

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
Relating to Global Dynamic Asset Allocation Investment Guidelines

Resolution 2019-02

WHEREAS, the Alaska Retirement Management Board (Board) was established by law to serve as trustee to the assets of the State's retirement systems; and

WHEREAS, under AS 37.10.210-220, the Board is to establish and determine the investment objectives and policy for each of the funds entrusted to it; and

WHEREAS, AS 37.10.071 and AS 37.10.210-220 require the Board to apply the prudent investor rule and exercise the fiduciary duty in the sole financial best interest of the funds entrusted to it and treat beneficiaries thereof with impartiality; and

WHEREAS, the Board contracts an independent consultant to provide experience and expertise in asset allocation and other investment matters to come before the Board; and

WHEREAS, the Board has established an asset allocation for the funds that considers earnings and liabilities on a current as well as a future basis; and

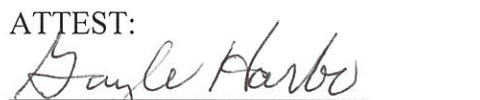
WHEREAS, the Board has authorized investment in tactical asset allocation for the Public Employees' Retirement System, Teachers' Retirement System, and Judicial Retirement System, including investments for those systems in the State of Alaska Retirement and Benefit Plans Trust; and

WHEREAS, the Board establishes and from time to time as necessary, modifies investment policies, procedures, and guidelines for tactical asset allocation;

NOW THEREFORE, BE IT RESOLVED THAT THE ALASKA RETIREMENT MANAGEMENT BOARD adopts the Global Dynamic Asset Allocation Investment Guidelines, attached hereto and made a part hereof, as the tactical asset allocation guidelines applicable to PineBridge Investments.

DATED at Juneau, Alaska this 5th day of April, 2019.


Chair

ATTEST:

Secretary

GLOBAL DYNAMIC ASSET ALLOCATION (“GDAA”)
INVESTMENT GUIDELINES

A. Investment Objective

The investment objective of the GDAA Portfolio (“Portfolio”) is to outperform the benchmark net of fees by 200 bps or more, and achieve a total return of US CPI Urban Consumers Less Food & Energy Index + 5%, over a full market cycle. An additional objective is to provide fundamental downside protection, specifically in stressed environments that result in protracted bear markets.

The results will be achieved primarily through passive management of market exposure using dynamic asset allocation. Portfolio risk will be managed dynamically, yet is expected to average the Benchmark risk over a full market cycle. It is understood such results are an objective of the Portfolio and cannot be guaranteed.

B. Benchmark and Permissible Ranges

The benchmark for the Portfolio is constructed as follows:

Index	Benchmark
MSCI All Country World Daily Total Return Net Index	60%
Bloomberg Barclays Global Treasury Total Return Index	40%

While portfolio implementation is expected to be passive in terms of security selection, portfolio asset class weights are expected to deviate significantly from these benchmark weights. Portfolio exposures are broadly expected to be in the following ranges:

Asset Class	Permissible Ranges	
	Minimum	Maximum
Equity Asset Classes	20%	85%
Fixed Income Asset Classes	20%	85%
Liquid Alternatives *	0%	15%

* Liquid Alternatives include commodities and any future liquid asset classes added to PineBridge’s research coverage universe (as defined by asset classes covered in PineBridge’s unabridged Capital Market Line document) that do not fall in the equity or fixed income categories as defined by the nature of the security instrument rather than how PineBridge may assign the asset class for portfolio modeling and construction.

PineBridge will request permission from Alaska Retirement Management Board (“ARMB”) staff before investing outside of these ranges.

C. Investable Securities

The list of asset classes in Exhibit A of these guidelines reflects the current composition of the Capital Market Line asset class constituents maintained by PineBridge. As such, liquid asset classes in this list reflect potential ARMB portfolio investments over time. The asset class list in Exhibit A is subject to change over time as PineBridge evolves the asset class structure with the market opportunity set.

Assets of the Portfolio generally shall be allocated among cash instruments, exchange trade funds (ETFs), derivatives, and funds/trusts/portfolios managed by PineBridge Investments, LLC and its affiliates (“PineBridge”). Allocations made to funds/trusts/portfolios managed by PineBridge shall be managed without a management fee however, shall be subject to normal operating costs and expenses (e.g. administrator and custodian fees and expenses).

The assets of the Portfolio and the transactions that may be entered into by the Portfolio may include long and short positions in U.S. and non-U.S. equities and equity-related instruments, fixed income and other debt-related instruments; securitization products, such as MBS, CMBS, ABS, and CLOs; derivatives, including

options, warrants, futures and other commodities, currencies, currency forwards, and other over-the-counter derivative instruments such as total return swaps; repurchase and reverse repurchase agreements; hybrid securities, including preferred stocks and convertible bonds, convertible preferred stocks, bonds or preferred stocks with warrants, contingent convertibles (CoCo's), and zero or low coupon convertibles; real estate related securities; and Cash and Cash Equivalents (as defined below).

The use of derivatives within the Portfolio is expected to be for replicating market exposures, efficient rebalancing of the asset allocation, and hedging purposes. The net long exposure of the Portfolio will be maintained between 40% and 100%; the gross long exposure may increase to 180% under certain circumstances, excluding currency hedging. The Portfolio may hold "Cash and Cash Equivalents," which include cash, short-term investment funds managed by the custodian and money-market instruments, which include (i) U.S. Government securities, (ii) obligations issued or guaranteed by U.S. and foreign corporations payable in U.S. dollars (e.g., commercial paper) and (iii) obligations of domestic banks, which include certificates of deposit, time deposits, unsecured bank promissory notes and bankers' acceptances.

Gross long exposure is defined as:

Base market value of all long cash equity and fixed income market positions	+
Absolute base market value of all underlying long exposure of equity/fixed income/commodity derivative positions	+
Absolute base market of all underlying short exposure of equity/fixed income/commodity derivative positions	+
Total gross long (\$)	=
Total market value of the portfolio (NAV)	/
Gross long exposure (%)	=

Net long exposure is defined as:

Base market value of all long cash equity and fixed income market positions	+
Absolute base market value of all underlying long exposure of equity/fixed income/commodity derivative positions	+
Absolute base market of all underlying short exposure of equity/fixed income/commodity derivative positions	-
Total net long (\$)	=
Total market value of the portfolio (NAV)	/
Net long exposure (%)	=

For both gross long and net long calculations, Cash & Cash Equivalents asset classes (including currency related derivatives) are excluded from the calculation of the numerator. However, Cash & Cash Equivalents asset classes are included in the calculation of the denominator.

D. Investment Restrictions

1. Manager has full discretion on security selection. In the event the aggregate total of any equity security held by the ARMB exceeds five percent (5%) of total shares outstanding, the ARMB will notify portfolio managers who will act to sell the security in a commercially reasonable manner until the aggregate is

below five percent (5%). The ARMB will be responsible for monitoring its aggregate position size and notifying Manager if action needs to be taken.

2. No more than ten percent of the voting stock of any corporation may be acquired or held.
3. The Portfolio will not purchase the securities of a company for the purpose of acquiring control or management thereof.
4. Certificates of deposit must be issued by domestic United States banks or trust companies which are members of the Federal Deposit Insurance Corporation, and are readily saleable in a recognized secondary market for such instruments.
5. Bankers' acceptances must have been drawn on and accepted by United States banks which have capital and surplus of at least \$200 million each.
6. The issuing bank for negotiable certificates of deposit and bankers acceptances must have total assets in excess of \$5 billion.
7. All futures and options positions must be reported to the client each month. The report must show both the nominal position and the "economic impact" of all derivative positions.
8. Repurchase agreements must be collateralized only by U.S. Treasury obligations, including bills, notes, and bonds, and only when the collateral carries a market value equal to or greater than 102% of the amount of the repurchase agreements, and only when the custodial bank appointed by retirement funds will take custody of the collateral.
9. The Portfolio may not hold more than 5% of the portfolio's assets in any one corporate debt issuer.
10. The Portfolio may not purchase more than 10% of the currently outstanding par value of any bond issue.
11. Internal cross trading is permitted but only in accordance with requirements under: (1) 29 U.S.C. §1108(b)(19); (2) 29 C.F.R. §2550.408b-19; and (3) 26 U.S.C. §4975(d)(22).
12. Futures and options contracts must be traded on an exchange. With respect to OTC derivatives, the period of the contract may not exceed twelve months and must be transacted with a counterparty authorized by PineBridge's Counterparty Approval Committee with an investment grade issuer rating by S&P, Moody's or Fitch. In the event that, after such investment is made, the counterparty fails to meet the minimum credit issuer rating requirement, the investment manager shall take appropriate measures within six months.
13. The Portfolio does not gain leverage through borrowing.
14. The Portfolio may not purchase securities on margin.
15. The Portfolio may not short individual stocks or bonds.
16. PineBridge is not permitted to lend or pledge securities in the account, unless it is part of an option strategy, such as a covered call. However, the Portfolio may participate in ARMB's securities lending program.
17. Short positions shall be held against long exposures at the asset class level. The resulting net long asset class exposure will be at least 0%.
18. The Portfolio will not invest in illiquid asset classes, such as Private Equity.

19. There shall be no investment in private placements, except Rule 144A securities, Regulation S securities, and commingled funds and trusts managed by PineBridge.
20. The Portfolio may not invest in securities originated by PineBridge with the exception of PineBridge managed comingled funds/trusts.
21. The Portfolio will not invest in certain statutorily specified types of companies doing significant business in Iran. The Alaska Retirement Management Board provided the initial restricted list and will notify PineBridge of any amendments to the universe.

E. Brokerage and Commissions

In carrying out its functions, a manager will use its best efforts to obtain prompt execution of orders at the most favorable prices reasonably obtainable, and in doing so, will consider a number of factors, including, without limitation, the overall direct net economic result to the ARMB (including commissions, which may not be the lowest available but which ordinarily will not be higher than the generally prevailing competitive range), the financial strength and stability of the broker, the efficiency with which the transaction is effected, the ability to effect the transaction at all where a large block is involved, the availability of the broker to stand ready to execute possible difficult transactions in the future and other matters involved in the receipt of “brokerage and research services” as defined in and in compliance with Section 28(e) of the Securities Exchange Act of 1934, as amended, and regulations thereunder.

If the manager determines execution only transactions do not result in the greatest net benefit to ARMB considering the factors described in this section E, the manager is encouraged to execute transactions with a brokerage firm participating in a commission recapture program with the ARMB.

Exhibit A

PineBridge Asset Class Structure

Multi Asset Coverage Universe

<u>Equities</u>	<u>Fixed Income</u>	<u>Alternatives</u>
US Equity	3M US Tbill	Commodity
Canadian Equity	3M Canadian Tbill	Real Estate *
UK Equity	3M Mexican Tbill	Hedge Fund of Funds
Japanese Equity	3M German Tbill	Private Equity
Australian Equity	3M UK Tbill	Private Credit
Singaporean Equity	3M Japanese Tbill	Listed Infrastructure *
International Small Cap	3M Australian Tbill	Private Infrastructure
EM Equity	3M Singapore Tbill	US Timber
EM Asian Equity	US Govt Bond	Listed Private Equity *
South Korean Equity	Canadian Govt Bond	
Taiwanese Equity	Mexican Govt Bond	<u>Currencies</u>
Indian Equity	German Govt Bond	USD
Indonesian Equity	UK Govt Bond	CAD
EM EMEA Equity	Japanese Govt Bond	GBP
Russian Equity	Australian Govt Bond	CHF
Hungarian Equity	Singapore Govt Bond	JPY
EM LatAm Equity	US TIPS	AUD
Brazilian Equity	US Municipal	SGD
Mexican Equity	US Intermediant Credit	EME
Peruvian Equity	US Long Credit	MXN
US Equity Value	US High Yield	EMD
US Equity Financials	US CLO AAA	
US Equity Large Broad	US Bank Loans	
US Equity Large Growth	MBS	
US Equity Large Value	CMBS	
US Equity Mid Broad	ABS	
US Equity Mid Growth	Asian Credit	
US Equity Mid Value	CoCo Bond	
US Equity Small Broad	EM Local Currency Debt	
US Equity Small Growth	EM Sovereign	
US Equity Small Value	EM Corporate	
German Equity	EM Corporate IG	
French Equity	EM Corporate HY	
Italian Equity	EM Sovereign IG	
Spanish Equity	EM Sovereign HY	
Swiss Equity	Brazilian Local Currency	
Dutch Equity	Peruvian Local Currency	
Productivity Basket	Argentinian Hard Currency	
Productivity Basket - AI & IOT	Indonesian Local Currency	
European Financials	US CLO AA	
Productivity Basket - Cloud	US CLO A	
Productivity Basket - Cyber	US CLO IG	
Productivity Basket - Big	Asian Credit HY	
Productivity Basket - SaaS	Asian Credit IG	
Productivity Basket - IT		
European Small Cap Equity		

* Investments in REITS and other listed alternatives should be included in "Equity Asset Classes" for purposes of determining Permissible Ranges in Section B.