformed the Benchmark across longer periods including 3- year and 5- year time periods.
- The Risk Mitigation Strategies portfolio protected capital and delivered uncorrelated returns during the market sell-off in the first part of the fiscal year 2023. During the fiscal year, in every month when global equities posted a negative return, the Risk Mitigation Strategies portfolio was positive and gained a total 1.77% while MSCI ACWI declined a total of -19.60% while the 10-year Treasuries declined 13.84% over those months. Over the fiscal year, the Risk Mitigation Strategies had a beta of 0.00 to the MSCI ACWI and 0.01 to the S&P 500 Index. Given the Risk Mitigation Strategies portfolio by design had no market exposure, it did not fully participate in the equity rally which took place beginning October 2022, however, it still delivered consistent positive returns.
- Key factors impacting relative performance included reversals of themes such as short equities, short bonds, and long commodities which performed well and led to strong gains in the prior fiscal year. This resulted in negative performance from macro strategies, specifically, macro-systematic funds which had losses from short positions in equities, while macro-discretionary funds maintained low levels of risk and did not generate meaningful positive returns. This was partially offset by strong performance from several fund of funds which had exposure to higher equity beta funds and outperformed the benchmark.
- The Division is continuing to evaluate the Risk Mitigation Strategies portfolio structure to improve downside protection by increasing convexity and at the same time, enhance liquidly and reduce fees for the overall program in the coming quarters.

CASH MANAGEMENT FUND

		Annualized Returns (%)[1]	
	FY23	3 Years	5 Years
Cash Mgt. Fund – State Participants	3.66	1.34	1.58
Cash Mgt. Fund – Non-State Participants	3.60	1.29	1.52
91 Day U.S. Treasury Bills (Daily)	3.59	1.27	1.55

[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, 2023, the net asset value of the Cash Management Fund was $39.0 billion.
- The CMF was primarily invested in U.S. Treasury and Agency obligations, highly-rated commercial paper, and other highly-rated government debt as of June 30, 2023.
- The CMF's yield rose in Fiscal Year 2023, primarily as a result of the Federal Reserve increasing short-term interest rates as inflation accelerated during the second half of the fiscal year.
- 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 HOLDINGS[1] AS OF JUNE 30, 2023

	Portfolio Holdings (%)	Portfolio Holdings ($ millions)
US TREASURY BILLS	87.27	34,014.7
COMMERCIAL PAPER	6.87	2.679.7
GOVERNMENT AGENCY	2.99	1,166.3
US TREASURY NOTES	2.87	1,117.6
STATE STREET STIF	0.00	0.1
TOTAL	100.00	38,978.4

[1]Excludes receivables and payables

ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG) AND SUSTAINABLE INVESTING

In 2018, the Council formally adopted its Environmental, Social, and Governance (ESG) Policy which, among other things, laid the foundation to address the growing risks to the Pension Fund from climate change and the ongoing transition to renewable energy. Since then, the Division has taken numerous steps to measure and manage ESG risks across its portfolios.

In Fiscal Year 2022, the Division of Investment developed Principles and Practices Regarding Climate Change as a framework to implement the Council's ESG Policy and to convey how the Division plans to address and manage climate-related risks and opportunities. The Sustainable Investing team continued to build off this framework in fiscal 2023 researching the energy transition underway across the global economy.

Throughout Fiscal Year 2023, the Division advanced its investment stewardship priorities, both through proxy voting and corporate engagement. The Division believes that active engagement produces the best financial outcomes for the Pension Fund. With respect to proxy voting, the Division focused on financial materiality and generally supported resolutions that improve corporate disclosure and accountability regarding financial, physical, or regulatory risks related to climate change and other issues.

In FY 2023 the Sustainable Investing Team completed reviews of the Pension Fund's largest fossil fuel holdings representing approximately $800 million in public market value at the fiscal year end. Each of these major energy firms is reporting at least Scopes 1 and 2 emissions and all have some level of emission reduction targets in place including Net Zero by 2050 goals. Further, each is investing to some degree in green fuels or technologies that will support the transition to a lower carbon economy.

Within Alternative Investments, Division staff completed their assessment of General Partner ESG integration efforts across the Pension Fund's private equity portfolio. Engagements were held with every core manager with the focus of driving positive financial outcomes through consideration of sustainability factors across their private market investments. ESG due diligence assessments have also been integrated across alternative investment processes.

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 $26.7 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 $364.7 million in management fees and expenses in Fiscal Year 2023 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 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 $25.9 million to advisers with respect to its emerging market equity, international small cap equity and high-yield fixed income portfolios in Fiscal Year 2023. Investments in these portfolios totaled $6.5 billion as of June 30, 2023.

Operating expenses for staff compensation, overhead and equipment were $16.5 million for the fiscal year and represent approximately 3.98% of fees and expenses or 0.01% of $125.6 billion in total assets under management.

Fees for consulting services, custodial banking, and legal services were $8.2 million for the fiscal year and represent approximately 1.97% of fees and expenses or 0.01% of $125.6 billion in total assets under management.

In total, costs to manage the portfolios were $415.3 million, or 0.33% of $125.6 billion in total assets under management. The following chart summarizes total fees and expenses for Fiscal Year 2023.

Fees & Expenses[1]	Fiscal Year Ended June 30, 2023 ($ millions)
Private Equity Funds	135.7
Private Credit Funds	91.2
Real Estate Funds	62.1
Hedge Funds	39.8
Real Asset Funds	35.9
SUBTOTAL	364.7
High-Yield, Small Cap and Emerging Market Advisers	25.9
Division Operations	16.5
Consulting Fees	4.3
Custodial Banking Fees	2.4
Legal Fees	1.5
TOTAL	415.3

[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 Common 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 2023 may have crystallized during Fiscal Year 2022. Similarly, certain portions of performance allocation that were realized during Fiscal Year 2023 may have crystallized at the close of calendar year 2022, following a longer-term period of generally strong investment returns.

The table below summarizes the performance allocation for the AIP for Fiscal Year 2023.

	Performance Allocation		
	Amount ($ Millions)	As % of Assets	As % of Gross Profit
Private Equity	186.6	1.70	21.75
Real Estate	55.7	1.30	-239.18
Private Credit	52.1	0.85	7.39
Hedge Funds	33.0	1.13	22.95
Real Assets	5.90	0.26	5.89

For Fiscal Year 2023, the AIP earned a net return of 4.21% and generated $1.086 billion of net profits. The AIP has been a significant driver of favorable returns for the total Pension Fund over longer-term periods. For the ten years ended June 30, 2023, the AIP has returned 8.55%, in line with the Total Pension Fund.

The table below summarizes the net returns and profits for the AIP for Fiscal Year 2023.

	Estimated Average Gross Assets ($ Millions)	Estimated Gross Profit (Loss) ($ Millions)	Estimated Net Profit (Loss) ($ Millions)	FY23 Net Return (%)
Private Equity	10,990.2	857.9	535.5	5.00
Private Credit	6,113.6	705.5	562.2	9.01
Real Estate	4,287.6	-23.3	-141.0	-3.58
Hedge Funds	2,920.3	143.7	70.9	3.30
Real Assets	2,257.1	100.6	58.8	2.65
TOTAL[1]	26,568.7	1,784.4	1,086.4	4.21

[1]Total may not equal sum of components due to rounding.

Performance allocations were $88.7 million lower in Fiscal Year 2023 versus Fiscal Year 2022 primarily due to reductions in performance allocations across Private Equity, Real Estate and Real Assets. Fees and expenses within the AIP were $58.1 million higher in Fiscal Year 2023 versus Fiscal Year 2023, driven by increased allocations across most asset classes.

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

	FY23 ($ Millions)	FY22 ($ Millions)	Year over Year Change ($ Millions)
Fees and Expenses	364.7	306.2	58.5
Performance Allocation	333.3	422.1	-88.7
Estimated Net Profit (Loss)	1,086.4	1,860.1	-773.8

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 five 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 AIP fund managers in connection with commitments made from January 1, 2018 through June 30, 2023 in Appendix 2 of this Annual Report.

COMMISSIONS

The Division incurred broker/dealer commission costs totaling $0.9 million for Fiscal Year 2023.

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

	Fiscal Year Ended June 30, 2023 ($)	Fiscal Year Ended June 30, 2022 ($)	Fiscal Year Ended June 30, 2021 ($)	Fiscal Year Ended June 30, 2020 ($)	Fiscal Year Ended June 30, 2019 ($)
Hedge Funds	39,789,358	38,959,925	29,276,827	33,669,770	53,588,989
Private Equity Funds	135,742,429	119,754,526	112,312,874	122,523,036	113,064,371
Real Estate Funds	62,060,250	49,853,370	48,172,669	66,423,957	57,870,196
Real Asset Funds	35,869,819	26,138,900	25,828,658	31,335,637	31,496,895
Opportunistic Funds[1]	0	839,556	5,970,979	5,775,580	11,770,080
Private Credit Funds	91,232,705	70,650,155	86,806,864	72,894,329	66,167,004
Division Operations and Internal Management[2,3]	50,642,624	51,028,173	47,352,620	37,108,258	38,333,573
Total Fees and Expenses:	415,337,185	357,224,605	355,721,490	369,730,567	372,291,108
Performance Allocation:					
Hedge Funds	32,967,950	39,805,064	50,463,416	32,538,336	28,913,464
Private Equity Funds	186,628,775	240,280,706	308,324,811	113,469,221	155,890,534
Real Estate Funds	55,683,838	70,545,786	52,013,106	40,496,797	20,247,890
Real Asset Funds	5,924,137	7,951,047	23,615,777	11,446,670	946,262
Opportunistic Funds[1]	0	209,799	2,946,274	0	0
Private Credit Funds	52,112,023	63,263,429	169,035,022	41,806,274	42,613,549
Total Performance Allocation:	333,316,723	422,055,831	606,398,405	239,757,298	248,611,700
Total Fees, Expenses and Performance Allocation:	748,653,908	779,280,436	962,119,896	609,487,864	620,902,808

[1]Opportunistic investments were transferred to Private Equity based on regulation changes.
[2]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.
[3]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, 2023 and the amounts of fees and expenses paid for Fiscal Year 2023.

Investment.	Commitment (Millions)	Annual Management Fee	Performance Fee/ Carried Interest	Fees and Expenses Paid	Performance Fees Paid
Aether Real Assets SONJ Fund, L.P Executed March 2018	$135	Years 1-5: 0.60% Years 6-12: 85% of prior year's fee Years 13-15: 0.1%	4.475% carried interest subject to 7% return.	$3,081,903	$0
Aermont IV (1) Executed October 2018	$111	1.50% of aggregate commitments stepping down to 1.7% of net invested capital during the post investment period.	20% carried interest subject to 9% return.	$1,950,571	$0
Ardian IV (2) Executed March 2020	$137	1.5% of total commitments during the investment period; 1.5% of total cost post investment period.	20% carried interest subject to a 8% return	$1,219,603	$0
ABF VII New Jersey S.L.P.(3) Executed July 2020	$56	No management fee.	No Performance Fee/No Carried Interest	$272,777	$0
Altaris Health Partners V Executed July 2020	$100	2% during the commitment period; thereafter 2.0% of an amount equal to the Limited Partner's share of the aggregate capital invested in portfolio investments upon expiration of the Investment Period.	20% carried interest subject to a 8% return.	$350,978	$0
American Industrial Partners VIII Executed May 2023	$150	2% on committed capital during the investment period;1.5% on contributed capital during the harvest period.	20% carried interest subject to a 8% hurdle	$374,326	$0
Blue Owl Diversified Lending 2020 Fund (6) f/k/a Owl Rock Diversified Lending 2020 Fund Executed August 2022	$350	1% of gross assets. No management fee on undrawn capital.	0% through 6/30/2025; thereafter 10% carried interest with a 6% preferred return.	$2,591,042	$0
Blue Owl Diversified Holdings LLC f/k/a Owl Rock Diversified Holdings LLC Executed August 2022	$0	0%	10% carried interest with a 6% preferred return through 6/20/2025, none thereafter.	$2,717,830	$0

Blue Owl Technology Corporation f/k/a Owl Rock Technology Corporation Executed November 2018	$100	Prior to Exchange Listing: 0.90% of gross assets above 200% asset coverage, plus 1.50% of unfunded capital commitments. After Exchange Listing: 1.50% of gross assets above 200% asset coverage, plus 1.0% of gross assets below 200% asset coverage.	17.5% prior to Exchange Listing subject to a 6% hurdle; 17.5% after Exchange Listing subject to a 6% hurdle.	$8,498,834	$1,409,676
Blueprint Cap L.P. 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	$3,514,069	$1,351,682
Brookfield Capital Partners V,L.P. Executed April 2019	$100	1.675 % during the commitment period; 1.425% in the post commitment period.	20% carried interest subject to a 8% return	$1,852,953	$508,605
Brookfield Global Transitions Fund -B, Executed June 2022	$300	1.15% on committed capital	20% carried interest subject to a 8% return	$5,545,154	$0
Brookfield Global Transitions Fund Co-Invest (N) Executed June 2022	$300	0%	No Performance Fee/No Carried Interest	$0	$0
CVC Capital Partners VIII (4) Executed June 2020	$108	During investment period: 1.425% of Total Commitment. After investment period: 1.25% of unreturned cost.	20% carried interest subject to a 8% return	$2,131,146	$0
CVC Capital Partners IX (5) Executed June 2023	$261	1.375% on committed capital	20% carried interest subject to a 6% hurdle	$0	$0
CVC Credit Partners EU DL II Co-Invest (7) Executed May 2021	$118	0.35% on Net Invested Capital.	No Performance Fee/No Carried Interest	$1,016,234	$0
CVC Credit Partners EU Direct Lending III, L.P.(8) Executed December 2021	$169	0.85% on invested capital.	12.5% carried interest subject to a 7% return.	$2,744,422	$1,737,069
CVC Credit Partners EU DL III Co-Invest (8) Executed July 2022	$169	0%	No Performance Fee/No Carried Interest	$2,345,459	
Divco West Fund V I-A Executed August 2020	$100	1.25% on Un-contributed Capital during the commitment period. 1.5% on invested capital after the commitment period.	20% carried interest subject to a 7% preferred return.	$1,489,431	$0
Eagle Point Defensive Income Fund NJ Executed December 2021	$120	0.43% on assets	10% carried interest subject to a 5% preferred return.	$913,545	$0

Eagle Point Defensive Income Fund US Executed September 2021	$55.3	0.94% on invested capital.	7.5 % carried interest subject to a 8% preferred return.	$643,556	$0
EQT Infrastructure V L.P. Executed October 2021	$160	1.5% on committed capital during the investment period, thereafter 1.5% on invested capital.	20% carried interest subject to a 6% return.	$3,292,995	$0
Excellere Capital Fund IV L.P. Executed October 2021	$100	2.0% on committed capital during the investment period, thereafter 2.0% on invested capital.	20% carried interest subject to a 8% return; 25% carried interest subject to a 2.0x net multiple on invested capital and a 8% return.	$961,409	$0
Exeter Core Industrial Club Fund III Executed June 2019	$100	0.90% on invested capital	15% carried interest subject to 8% return.	$979,446	$0
Glendon Opportunities Fund III Executed June 2023	$150	2% on invested capital during the investment period; 1.5% on invested capital during the harvest period.	20% carried interest with a 8% hurdle rate	$0	$0
Hammes Partners IV L.P. Executed March 2022	$65	1.5% on committed capital during the investment period, thereafter 1.5% on invested capital.	20% carried interest subject to 8% return.	$339,692	$0
Hellman & Friedman Capital Partners X Executed May 2021	$125	1.5% of committed capital in aggregate (0.375% management fee and 1.125% Management Profits Interest) stepping down upon the earlier of the end of the commitment period of activation of a subsequent fund to 1.25% of Remaining Cost of investments for the first two years; 1.00% for the following two years; and 0.75% thereafter.	20% carried interest	$2,092,658	$0
Homestead 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.	$1,567,058	$0
ICG Europe Fund VIII SCSp (9) Executed July 2022	$215	1.30% on committed capital during the investment period. 1.25% on invested capital post investment period.	20% carried interest subject to 8% return.	$5,962,489	$0
ICG Global Co-Investment E SCSp (10) Executed October 2022	$109	0%	No Performance Fee/No Carried Interest	$140,583	$0
IPI Partners II- A Executed March 2021	$150	1.425% on committed and invested capital	20% carried interest subject to a 7% return.	$1,908,693	$0
JLL Partners Fund VIII Executed February 2019	$200	2.0% of commitments during the Investment Period; thereafter, 1.5% of actively invested capital.	20% carried interest subject to 8% return.	$3,522,411	$0

Khosla Ventures Seed F Executed May 2023	$20	2.5% on committed capital.	30% incentive fee.	$34,427	$0
Khosla Venture VIII Executed May 2023	$80	2% on committed capital	30% incentive fee.	$68,227	$0
Khosla Opportunity II Executed May 2023	$100	1% on committed capital	20% incentive fee	$52,987	$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.	$968,646	$20,565
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.	$820,797	$0
Magenta Fund Ltd. Executed April 2021	$100	0.85% on invested capital.	No Performance Fee/No Carried Interest	$832,184	$0
NB/NJ Custom Fund III Executed April 2018	*$200*	0.10% on commitment during the investment period; 0.30% on actively invested capital.	10% carried interest subject to 8% return. 15% carried interest subject to 15% return.	$1,740,381	$0
NB/NJ Custom Fund III Tranche B Executed July 2021	$350	0.30% on invested capital/fair market value	7.5% carried interest subject to 1.5x net multiple on invested capital; 10% carried interest subject to a 1.8x net multiple on invested capital.	Included above	$0
NJ High Point VC Fund, L.P. Executed May 2023	$200	Year 1-5: 0.39% on invested capital; Year 6-9: 0.39% on the lower of NAV or invested capital; Thereafter 0.25% on lower of NAV or invested capital.	1% subject to a 1.75X Net MOIC; 3% subject to a 2.5x Net MOIC	$0	$0
Silver Lake Partners VI, L.P. Executed September 2020	$100	1.5% on committed capital during the investment period. 1.0% on invested capital after the investment period.	20% carried interest subject to a 8% hurdle.	$2,218,647	$0
Sixth Street Growth II Partners Executed October 2022	$130	1.25% on unused commitments and 1.5% on invested capital during the investment period; 1.5% on the lower of invested capital or NAV after the investment period.	20% carried interest subject to a 8% hurdle.	$2,333,009	$0

Sixth Street Mid-Stage Growth Executed October 2022	$50	1.25% on invested capital during the investment period; 1.25% on the lower of invested capital or NAV after the investment period.	20% carried interest subject to a 8% hurdle.	$227,557	$0
Stellex Capital Partners II, L.P Executed September 2020	$125	1.75% on committed capital during the investment period; 1.75% on invested capital thereafter.	20% carried interest subject to a 8% hurdle.	$2,333,009	$0
Stonepeak CPF Investment Partners Executed April 2023	$75	0%	No Performance Fee/No Carried Interest	$0	$0
Stonepeak Global Renewables Fund Executed January 2021	$100	1% of capital commitments during investment period; thereafter, 1% of net asset value.	10% carried interest subject to a 6% hurdle.	$1,720,450	$0
Stonepeak Infrastructure Fund IV L.P. Executed November 2021	$125	1.225% on committed capital until the third anniversary of the Fund's effective date on October 31, 2023. Thereafter the management fee resets to 1.35% on committed capital during the investment period and on net investment capital after the investment period ends.	20% carried interest subject to a 8% hurdle.	$350,978	$0
Strategic Value Special Situations Fund V L.P. Executed April 2021	$125	0.725% on commitment during the investment period until 50% of the capital has been called. Thereafter, 1.45% of commitments.	20% carried interest subject to a 8% hurdle.	$1,764,548	$0
Sycamore Partners III, L.P Executed January 2018	$150	2% per annum of commitments during the investment period, thereafter, 2% per annum of invested capital.	20% carried interest subject to 8% return.	$3,099,859	$0
TGM Apartment Partners II Executed January 2023	$300	0.75% on invested capital.	15% carried interest subject to 9% return.	$0	$0
The Rise Fund II Executed March 2019	$125	1.75% of capital commitments 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.	$1,494,612	$0
TPG Growth V, L.P Executed September 2020	$100	1.75% during the commitment period, 1.25% thereafter. 0.5% during any extensions	20% carried interest subject to 8% return.	$2,038,804	$0

TPG Real Estate Thematic Advantage Core-Plus JV, L.P. Executed January 2022	$150	0.7% on Net Asset Value	10% carried interest subject to a preferred return of 7%	$592,602	
TPG Real Estate Partners III LP Executed May 2018	$100	1.5% on first $50 million of invested capital; 1.25% on next $150 million. The management fee on committed but un-invested equity during the Commitment Period is 0.80%of the blended rate on invested equity.	20% carried interest subject to 8% net return.	$1,640,908	$572,318
TPG Rise Climate, L.P. Executed March 2022	$150	1.4% on committed capital during the commitment period, thereafter 1.25% on actively invested capital upon the expiration of the commitment period. 0.5% of actively invested capital during any extension period.	20% carried interest subject to 8% return.	$2,783,716	
TSG 8 L.P. Executed December 2018	$100	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 2.0x TVM	$1,949,295	$0
Vista Equity Partners VII Executed August 2018	$300	1.5% of commitments during the Investment Period; thereafter, 1.5% of net invested capital.	20% carried interest subject to 8% net return.	$3,879,687	$0
Vista Foundation Fund IV Executed February 2020	$100	2% of capital commitments during the Investment Period. 2% of the cost basis of investments, 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 distributions 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.	$2,280,579	$0
Warburg Pincus China Southeast Asia II Executed June 2019	$90	1.4% on commitments during the investment term; 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.	$1,574,864	$0

West Street NJ Private Credit Partners Executed December 2022	$500	.0.475% on gross assets	12% profit allocation with a 7% preferred return.	$1,701,061	$0
West Street NJ BSL Credit Partnership Executed May 2023	$1,000 (11)	0.22% on first $500 invested; 0.20% on balance above $500 million.	0%	$103,307	$0
Total	$9,653			$100,864,327	$5,599,915

1. Euro 100 Million Commitment made in October 2018 converted at 6/30/2023
2. Euro 125 Million Commitment made in March 2020 converted at 6/30/2023
3. Euro 50 Million Commitment made in July 2020 converted at 6/30/2023
4. Euro 100 Million Commitment made in June 2020 converted at 6/30/2023
5. Euro 250 Million Commitment made in June 2023 converted at 6/30/2023
6. Per the April 2022 SIC Notification, the prior $200 million commitment to Owl Rock Co-Investment was collapsed into this fund.
7. Euro 150 Million Commitment made in May 2021 converted at 6/30/2023
8. Euro 150 Million Commitment converted into US dollars at fund execution,
9. Euro 200 Million Commitment made in July 2022 converted at 6/30/2023
10. Euro 100 Million Commitment made in October 2022 converted at 6/30/2023
11. There is no set commitment amount, funding can be up to $1 billion