

ALASKA RETIREMENT MANAGEMENT BOARD

Invested Assets

June 30, 2023

(With Independent Auditors' Report Thereon)

ALASKA RETIREMENT MANAGEMENT BOARD

Invested Assets

June 30, 2023

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KPMG LLP
Suite 600
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Anchorage, AK 99501

Independent Auditors' Report

Alaska Retirement Management Board and
State of Alaska Department of Revenue
Treasury Division:

Report on the Audit of the Schedules

Opinion

We have audited the accompanying schedules of Invested Assets of the Alaska Retirement Management Board as of June 30, 2023, and of Investment Income and Changes in Invested Assets of the Alaska Retirement Management Board for the year then ended, and the related notes to the schedules (collectively referred to as "the Schedules").

In our opinion, the accompanying schedules referred to above present fairly, in all material respects, the invested assets of the Alaska Retirement Management Board as of June 30, 2023, and the investment income and changes in invested assets of the Alaska Retirement Management Board for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Schedules section of our report. We are required to be independent of the Company and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Emphasis of Matter

We draw attention to note 1 of the Schedules, which describes that the accompanying Schedules were prepared to present the invested assets of the Alaska Retirement Management Board and changes therein. The presentation of the Schedules is not intended to be a complete presentation of the financial status of the State of Alaska Retirement and Benefit Plans.

Responsibilities of Management for the Schedules

Management is responsible for the preparation and fair presentation of the Schedules in accordance with U.S. generally accepted accounting principles and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the Schedules that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibilities for the Audit of the Schedules

Our objectives are to obtain reasonable assurance about whether the Schedules as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of



internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the Schedules.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the Schedules, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the Schedules.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Treasury's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the schedules.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

KPMG LLP

Anchorage, Alaska
October 12, 2023

ALASKA RETIREMENT MANAGEMENT BOARD
SCHEDULE OF INVESTED ASSETS
June 30, 2023

	Pooled Investments	Participant Directed Investments	Total ARMB Assets
Investments (at Fair Value)			
Cash and Cash Equivalents	\$ 311,911,780	-	311,911,780
Fixed Income Securities	5,771,684,917	-	5,771,684,917
Broad Domestic Equity	7,831,657,931	-	7,831,657,931
Global Equity Ex-U.S.	5,431,497,502	-	5,431,497,502
Multi-Asset	2,575,487,003	-	2,575,487,003
Private Equity	5,137,345,647	-	5,137,345,647
Real Assets	4,530,752,905	-	4,530,752,905
Participant Directed	-	8,035,914,424	8,035,914,424
Synthetic Investment Contracts (at contract value)	-	861,214,632	861,214,632
Securities Lending Collateral Invested	33,634,554	-	33,634,554
Securities Lending Collateral Payable	(33,634,554)	-	(33,634,554)
Total Invested Asstes	\$ 31,590,337,685	8,897,129,056	40,487,466,741

ALASKA RETIREMENT MANAGEMENT BOARD
SCHEDULE OF INVESTMENT INCOME AND CHANGES IN INVESTED ASSETS
Year ended June 30, 2023

	Pooled Investments	Participant Directed Investments	Total ARMB Assets
Investments (at Fair Value)			
Cash and Cash Equivalents	\$ 12,929,946	-	12,929,946
Fixed Income Securities	5,926,979	-	5,926,979
Broad Domestic Equity	1,260,570,543	-	1,260,570,543
Global Equity Ex-U.S.	771,237,788	-	771,237,788
Opportunistic	112,934,954	-	112,934,954
Private Equity	100,749,242	-	100,749,242
Real Assets	19,640,546	-	19,640,546
Participant Directed	-	851,589,075	851,589,075
Synthetic Investment Contracts (at contract value)	-	17,415,623	17,415,623
Securities Lending Income	1,365,321	-	1,365,321
Less: Securities Lending Expense	(273,039)	-	(273,039)
Net Securities Lending Income	1,092,282	-	1,092,282
Total Investment Income	\$ 2,285,082,280	869,004,698	3,154,086,978
Total Invested Assets, Beginning of Year	30,654,685,371	8,004,623,440	38,659,308,811
Total Contributions	998,402,921	533,718,033	1,532,120,954
Total (Withdrawals)	(2,347,832,887)	(510,217,115)	(2,858,050,002)
Total Invested Assets, End of Year	\$ 31,590,337,685	8,897,129,056	40,487,466,741

See accompanying notes to Schedules

Alaska Retirement Management Board

Invested Assets

Notes to Schedules

June 30, 2023

(1) THE ACCOUNTING ENTITY

The Alaska Retirement Management Board (Board) is the investment oversight authority for the State of Alaska's Retirement and Benefits Plans (Plans). These Plans are made up of six systems: the Public Employees' Retirement System (PERS), Teachers Retirement System (TRS), Judicial Retirement System (JRS), National Guard and Naval Militia Retirement Systems (MRS), Supplemental Benefits System (SBS), and Deferred Compensation Plan (DCP). The systems comprise a mix of individual Defined Benefit and Defined Contribution Retirement Plans. These schedules of invested assets and of investment income and changes in invested assets (the Schedules) are those of the six systems' invested assets and not the systems as a whole. Fiduciary responsibility for the Board's Invested Assets is pursuant to Alaska Statutes 37.10.210-390.

Alaska Statute 37.10.071 provides that investments shall be made with the judgment and care under circumstances then prevailing that an institutional investor of ordinary professional prudence, discretion, and intelligence exercises in managing large investment portfolios.

(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The Schedules are prepared using the accrual basis of accounting for investment income. Assets are reported at fair value. Contributions represent contributions from employers and employees. Withdrawals represent benefits paid to plan participants and administrative and investment management expenses. Contributions, benefits paid, and all expenses are recorded on a cash basis.

Investments

Securities are valued each business day using prices obtained from a pricing service when such prices are available; otherwise, such securities are valued at the most current sale price or based on a valuation provided by investment managers. Fair values of investments that have no readily determinable fair value are generally reported by using the net asset value per share (or its equivalent) of the investment. Pooled participant directed accounts and the collective investment funds are valued based on a unit value determined by the managers or trustees multiplied by the total units held by each Plan. The unit value is determined by the respective managers or trustees based on the fair value of the underlying assets.

The Plan's investments in fully benefit-responsive Synthetic Investment Contracts (SICs) are stated at contract value.

Investment purchases and sales are recorded on a trade-date basis. Investment income includes realized and unrealized gains and losses and interest income on investments and income from securities lending.

(3) FAIR VALUE MEASUREMENTS

Various inputs are used in valuing the investments held by the Board. U.S. generally accepted accounting principles (GAAP) establishes a hierarchy of inputs used to value investments emphasizing observable inputs and minimizing unobservable inputs. These inputs are summarized as follows:

Level 1 – Quoted prices for identical assets in an active market.

Level 2 – Inputs, other than quoted prices, that are observable for an asset, either directly or indirectly.

Level 3 – Unobservable inputs. Unobservable inputs should only be used to the extent that observable inputs are not available for a particular asset.

Alaska Retirement Management Board

Invested Assets

Notes to Schedules

June 30, 2023

(3) FAIR VALUE MEASUREMENTS (Cont.)

The Board categorizes fair value measurements within the fair value hierarchy established by GAAP. The Board has the following fair value measurements at June 30, 2023 (in thousands):

Investment by fair value level	Total	Level 1	Level 2	Level 3
Cash Equivalents				
Deposits	\$ 29,674	29,674	-	-
Money Market	273,200	-	273,200	-
Repurchase Agreement	63,993	-	63,993	-
Total Cash Equivalents	366,867	29,674	337,193	-
Debt Securities				
Commingled Debt Funds	2,180,606	1,691,982	488,624	-
Corporate Bonds	1,231,170	-	1,231,170	-
Mortgage Backed	1,431,570	-	1,431,570	-
Other Asset Backed	325,177	-	325,177	-
U.S. Government Agency	544,667	-	544,667	-
U.S. Treasury Bills, Notes, and Bonds	1,148,289	-	1,148,289	-
Yankee Corporate Bonds	365,146	-	365,146	-
Yankee Government Bonds	80,973	-	80,973	-
Total Debt Securities	7,307,598	1,691,982	5,615,616	-
Equity				
Commingled Equity Funds	4,504,269	4,504,269	-	-
Common and Preferred Equity	11,051,544	11,050,294	5	1,245
Depository Receipts	146,554	146,554	-	-
Futures	409	409	-	-
Real Estate Investment Trust	775,366	775,366	-	-
Warrants	23	23	-	-
Total Equity	16,478,165	16,476,915	5	1,245
Other				
Balanced Funds	2,092,983	-	2,092,983	-
Target Date Funds	3,014,011	-	3,014,011	-
Securities Lending Collateral Invested	61,606	-	61,606	-
Total Other	5,168,600	-	5,168,600	-
Total investments by fair value level	\$ 29,321,230	18,198,571	11,121,414	1,245
Investment measured at NAV				
Alternative Beta	\$ 297,213			
Alternative Fixed Income	866,368			
Energy	54,017			
Farmland	1,064,200			
Infrastructure	864,361			
Private Equity	5,116,400			
Real Estate	1,663,756			
Timber	399,500			
Total Investment measured at NAV	10,325,815			
Total Investments measured at fair value	\$ 39,647,045			
Synthetic Investment Contracts at Cost				
Synthetic Investment Contracts at Cost	\$ 861,214			
Net Receivables / (Payables)	(20,792)			
Total Invested Assets	\$ 40,487,467			

Alaska Retirement Management Board

Invested Assets

Notes to Schedules

June 30, 2023

(3) FAIR VALUE MEASUREMENTS (Cont.)

Securities classified as level 1 are valued using prices quoted in active markets for those securities. Securities classified as level 2 are valued using matrix pricing using various sources. Each balanced and target date options classified as level 2 are priced daily by the investment managers based on the prevailing market values of the underlying security portfolios. Securities classified as level 3 are valued using the last traded price or a price determined by the investment manager's valuation committee.

Investments in alternative beta, alternative fixed income, energy, farmland, infrastructure, private equity, real estate, and timber are measured at net asset value (NAV) per share of the investments (or its equivalent) of the capital account balance nearest to the balance sheet date, adjusted for subsequent contributions and distributions. These investments undergo annual independent financial statement audits. Additional information about these investments is listed in the following table.

	<u>Fair Value</u>	<u>Unfunded Commitments</u>	<u>Redemption Frequency (if currently available)</u>	<u>Redemption Notice Period</u>
Alternative Beta	\$ 297,213,123	-	N/A	N/A
Alternative Fixed Income	866,367,516	377,896,806	Quarterly	2-90 days
Energy	54,016,675	31,213,720	No redemptions	No redemptions
Farmland	1,064,199,647	87,206,258	N/A	N/A
Infrastructure	864,360,843	-	Quarterly	30-90 days
Private Equity	5,116,401,927	1,622,189,190	No redemptions	No redemptions
Real Estate	1,663,755,626	299,529,375	Varied	Varied
Timber	399,499,569	-	N/A	N/A
Total investments measured at NAV	\$ 10,325,814,926			

Alternative Beta & Alternative Fixed Income: Investment strategies include pooled investment vehicles and securities in a variety of markets.

Energy: This type includes investments in three energy funds which invest in the debt and equity of energy-related companies. These investments can never be redeemed. The nature of these investments is such that distributions are received through the liquidation of underlying assets of the funds. These investments are expected to be funded for 10 years after the commitment date of the most recent commitment.

Farmland: This type includes investments of a wholly owned agriculture fund. This fund is for the purpose of owning and managing real estate property devoted to agricultural use. Investment properties include row crops, permanent crops, and vegetable crops. This investment is a fund of one, and therefore can be liquidated at any time.

Infrastructure: This type includes investments in two open-ended infrastructure funds. Investments include electricity generation, transmission, toll roads, pipelines, bridges, and other infrastructure-related assets. Funds can be redeemed on a quarterly basis with proper notice.

Alaska Retirement Management Board

Invested Assets

Notes to Schedules

June 30, 2023

(3) FAIR VALUE MEASUREMENTS (CONT.)

Private Equity: This type includes investments in 42 private equity funds including two gatekeeper managers who invest on behalf of the Alaska Retirement Management Board. These funds are diversified in various sectors including but not limited to venture capital, acquisitions, debt, and special situations. These investments can never be redeemed. The nature of these investments is such that distributions are received through the liquidation of underlying assets of the funds. These investments are expected to be funded for 10 years after the commitment date of the most recent commitment.

Real Estate: This type includes investments in 15 real estate funds that invest primarily in U.S. commercial real estate including value-added, opportunistic and core investments. Four of these funds are open-ended. Two of these open-ended funds are funds of one, and therefore can be liquidated at any time. For the remaining 11 funds, investments can never be redeemed. The nature of these investments is such that distributions are received through the liquidation of underlying assets of the funds. These 11 remaining investments are expected to be funded for 10 years after the commitment date of the most recent commitment.

Timber: Investment in one wholly owned fund that invest in timberland property and related opportunities.

Synthetic Investment Contracts: The Board's investment manager entered into investment contracts, on behalf of the Board, with five financial institutions. These institutions provide wrap contracts that cover separately managed SIC portfolios. The accounts are credited with earnings and investment deposits, less administrative expenses charged by the financial institutions and investment withdrawals. The contracts are included in the Board's statements at contract value. They are fully benefit-responsive. There are no reserves against contract value for the credit risk of the contract issuer or otherwise. The crediting interest rate is based on the approximate rate of interest that will amortize differences between contract and market value over the portfolio's average duration. Accounts and terms of SICs in effect at June 30, 2023, are as follows:

	As of June 30, 2023	
	Contract Provider	Alaska Retirement Management Board
Contract Value of Investment Contract	Prudential Insurance Company of America	169,537,192
Market Value of Portfolio	Prudential Insurance Company of America	153,463,774
Average Crediting Rate	Prudential Insurance Company of America	2.30%
Contract Value of Investment Contract	New York Life Insurance Co.	169,028,133
Market Value of Portfolio	New York Life Insurance Co.	152,817,052
Average Crediting Rate	New York Life Insurance Co.	2.11%
Contract Value of Investment Contract	Pacific Life Insurance Co.	169,777,026
Market Value of Portfolio	Pacific Life Insurance Co.	153,740,303
Average Crediting Rate	Pacific Life Insurance Co.	2.32%
Contract Value of Investment Contract	State Street Bank & Trust Co.	169,577,275
Market Value of Portfolio	State Street Bank & Trust Co.	153,356,433
Average Crediting Rate	State Street Bank & Trust Co.	2.26%
Contract Value of Investment Contract	Massachusetts Mutual Life Insurance Co.	169,121,994
Market Value of Portfolio	Massachusetts Mutual Life Insurance Co.	152,823,228
Average Crediting Rate	Massachusetts Mutual Life Insurance Co.	2.12%

Alaska Retirement Management Board

Invested Assets

Notes to Schedules

June 30, 2023

(4) DEPOSIT AND INVESTMENT RISK

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The ARMB invests its cash in the State of Alaska, Treasury Division's (Treasury) Short-Term Fixed Income Pool. As a means of limiting its exposure to fair value losses arising from increasing interest rates, Treasury's investment policy limits individual fixed rate securities to 14 months to maturity or 14 months expected average life upon purchase. Floating rate securities are limited to three years to maturity or three years expected average life upon purchase. At June 30, 2023, all securities within the Short-term Fixed Income Pool met these compliance metrics.

Duration is a measure of interest rate risk. It measures a security's sensitivity to a 100-basis point change in interest rates. The duration is the average fair value weighted duration of each security considering all related cash flows. At June 30, 2023, the effective duration of the Board's fixed income investments by type, was as follows:

	Effective Duration (in years)
Corporate Bonds	6.77
Mortgage Backed	5.31
Other Asset Backed	0.97
U.S. Government Agency	4.04
U.S. Treasury Bills, Notes, and Bond:	6.66
Yankee Corporate Bonds	4.25
Yankee Government Bonds	5.42
Total Portfolio	5.55

Synthetic Investment Contracts

The Board contracts with an external investment manager who is given the authority to invest in SICs and a reserve. This external manager also manages the securities underlying the SICs. In the case of the Board's constant duration SICs, duration is the fair value weighted average term to maturity of all fixed income securities underlying the contracts and their related cash flows. Duration of the Plan's structured payout SICs is the weighted average maturity of the contract payments. Through the Board's investment policy, exposure to fair value losses arising from increasing interest rates is managed by limiting the duration on SICs as follows:

Constant duration SICs duration cannot exceed the longer of six years or the duration of the Bloomberg Barclays Aggregate Bond Index plus one-half year. The weighted average duration of the constant duration SICs was 4.60 years at June 30, 2023. The duration of the Bloomberg Barclays Aggregate Bond Index was 6.28 years at June 30, 2023. The account's weighted average effective duration will generally not exceed the effective duration of the Bloomberg Barclays U.S. Intermediate Aggregate Bond Index plus 10%. The weighted average duration of the account was 4.51 years at June 30, 2023. The duration of the Bloomberg Barclays U.S. Intermediate Aggregate Bond Index was 4.53 years at June 30, 2023. The balance of the reserve is invested in the custodian's Institutional Treasury Money Market Fund and the external manager's Cash Reserves Trust Fund.

The account did not hold any buy-and-hold SICs or structured payout SICs investments at June 30, 2023.

Alaska Retirement Management Board

Invested Assets

Notes to Schedules

June 30, 2023

(4) DEPOSIT AND INVESTMENT RISK (Cont.)

Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. At June 30, 2023, the Board's Invested Assets consisted of fixed income securities with credit quality ratings issued by nationally recognized statistical rating organizations. Securities lending collateral was invested in a registered 2(a)-7 money market fund that was not rated. Using Standard & Poor's Corporation rating scale, the values for each rating are as follows (in thousands):

Rating	US Dollar	Foreign
A	\$ 773,356	-
A-1	7,214	-
AA	141,238	-
AAA	255,839	-
B	2,906	-
BB	17,432	-
BBB	683,843	-
Note Rated	3,732,814	-
U.S. Government Agency	544,667	-
U.S. Treasury Bills, Notes and Bonds	1,148,289	-
Grand Total	\$ 7,307,598	-

Synthetic Investment Contracts

The Board's investment policy has the following credit risk limitations for SICs, investments underlying the synthetic investment contracts and the reserve:

Synthetic investment contract issuers must have an investment grade rating. Supranational Agency and Foreign Government entity investments must have a minimum rating of A- or equivalent. Corporate debt securities must have a minimum rating of BBB- of equivalent. Asset-backed securities must have a minimum rating of AAA or equivalent. The ratings assigned to issuers of money market instruments must have the highest rating of any nationally recognized statistical rating organization. This limitation does not apply to the investment funds maintained by the custodian.

Custodial Credit Risk – Deposits

Custodial credit risk is the risk that deposits may not be returned in the event of a bank failure. The Board does not have a policy in relation to custodial credit risk for deposits. At June 30, 2023, the Board's Invested Assets had uncollateralized and uninsured foreign currency deposits of \$40,433,063.

Alaska Retirement Management Board

Invested Assets

Notes to Schedules

June 30, 2023

(4) DEPOSIT AND INVESTMENT RISK (Cont.)

Foreign Currency Risk

Foreign Currency Risk is the risk that changes in exchange rates will adversely impact the fair value of an investment. The Board's Stable Value Fund policy requires that all investments underlying a synthetic investment contract be denominated in U.S. dollars. For all other funds, through its asset allocation, the Board limits risk by limiting total investments in foreign currencies to the following:

<u>Pension System</u>	<u>Multi-Asset</u>	<u>Global Equity Ex-U.S.</u>	<u>Private Equity Pool</u>	<u>Real Assets Pool</u>
PERS	12%	21%	21%	21%
TRS	12%	21%	21%	21%
JRS	12%	21%	21%	21%
MRS	12%	13%	12%	11%

At June 30, 2023, the Board had exposure to foreign currency risk with the following deposits and investments (in thousands):

	<u>Deposits</u>	<u>Equity</u>	<u>Futures</u>	<u>Private Equity</u>	<u>Rights & Warrants</u>
Australian Dollar	\$ 136	64,242	-	542	-
Brazilian Real	287	57,035	-	-	-
Canadian Dollar	676	115,626	25	-	-
Chilean Peso	95	5,230	-	-	-
Colombian Peso	-	846	-	-	-
Czech Koruna	35	1,206	-	-	-
Danish Krone	39	67,788	-	-	-
Euro Currency	2,135	852,991	-	372,416	-
Hong Kong Dollar	1,753	216,866	46	-	-
Hungarian Forint	55	1,761	-	-	-
Iceland Krona	-	-	-	-	-
Indian Rupee	271	106,516	-	-	-
Indonesian Rupiah	29	10,469	-	-	-
Japanese Yen	2,778	518,572	-	-	-
Kuwaiti Dinar	72	964	-	-	-
Malaysian Ringgit	6	8,745	-	-	-
Mexican Peso	-	29,067	-	-	-
New Israeli Sheqel	80	9,702	-	-	-
New Taiwan Dollar	326	101,733	-	-	-
New Zealand Dollar	53	4,877	-	-	-
Norwegian Krone	44	21,756	-	-	-
Philippine Peso	20	5,690	-	-	-
Polish Zloty	50	3,587	-	-	-
Pound Sterling	717	313,891	-	85,439	-
Qatari Rial	87	5,473	-	-	-
Russian Ruble	1,293	-	-	-	-
Saudi Riyal	7	7,613	-	-	-
Singapore Dollar	10	32,847	-	-	-
South African Rand	107	13,110	-	-	-
South Korean Won	17	89,714	-	-	-
Swedish Krona	41	70,363	-	9,661	-
Swiss Franc	912	178,449	-	-	23
Thailand Baht	6	11,834	-	-	-
Turkish Lira	55	38,072	-	-	-
Uae Dirham	90	7,844	-	-	-
Yuan Renminbi	-	75,643	-	-	-
Yuan Renminbi Offshore	28,151	-	-	-	-
Grand Total	\$ 40,433	3,050,122	71	468,058	23

Alaska Retirement Management Board

Invested Assets

Notes to Schedules

June 30, 2023

(4) DEPOSIT AND INVESTMENT RISK (Cont.)

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. At June 30, 2023, the Board's Invested Assets did not have exposure to any one issuer greater than 5% of total invested assets.

Synthetic Investment Contracts

The Board's policy regarding concentration of credit risk for, underlying investments, and reserve is as follows:

No investment will be made if, at the time of purchase, total investment in any single issuer of investment contracts would exceed thirty-five percent of the account's total value.

No investment will be made if, at the time of the purchase, the investment could cause any single issuer, or all issuers of the securities held as supporting investments under the synthetic investment contracts to exceed the respective percentage of the account's total value in the table below.

Investment Type	Maximum Per Issuer	Maximum for All Issuers
U.S. Treasuries, U.S. Agency, and U.S. Government Entity Securities - Full Faith and Credit	100%	100%
U.S. Agency Securities and U.S. Government Entity Securities - Non Full Faith and Credit	100%	100%
Agency Mortgage-Backed Securities	50%	50%
Non-Agency Mortgage-Backed Securities	5%	50%
Asset-Backed Securities	5%	50%
Domestic and Foreign Corporate Debt Securities	5%	50%
Supranational Agency, Foreign Government, and Foreign Government Entity Securities	5%	50%
Money Market Instruments - Non Government/Agency	5%	100%
Custodian Short-Term	100%	100%

The maximum exposure to corporate debt securities rated between BBB- and BBB+ or equivalent is limited to twenty percent of the account's total value.

For the reserve, no investment will be made if, at the time of purchase, the total investment of any single issuer of money market instruments exceeds five percent of the total account's value. This limitation does not apply to the investment funds maintained by the custodian.

No investment will be made if, at the time of purchase, the total investment in all domestic and foreign corporate debt securities of any one industry exceed twenty-five percent of the account's total value.

(5) DERIVATIVES, FOREIGN EXCHANGE, AND COUNTERPARTY CREDIT RISK

The Board is exposed to credit risk on investment derivative instruments that are in asset positions. The Board has no policy of requiring collateral or other security to support derivative instruments subject to credit risk. Additionally, the Board has no policy regarding entering into netting arrangements when it enters into derivative instrument transactions with a counterparty, nor does the Board have a policy for contingencies. On June 30, 2023, the Board had the following derivative instruments:

	Changes in Fair Value		Fair Value		
	Classification	Amount	Classification	Amount	Notional
Commodity Futures Long	Investment Revenue	\$ (4,232,635)	Futures	-	3,200
Commodity Futures Short	Investment Revenue	769,972	Futures	-	(1,600)
Fixed Income Futures Long	Investment Revenue	(671,470)	Futures	-	71,900,000
FX Forwards	Investment Revenue	(6,615,492)	Long Term Instruments	(1,795,989)	108,005,881
Index Futures Long	Investment Revenue	(8,993,987)	Futures	-	91,123
Index Futures Short	Investment Revenue	(6,440,040)	Futures	-	(15,700)
Rights	Investment Revenue	(8,544)	Common Stock	-	-
Total Return Swaps Equity	Investment Revenue	1,723,774	Swaps	-	-
Warrants	Investment Revenue	31,752	Common Stock	23,272	30,578

Alaska Retirement Management Board

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June 30, 2023

(5) DERIVATIVES, FOREIGN EXCHANGE, AND COUNTERPARTY CREDIT RISK (Cont.)

The International Equity Pool includes foreign currency forward contracts to buy and sell specified amounts of foreign currencies at specified rates on specified future dates for the purpose of hedging existing security positions. The counterparties to the foreign currency forward contracts consist of a diversified group of financial institutions. Credit risk exposure exists to the extent of nonperformance by these counterparties; however, the risk of default is considered to be remote. The market risk is limited to the difference between contractual rates and forward rates at the balance sheet date. At June 30, 2023, the Board had the following Foreign Currency risk related to derivatives:

Currency Name	Rights & Warrants	Receivables	Payables	Total Exposure
Australian Dollar	\$ -	(163,486)	-	(163,486)
Canadian Dollar	-	36,756	-	36,756
Euro Currency	139	41,275	-	41,414
Indian Rupee	-	57,686	-	57,686
Japanese Yen	-	(1,807,362)	-	(1,807,362)
Pound Sterling	-	6,938	-	6,938
South Korean Won	-	-	26,792	26,792
Swiss Franc	23,133	5,412	-	28,545
	\$ <u>23,272</u>	<u>(1,822,781)</u>	<u>26,792</u>	<u>(1,772,717)</u>

At June 30, 2023, the Board had no counterparty credit and counterparty concentration risk associated with its investment derivative positions.

(6) SECURITIES LENDING

Alaska Statute 37.10.071 authorizes the Board to lend assets, under an agreement and for a fee, against deposited collateral of equivalent fair value. The Board lends marketable debt and equity securities through a contract with State Street Bank and Trust (the Bank). International equity security loans were collateralized at not less than 105 percent of their fair value. All other security loans were collateralized at not less than 102 percent of their fair value. Loaned securities and collateral were marked to market daily and collateral was received or delivered the following day, as necessary, to maintain collateral levels. The Board cannot pledge or sell collateral received until and unless a borrower defaults. At year-end, the Board had no credit risk exposure to the borrowers because the amounts the Board owed to the borrowers exceeded the amounts the borrowers owed the Board.

The fair value of securities on loan at June 30, 2023, was approximately \$32.7 million. At June 30, 2023, cash collateral received totaling \$33.6 million is reported as a securities lending payable and the fair value of the re-invested cash collateral totaling \$33.6 million is reported as security lending collateral invested in the Schedule of Invested Assets.

Cash collateral was invested in a registered 2(a)-7 money market fund. Maturities of investments in the money market fund generally did not match the maturities of the loaned securities because the lending agreements were terminable at will. Securities under loan, cash collateral and cash collateral payable are recorded on the financial schedules at fair value. The Bank and the Board received a fee from earnings on invested collateral. The Bank and the Board shared the fee paid by the borrower.

There was limited credit risk associated with the lending transactions since the Board was indemnified by the Bank against any loss resulting from counterparty failure or default on a loaned security or its related income distributions. The Bank further indemnified the Board against loss due to borrower rebates in excess of earnings on cash collateral. Indemnifications were subject to limitation relating to a force majeure event as outlined in the contract.

For the year ended June 30, 2023 there were no losses incurred as a result of securities lending transactions and there were no significant violations of legal or contractual provisions nor failures by any borrowers to return loaned securities.