APFC ALASKA PERMANENT FUND CORPORATION
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Memorandum

To: Senator Stedman, Co-Chair
Senator Bishop, Co-Chair
Senate Finance Committee, Alaska State Legislature

From: Valerie Mertz, Chief Financial Officer & Acting Executive Director
Alaska Permanent Fund Corporation

Date: February 7, 2022

Re: Follow Up to Senate Finance Committee on January 26

Thank you for the opportunity to present to the Senate Finance Committee on the Alaska Permanent Fund and highlight the work that the Corporation does to manage and invest Alaska's largest, renewable financial resource, the Alaska Permanent Fund. In response to the remaining answers and requests for additional information that you requested during the hearing, we provide the following

1. *Additional context to highlight the Legislature's forward funding of Inflation Proofing based on the intent language associated with the $4 billion special appropriation to Principal in FY20.*

   The intent language in the FY20 Operating Budget provided that the special legislative appropriation from the Earnings Reserve Account to the Principal of the Alaska Permanent Fund be used to satisfy the inflation proofing requirement in the next fiscal years. While APFC has categorized the FY20 appropriation as a special appropriation in the financial records of the Alaska Permanent Fund, we do recognize the importance of tracking and reporting the forward funding contribution of the $4 billion and provide the following for reference –

   - The calculation for FY21 Inflation Proofing totaled $577 million
   - The calculation for FY22 Inflation Proofing is estimated to be $2.4 billion

   The Principal can only maintain purchasing power through the appropriation of inflation proofing. Under the current two account structure, the prudent reinvestment of a portion of the Funds' earnings to protect the Principal's future value is essential to maintaining a healthy Fund for all generations of Alaskans.

   The Board of Trustees have affirmed their ongoing support for and the fundamental importance of inflation proofing the Principal of the Fund in Resolutions 18-04 and 17-01. The Board has also noted that special appropriations are not a substitute for annual inflation proofing based on a rules-based framework.

2. *Information on APFC's out-of-state / flexible work plan, including the policy, Board meeting minutes, the number of staff utilizing this work plan, the funding associated with travel, and the benefits to APFC and the Fund.*

APFC's Flexible Work Plan
Attracting and retaining talent has been a priority of APFC and the Board of Trustees. The ability for staff to work remotely has been a remarkable tool in supporting effective and efficient management and investment of the Alaska Permanent Fund. To ensure the success of this remote working relationship, APFC recognizes that it is essential that the primary benefit is for the Alaska Permanent Fund. As part of the flexible work agreement, it is required that the employee and manager document the benefit to APFC and the Fund.

Outlined below is a brief overview of APFC's remote work policy, processes, and staff expectations to assist the Committee to better understand how the remote work program benefits the Fund and, ultimately, the State of Alaska.

Process
Approval for and the success of remote work lies primarily on the shoulders of the direct managers. These managers best understand the nuances of their team, the job, what performance indicators to monitor, and viable alignment between remote work and benefit to APFC and the Fund. They are also best suited to monitor and confirm the positive impact of remote work. At every point in the process, thorough communication as to the benefits is expected. In some cases, managers may foresee gaps that would not be conducive to remote work. In these instances, they may decide to develop a plan to bridge those gaps or ultimately determine remote work might not be in the Fund's best interest.

Initial approvals are for six months. At the six-month mark, staff must submit a request for an extension for a maximum of one year. The process for the initial and renewal approval is extensive. During the initial approval, the employee meets with their manager to discuss the viability of their request, benefits, logistics, and expectations. If the manager determines alignment, formal documentation is completed by the employee, approved by the manager, and submitted to the Divisional Chief and Executive Director for approval. APFC Human Resources processes the documentation, including the steps necessary for tax purposes, and maintains the records. In the cases where staff work outside the state, they are expected to return to Juneau two weeks per quarter.

Work Remote Positions
Out of State Staff = 9.8% of budgeted positions (6/61) / 11.1% of Investments staff (3/27) and 8.8% of Operations staff (3*/34). *2 Individuals in temporary work remote status intend to return to Juneau.

- Investment Officer – New York
- Investment Officer – Austin, TX
- Investment Associate – Los Angeles, CA
- Portfolio Accountant – Mobile, AL
- Risk Officer – Utah (*Temporary - ending 5/15/2022)
- Administrative Specialist – Washington (*Temporary- ending 4/15/2022)

As of 1/27/2022, every employee working remotely out of Alaska is in the initial six-month period. The process for renewal is nearly identical, with one noteworthy difference; direct managers and staff review accomplishments, challenges, and performance to confirm the benefits to APFC and the Fund.

Cost

The remote work plan for APFC is relatively new, so data to evaluate the savings and expenses for the program are limited. Annually, APFC develops a travel budget from zero, considering new investments, due diligence, and industry-related conferences and training. APFC's FY23 request for travel is being held flat from the FY22 authorization. This was done in anticipation that having staff working remotely from key investment regions within the US will reduce investment-related trips from Juneau. A portion of the savings will be expended quarterly, bringing these individuals to Juneau, resulting in the request being held flat. In FY22, the actual costs associated with quarterly staff returns to Juneau is approximately $27,050.

Attached Flexible Work Policy Documents

1. Board of Trustees Meeting Presentation – December 2020
2. Board of Trustees Meeting Minutes – December 2020
3. APFC Flexible Work Policy
4. APFC Flexible Work Request Form
5. General Telework Acknowledgement Form

As with any new program, we will monitor the need and effectiveness of the requirements to determine the benefit vs. cost to the Corporation and work with the Board of Trustees to adjust if needed.

3. *Information about APFC's Alaska Investment Policy including: the Board Meeting Minutes, the In-State Investment Policy and associated targets, and the Board Resolution supporting the In-State Investment Program.*

Alaska In-State Investments

The Alaska Permanent Fund Corporation's (APFC) statutory responsibilities pertaining to in-state investments are set forth in AS 37.13.120 (c), which specifies that if an Alaskan investment has equivalent risk and expected return comparable to or better than a similar investment outside of Alaska, the Alaskan investment should be preferred. In recognition of this statutory provision, APFC's Board of Trustees took **two actions** during their September 2018 Annual Meeting:

- **Amended the Alaska In-State Investment section of APFC's Investment Policy & Procedures to establish a target for increased Alaska investment; and**

- **Adopted Board Resolution 18-03 Supporting an In-State Emerging Manager Program.**

Attached Alaska In-State Investment Policy Documents

6. Board of Trustees Meeting Minutes – September 2018
7. APFC's Investment Policy – Section V. Alaska In-State Investment Policy
8. Resolution 18-03 Supporting An In-State Emerging Manager Program
9. Pages from Board of Trustees Meeting Packet – December 2021 – In-State
10. Private Equity Commitments Report as of June 2021
11. Monthly Performance Report as of December 2021

a. *Overview of the Alaska In-State Investment Policy*

Alaska In-State Investment Policy

The Board supports an in-state investment policy that maintains the investment integrity of the Fund, that is both proactive and impartial. As such, any in-state investment should be considered by APFC based on these factors:

- Honor Alaska Statute 37.13.120(c) – stipulations in-state investment parameters.
- Require Compelling Risk-Adjusted Returns - honor the prudent investor rule provided in Alaska Statute 37.13.120(a); any Alaskan investment contemplated by APFC must be attractive on a stand-alone basis.
- Ensure Fund Diversification - provide sufficient risk diversification and require board approval for any in-state investment that would exceed 1% of the Fund at the time of investment.
- Seek Participation by Another Institutional Investor - ensure that an Alaskan investment opportunity is attractive on a stand-alone basis and satisfies the institutional quality requirements by seeking to invest into an Alaskan investment alongside at least one institutional partner.

Investment targets and guidelines were also incorporated into the Alaska Investment Policy to promote and encourage Alaskan investments. The aspirational goals outlined in the amended Alaska Investment Policy are designed to encourage investments in Alaska and/or the management of Permanent Fund assets in Alaska with in-state management firms. An investment is considered "in-state" if an external manager has an office in Alaska with the portfolio management team based in Alaska or if an external investment manager invests in a project located in Alaska.

The aspirational goals outlined in the amended policy called for 2% of the portfolio to be managed/invested in-state by 2020, increasing by 1% each year up to 5% of the Fund being managed/invested in-state by 2023. As of June 30, 2021, 0.78 % of the Fund's $83.1 billion portfolio totaling $647.3 million is invested in-state through external investment managers for Alaska-based management for public equities, direct ownership of APFC's office building in Juneau, and the In-State Private Equity Manager program.

b. *Information about the In-State Private Equity Manager Program*

Alaska In-State Private Equity Manager Program

As directed by the Board of Trustees through Resolution 18-03, APFC launched the Alaska In-State Private Equity Program in 2019 and selected external, independent fund managers to execute an Alaska-focused private markets investment program with an initial allocation of $200 million. $100 million was committed to each external manager, McKinley Capital Management, LLC (Na'-Nuk Investment Fund) and Barings, LLC (Alaska Future Fund).

To encourage Alaska investment consistent with the requirements of Alaska Statute 37.13.120(c), the Alaska Permanent Fund Corporation targets a portion of its private equity and venture capital investments at opportunities within Alaska that provide a rate of return on investment consistent with the expected risk/return profile of similar investments outside of Alaska.

This in-state program is part of APFC's existing private market investment program that has been in place since 2004. Investment decisions for the In-State program are made by McKinley Capital Management and Barings, who were selected through a competitive process in 2019. APFC's Alaska-based investment staff also carefully monitors and oversees this independent investment activity.

APFC's staff, Trustees, and external investment managers all have a fiduciary obligation to act only in the best interests of the Permanent Fund. This structure is designed to reduce the risk of political influence in investment decisions. It can be expected to continue to deliver excellent investment returns for all current and future generations of Alaskans.

Performance

The Alaska Investment Program is part of the Private Equity and Special Opportunities asset class. As noted in the Investment Policies and Procedures, the portfolio performance will be evaluated using a comparison of vintage year performance against the Cambridge Private Equity Index benchmark. Using the benchmarks for asset class performance allows for measurement in relation to institutional investor peers.
APFC issues a monthly performance report that is available at apfc.org for all of our asset classes and external managers, including the In-State Private Equity managers McKinley Capital Management, LLC and Barings, LLC. Given the confidentiality terms of private markets, APFC does not publish performance on an investment-by-investment basis. Rather, performance information is aggregated and provides a view of the program's overall returns compared to the private equity benchmark assigned to these managers.

Confidentiality

AS 37.13.200, which the Alaska Legislature enacted when creating the Alaska Permanent Fund Corporation, directs us to maintain the confidentiality of proprietary information. This provision opened the door to investment opportunities like private equity, which require investors to agree to maintain the confidentiality of proprietary information as a condition to invest in such assets. Private market investments represent almost 50% of the assets in the Fund and although generally less liquid than public markets investments (stocks and bonds), these private market investments represent some of the highest returning assets in the Fund (private equity) and some of the best diversifiers (real estate/absolute return) to market volatility. For example, in the fiscal year 2021, the private equity and special opportunities portfolio generated a 64.6% return net of all fees and expenses associated with these investments. The private equity fund managers that helped generate this return for the Fund would not have allowed us to invest in these funds if we were not able to maintain the confidentiality of the portfolio companies they had invested in and the terms under which they generated these compelling returns.

To provide further insight into the importance of confidentiality measures for private equity investment, the article A BLOW TO PUBLIC INVESTING: REFORMING THE SYSTEM OF PRIVATE EQUITY FUND DISCLOSURES from the UCLA Law Review in 2005 is informative. This article supports our state statute's decision to make portfolio company-level information confidential. Essentially, disclosure of private markets information may satisfy the public's interest but would harm the Fund's returns.

APFC and the independent managers of this program understand that Alaskans want to learn more about how the assets of the Alaska Permanent Fund are being invested in our State. APFC also understands that Alaska law requires APFC to maintain the confidentiality of proprietary information from these private market investments. We are working with our external managers to address these transparency concerns while also ensuring that we comply with state law and do not negatively impact the investment returns of these investments.

4. Information about SEC Compliance and Rules pertaining to insider trading.

Attached is a copy of the policy that APFC uses to handle material non-public information (MNPI) that APFC acquires while making investment decisions on behalf of the Fund. This Policy was drafted with the assistance of APFC's outside counsel, who is well versed in the requirements for handling such information in compliance with Section 10(b) of the Securities Exchange Act of 1934. Please let us know if you have any additional questions regarding this subject.

Attached MNPI Policy

12. Material Non-Public Information Handling Policy

As always, please feel free to contact us if there are further questions. APFC's Director of Communications, Paulyn Swanson, can be reached via email pswanson@apfc.org or at 907-796-1520.

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Board of Trustees Meeting
Presentation – December 2020

APFC ALASKA PERMANENT FUND CORPORATION

Physical Office & Remote Work

Objective

Our goal is to provide the Board of Trustees with the information they need to help ensure the longevity of the fund and provide insight to help us achieve our goal of successfully managing the Permanent Fund.

As has been discussed recruiting and retention continues to be a challenge at APFC and having options including additional Physical Office Location(s) and Remote Work Policy have been identified by the Board and staff as possible options to help alleviate these challenges.

According to the Strategic Plan adopted by the Board of Trustees, APFC staff is to present each year at the Annual Meeting of the Board of Trustees on the possibility of new office location options throughout the world and per the Board's request in the September 2020 Board Meeting to present a Remote Work Policy Option.

Intent

AFPC looks to base our decisions through the lens of our core values; Integrity, Stewardship & Passion and our intent is to present clear concise information for the board to provide guidance.

APFC Staff in partnership with our Board of Trustees have identified 2 viable options that align with our values and potentially add value to the fund.

1. Physical Office – Anchorage Alaska
2. Remote Work Policy

The board discussions have provided the opportunity to evaluate how additional physical office space moves the needle on Fund performance.

It is been indicated that the success of an Anchorage office could potentially open the door to additional offices in regions outside the state that would significantly benefit the Fund.

Timing Review

Aug – Dec 2019	July 2020	August 2020	Sept 2020	Dec 2020
Need for additional options identified	Initial Office Plan provided to Board	Revisions based on Board feedback	Board Requested POP and Work Remote plans be presented in December	Board to provide additional guidance for next steps.

If the Board decides to move forward with an Anchorage office, at that time we can analyze whether there are sufficient funds in the existing budget along with additional funding would need to be included in the next budget. Since additional review was requested during September 23-24th meeting no Budget was included in the FY 22 budget.

*March 23, 2020 the Staff at APFC were asked to work remotely our current technology allowed us to transition to remote work in 1 day. Current technology was used to make that transition and we've since added to our catalog of technology to make working remotely more sustainable for the long term (i.e. additional monitors & docking stations for home use)

Physical Office - Overview

With the goal of enhanced recruitment and retention we have identified a few notable items regarding the components of the office

1. Target office Size approximately 2300 sq ft – 5 staff
   – Including 2-3 Offices, 2-3 workspaces, break/kitchen area, conference area & reception area (if needed)
2. Based on current staff interest and forecasted recruitment a second office will likely be a cross-section of staff from all departments – front, middle and back office. This cross section will require more complex systems and data integration to maintain fluid functionality.
3. IT Support will be required on a regular basis, either current staff onsite regularly or outsourcing of some IT functions
4. It is likely there will be no administrative support in an Anchorage office

Please note the data provided throughout the proposal reflects our attempt to replicate the office configuration, including similar furnishings, technology and security found in our Juneau headquarters.

Procurement & Acquisition

Physical Office Location

- AS 30.360.850 provides that all contracts not deemed an investment contract go through the state procurement process. APFC does not have an exemption to the procurement code and as such all leasing is done on our behalf by the Department of Administration, Shared Services.
- If using available space APFC would likely assume the space size and lease terms previously negotiated.
  - A RFP process allows Shared Services to customize the search

Timing

- Approximately 2 weeks + build out time to 3 months + build out depending on using currently available space or if an RFP is needed*
  - Relocation efforts can coincide with buildout time (approximately 30-60 day)

*Per Department of Administration Shared Services Leasing Team

Overview - Anchorage Office Space

- Based on previous discussions with the board we continue to focus on Class A office space throughout downtown and midtown Anchorage.

- State of Alaska Leasing has also provided us with both Class A and Class B space options for the board to review.

Benefits & Challenges - Physical Office

- Benefits
  - Opportunity to demonstrate success of remote office potentially leading to other remote offices
  - Sharing and exchanging of ideas, increased innovation
  - Ability to build Office Culture
- Challenges
  - Higher cost than working remote
  - Political concerns
  - Significant IT infrastructure needs

Initial Costs – Anchorage Physical Office

Expense	Low	High	Original Estimate	Updated Estimate
Relocation	$11,000	$55,000	$33,000	$33,000
Buildout	$100,000	$300,000	$225,000*	$172,000*
IT Expenses	$100,000	$200,000	$150,000	$130,000
Office Equipment	$35,000	$50,000	$40,000	$28,640
Furniture	$100,000	$150,000	$125,000	$80,460
AV	$40,000	$50,000	$50,000	$50,000
Miscellaneous	$25,000	$100,000	$50,000	$50,000
Total	**$411,000**	**$905,000**	**$673,000**	**$544,100**

Data unchanged from September Board Meeting

*Difference in estimated sq ft based on availability at the time

Available Space & Pricing*

Building	Class	Price Per Sq Ft	Available Size	Annual Cost
GMC Building	B	$1.80	4,962	$107,180
University Center	B	$2.10	1,800 4,800	$45,360 $120,960
Flashcube	A	$2.39	5,918+	$169,729
Frontier	A	$2.79	3,012	$100,842
Whale	A	$2.93	1,991	$70,004
Atwood	A	No Space Available		

Information provided by SoA Shared Service Leasing Team - Updated 11/10/2020

Ongoing Costs

Expense Type	Low	High	Estimated**
Lease	$55,000	$83,000	$100,000
Internet	$6,000	$12,000	$10,000
Office Technology	$4,500	$10,000	$8,000
Office Supplies*	$5,000	$12,000	$9,000
Miscellaneous	$3,500	$10,000	$5,000
Total	**$74,000**	**$127,000**	**$132,000**

- Includes Services & Commodities
- Estimated assumes we are required to take space as presented on Slide 16 rather than our request of 2300 sq ft.

Remote Work Policy – Overview

APFC's Core Values are Integrity, Stewardship and Passion and as such each member of our team is expected to act with the highest level of integrity and stewardship for the resources we have been entrusted with. This means we act with care with our budget resources while providing Alaskans and the State of Alaska the results they are expecting from our organization. We extend this trust to our employees and empower them to shape their work so that they can achieve the best possible results.

This paradigm motivates our employees while improving the company's performance capabilities and enhance our market position as a flexible and attractive employer which directly impacts our ability to generate top investment returns.

Remote Work Policy - Highlights

Policy rooted in the State of Alaska Policy – with APFC specific procedures

Approved for up to 1 year & reviewed every 6 months

Approval Based on established criteria
- Position suitability for remote work
- Employees suitability for remote work
- Mutual benefits to the Fund, APFC and the employee

Each member of the staff and their supervisors are required to include
- Detailed outline of KPI requirements & communication expectations
- Explanation of benefit to the fund (not just the corporation)

Multiple standardized options for Managers/Staff to choose from

Initial Costs – Remote Work

Expense	Estimate
Relocation	$0
Buildout	$0
IT Expenses	$5,000
Office Equipment	$5,000
Furniture	$5,000
AV	$0
Miscellaneous	$10,000
Total	**$25,000**

Not currently in 2022 budget, however due to the low cost and surplus in our travel budget we can absorb these costs into our current budget allocation.

Ongoing Costs – Remote Work

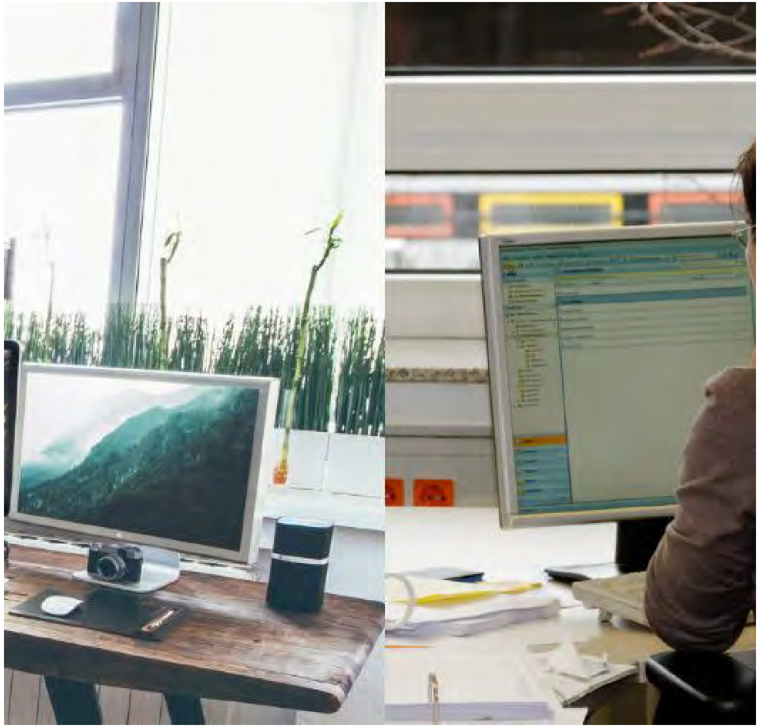
Expense Type	Estimated**
Lease	$0
Internet	$0
Office Technology	Built in to annual technology replacement schedule
Office Supplies	Built in to annual administrative budget
Miscellaneous	$10,000
Total	**$10,000**

Benefits & Challenges – Remote Work

- Benefits
  - Low Cost
  - Not Locked in to time if not successful
  - Opportunity to increase total headcount with no buildout Juneau Office
  - More time working
- Challenges
  - Onboarding Challenges
  - Understanding Culture
  - Political concerns
  - Distractions

Summary

Both working from home and opening a new office come with unique benefits and challenges. They simply provide different routes to assist with the challenges we face.



ALASKA PERMANENT FUND CORPORATION
ANNUAL MEETING OF THE BOARD OF TRUSTEES

WEBEX/TELECONFERENCE
December 9&10, 2020
8:30 a.m.

Originating at:
Alaska Permanent Fund Corporation
801 West 10th Street
Mendenhall Conference Room
Juneau, Alaska 99801

SUMMARY MINUTES

Trustees Present:

William Moran, Chair	Steve Rieger, Vice Chair
Ethan Schutt	Corri Feige
Lucinda Mahoney	Craig Richards

Trust Staff Present:

Angela Rodell, CEO	Marcus Frampton, CIO
Val Mertz, CFO	Steve Moseley
Valeria Martinez	Jim Parise
Sebastian Vadakumcherry	Sara Race
Tim Andreyka	Tom O'Day
Chad Brown	Danielle Graham
Jennifer Thorsteinson	Larissa Murray
Ross Alexander	Youlian Ninkov
Paulyn Swanson	Katherine Smith
Masha Skuratovskaya	Nellie Metcalfe
Rachel Price	Julia Megas
Chris LaValle	

Investment Adviser:

George Zinn	John Skjervem
Kenneth Frier	

Other Participants:

Greg Allen, Callan	Steve Center, Callan
Doug Woody, 350Juneau	Rob Schroeder
James Simard	Michael Tobin
Pierre Lapeyre, Riverstone	David Leuschen, Riverstone
David Hayes, NGP Energy Capital	Scott Dahnke, L Catterton
Kevin Kingman, L Catterton	Megan Price, Crestline, Inc.
Jeffrey Shields, JP Morgan	Emerson Tyler
David Peligal, Brookfield	Kevin Jardell

PROCEEDINGS

CALL TO ORDER

CHAIR MORAN called the meeting to order and asked for a roll call.

MS. THORSTEINSON called the roll and stated there was a quorum.

CHAIR MORAN asked for a motion to approve the agenda.

> **MOTION:** A motion to approve the agenda was made by TRUSTEE FEIGE; seconded by TRUSTEE RIEGER.
>
> *There being no objection, the motion was approved.*

CHAIR MORAN asked for a motion to approve the minutes of September 3, 2020, September 23-24, 2020, and November 5, 2020.

> **MOTION:** A motion to approve the minutes of the last meeting and the meetings identified in the agenda was made by TRUSTEE MAHONEY; seconded by TRUSTEE FEIGE.
>
> *There being no objection, the motion was approved.*

SCHEDULED APPEARANCES AND PUBLIC PARTICIPATION

CHAIR MORAN moved to scheduled appearances and public participation.

MS. THORSTEINSON stated that public testimony was limited to two minutes and began with Mr. Woodby.

MR. WOODBY thanked all for the opportunities to comment. He continued that he is a member of 350 and stated that, over the past few years, he had stressed fiduciary risk of the climate crisis and the case for a fiduciary response has become increasingly clear. He compared the history for the fossil fuel industry to the link between smoking and cancer; the evidence on the link between burning fossil fuels and the greenhouse effect was found in the '70s and early '80s. Despite knowing all that, a disinformation campaign, which continues today, tries to cast doubt on the science. He stated that the point is that the fossil fuel industry is undergoing a financial reckoning where the majority of the $20 trillion of carbon assets still in the ground are destined to become stranded. This indicates the beginning of the collapse of the industry. He gave the Board three suggestions: First, determine the exposure across all asset classes to include identifying investments that are not directly fossil fuel enterprises but otherwise impacted; two, conduct a climate risk analysis across all asset classes; three, move funds to less risky investments. He added that the New York Comptroller announced a very detailed plan for divestment which would serve as a blueprint for the APFC. He thanked all.

CHAIR MORAN thanked Mr. Woodby and asked if there were any additional participants.

MS. THORSTEINSON recognized Mr. Schroeder.

MR. SCHROEDER stated that he was Bob Schroeder from Juneau. He continued that he has received a yearly dividend check since the first one, and thanked all for the work managing the Permanent Fund. He has testified several times and urged the Board to get serious about evaluating climate risk on the portfolio. He talked about organizations that divested $14 trillion in assets from fossil fuels. Lenders are increasingly unwilling to provide financial backing for oil and gas development. He thanked the Permanent Fund for providing detail on investment holdings in response to the public records requests over time. He added that he would prefer that APFC provides information on its holdings as an easily accessible report in its meeting materials. Alaskans need to be able to see how the investments are doing over time. He thanked the trustees for their service on the Board.

MS. THORSTEINSON thanked Mr. Schroeder and recognized James Simard.

MR. SIMARD talked about the early climate-related litigation, notably the Community of Kivalina versus Exxon, and Juliana versus United States, a children's suit. Many of the lawsuits failed due to the lack of standing in Federal courts. He quoted Federal Court Judge William Smith: Climate change is expensive, and the State wants help paying for it specifically from defendants in this case who extracted, advertised and sold a substantial percentage of the fossil fuels burned globally since the 1960s. This activity has released an immense amount of greenhouse gas in the Earth's atmosphere, changing its climate, and leading to all kinds of displacement, death and destruction. Defendants understood the consequences of their activities decades ago when transitioning from fossil fuels to renewable sources of energy that would have saved the trouble: He urged the Board, when considering the risks to the investments, to consider the probability that fossil-fuel companies will be held financially liable for damages caused, knowingly, by their past and present actions. He thanked all for the opportunity to speak, and for their service.

MS. THORSTEINSON recognized Mr. Tobin.

MR. TOBIN stated that he was Michael Tobin from Juneau. He requested that the Board establish a formal method of climate risk assessment for the funds that are managed. He talked about some information out of California that its retirement plan, CalPERS, had to factor in climate-related risk to their portfolios and report progress on that and on meeting the Paris Climate Agreement goals every three years. He explained the reports and what was noted. He concluded that a formal climate risk assessment process is part of the Board's fiduciary duty. He urged the Board to institute a climate risk assessment process, and do not get caught with the assets stranded.

MS. THORSTEINSON asked for anyone else online. There being none, the scheduled appearances and public participation were concluded.

CHAIR MORAN moved to the Chief Executive Officer's Report.

CHIEF EXECUTIVE OFFICER'S REPORTS

CEO RODELL began with the human resources report on all the activity and things being tried for recruitment, which will help the Board understand how it changes from quarter to quarter. She recognized Chad Brown for his success in having an article published in Forbes this week. She moved to communications and talked about the Alaskans' Guide to the Permanent Fund, which is available on the website. It is a comprehensive guide to how the Fund works and the history. Print copies are also available. She stated that there was a bit of reorganization of the website to make things more intuitive and to help with the education efforts. She continued that incoming legislators have been invited to webinars on the Fund. There will be one-hour webinars for them in advance of the session starting so they can understand how the Fund works and ask questions.

CHAIR MORAN moved to the Chief Investment Officer's Report.

CHIEF INVESTMENT OFFICER'S REPORT

MR. FRAMPTON began by going through the key topics that are focused on from an investment perspective. He reviewed the performance to date for the quarter that ended September 30th. He stated that it was a mixed performance. He went through each asset class and continued that the largest public equities trailed slightly with the value overweight that has been discussed in the past. He continued that, from a portfolio positioning standpoint, it is running very close to the benchmark weights and the portfolio is rebalanced every two to three weeks. He moved to personnel and stated that two positions were added: a credit analyst and a real estate portfolio manager. There are five open positions being actively recruited for: real estate, two in private equity, and two in public equity. There is good progress on recruiting for all five positions. He talked about the flexibility of investing in gold via ETFs and reported the purchase of $200 million of IAU, one of the gold ETFs available. He then highlighted the five key strategic considerations that were tracked and focused on. He continued to describe the problem assets as international, with retail being the toughest sector and rent collection still an issue in retail, which hurt the returns. He moved to performance and reviewed each asset class. On the attribution, the key was the active managers versus their assigned benchmark which helped in the quarter. He pointed out the listing of all the investment actions taken in the quarter that ended in September.

CHAIR MORAN moved to the adviser comments.

CEO RODELL noted that John Skjervem will be available later this morning.

INVESTOR ADVISOR COMMENTS

MR. ZINN stated that he would stick with the framework using his introductory comments to address an outside-in-perspective, and then his closing comments will be more of an inside-out perspective. He continued building on the comparison and the comments he made at the May meeting, drawing an analogy to the pandemic versus the global financial crisis. The pandemic represented both a global supply shock as well as a demand shock. In comparison, the central bank monetary stimulus is unprecedented to the tune of trillions of dollars, as compared to the global financial crisis. He added that another divergence is the rising industrial commodity prices; copper is up 50 percent from its 2020 lows. Tariffs and supply-chain disruptions are leading to higher transportation costs across the globe. He stated that it was unlikely that capacity can come back online given the decrease in the barrel-per-day production. He added that unless the Fed alters its stance, or the vaccines are unsuccessful, what is seen is continued dollar weakness, an increase in inflation, and an increase in long Treasury yields. He stated that in the fiduciary capacity, the DOL put out a rule regarding financial factors and selecting plan investments on October 30th. The final rule governing fiduciary investments stated the purpose was to confirm the plan, that fiduciaries must select plan investments solely based on considerations that impact the investment's economic value. This new rule discards explicit reference to environmental, social, and corporate governance due to the inability to precisely define such factors and to avoid unduly narrowing the rules' overriding goals.

CHAIR MORAN thanked Mr. Zinn and moved to Ken Frier.

MR. FRIER commended the private equity result and then remarked on the risk and the discussion on long-term expected returns. He also commended Sebastian for the excellent presentation for the deep dive on risk and recommended building on that discussion to add a couple other elements to the risk approach for the fund. He stated that the Aladdin system, with this detailed granular information about what is in the portfolio, can be used to ask portfolio engineering questions that may not have been asked before. On the risk topic, he believed that adding a long-term perspective to the risk discussion would help the board balance the short-term and the long-term. He continued that, in terms of long-term returns and equity valuations, it was a lucky year given the change in the fundamentals. He then provided some specifics on the equity valuation comment, and added that the challenge is that the expected returns on all the things that institutional investors normally would consider are just lower than normal presently.

CHAIR MORAN called a break.

(Break.)

CHAIR MORAN came back on the record and moved to the Capital Market Overview.

CAPITAL MARKET OVERVIEW

MR. ALLEN stated that he liked Mr. Frampton's presentation and added that it was a bit sobering. From his perspective, they were about to come out with the capital market expectations. He calculated the median expected return for the Permanent Fund portfolio, which is about 3.4 and 3.5 percent real over the next ten years annualized. He added, that was down from the last projection last year by a fair amount. He explained that asset managers place more emphasis on valuations in their projection process, and Callan has a more muted approach, recognizing that the big clients are making long-term strategic decisions and shifting their portfolios year to year in response to changes in valuation is not wanted. He believed that a well-positioned organization like the Permanent Fund with the history, staff and the philosophy experience will be able to outperform reliably public equity with private equity. He asked Mr. Center to give a picture of what the capital markets have done and what they look like at this point.

MR. CENTER began with the capital markets and what was done through September 30th. He then updated through the end of November. He explained that the US equity market has continued to drive performance up 9 percent for the S&P 500, up 15 percent over the last year; and up positive 14 percent year to date through the end of November. He stated that the emerging market stocks have done fairly well and then explained the two Callan Periodic Table charts which showed the year-to-date performance through the end of September. He talked about the incredible dip in March: 16 trading days for the market to go down 33 percent. Then in a period of about 97 days, that full dip has been recovered, and the market is back to positive territories. He compared that to the gold financial crisis, almost 240 trading days to get down negative 30 percent, and recovery took a far longer period.

CEO RODELL stated that there is continued confusion by the headlines that say there is a recession, and bad news about the US economy, and then we have the stock market performance being what it is. She asked how those headlines versus the data perspective could be reconciled.

MR. CENTER replied that what is available to purchase in the stock market are publicly tradeable securities and that market differs from the overall GDP makeup of the US. He continued that the Fed has made it unattractive to purchase fixed income and pushed investors towards the stock market. Another thing driving the strong performance seen in the stock market, and also has an impact on valuations, is how fixed income yields are a strong predictor of future performance. The best performing sectors tend to employ far fewer workers than many of the poorly performing sectors. The poorly performing sectors actually employ more people, and that tends to be bad for the economy as a whole. He stated that these poorly performing sectors are fairly small portions of the publicly tradeable stock market. This is why the stock market performs well while there are question marks about the economy and its health going forward. He then looked at global equity where returns and the non-US equity space were broadly positive, as were emerging markets. He added that the emerging market equity recovery is driven by appetite for risk, particularly as yields come down in the fixed income space. He talked about the US dollar and explained that the key drivers will be the global recovery post pandemic, and the outcome of the US elections. He moved to the global fixed income performance, stating that central banks continue to act very aggressively in the face of the global pandemic. He stated that emerging market debt made up ground during the quarter, and real estate had quite a bit of differentiation from the sector standpoint. He continued that transaction volumes came down substantially, and Callan expects negative appreciation to continue in Q4 and into 2021. He explained some of the things available on Callan's website from a research standpoint. He transitioned to the performance report and stated that this had to do with performance for the Permanent Fund for the trailing quarter, the year to date, and historical periods, and continued his presentation with the asset class performance.

MR. ALLEN provided some industry context and added that there are more products dissolving in the database at a higher speed than ever observed. He stated that it is being driven by the concentration in capitalization-weighted indices. Across the industry, people have given up on value, on small cap, on active management, making it a difficult, tough environment. He added that it will all be fine, and to hang in there.

MR. CENTER continued on the performance of the Permanent Fund's small cap portfolio which performed fairly well, above median in the small cap universe over all standard time periods, and ahead of the benchmark, as well. He then dove deeper into the non-US and global equity structure and added that this portfolio was divided amongst dedicated non-US developed market, dedicated emerging markets, and dedicated global managers, which invest in both the US and non-US.

CHAIR MORAN called the lunch break.

(Lunch break.)

CHAIR MORAN called the meeting back to order and moved to the Risk Overview.

RISK OVERVIEW

MR. VADAKUMCHERRY began with a request for a waiver that pertains to outstanding future commitments for the private assets portfolios. He explained that in the new investment policy, approved earlier this year, there was a lower and upper limit for outstanding future commitments. He stated that the lower part of that threshold was an oversight which he took responsibility for. He emphasized that the upper bounds or the yellow and red zones on the upper bounds would not be exceeded.

CEO RODELL added that this is something that will be corrected and brought back in the investment policy at a future date. She stated that the goal is to make meaningful changes to the investment policy on an annual basis and not at every meeting.

CHAIR MORAN stated that this was an action item and asked for a motion.

> **MOTION:** <u>A motion to waive the lower bound limit on future outstanding commitments relating to private assets for a period of 12 months was made by TRUSTEE RIEGER; seconded by TRUSTEE MAHONEY.</u>
>
> *After the roll-call vote, the Motion was Approved. (Trustee Richards, yes; Trustee Mahoney, yes; Vice Chair Rieger, yes; Trustee Schutt, yes; Trustee Feige, yes; Chair Moran, yes.)*

MR. VADAKUMCHERRY moved to the second part of the presentation which was reporting of the risk statistics for the Fund. He emphasized that it is the historical backward-looking realized volatility and the realized Fund Sharpe Ratio. He stated that it looks at a three-year window; historical and quarterly returns are used. He continued that not much changed since the last quarter. There was a small uptick in terms of a Sharpe Ratio because the deep decline was crossed from the quarter before. He went through the snapshot of the 30th of September, 2020. He also pointed out that in terms of risk parity and total fund cash, these were two new portfolios in the sense that the asset classes were added on as separate buckets. He added that it is all one standard deviation.

ALTERNATIVES, ASSET CLASS UPDATE

CHAIR MORAN moved on to the alternative asset classes and recognized Mr. Moseley.

MR. MOSELEY stated that he manages alternatives and private markets for the Permanent Fund. He continued that Youlian Ninkov is responsible for the absolute return portfolio. He added that Ross Alexander will talk about private income, which includes infrastructure, private credit, and the income opportunities. He would cover private equity and special opportunities. He stated that the goal would be to describe each one of the activities in each one of the asset classes and discuss how it was organized and how it was approached.

CHAIR MORAN stated that there had been a lot of discussion at the last few meetings on volatility and valuation figured on the private assets. He asked for thoughts on how the trustees should be incorporating that in the overall risk analysis.

MR. MOSELEY asked Mr. Ninkov to cover absolute returns.

MR. NINKOV began with a bit of background and overview of the absolute return program at APFC. He stated that the focus is on completely understanding or trying to understand what it is in the manager's investment process or organization that differentiates and helps produce the uncorrelated returns. He continued that the value of the returns is significant in a portfolio. He added that the objective is to produce positive, healthy returns. He moved to the discussion on current state and performance. He continued explaining the current strategy mix in the portfolio and the correlations to the S&P or Fixed Income Agg. That correlation jumped significantly earlier this year with that dislocation in the market in the first quarter. He added that, on a month-to-month basis, the portfolio behaves quite well relative to the expectations of uncorrelated through the traditional asset classes.

MR. MOSELEY asked Mr. Alexander to jump in on private income.

MR. ALEXANDER stated that he is a portfolio manager mainly responsible for infrastructure assets at the Permanent Fund, and does work on the broader private income team with Logan Rahn; a small team to cover three different portfolios. He continued that private income is actually a composite made of three underlying portfolios: Infrastructure, private credit, and income opportunities. He added that the goal is to generate a return between public equities and fixed income, generating both current yield and some level of capital appreciation. He began with infrastructure and stated that the investment manager is responsible for sourcing and acquiring assets. They are managing the assets or building them out. He briefly explained performance. He stated that there was a lot of uncertainty in the market, which is both providing opportunities and causing a cautious approach for making new commitments. He moved to credit and stated that in the credit portfolio the investment here is for the purposes of diversification and current income, while at the same time earning a premium to liquid loans. The last piece of the private income portfolio is income opportunities, which is a flexible pool of capital that does not have any specific themes but is adjacent to the infrastructure and credit portfolios.

MR. MOSELEY moved to private equity and explained the strategy is to deploy the capital through commitments to funds. He explained that about 75 percent of the capital in private equity is deployed through funds. The other 25 percent will be invested alongside and will support their activity. He went through the history of the program and then highlighted the different managers or portfolios that have different approaches or tactics that together add up to a robust program that will continue to grow.

CEO RODELL asked how, because of COVID and not being able to do business travel and meet in person, has that affected the relationships and the access.

MR. MOSELEY replied that his view is that the work done, those road warrior days and hours, and the time and effort that preceded work at the Permanent Fund, way back in terms of relationships, some benefit has been captured from that over time.

CHAIR MORAN stated it was a great presentation and called a break.

(Break.)

CHAIR MORAN called the meeting back to order.

CEO RODELL stated that Commissioner Mahoney had to go into a meeting in the Governor's office and will not be joining right now.

CHAIR MORAN asked CEO Rodell to explain the next steps.

CEO RODELL stated that each year one of the things done is briefing the Board on the protocols for IT, both to protect the Fund, and a lot of the data that is not public information, which is why it is done in Executive Session. That gives the trustees an opportunity to really understand the safeguards that have been put in place in terms of the IT infrastructure.

CHAIR MORAN asked for a motion to go into Executive Session.

> **MOTION:** In accordance with Alaska's Open Meetings Act, a motion that the Board of Trustees convene in executive session to receive an update on APFC's cyber security and business continuity disaster recovery plan. This topic is appropriate for executive session because the immediate knowledge of this information could thwart the efficacy of this plan and in turn negatively impact the value of the Permanent Fund was made by TRUSTEE RIEGER; seconded by TRUSTEE FEIGE.
>
> *After the roll-call vote, the Motion was Approved. (Trustee Richards, yes; Trustee Mahoney, absent; Trustee Rieger, yes; Trustee Schutt, yes; Trustee Feige, yes; Trustee Moran, yes.)*

(Executive session from 3:35 p.m. until 4:52 p.m.)

CEO RODELL stated that Trustee Richards was having some technical issues and asked to please go ahead without him.

CHAIR MORAN announced that while in executive session the trustees considered only the matters mentioned in the motion and took no action. He asked for any other business.

CEO RODELL stated that there was no more business on her end.

CHAIR MORAN stated that the meeting would reconvene tomorrow morning at 8:30.

(Alaska Permanent Fund Corporation quarterly meeting recessed at 4:56 p.m.)

December 10, 2020

CHAIR MORAN called the meeting back to order.

MS. THORSTEINSON noted that all the trustees were online.

CHAIR MORAN recognized CEO Rodell.

CEO RODELL stated that Steve Moseley would do the introductions for the outlook for the future of oil and gas.

THE FUTURE OF OIL AND GAS

MR. MOSELEY introduced Pierre Lapeyre and David Leuschen from Riverstone, two of the Fund's investment partners. They formed the original global energy and power group at Goldman Sachs in the '80s, and then formed Riverstone in about 2000. They both are viewed in the investment industry as being among the founders of private equity investing in the energy sector. He added that it would be interesting to hear about their current thoughts on the industry and investment opportunities available.

MR. LAPEYRE stated that 2020 was a surprising year in a lot of ways for a lot of people in a lot of industries. It is a constant reminder of how volatile things are and how rapidly things change in the energy business. He stated that the COVID pandemic and everything else created a lot of general consternation. He added that it was an unbelievably tumultuous year in energy. Prices and valuations have been crushed; a lot due to the pandemic and the economic shutdowns. He continued that the relevance of energy broadly defined to the public markets has significantly declined and has hurt capital flows as a result. He explained that at the peak of demand, destruction related to the pandemic, 8 million barrels a day were lost on a sustained basis. A lot of that has worked off as gasoline and transportation demand returned and there are a variety of estimates as to how long it will take for people to become completely comfortable to get back to where normal resides. The environmental pressures or ESG pressures are moving beyond coal and natural gas to sort of all things carbon. He added that the entire US energy market cap is still significantly smaller than the market cap of Apple. He talked about the major themes dominating the energy market from his perspective. He started with the upstream E&P business, which is where everything in the way of activity starts in the industry. He stated that the industry has been crippled the past two years by low prices. In the last year, it was brought on by an overwhelming combination of simultaneous negative factors: First there was the oversupply from the Saudi-Russia battle for oil market share; then the record demand destruction through the pandemic because of lockdowns and mobility restrictions; and third, there was a significant amount of rising uncertainty in the markets over the timeline to recovery until the Pfizer vaccine was announced and increasing concern as to what future fossil fuel demand would be with the ESG, decarbonization, and a movement to electrifying everything in the energy business. That led to significant negative institutional capital flows. The fourth point is that there is a significant bifurcation both in acceptability of companies and the strategy related to scale. He added that it is all about scale which is because the larger companies can really meet the market's demand for the three key goals which is to live within the cash flow, generate excess cash, show some modest growth and return capital to shareholders. He moved to the fifth point which is that the market shifted from growth to discipline and is trying to keep from overproducing so that the market could be balanced. He continued that reduced activity and volumes that come with that have a direct impact downstream in the energy business that have a significant impact on oil field service and midstream companies. He continued going through the different points of his presentation and stated that the renewable business is moving to its next phase, which is not just wind and solar infrastructure, but more of an industrial focus on decarbonization and more of emerging companies in technologies that clean up the existing fossil fuels, providing entire new businesses that are built around decarbonizing energy. He added that this significant growth in green credit or impact credit is a large growing part of his business.

MR. LEUSCHEN stated that the larger companies are still trading at positive cash flow multiples almost in the range of where they used to trade. It is a majors play, and all the independents are disappearing. He continued that the small caps have been decimated and many are viewed as subscale, overlevered, non-free cash flow positive and having little access to capital.

MR. LAPEYRE continued that in terms of their outlook, the question is how fast is the recovery going to come and to what degree will it last before the industry reverts back to the lack of capital discipline. He noted the need to get on the other side of the COVID fog and demand recovery, which is difficult to predict even with the vaccine. He added, it is moving in the right direction. He stated that it is clear that the industry is transforming itself from an extractive process to one that is using creative technology -- the move to electrification of everything.

MR. LEUSCHEN explained the Riverstone decarbonization target list. He talked about the new technologies and new applications to the existing conventional business that will radically change the carbon footprint over the next few years.

MR. MOSELEY thanked both for the great overview. He asked for some examples of investment opportunities in energy transition.

MR. LEUSCHEN replied that there is an entire series of hydrogen trucking companies, a whole system of the EV charging stations, agricultural opportunities. There is also mechanical carbon capping, like carbon engineering. Looking at next-generation fuels, hydrogen is everywhere. He noted that hydrogen is the one fuel that solves a lot of problems.

MR. LAPEYRE continued that the electrification of mobility has an emerging supply chain from batteries to power management systems to home-charging or commercial-charging applications. He stated that the technologies are evolving very rapidly and have margins that are much higher than the traditional fossil fuel energy business.

MR. MOSELEY thanked the friends from Riverstone and introduced David Hayes, who is a managing director at NGP which, like Riverstone, is one of the early investors in energy in the private markets and also an investment partner for Alaska Permanent Fund.

NGP ENERGY CAPITAL

MR. HAYES began by looking at the current oil price environment and then the history of the last decade from a price standpoint, downward shocks. He went through the projections by multiple agencies for demand in 2025 and 2030, and stated that they are pretty conservative and showed the growth for the next decade. He focused on the Permian and went through the rig count, going back six-plus years. He talked about the impact on production: The Permian grew from about a million barrels a day over the last decade to 5 million barrels a day, which is 5 percent of world supply, and it is a big deal. He added that it was where most of the capital went as it related to upstream activity. He moved to a chart of production growth which is projected to come down dramatically, and then discussed natural gas production and growth. He continued on to mineral ownership and stated that most of it is in private hands; sometimes attached to the surface, and increasingly detached from the surface. He then focused on a mineral acquisition that one of their portfolio companies made, and about the royalty mineral market. He stated that they continue to innovate and try to bring down the costs and improve information and intel with the use of data. He continued that they have a 15-year track record of investing in energy technology, and there is a dramatic acceleration in energy transition, which is on the backs of the competitiveness of renewable, solar and wind. The reduction in cost and the complementary technology is primarily storage, which has a long way to go. He continued that the top-performing legacy energy investors are best suited to navigate that evolution that will probably continue in perpetuity. He stated that the energy transition theme, renewable energy is increasing and will continue to do so. Electrification is a big deal. The support by governmental, corporate, and individually for accelerating the pace of this has never been higher. He continued that the legacy investment platform is well positioned with capital, with good deal flow, with great teams in the field to take advantage of the absence of capital and the deals to be had in the current market which are executing well. He added that the energy transition investment opportunities are growing, and are increasingly competing for capital.

CHAIR MORAN thanked Mr. Hayes for a fantastic presentation and called a break.

(Break.)

SECTOR OUTLOOK – THE FUTURE OF HOSPITALITY AND TOURISM
CHAIR MORAN called the meeting back to order and recognized Steve Moseley.

MR. MOSELEY introduced L Catterton, Scott Dahnke and Kevin Kingman. He stated that Catterton is the largest consumer-focused private equity firm in the world and is a truly global organization. He asked Scott Dahnke to begin.

MR. DAHNKE stated that the agenda for the presentation will be the consumers of today. There is fairly recent data, research on consumers, both primary and secondary research, which is conducted throughout. He continued that it is important to think about where the consumer will be spending their precious capital going forward.

MR. KINGMAN noted that they were in the business of doing research and focusing on understanding consumer behavior. He continued that the data comes from proprietary consumer surveys and interviews and research that had been done. He added that one of the effects of technological innovation is that there is more data and more access to what consumers are doing; we can follow where consumers are using their cell phones; the panel data on where money is being spent on credit cards. That behavior is more valuable than what people say on web-based surveys. Then insights from some of the leading consultancies, investment banks and the like are synthesized. He went through an index that was built to understand: Are people impacted about the economics; impacted by health effects; or not by either economically or health effects. He stated in May they talked about COVID being more of an economic crisis, and then in September, as policy makers effectively addressed some of the economic concerns and lockdowns lifted, the economic anxiety reduced. But, as the pandemic progressed, more people have been impacted directly or indirectly by the virus. This net understanding of the fact that more had a concrete experience with the health-care risks, the economic risks became more abstract. This is the most relevant way to think about the impact of the crisis. He stated that this is useful data and publicly available to anyone going online. There have been some interesting patterns created, which he explained.

He continued that the real impacts on where money was spent which was in grocery stores, and traveling stopped. More money was spent on delivery services, especially food delivery. There is also more money spent on home improvement and service providers. He talked about technological adoption and the range of technologies monitored. He continued that it was a step-function growth in trial of the technologies. Group videoconferencing was up threefold over the course of the crisis. All these new ways are being tried to fulfill needs. He added that some of the changes are permanent, but most of them are not because consumers really want to get back to the old way of living.

CEO RODELL stated that, from her perspective, this presentation was really illuminating. She appreciated the willingness to share some of the research they found. In thinking about not just the perspective from the seats here in Alaska, but just generally on recovery and investment opportunities and directionally the potential for growth and opportunity. She thanked them again.

CHAIR MORAN also thanked them and called a lunch break.

(Lunch break.)

CHAIR MORAN called the meeting back on the record and asked if John Skjervem was ready.

INVESTMENT ADVISOR PRESENTATION

CEO RODELL introduced John Skjervem and stated he was currently the CEO of Alan Biller and Associates and is under contract with APFC as one of the members of the investment advisory group. She stated that one of the charter changes adopted by the Board was to ask each individual of that group to make a presentation on a topic they thought had relevance for the Board. Mr. Skjervem is presenting a topic on asset allocation.

MR. SKJERVEM stated that the title of his presentation is "Risk and Return Over Time." The objective is to really understand why the future is going to be more challenging than the past, to really appreciate that as a thorough investigation of the past, and how we got to this unique juncture. He continued that this presentation is customized every time to reflect the organization, and he collected some data to make it custom to the Permanent Fund. It is at a high level, and yet is faithful in tracking the asset allocation of the Fund over time, and faithful in terms of the inputs and the integrity of those inputs. The goal is to quantify in some detail how we got to where we are so that the prospects of where we are going can be understood. To meet the Alaska Permanent Fund's return expectations, APFC trustees have accepted incrementally higher levels of risk, especially in illiquid, private market strategies, as a result of ever lower rates in sovereign bond and credit markets. He concluded that the collapse in base rates makes achieving the Fund's return objective very difficult going forward with adopting an otherwise imprudent asset allocation.

CHAIR MORAN thanked Mr. Skjervem for an excellent presentation. He asked CEO Rodell about a flexible work policy.

FLEXIBLE WORK POLICY

CEO RODELL stated that Chad Brown, director of HR, and Sara Race, administrative services manager, have put a tremendous amount of work into this policy and are available to answer questions. She continued that this goes back to a goal that the Board identified going back to 2015 which is about: What are the steps that can be taken, things that can be done that may not require monetary resources but will help with recruitment retention and really continuing to build on a world-class staff at APFC. She added that the goal with this presentation is to provide information to help think about this. She moved on to the different options and stated that the first option was the addition of physical office locations, and the second was a flexible work policy. She noted that they are not mutually exclusive, but it recognizes that a remote work policy has many different implications. She began with an overview of where they are regarding the physical office. The first office would be located in Anchorage and is not an out-of-state or out-of-country office. It includes two or three private offices with a couple of associated cubicles or work spaces, a break area , and a conference room. And depending on the layout of the space, there may or may not be a reception area. The belief is that a cross-section of APFC would be located in Anchorage. She talked about the procedures in procuring the space, and then did an overview of and costs of what was available in Anchorage. She noted that there was a draft of the policy that would go into effect along with the documentation of what would have to be done with employees that wanted to pursue this. She believed that it will not necessarily take effect immediately if the Board adopts it, but that having it in place will help the transition of getting back to a more traditional, normalized work environment.

> **MOTION:** A motion to adopt an APFC flexible-work policy was made by TRUSTEE RICHARDS; seconded by TRUSTEE FEIGE.
>
> *After the roll-call vote, the MOTION was approved. (Trustee Mahoney, yes; Trustee Rieger, yes; Trustee Feige, yes; Trustee Schutt, yes; Trustee Richards, yes; Trustee Moran, yes.)*

REGULATION PROJECT
CHAIR MORAN recognized Chris Poag about the regulation project.

MR. POAG stated that the one-page cover memo provided a bit of a background on why staff is proposing changes to the real estate regulation. He talked about why the Board has regulations, the process used to adopt changes to regulations, and then why this was being brought to the Board. He explained that the language is trying to give the real estate team a bit broader authority to look at both debt and equity, to look at both core, value-added opportunistic, as well as a possibility to invest in REOCs and publicly traded real estate investments.

CHAIR MORAN asked if this will be revisited at the next February meeting.

MR. POAG replied that this was a heads-up that this is coming and would not be a surprise in February when the proposed changes and comments were presented.

CHAIR MORAN stated that he supported this moving ahead, and called a break.

(Break.)

CHAIR MORAN stated that the next order of business is the supplemental budget request, and he recognized CEO Rodell.

FY21 SUPPLEMENTAL BUDGET REQUEST
CEO RODELL stated that part of the budgeting challenge every year is to forecast the budgets well in advance of a fiscal year. The investment performance for some of the managers has well exceeded the expectation when the FY21 budget was prepared. This is being brought forward because it is driven by the timing by both OMB and their need to review requests, as well as the legislative process. She asked Sara Race to continue.

MS. RACE stated that this is done at this time of year to monitor fee projections closely because this is the one opportunity to be able to determine if it would be prudent to request a supplemental appropriation to be able to fulfill the contractual obligations. This is done on the timeline of the OMB schedule. This requested action to be taken was brought before the Board today because supplemental requests are due to OMB by January 4th. She revisited some of the important points on how the fee projections were created and what they included.

> **MOTION:** A motion that the Board of Trustees direct staff to submit a $25 million supplemental budget request for the fiscal year 2021 Investment Management Fee

allocation to fund external manager fees. The Board also authorizes, under this motion, staff to adjust the supplemental request as needed as the fiscal year progresses was made by TRUSTEE RICHARDS; seconded by TRUSTEE SCHUTT.

After the roll call vote the MOTION was approved. (Trustee Mahoney, yes; Trustee Richards, yes; Trustee Rieger, yes; Trustee Schutt, yes; Trustee Feige, yes; Trustee Moran, yes.)

ADVISOR COMMENTS

CHAIR MORAN moved to advisor comments and recognized Mr. Zinn.

MR. ZINN stated that he was super impressed and complimented staff on a tremendous performance over the COVID window, and also a great meeting. He continued that it was foreshadowed in his earlier comments and that confirmed the five-year plan with moving PE from 15 to 19 percent, and in addition to that, real estate and other illiquids essentially moving the portfolio from 37 to 46 percent supported by the trustees and largely based on Mr. Moseley's presentation enthusiastically supported. It was a terrific outcome for the day. He also touched on the recurring theme of resources and was curious if there were any possibilities of things that can be done under control, as opposed to tin-cupping with the Legislature.

CHAIR MORAN thanked Mr. Zinn and recognized Mr. Frier.

MR. FRIER congratulated all on a good meeting. He had a comment for consideration about the meeting. If he were a Board member, he would have wanted more time given to the alternatives-of-investments people. It could benefit the Board for the class heads to articulate a portfolio strategy for the period ahead, rather than having so much emphasis on the period in the past. He added that about half the slides in that section were about past performance. He stated that it was clear that there is a very strong investment team here and, if he were a Board member, he would want to know more about the thinking in the period ahead, and then being able to compare that thinking to how things actually turn out. He commented on private equity risk, and then looked at global public equity. He stated that his hesitation about the year ahead is that the prices and asset values now are dependent upon things working out well next year.

CHAIR MORAN thanked Mr. Frier and asked CEO Rodell about the calendar.

OTHER MATTERS

CEO RODELL stated that one of the actions the Board takes is to adopt a two-year calendar. The Board previously adopted a 2021 calendar, but we also need adoption of a 2022 calendar. She talked about the meeting to happen in Kodiak and stated that it will be difficult to have any sort of virtual participation given the limitations within meeting areas. That will be one of the challenges with meeting in Kodiak. She added that they tried to coordinate with the Alaska Retirement Management Board to prevent any potential conflicts that some may have with that group. She stated that the Governor extended the declaration of emergency orders for public health to mid-January.

CHAIR MORAN asked if the February meeting can be put on the schedule for Juneau.

CEO RODELL stated that the schedule needed to be adopted and approved. She explained that it is a review of 2021, and both 2021 and 2022 should be approved.

MOTION: A motion to approve both the 2021 Board of Trustees meeting schedule and the 2022 Board of Trustees meeting schedule as presented was made by TRUSTEE FEIGE; seconded by TRUSTEE MAHONEY.

After the roll-call vote, the MOTION was approved. (Trustee Feige, yes; Trustee Mahoney, yes; Trustee Schutt, yes; Trustee Richards, yes; Trustee Rieger, yes; Trustee Moran, yes.)

TRUSTEE COMMENTS

CHAIR MORAN moved to trustee comments.

TRUSTEE FEIGE stated that she liked what Mr. Frier had to say about a look at the strategy in the asset classes and asked about incorporating some of that discussion into future meetings, which would be very interesting.

MR. SKJERVEM stated that he had switched devices and had technical difficulties. His comment was that plenty of commentary is received on realized results from the very thorough reports from Callan. It would be more interesting to look forward and get more color on the challenges being faced, implementing in the here and now.

CHAIR MORAN asked for any additional comments.

TRUSTEE RIEGER stated that it was a really good meeting, and the investment performance numbers were really impressive. He talked about the comments and the outlook for the future. He added that it seems there are some really big discussions coming up on asset allocation for the next meeting.

TRUSTEE SCHUTT thanked the staff and the external advisers for well-put-together materials. He commented about his feelings on how it feels like they were engaged in a game, but it is imminent that something will happen.

CHAIR MORAN called a break.

(Break.)

TRUSTEE RIEGER stated he was ready to make the motion.

MOTION: In accord with Alaska's Open Meetings Act, a motion that the Board of Trustees convene in executive session for the purpose of discussing the annual performance evaluation of the executive director. Because this discussion could be harmful to the executive director's reputation or character, under applicable law this discussion should take place in executive session unless the executive director requests a public discussion was made by TRUSTEE RIEGER; seconded by TRUSTEE FEIGE.

After the roll-call vote, the MOTION was approved. (Trustee Rieger, yes; Trustee Schutt, yes; Trustee Richards, yes; Trustee Mahoney, yes; Trustee Feige, yes; Trustee Moran, yes.)

MS. THORSTEINSON stated that they will go off the record and trustees can call into executive session.

(Executive session began at 3:27 p.m. until 5:16 p.m.)

CHAIR MORAN announced that while in executive session, the trustees considered only the matters mentioned in the motion and took no action.

> **MOTION:** A motion to set the executive director's salary for calendar year 2021 or at least commencing 1/01/2021 be set at $389,000 was made by TRUSTEE RIEGER; seconded by TRUSTEE RICHARDS.
>
> *After the roll-call vote, the MOTION was approved. (Trustee Feige, yes; Trustee Rieger, yes; Trustee Schutt, yes; Trustee Richards, yes; Trustee Mahoney, not present; Trustee Moran, yes.)*

CEO RODELL thanked all and stated her appreciation for the support and recognition.

CHAIR MORAN stated that was the end of the agenda and asked for any additional business of comments before adjournment. He thanked staff for another excellent meeting, and the two sessions today were superb. They were on point for the Permanent Fund but also for the economy of Alaska. He adjourned the meeting.

(Alaska Permanent Fund Corporation quarterly meeting adjourned at 5:20 p.m.)

Attachment 3

APFC Flexible Work Policy

APFC's Core Values are Integrity, Stewardship and Passion and as such each member of our team is expected to act with the highest level of integrity and stewardship with regard to the resources with which we have been entrusted. This means we act with care with our budget resources while providing Alaskans and the State of Alaska the results they are expecting from our organization. We extend this trust to our employees and empower them to shape their work so that they can achieve the best possible results. This paradigm motivates our employees while improving the company's performance capabilities and enhances our market position as a flexible and attractive employer which directly impacts our ability to generate top investment returns.

This policy is provided in accordance with the State of Alaska's Telecommuting Policy and Guidelines. Telecommuting is an arrangement to permit employees to perform their job duties at an alternate work location with a Telecommuting Work Agreement. Telecommuting is not an employee benefit or right. Employee participation in telecommuting is voluntary and is completely subject to management decision.

Telecommuting Guidelines:

A. **Telecommuting is available to employees when approved by supervisors.** These guidelines do not apply to employees who work at home as a temporary or permanent reasonable accommodation approved under the Americans with Disabilities Act.

B. **Telecommuting arrangements may be on a part-time or full-time basis**. Initial telecommuting arrangements may only be approved for a period up to 6 months, and then must be reviewed prior to extending. Once an arrangement has been shown to be successful, it may be approved for up to 12 months at a time.

C. **Employees must have written approval from his/her supervisor prior to beginning a telecommute arrangement**. An employee must have an approved Telework Request Form as well as an approved Telework Agreement between the Executive Director, employee and supervisor before beginning a telecommute arrangement.

D. **Management retains the right to approve or deny requests based on established criteria**. Telecommuting should only be considered if mutually beneficial for the agency and the employee. In deciding whether to approve an employee's request for telecommuting, the supervisor shall consider the following factors:

    1. The position's suitability for telecommuting;

    2. The employee's suitability for telecommuting; and

    3. The mutual benefits to the Fund, APFC and the employee.

F. **Employees must be available during work hours established in their TRF**. Employees must account for all time worked and use leave, as appropriate, with prior management approval only.

G. **Employees are expected to be in the Juneau office 2 consecutive business weeks per quarter**, unless they receive specific exemption. Supervisors, with the approval of the Executive Director may approve shorter, nonconsecutive time in the office.

H. **The telecommute location will require adequate workspace, light, telephone service, power and temperature control**. The employee will provide telecommute worksite furniture and equipment and should maintain a clean and safe workspace. APFC will not pay operating costs, maintenance, system upgrades, or other incidental costs (e.g., utilities, telephone, or Internet access) associated with the use of an employee's telecommuting site.

I. **It is the responsibility of the telecommuter to determine any income tax implications of maintaining a home office area**. APFC will not provide tax guidance nor will APFC assume any additional tax liabilities.

J. **Employee Eligibility**

Telecommuting shall be considered an option at the exclusive discretion of management, not an employee benefit or right. APFC management has the right to initiate, terminate or suspend a telecommuting arrangement for an individual employee or group of employees at any time. Management may designate any group or unit of employees not eligible for telecommuting at any time. Management shall utilize the following criteria in evaluating if an individual employee or group of employees may be eligible for TWAs:

1. Whether the employee consistently demonstrates work habits that are well-suited to telecommuting, including but not limited to: self-motivation, self-discipline, the ability to work independently, manage distractions, meet deadlines, and a demonstrated record of meeting established performance expectations; and

2. Whether the employee has the technical capacity to work remotely, including consistent internet connection, electricity, phone reception, ability to keep sensitive or confidential materials secure, etc.

An employee may **not** be eligible to participate in Remote work if:

1. The employee has received formal discipline for performance or conduct or a Performance Improvement Plan (PIP), during the previous 12 months; or

2. The employee has not gained permanent status in their current position. This requirement can be waived with approval from the Executive Director, as appropriate.

Alaska Permanent Fund Corporation Procedures

Written requests for telecommuting arrangements shall be submitted to Human Resources and approved by the Executive Director (ED).

A. Approval flow for Telecommuting:

1. Employee submits request to HR for Telework Request Form (TRF)

2. Employee fills out their portion of the TRF which automatically routes to their immediate supervisor up to the Executive Director for approval.

3. If the ED approves the request, HR will send the Supervisor and employee a Telecommuting Work Agreement (TWA). Both the employee and supervisor must sign the TWA prior to the implementation of the telecommuting arrangement.

4. Copies of the approved TRF and signed TWA will be saved to the employee file.

5. The Supervisor and Employee review the TWA at least annually to evaluate the Employee's performance while telecommuting. If the Employee is meeting expectations while telecommuting, the TWA can be extended for an additional year.

C. Contents of the TRF

The TRF sets out the specifics for the individual circumstance of the telecommuting arrangement including state and personal equipment to be used, days/hours of work, location of work, general duties to be performed and method(s) of assessing telecommuting performance. A template for a TRF is attached as Appendix A.

D. Renewing the TWA

1. The TWA must be discussed and renewed at least annually, or whenever there is a major change in job duties.

2. The TWA may be canceled by the employee with 15 calendar days written notice.

3. The supervisor may cancel this agreement and instruct the employee to resume working at the duty location at any time. If the employee is telecommuting from a location outside their normal duty station, the supervisor shall give 15 calendar days' notice when cancelling the agreement.

ALASKA PERMANENT FUND CORPORATION

Flexible Work Request Form

New Agreement
In-State

Renewal
Out- of-State

Note: If the telecommute is out-of-state, employees are responsible for applicable taxes and are required to submit applicable state tax paperwork to the Division of Finance.

Name ______________________
Title ______________________
Division ______________________
Department ______________________

Employee ID ______________________
PCN ______________________

Which of the following approved Flexible Work options are you requesting?

Option A - Weekly	Option B - Monthly	Option C - Quarterly
2+ designated days per week in person at the Corporate Office	1+ designated week(s) per month in person at the Corporate Office	2+ designated weeks per quarter in person at the Corporate Office

Describe why your position is suitable for the Flexible Work Option you selected along with your intended schedule to be physically in the office

Provide a brief overview of why flexible work is mutually beneficial to APFC and yourself

Requested Start Date ______________________ Expected Duration ______________________

Location(s) from which employee anticipates working: ______________________

If selecting Option A - Weekly please list your set schedule and hours below

Monday	Tuesday	Wednesday	Thursday	Friday

Supervisor Approval

Do you have concerns with the employee's current performance? Yes No

Is this position suitable for Flexible Work? Yes No

If this position is suitable for a Flexible Work arrangement please describe why

Outline the plan to ensure communication and accountability are maintained

Describe benefits to APFC and employee

Request Approved Yes No

If not approved, please provide the rejection reason below

Signature ______________________ Date ______________________

Name ______________________ Title ______________________

Divisional Director Approval

Request approved Yes No

If not approved, please provide the rejection reason below

Signature ______________________ Date ______________________

Name ______________________ Title ______________________

Executive Director Approval

Request approved Yes No

If not approved, please provide the rejection reason below

Signature ______________________ Date ______________________

Name ______________________ Title ______________________

Attachment - 5

General Telework Acknowledgement

Teleworking is a voluntary agreement between the requesting employee (teleworker) and Alaska Permanent Fund Corporation (APFC). Location(s) for temporary telework are to be disclosed in the leave request when submitted.

Teleworking can be discontinued at any time by either party without adverse repercussions.

Environment

1. I agree to maintain a safe and ergonomically sound work environment, to report work-related injuries to the supervisor at the earliest opportunity, and to hold the APFC harmless for injury to others at the approved RWL.
2. I agree to allow an authorized APFC representative to inspect the home office at the approved RWL.
3. I agree to maintain dependent care arrangements to not interfere with my work. (if applicable)
4. I agree to represent APFC in a professional manner while working remotely, including video calls (video calls are required to have a professional background and reasonable efforts must be made to mitigate disruption during such calls).

Security

1. I agree to: (a) provide a secure location for all APFC-owned equipment, materials, and confidential information; and, (b) not use, or allow others to use, such equipment, materials or confidential information, other than as required for APFC business.
2. I agree to allow APFC reasonable access to its equipment, materials, and confidential information.
3. I agree to return APFC equipment, records, and materials within 24 hours of termination of this agreement.
4. I agree that all APFC equipment will be returned by the employee for inspection, repair, replacement, or repossession with 24 hours of notice.
5. I agree to implement best in class (as defined by the APFC IT Director) steps for information security in the home-office setting, and will immediately check with my supervisor and the APFC IT Department when security matters are an issue.
6. I agree that all work is to be done on company furnished equipment (laptops, phones, tablets etc.)
7. All equipment, records (including confidential information), and materials provided by APFC remain APFC property while in use at the approved RWL.

Virtual Desktop Infrastructure (VDI) is required to be used for all telework in order to maintain the highest level of security – NO work is to be done and saved on your endpoint as it poses a significant security risk, not adhering to this could result disciplinary action up to and including immediate termination.

Communication

1. I agree to be available for work-related communication during standard working hours (8:00 am to 4:30 pm Alaska time) and agree to timely respond to all work-related communication in a similar timeframe as if I was physically located in our Juneau headquarters.
2. Failure to not utilize internal communications systems or not responding timely could result in an immediate halt to the Telework Arrangement, or additional consequences including time processed as Leave without Pay or disciplinary actions up to and including termination.

IT supported Instant Messaging is required to be on and will reiterate your availability and location at all times.

General

1) I understand my salary, retirement, leave benefits, and insurance coverage shall remain the same.
2) I understand that the duties, obligations, responsibilities and conditions of my employment with APFC remain unchanged.
3) Work hours, use of personal leave, and approval process for use of personal leave remain unchanged.
4) I understand that there are no changes to the Business Leave process, all requests must be submitted, approved, and executed according to APFC and State Policy.
5) APFC will not be responsible for the following expenses incurred by the employee while working remotely:
   a) State or local Tax obligations, insurance requirements, or local zoning requirements;
6) Maintenance or repairs of privately-owned equipment, including home office equipment;
7) Utility costs associated with working remotely, including the costs associated with internet connectivity; and
8) Office space, equipment and supplies needed to work remotely.
9) Juneau based offices/space, including offices/window seats are designated for staff who spend the bulk of their time working at APFC Headquarters, teleworking employees agree to use any available desks when working in Juneau.

Information Security and Technology confirmation:

I confirm I will use only company furnished equipment, understand the expectations to use our Virtual Desktop Infrastructure, and the ISP connection I will be using is sufficient for remote work.

RWL Security Meeting VDI Expectations IM Expectations

Agreement One (1) year from date approved

I have read this Telework Agreement, the telework policy and agree to its terms.

Employee ______________________ Date ______________

Manager ______________________ Date ______________

Division ______________________ Date ______________

Human Resources ______________________ Date ______________

APFC retains the right to modify the agreement on a permanent or temporary basis for any reason or as a result of business necessity (for example, the employee may be required to come to the office on a particular day), or as a result of an employee request supported by the supervisor.

ALASKA PERMANENT FUND CORPORATION

ANNUAL MEETING OF THE BOARD OF TRUSTEES

September 26-27, 2018

Location of Meeting:
Marriott Downtown Hotel
Anchorage, Alaska

SUMMARY MINUTES

Trustees Present:	William G. Moran, Chair Carl Brady, Vice Chair Sheldon Fisher Craig Richards Marty Rutherford Andrew Mack
Investment Advisor:	George Zinn
Staff Present:	Angela Rodell, CEO Marcus Frampton Danielle Graham Valerie Mertz, CFO Valeria Martinez Chris Poag Paulyn Swanson Rose Duran Jared Brimberry Stephen Moseley Jim Parise Fawad Razzaque Chad Brown Robin Mason
Other participants:	Greg Allen, Callan Associates Beth Stuart, KPMG Taylor Mammen, RCLCO Ben Maslan, RCLCO Myles Sanger, CBRE Chris Harris, Brookfield Barry Blattman, Brookfield Paul Yett, Hamilton Lane Jason Howard, GMC Grosvenor Jeb Burns, CIO candidate David Kushner, CIO candidate

SEPTEMBER 26, 2018

CALL TO ORDER

CHAIR MORAN asked for a roll call.

ROLL CALL

VICE CHAIR BRADY, CHAIR MORAN, TRUSTEES RICHARDS, RUTHERFORD, MACK and FISHER were present to form a quorum.

APPROVAL OF AGENDA

CHAIR MORAN stated that if there are no suggestions or changes from the board, the agenda is considered approved.

APPROVAL OF MINUTES (May 23-24, 2018; July 24, 2018)

MOTION: TRUSTEE RUTHERFORD made a motion to approve the minutes of the May 23-24, 2018 and the July 24, 2018 board meetings. Seconded by TRUSTEE FISHER.

The MOTION WAS APPROVED with no objection.

SCHEDULED APPEARANCES AND PUBLIC PARTICIPATION

CHAIR MORAN stated that there were no scheduled appearances. He asked if there was anyone from the public that wished to address the board. There being no one, he moved to the Chief Executive Officer's report.

CHIEF EXECUTIVE OFFICER'S REPORT

CEO RODELL began by talking about attending the International Forum of Sovereign Wealth Funds annual meeting in Marrakesh. She continued that every three years this group elects a board of five members, three nonelevated members, a deputy chair and a chair. She was elected deputy chair, which she will serve as for three years, and then will serve as chair for three years. This is quite an honor and the first time the U.S. has been represented on the board. She moved to the communications report and stated that the website redesign has been up and running for a year, and went over some of the statistics seen since the launching. She continued to the annual report and thanked Paulyn Swanson and staff for writing up what is going on with the individual asset classes within the corporation in general. She also highlighted the investment management fee report which is revised on a regular basis to make it more transparent, explaining the types of fees.

CHIEF INVESTMENT OFFICER'S REPORT

MR. FRAMPTON stated that one of the purposes of this meeting is to review the investment performance through June 30, 2018. He continued that it was a successful year with the 10.7 percent return, which compares to an 8.2 percent performance benchmark return. The performance was strong across the board, and more detail will be provided by the investment directors. He added that this period now is of historically high multiples of public stocks and historically low yield on securities. The good news is that the investment team is very strong and aware of the market, and they continue to manage the portfolio to get the returns that are expected.

REPORT OF ANNUAL AUDIT

MS. MERTZ stated that the fiscal 2018 audit has been completed. She introduced Beth Stuart, the managing partner for KPMG in Anchorage, to go through the audit process and the results.

MS. STUART stated that she had presented to the Audit Committee on September 6th just before the audit issuance, and they accepted the audit report and financial statements at that time. She continued that the audit report reflects an unmodified opinion on the financial statements. There are two emphasis paragraphs within the opinion: one emphasizes that the financial statements are the financial statements of the fund and not of the State of Alaska; the other relates to the management's discussion and analysis that is within the financial statements, but not subject to the audit performance. She added that the more significant accounting policies within the financial statements are reported in Note 2 to the financial statements. There were new accounting policies adopted during the year. There is also information discussed with the Audit Committee on the presentation of fund balance classification and the impact that the percent of market value and change in law this year had on the classification of fund balance. She stated that two significant risks were identified within the financial statement audit, and those areas were emphasized during the audit process. She continued that the audit is designed to evaluate the internal control that management has to prevent errors. She added that no errors for management override were identified. The other significant area related to the valuation of alternative investment is that the valuation of the private investments is more subjective and more of an audit challenge. She stated that in the packet is a page that summarizes the audit work over private investments and those procedures. There were no adjustments that management was required to record as a result of the audit procedure. The valuation of real estate investments was reviewed, and there were no adjustments proposed relating to real estate. Also concluded was that the financial statements were materially correct. She continued that, during the audit, internal controls are evaluated at a process level and are particularly focused on wire transfer and investment transaction controls, as well as the monthly reconciliations that management performs against the custodial bank. She added that the purpose of the audit is not to test or opine on internal control of financial reporting. The audit did not identify any significant deficiencies or material issue in that.

> **MOTION:** TRUSTEE RUTHERFORD made a motion to accept the annual audit performed by KPMG, and to thank them for the good job and the staff support, seconded by TRUSTEE RICHARDS.
>
> Following a roll call vote, THE MOTION WAS APPROVED by the Trustees (RUTHERFORD, MACK, BRADY, RICHARDS, FISHER and MORAN).

PERFORMANCE REVIEW

MR. ALLEN began by going through the standard practice and stated that non-U.S. equities have been challenging in this quarter; in particular, emerging markets. He stated that U.S. equities were the leading asset classes going back ten years. He continued that it has also been a challenging time to be a consultant because diversification is preached, and, in almost every case, diversification for the last ten years does not help relative to a stock portfolio. He stated that there have been a number of things that have been headwinds in the emerging markets, but the currency has been a component of that. The strong dollar has helped a bit in terms of keeping inflation down, but it has hurt overseas investments because of the currency effect. He added that the U.S. economy is doing fine, and inflation is coming up a bit. The markets are starting to see some of it, and there are signs that more will continue. It is also causing the Fed to start ramping up interest rates with projections of it getting to 2.5 or 2.75 by the end of the year. He stated that small cap outperformed large cap for the year to date. Growth continued to outperform value, which has been a struggle for asset managers. These stocks are already big and indexed, and overweighting them is unusual. He continued that most asset managers have been underweighting the stocks, making it hard to beat the index when performance is essentially driven by essentially five names; Google, Apple, Amazon, Netflix, and Microsoft. The fixed income market has been pretty much negative across the board for the quarter, and it would be difficult to generate a positive return for the quarter. He moved to real estate where cap rates are close to all-time lows. He added that there is still a lot of transaction volume and a fair amount of money still flowing from institutional investors. He stated that hedge funds had a difficult quarter and, on average, turned around zero. He continued that private equity is fundraising at all-time highs, and the degree of buyout space is getting higher. It is not a time to accelerate funding. The best time to invest historically has been when everyone is panicking and selling this asset class. He added that the key is to continue a measured pace and not react to the markets, and to keep the vintage year diversification even and steady. He moved to the good news that public equities is the biggest asset category with a high allocation between fixed income and cash. He continued that performance has been good. Total fund for the quarter outperformed two out of three of its benchmarks. It was not able to outperform the CPI plus 5 percent. The fiscal year and last year were the same. He moved on and talked about individual asset classes. On a risk-adjusted basis, it has done well relative to peers; excess return ratio is well above median, top quartile. There is not a lot of bias in this portfolio, with a slight overweight to value and a slight overweight to small cap. He stated that the large cap portfolio is behind the benchmark for the quarter, slightly behind for the fiscal year a couple basis points. He continued that it was a difficult quarter for non-U.S. equities which were negative across the board. There was not a single response to generate a positive return to international equity for the quarter. The international equity portfolio underperformed the benchmark for the quarter, but is ahead for the year. It has a fairly high weight to emerging markets which could explain the performance for the quarter. He added that the emerging markets outperformed its benchmark and was above median for the quarter. The fiscal year is up above the median and the benchmark. He stated that it is doing well lately relative to peers and the benchmark. The global equity portfolio is ahead of the benchmark for the quarter and above median for the year. He added that putting equity into a fixed income composite will swing around from top to bottom, depending on how equities do. This tends to dwarf anything that the bond managers can do relative to the benchmarks in terms of explaining relative performance. It is important to keep an eye on what happened to REITs and infrastructure when trying to evaluate the rankings. He added that over the 1.75-year period, the fund is ahead of most peers, as well as the benchmark.

(Break.)

RISK OVERVIEW

MR. FRAMPTON presented the risk presentation of the current framework with the green zones and VAR, and tracking error base framework, which was created under the Jeff Scott CIO period. He stated that a series of new charts for historical volatilities and Sharpe Ratios were introduced at the last board meeting. He continued that he is trying to include all of the data and charts that were used in risk presentations in the past several years. Everyone is aware of the restructuring of the approach to risk, including adding a chief risk officer. He added that through that structure more emphasis is being put on risk as an independent function, and that is in keeping with where the industry is headed. He highlighted that risk is a critical part of any portfolio manager's job, and we are not trying to deemphasize risk within the investments department. The graphical presentation of the APFC's key risk measures include statistics that measure realized volatility and Sharpe Ratios, asset class and factor contributions to risk, tracking error to benchmarks, risk scenarios, and Value-at-Risk. There is a need to understand what the risk systems are saying, but also the need to understand that there are a lot of assumptions going on behind the scenes that may not be valid, and understanding that different systems treat risk differently. He continued that the new system attempts to have a more nuanced evaluation and is a factor-based approach.

PUBLIC EQUITIES

MR. RAZZAQUE stated that public equities had solid, double-digit returns for the fiscal year. He continued that the returns for the MSCI index over the fiscal year were almost entirely delivered in the first half of the fiscal year, from July to December, but they were pretty flat the second half from January to June. He added that during the first half economic expansion was in full swing and everyone was in expansionary mode. There was no volatility with lower rates, and multiples continued to expand until the end of December. In the second half, inflation picked up, rates started to move up sharply, and volatilities spiked. There was some divergence between the U.S. economic fundamentals with tax stimulus where the rest of the world did not have tax stimulus. There was some cyclical weakness in Europe and Japan in some of the emerging markets. He stated that overall in the year gains were led by growth in the tech sectors; with technology and consumer discretionary, the market became narrower. He continued that about 60 percent of the managers outperformed for the last fiscal year. He stated that the U.S. economy is growing fast, and the rest of the world is not growing that much. This growth eventually favors the U.S. equities. He continued that yields are also tracking U.S. equities, and we also have to worry about deficits, especially the debt and fiscal deficit, which is going to grow. That is not good for the dollar, which is a risk factor to be managed.

CHAIR MORAN called a lunch break.

(Lunch break.)

FIXED INCOME

MR. PARISE stated that he will talk about the fixed-income-plus portfolio and delved into the details of how the portfolio is positioned and some of the moves made over the last quarter. He began with the portfolios that are 100 percent internally managed in-house, meaning that securities are being bought and sold to build these portfolios. He gave an overview of the performance, going though the internally managed in-house portfolios. He continued that fixed-income-plus only has one year of numbers for the composite, and it outperformed by 13 basis points.

PRIVATE EQUITIES & SPECIAL OPPORTUNITIES

MR. MOSELY stated that the portfolio continues to generate strong risk-adjusted returns, contributing $5.5 billion in cumulative net gains. He noted that the decisions made by the team in special opportunities were the right choice. He stated that the purchase price multiples and fundraising velocity require caution. He continued that the exit activity has decelerated in the first half of 2018, and the U.S. M&A activity continues to be robust.

CEO RODELL stated that she was asked by every single sovereign wealth fund in attendance at the meeting last week on what the Fund was doing different or special; what kind of resources were being attached to this asset class that was generating this type of return. She added that this sets the Fund up as a best-in-class performer in this asset class that people want to replicate. She continued that she answered this by saying that it has been a lot of work. What is not seen, that has proven beneficial, is the secondary sales and how they were weeded out and sold, and the ones we kept were very deliberate.

(Break.)

ASSET ALLOCATION STRATEGIES

MS. MARTINEZ began with the overall fund allocation, which is divided into two different groups: Asset classes that provide income; and asset classes that are for growth opportunity. Then it is divided into income, 39%, and then growth and strategies 61%. Within those two groups the assets have been divided in the illiquid market for the income category and illiquid income for private assets. She stated that there is an overweight to public equities and some underweight into fixed income; overweight private equity; significantly underweight in real estate; underweight infrastructure and special income; underweights in absolute return; and a significant overweight in the asset allocation. She continued that this is important because the way asset allocation is set up, not only the strategic asset allocation, but also how the portfolio is positioned translates to the risk that will be taken. Basically, the Permanent Fund is very well diversified and has outperformed all the benchmarks for the year, the last three and five years; liquid benchmarks, as well as the return objectives, CPI plus 5. She added that some of it is a decision made as an investment committee and team, and others are just technical underweights. She moved to the currency overlay strategy, which is a $2 billion currency overlay, and this is where the currencies in the portfolio are seen. She stated that last year the board had an opportunity to add a new tool which was to invest in derivatives and expose this excess cash to the market. It is still in liquid form and easy to fund obligations as they come along. At the same time, the duration of the cash flows can be matched to have better management of the liquidity of the fund at this time. She continued that this structure managed the overlay of the equity of the fund in decisions for the extra cash. Any excess cash will be split between equities and bonds. In this asset allocation there is a benchmark which is 60 percent bonds and 40 percent T-bills. She added that a balance needs to be kept within this portfolio and cannot be mismatched with that benchmark. She moved on and highlighted what is being done in the risk parity program approved in May with the belief that it would add more diversification to the fund. It is expected that, over time, there will be better risk-adjusted returns that will be an ultimate benefit to the fund. She added that this program will be started with three managers, and the dilution is expected to be 2.5 percent of the fund. She continued that these are completely liquid strategies, and, like ECIO, they are not allowed to have any private assets.

CHAIR MORAN called a break.

(Break.)

REAL ASSETS, PRIVATE INCOME & ABSOLUTE RETURN

MR. FRAMPTON stated that he will cover the real assets and absolute return area. He noted that there is a lot going on in this portfolio, and to some extent this is being improved together because it is the same team managing absolute return and real assets, more so than consistent underlying drivers. This includes the private real estate portfolio, infrastructure, private credit and income opportunities. He added that the blended benchmark for the four areas has summed up the performance in that it has been a strong performer and a great source of income for the fund. He stated that the absolute return portfolio was a little under target as of June 30. It has been a portfolio that has performed well in recent periods; specifically the last two years since the strategy was changed. This portfolio is one that is relied on for uncorrelated returns and the ability to make money in more adverse market environments.

MR. BRIMBERRY stated that the market asset returns portfolio is about two years from when the strategy was redone, and the focus is on a much lower, zero beta exposure portfolio, still targeting the returns related to the fund. Historically, the returns of the legacy portfolio and the new direct program are right around where the returns were hoped to be on an annual basis. This portfolio has very little equity data and, instead, is looking for idiosyncratic return drivers in the underlying equity management. What unifies these different funds is they are taking a top-down view of the world and incorporating that into the portfolio with derivative instruments. He moved to the commodity trading advisers and global asset allocators, explaining that the CTAs are known as trend followers and look for signals. They will frequently change and use derivatives, more frequently use FX contractions, equity indices and forward. The managers are looking for an actual signal that is showing a trade is going to revert or continue going forward in the future investment.

MS. DURAN stated that real estate produces an inflation-protected income stream. It is expected to produce returns that are between fixed income; and then public equity markets, as well. She pointed out in looking at the returns the objective is met and, factoring in the 45 basis points, they do line up with the benchmark. She continued that, predominantly, 100 percent of the fund property is owned. The larger properties have a 50/50 percent joint venture with large operating partners. Managing the portfolio like that gives the control or co-control in being able to make key investment decisions like exiting, selling, timing the exit, operating budgets, along with re-leasing. She went through the portfolio composition with $4.1 billion invested across industrial, hotel, multi-family, office and retail. She stated that there is still work to do at 299 Park, and we have been patient in terms of making sure the right credit tenant gets in there. It is actually a more diversified asset at this point, being 85% rented now. She stated that, like fixed income, real estate has been a beneficiary of these extracurricular asset class reclassifications by the prior CIO. She noted that they are 2.5 billion under their allocation. She continued that, in terms of underwriting, the issue is that it is needed, and we have to proceed in a disciplined fashion, which is what is being done. She summarized that cap rates are holding firm and fundamentals remain steady. The space markets, three of five are in equilibrium. The overall take-away is that real estate is pricey.

MR. FRAMPTON talked about the $2.5 billion private infrastructure portfolio and stated that the infrastructure market does not reach the private benchmark services, and the sector kind of represents the market mix of most institutional investors which will have about 40 percent of transportation, 40 percent in energy; and added that this portfolio has done well.

MR. BRIMBERRY stated that on the private credit, the portfolio continues to perform well in a low-default environment. The two greatest comparisons are the high-yield index and the leveraged loan market. In the portfolio, a strategic decision has been made to lend to smaller companies, which adds a bit more value on the sourcing side and also allows the managers to have stricter loan documents, but still have the ability to get back to the table if the underlying companies start to decay in fundamentals. The syndicated loan market has eclipsed the high-yield market in terms of volume and is over a trillion dollars, driven primarily by CLO insurance as moneys coming in from foreign sources, particularly Japan. This has driven a lot of demand for collateralized loan obligation funds, and has helped push the dynamics of looser covenants into the documents. He stated that the performance has done well primarily due to the lack of default in the underlying yield on the loans coming in. He moved to the income opportunities portfolio which had a few different investments added. The bulk of this portfolio is American Homes 4 Rent and Generate.

REVIEW OF THE STRATEGIC PLAN

CEO RODELL stated that the review of the strategic plan is important in terms of setting up the budget discussion and the legislative initiatives discussion because it is the foundation on which those recommendations are being made. The five-year-strategic plan is about halfway through, and good progress has been made. She pointed out that the goals have been outlined in the strategic plan, and then any recommendations that are needed going forward. She stated that the strategy is to continue to work on moving the budget into the language section as a priority because that will give the control needed to manage internal and external managers as one asset owner management basis. The second goal was implementing the trade order management system, which was effective July 2017. The third goal was tabled to implement a central network data management solution, which is being reviewed for a solution for a path to go down. Next is to develop and fully implement best-in-class asset allocation and asset class investment capability to produce the performance benchmarks. She continued that the final goal is to implement a competitive incentive compensation program by fiscal year ’19. She added that the policy of how this will run will come back to the board in December, separating the budget requests from the policy requests.

FY20 BUDGET APPROVAL

MS. MERTZ reviewed the proposed FY20 budget request. She continued that the budget will be submitted to OMB for inclusion in the Governor's budget that will be presented to the Legislature no later than December 15th for their consideration. She noted that in order to compare the '20 request it will be presented consistently with the way FY19 was authorized. Overall, for corporate operations with the incentive compensation funding, the request is an increment of $2.9 million over the FY19 authorized. She added that is the internal operating budget only; no investment management fees.

CEO RODELL mentioned that there was a recovery in September from a class-action lawsuit of over a million dollars related to the LIBOR trading scandal. She stated that was the actual value of having lawyers.

> **MOTION:** TRUSTEE RICHARDS made a motion to carry forward the fiscal year 2020 proposed operating and investment management allocations, including funding for an incentive compensation program for investment staff to the Governor and Legislature. He further moved to request the Corporation's budget be included in the language section of the operating budget bill as follows: "an amount not to exceed $176,781,600 is appropriated from the Alaska Permanent Fund corporate receipts for the investment and operating costs of the Alaska Permanent Fund Corporation." TRUSTEE RUTHERFORD seconded and offered a friendly amendment that would request that the staff also provide for the December board meeting a legislative narrative that supports this budget and talks about some of the elements of it, assuming that an agreement was gotten on the incentive program and we are moving ahead with the internship program.
>
> TRUSTEE RICHARDS seconded the friendly amendment.

CHAIR MORAN asked for any further discussion.

TRUSTEE MACK asked if the $176,781,600 includes the proposed incentive comp plan.

CEO RODELL replied yes.

TRUSTEE MACK stated that he will vote no because he has carefully examined the incentive comp plan and has become a skeptic of going down that road. He continued that he fully supported the other parts of this budget, but has to go back to his day job with folks that are working very hard and doing critical tasks for the State of Alaska, generating huge amounts of benefits to the State of Alaska. He added that he thinks it needs more work.

CHAIR MORAN stated that it was his understanding that the request for the incentive compensation program was not being forwarded until it is agreed on at the next meeting.

TRUSTEE MACK replied that he understood and is open to more conversation and discussion, but it is included in that number. He reiterated that he stood by his decision.

TRUSTEE RICHARDS commented that he shared a lot of the same concerns, and the difference is that he thinks we should get to the incentive compensation, but we just do not have it figured out yet. He stated that he will vote yes because it is a goal we should get to.

TRUSTEE FISHER commented that he did not feel that the budget was adequately supported and will be looking for some fairly meaty input from staff in December. He understood the need to go forward, but voted yes with that statement.

> Following a roll call vote, THE MOTION WAS APPROVED by the Trustees (RUTHERFORD, BRADY, RICHARDS, FISHER and MORAN voted yes, and MACK voted no).

LEGISLATIVE REQUESTS

CEO RODELL requested that the board endorse or direct staff to pursue various legislative options to the extent that they appear feasible. There are three here that have been before the board in the past. The first is procurement, because trying to find a way through a procurement process continues to be an issue. The strategy this year, rather than pursuing a full-on exemption from the State procurement code, to get contracts defined under 36.38.50, which would then be exempt from procurement. She added that it regularly makes it difficult to pursue certain investment opportunities because of the procurement requirements. She stated that the second is inflation-proofing. Sample language had been proposed stating that rather than relying on regular appropriations for inflation-proofing, that the amount of inflation-proofing be met out of the amount that would be transferred into the earnings reserves account. It would replenish the corpus immediately for its contribution in the earnings reserve account.

TRUSTEE RICHARDS stated support for this idea and that it needs to be brought forward with a series of other guidelines on how the board is going to weigh in on the structure. He requested a work session sometime in late October to sit down and talk about those guideposts.

CEO RODELL continued to the third, which is the sample language budget which is that the costs of making investments be included in designating State income. There are alternatives to that, making it more complicated. Part of this is to create some consistency so there are no ongoing battles, while at the same time having to develop a significant portion of unrestricted General Fund operating budgets. She added that this requires a motion.

TRUSTEE RICHARDS stated that this is one of about seven things that need to be part of a comprehensive Permanent Fund structuring package. It is a good piece, but there is a need to outline all the things that we want to do.

MR. POAG stated that the question was regarding whether or not the proposed language would remove the fund from the Executive Budget Act. He continued that it would not. The proposed language in 3(c) would authorize the board to adopt by regulation the types of investments for which the Permanent Fund can use assets. This would add to that the ability to include internal and external costs associated with those. There would be regulations following that. The second part of the budget is still being covered by the Executive Budget Act. The Executive Budget

Act, because it is on the annual basis, would be at odds with the language and would not apply to this budget. That would mean that the board's budget would go directly to the legislative process and would bypass the Governor's process because it would no longer fit within the annual budget process.

After discussion, the trustees decided to schedule a work session and get as much work done as they could.

CHAIR MORAN recesses the meeting until 8:30 a.m.

(Alaska Permanent Fund Corporation Full Board meeting recessed at 5:16 p.m.)

SEPTEMBER 27, 2018

CHAIR MORAN reconvened the meeting, and recognized Marcus Frampton.

MR. FRAMPTON stated that there are three partners here that each approach global real estate investing from a slightly different angle. He introduced Barry Blattman, one of the senior executives at Brookfield, a large publicly traded real estate investment fund. The Permanent Fund has committed $300 million to their Flagship Global Opportunistic Fund. He will provide some background and some news about that market.

MR. BLATTMAN stated that Brookfield is a large-scale global alternative asset manager focusing on three main sectors: property, infrastructure, and private equity. He continued that their style and culture is quite different because the history of the company is having owned global industrial complexes. Mining, energy, metals, timber and what was found through the ownership of those types of organizations going back to the late 1800's in Brazil and then more generally across the world. He added that the real assets that underlie the strategies of businesses are critically understood if one appreciates how they fit into the economic chain. He explained that the company is publicly traded with an equity market capital of about $45 million and control about $110 billion of their own permanent capital. They try to invest in the type of assets that generate high-quality cash flows that grow over time, backed by assets that appreciate over time. He stated that as a senior executive team they own 20 percent of the public float of the company in a separate class of shares that gives them control of the board of the company. He continued that this organization is based on buying where opportunities arise. He added that the alignment interest puts focus on the results that are ultimately for the money that is invested, as opposed to choosing options that will maximize fees. This is an organization that was built on the investment approach to acquire very high quality assets.

TRUSTEE FISHER asked about what is meant by enhancing value through operations.

MR. BLATTMAN replied that the main goal is to activate space so that it becomes worthy of higher rents. Value is something that can be enhanced and can be taken advantage of when there is a value opportunity as a buyer. He stated that leverage is relatively uncontrolled, and very low cost of liabilities are being created.

TRUSTEE RICHARDS asked why they are contrarian on retail.

MR. BLATTMAN replied that they are contrarian on retail because they have been a very active player in retail since the advantage prices when they led the capitalization of general growth. He stated that they have been an owner, operator and do not ignore the impact of on-line and other trends in the industry.

MS. DURAN asked if he could describe the opportunistic strategy.

MR. BLATTMAN replied that it is in all of those asset classes, through complexity, multifaceted transactions, finding broken ownership situations, broken operation situations, globally. He stated that they will buy an existing portfolio that has some development opportunities associated with it and execute on that development as part of the plan; but development on its own would be higher risk. He added that if they can buy now, own them for a cycle, and then sell them when everything gets back to what the real economy is demonstrating, that is a good strategy.

MS. DURAN introduced Myles Sanger and Tim Munn from CBRE Global.

MR. SANGER thanked all and stated the investments made has returned 23 percent random IRRs since inception four years ago, which represents about a 230 percent increase in the equity investments. He noted that CBRE global investments focuses on real estate and infrastructure. Infrastructure has installed the recent purchase of Caledon, which is well aligned to real estate. He stated that they are here to talk about the why and the how of investing internationally or globally. He began with the proposition that higher risk-adjusted returns potentially can be achieved through sensible long-term global allocation.

MR. ZINN asked how they would manage a situation where the U.S. is described in a cycle and there are opportunities, but they are not getting through the target.

MR. MUNN replied that there would be a strategic bandwidth, both regional and sector allocations, where there is a low-return target which is in the middle of that range. Then, based on the five-year forecasts to the different markets, the tactical allocation between that strategic bandwidth would be moved. If there is a feeling of a limited opportunity within particular markets for a particular region, then they will up-weight the allocation to other markets.

MR. MUNN stated that the global investable real estate universe is growing. Over the next five years, the developed world's share of that investable universe is set to reduce; therefore, as the U.S. shrinks, there will be more opportunities for investments in real estate outside of the U.S. He continued that markets do not move in a synchronized fashion across the globe, and therefore, adding investments in different countries improves the overall risk profile through positive active diversification, better risks and fantastic returns. He added that the reason this is important is the belief that by creating globally diversified portfolios mitigates downside risks. He stated that the main point is that there are clearly markets that are able to produce or cover the forecast to produce higher returns, that that plays to the points that there will be a greater opportunity set, which is considered the globe as a whole more than just the U.S.

TRUSTEE RICHARDS stated that there is a cost in terms of the learning curve and there is a cost in terms of risk of the markets. He continued that real estate seems harder than other areas in getting comfortable. He asked how are those risks gotten over to know when it is a good market, and everything is being done right.

MR. MUNN replied that it begins with partnering with the right people. The first point is having a strategic plan established in terms of what the global allocation is going to look like. They generally proposed deals in developed core markets and only invest where there is local knowledge. He went through some of the standard allocations for core events. Based on a five-year forecast, tactical adjustments are made to the strategic long-term targets. That is reviewed six months based upon the forecast across the globe and sector.

MR. SANGER noted that a global trend is that populations are largely moving from rural areas to the cities, whether in the U.S., Asia, or Europe. This influences where to have the real estate possessions. With populations growing, it is really the growth being returns. Generally, they have seen an overweight position to offices and favor residential and retail where those same factors are combined. Inner city retail is a strong factor. Residential in these locations where people are moving to have strong fundamentals of supply.

MS. DURAN introduced Taylor Mammen and Ben Maslan from RCLCO.

MR. MAMMEN stated that RCLCO was founded 51 years ago and celebrated their 50th anniversary as a real estate consultancy last year. He continued that they primarily worked with operators, developers, and public-sector clients during the early years and helped them understand how to translate economic and demographic trends into real estate demand. He added that they kind of invented the business of market feasibility consulting for real estate in the late '60s and 1970s; and continue to do that as a firm. He stated that they also have a management consulting practice and the newest addition is institutional investment advisory.

MR. MASLAN stated that he spends most of his time in the institutional practice group which advises public funds, pension funds in Alaska, TIP portfolios. He also serves on the management consulting practice group which advises exclusively real estate offering companies on how they approach strategic decisions associated with their companies.

MR. MAMMEN highlighted two aspects of the approach to thinking about investments in real estate. First is the belief that investments first and foremost should be demand-driven. Understanding the demand for real estate supersedes in importance all other decisions related to it. The primary risk in real estate is having an empty building; and we want to make sure that risk is mitigated. The second primary thing is to always evaluate, assess, and understand the two real estate markets. One is the property market for space, units, et cetera. The second is the market for transactions. Both of those dictate long-term investment performance. Real estate is categorized into three categories: Where people live; where people work; and where people shop. He stated that what is impacting where people are living is significant, demographic trends. Enduring lifestyle changes and shifts as people change how they live has an impact on housing. He explained that where people work is that companies are in a fierce competition for talent and are paying a great deal of attention to where talent wants to be, both in terms of neighborhoods, as well as the structural obsolescence of a lot of offices throughout the world, and significantly acquired capital expenditures. He added that industrial is really the new retail, where people shop has benefited enormously for the past few years because of that. He stated that the threats to retail are real and significant and began long before e-commerce came around.

MR. MASLAN added that there are properties that are internet-resistant, either they cannot be a service performed, or they offer an experience that cannot be replicated on the internet.

MR. MAMMEN stated that what is important is what is going to happen to these property types going forward as the economy crests, potentially goes into downturn conditions. The belief is that it is most important to focus on what is going to be demanded.

MR. MASLAN added that for the first time in five years new demand has exceeded new supply for apartments. There is a large supply pipeline for the next two years.

MR. MAMMEN stated that there are potential threats to continued value appreciation of assets with the most obvious threat being rising interest rates which directly or indirectly impact cap rates. Cap rates and interest rates have important long-term relationships, but are not perfectly correlated together. He states that there is an opportunity to look for potential inefficiencies in valuation, where the investor finishes over- or undervaluing the risks for these different property types.

MR. MASLAN stated that there are three categories of risk: One is property level risks in the United States; two is political risk where the same protections or regulations may not continue to be there; three is currency risks, which is difficult and expensive.

MR. MAMMEN stated that investing internationally in real estate, in particular, requires being highly cognizant of the risks and ensuring that those risks are priced in to what is being done internationally. He highlighted that, based on the data that is being looked at, the institutional market outside the United States is far more concentrated in particular property types, particularly office. There is far more investable institutional real estate in the United States, such as multifamily and industrial, than there is in other countries. Those are the spaces that investors should be focusing on in the next few years.

CHAIR MORAN called a brief break.

(Break.)

CHAIR MORAN recognized Mr. Moseley.

MR. MOSELEY introduced Jason Howard from GCM Grosvenor, and Paul Yett from Hamilton Lane to talk about in-state investing. Both of these individuals represent the largest managers of alternative asset funds, and both have a lot of specific on-the-ground experiences managing different types of geographically targeted funds.

MR. HOWARD stated that he is a partner on the investments team at GCM Grosvenor in the California office. GCM was founded in 1971, and is one of the largest alternative investment managers focused completely on alternatives. He continued that his area of focus is on private market investments; that private market activity started in 1999. That is important because one of the clients came and said that they had an area of specific interest but did not have the team and the resources to be able to allocate time to pursue those opportunities. That is how the private markets business began. Since then 75% of customized solutions have been developed for clients. There is just over $50 billion of assets under management. Two key parts of the business is the focus on emerging managers and in-state programs. He added that today they invest and manage programs on behalf of eight states, and invest over $1.7 billion in programs.

MR. YETT stated that he is a managing director with Hamilton Lane and is celebrating his 20th year with the firm this year. It was a small firm when he started and has grown into 15 global offices, about $415 billion of assets under advisement, with about $55 billion in discretional dollars. He continued that their focus is exclusively private markets.

MR. HOWARD began with the basic questions that determine how successful a program could be in Alaska and how thoughtful the discussion is about those questions. The key things to focus on are the program objectives and how the Alaska Permanent Fund defines success. The minimum size of the investment is important, and then the exposure it should have for it to count as an Alaska investment.

TRUSTEE RICHARDS asked about venture capital.

MR. HOWARD replied that venture capital is included within private equity.

MR. MOSELEY asked Mr. Yett about any cases of inadequate long-term funding for managers for deals.

MR. YETT replied that is one of the challenges. Another challenge is that once a program is started, is the ability to determine a target investment program. Nothing happens overnight. He went through an in-state program in Idaho that he started working with about 15 years ago, and the idea was never a set dollar amount. There were no private equity shops in Idaho when the program started. There was a lot of engineering talent and some entrepreneurial culture through HP. There was also an engineering lab where there were a lot of companies being seeded. This was developed through creativity. Today those three funds that were invested in are generating very good returns, and it is one of the drivers of performance in their overall private equity program. These programs do take a long time.

MR. HOWARD stated that it can take a long time for the programs to show success, but there are ways to mitigate that, as well. If there is a focus on equity, co-investments, as well as credit supporting companies where they need to grow or an opportunity to buy companies, having capital to support them is extraordinarily important.

MR. YETT stated that at the end of the day this is a long-term asset class. They like to see people that have a track record, have some affinity for looking at deals, have looked at deals, maybe have done deals, and that the person that is going to be in the office has to be a decision-maker within the organizations. If they do not represent the capital and the dollars, then it is not an effective program. He continued that the program leads with returns, and the returns have to be whatever that metric is. Then there are a host of the ancillary benefits.

TRUSTEE RICHARDS asked about the typical level of decision-making in terms of the external manager versus staff.

MR. HOWARD replied that, typically, they have discretion, but that is in close collaboration. There are clients that are spoken to weekly, and others that are annually. They have the ability to flex up and flex down. The typical approach is to schedule a kickoff call to set the parameters of how the program should be managed, and then determine the frequency for updates.

MR. YETT echoed the same and stated that all of their programs are discretion from full discretion with a report once a quarter to something a bit more quasi where the involvement with the investment office is more direct.

TRUSTEE RICHARDS asked about fee structure.

MR. HOWARD replied that it is structured to take the management fee and carry just like any other program.

CHAIR MORAN asked if there was a size to this, a kind of threshold size that below would be wasting time.

MR. YETT stated that the deal sizes go back to the strategic plan, developing that around what goals will be measured. The goal is that this is going to be a growth company.

CHAIR MORAN thanked both gentlemen, and recognized CEO Rodell.

ALASKA INVESTMENT POLICY

CEO RODELL stated, in terms of the Alaska Investment Policy, language was presented at the work session and feedback was taken from the trustees at that time. The language on the tab reflects the edits that were passed along from trustees. Everything that was requested was included. She continued that the goals for the years under section B, the percentages are targets, and the scope by 2023, at least $2.4 billion of the fund, if the fund stayed flat, would be invested in-state. She added that this is all external manager fund investments.

TRUSTEE RICHARDS pointed out that the memo has the old language about 1 percent, but is accurate in the Alaska Investment Policy as discussed in the work session.

CEO RODELL replied that the existing language is currently in effect in the memo, and the proposed changes are on page 447.

TRUSTEE RUTHERFORD asked if there was a need to consider expanding or amending the purposes section under B. As it is right now, it is rather loose, given the discussions today.

TRUSTEE RICHARDS replied that the emerging manager program is taken care of in the resolution on the next page, whereas this investment policy goes more towards the assets under management and direct Alaska investing. It is the way the staff chose to break up the direction.

CHAIR MORAN stated, after a discussion on some of the details of this policy, that the fund is to a point where the trustees need to make a statement in support of the State of Alaska, and that there are at least aspirational goals. He continued that the resolution supporting an in-state emerging manager program is a way to kick the program off. Neither of them really commits investing any money at this point, and it is just trying to encourage the process along.

MOTION: A motion to adopt the Alaska Investment Policy was made by TRUSTEE RICHARDS and seconded by TRUSTEE MACK.

After a roll call vote, the MOTION WAS APPROVED by the trustees (RUTHERFORD, FISHER, BRADY, RICHARDS, MACK and MORAN).

MOTION: A motion to adopt Resolution 18-03 was made by TRUSTEE FISHER and seconded by TRUSTEE RUTHERFORD.

After a roll call vote, the MOTION WAS APPROVED by the trustees (RUTHERFORD, FISHER, BRADY, RICHARDS, MACK and MORAN)

CHAIR MORAN broke for lunch.

(Lunch break.)

CHIEF INVESTMENT OFFICER INTERVIEWS

Jeb Burns, Marcus Frampton, and David Kushner were interviewed for the position of chief investment officer of the Alaska Permanent Fund Corporation.

(Break.)

CHAIR MORAN stated that the plan is to go into executive session and asked for a motion.

MOTION: In accordance with Alaska's Open Meetings Act, VICE CHAIR BRADY made a motion that the Board convene in executive session for the purpose of discussing the relative qualifications of the three candidates for Chief Investment Officer and potential economic terms. And because this discussion could be harmful to the reputation or character of these candidates, and could have an adverse effect upon the finances of the Corporation, under applicable Alaska law, this discussion should take place in executive session, unless any of these candidates request a public discussion. Seconded by TRUSTEE MACK.

After a roll call vote, the MOTION WAS APPROVED by the trustees (RUTHERFORD, FISHER, BRADY, RICHARDS, MACK and MORAN).

(Executive session from 3:16 p.m. until 4:22 p.m.)

CHAIR MORAN noted that while in executive session the trustees considered only the matters mentioned in the motion and took no action. He moved to the next item on the agenda, election of corporate officers.

ELECTION OF CORPORATE OFFICERS

VICE CHAIR BRADY nominated BILL MORAN be re-elected as chairman.

TRUSTEE RICHARDS stated that he would like to throw his name in the hat. Right now in Alaska, with the option of the POMV bill and the Permanent Fund restructuring, this is a unique time and it is appropriate during these meetings now for the Board to weigh-in in a very positive, constructive way. He continued that he is uniquely suited to do the work as the chairman. He was the architect of the Permanent Fund Protection Act, has written extensively on the subject, and knows the legislation.

TRUSTEE RUTHERFORD nominated Craig Richards for chairman.

TRUSTEE MACK nominated Trustee Brady to be the vice chair.

TRUSTEE FISHER asked Chair Moran if he would be interested in making a statement.

CHAIR MORAN stated that he likes the job and would love to continue in the position. He considers it an honor. It is one of the more interesting things he has ever done in his entire adult career. If the trustees would like him to continue, he would love to do it. He continued that he is not of the same mindset to be overly active with the Legislature and the executive branches on some of the issues, but does not have any problem with being more involved on our views with regard to things like inflation-proofing and the sustainability of the POMV once it gets to that point. He continued that his position will continue to be the need to keep us separate from too much of the political activities and focus more on the job to invest in the fund and provide whatever technical resources that can be provided to the Legislature. He does not believe that we should tell them how to do their job. That would be his position.

CEO RODELL stated that Chris Poag will collect the ballots.

MR. POAG states that a formal motion will be needed, and the Board will vote on that for the record. He recommended that there be a motion that Trustee Richards be appointed Chair. He offered to share the ballots to anyone that would like to view them.

> **MOTION:** A motion that Trustee Richards be appointed as Chair was made by TRUSTEE MACK and seconded by VICE CHAIR BRADY.
>
> After a roll call vote, the MOTION WAS APPROVED by the trustees (RUTHERFORD, FISHER, BRADY, RICHARDS, MACK and MORAN).

MR. POAG asked for a motion for Vice Chair.

MOTION: A motion that Trustee Brady be elected Vice Chair was made by TRUSTEE MACK and seconded by TRUSTEE RUTHERFORD.

After a roll call vote, the MOTION WAS APPROVED by the trustees (RUTHERFORD, FISHER, BRADY, RICHARDS, MACK and MORAN).

OTHER MATTERS

CEO RODELL stated that there are two things on other matters. The first is the calendar of meetings which needs a vote. She stated that this calendar of meetings was put together assuming that the Board wanted to continue to have its regularized quarterly meetings. Second, all the meetings are scheduled to be in Juneau. She explained that, in that capital project, we are building out a meeting conference space designed to broadcast the meetings with technology to broadcast the meetings throughout the state. It is challenging.

TRUSTEE RICHARDS stated that all the arguments for Juneau make sense, but this is an Alaska-based corporation and having access to multiple places in Alaska to come to meetings is valuable, particularly in this time period. His personal take would be to have one meeting in Fairbanks and one in Anchorage.

VICE CHAIR BRADY stated, historically, we have traveled around the state and went to Nome. The only marketing device was the newspapers, and ads were put in all the newspapers around the state. He commented that sometimes it is good to be available elsewhere.

TRUSTEE MACK agreed with both.

CHAIR MORAN asked if this needed a motion.

CEO RODELL replied yes. September 5, 2019 is the Audit Committee work session; September 26, 2019 in Anchorage; December 3-4, 2019 in Juneau; February 2020 in Juneau; May 20, 2020 Fairbanks; September 3rd will be in Juneau; September 23-24 will be in Anchorage; December 9-10 will be in Juneau.

MOTION: A motion was made by TRUSTEE RUTHERFORD to accept the calendar for 2019 and 2020, as articulated by CEO Rodell.

After a roll call vote, the MOTION WAS APPROVED by the trustees (RUTHERFORD, FISHER, BRADY, RICHARDS, MACK and MORAN).

CEO RODELL stated that Robert's Rules is very straightforward about the minutes. They basically need to reflect the actions that the Board takes. She wanted to get a sense from the Board if they like getting the full transcript of minutes or if a very succinct set of minutes could be considered with the digital audio.

TRUSTEE RUTHERFORD asked if that is online and how to access the digital online.

CEO RODELL replied that it would need to be fast-forwarded to get to the point, but the minutes would tell you at what point.

TRUSTEE FISHER asked if that is a cost-savings measure, and what is the savings.

MS. MERTZ replied that she thinks the budget is about $30,000.

TRUSTEE RICHARDS stated that he likes having the minutes out there as a matter of public record, and it is a warehouse of knowledge. The particular knowledge and decisions of this Board are reference materials for generations in the future, and he is personally biased towards keeping it. He does recognize it is a lot of money. He asked to think on this and get back to it.

TRUSTEE RUTHERFORD asked that in the minutes it would note where the subject matter is in the digital.

CEO RODELL replied yes.

TRUSTEE RUTHERFORD asked if that would be accessible through the APFC Website.

CEO RODELL believes that it can be made accessible. There are requests sometimes and the audio files are sent directly to the people that request files.

CHAIR MORAN asked if it could be done both ways for a couple of times.

TRUSTEE RICHARDS stated that he would like an actual written summary of the cost savings, too.

TRUSTEE RUTHERFORD stated that it is really important to have it easily accessible because there are a lot of us that do go back and listen and reread.

TRUSTEE FISHER stated that he will never listen to it, but would read it.

CEO RODELL stated that she is happy to keep it as it is. She added that there are no other matters.

INVESTOR ADVISOR COMMENTS

MR. ZINN stated that he holds himself accountable and will follow up with the introduction of the cybersecurity firm and the CEM benchmarking for the AUM fees under management. He continued that it was a terrific meeting and staff is to be commended. One of the comments that was clear from the trustees that he reiterates from the staff is some simplification of the legacy reporting for essentially executive-level consumption. He would consider thinking about having a way to look at the dual mandate, essentially the Fed has a dual mandate for inflation and employment. He thinks that the dual mandate should be between the CPI and the performance benchmarks. He stated that he was unaware of some of the FX activity and would be happy to bring on get-togethers in order to get to best practices.

CHAIR MORAN moved to trustee comments.

TRUSTEE COMMENTS

TRUSTEE FISHER stated that yesterday they talked about having a meeting later this month. He asked if that had to be formalized.

CEO RODELL stated that the board will be polled as to dates. Her understanding is that an in-person meeting in Anchorage was desired.

TRUSTEE RICHARDS stated that it could be in Juneau, whichever is convenient. He wanted to make sure it is a meeting where action can be taken.

TRUSTEE FISHER asked if there was any enthusiasm to talk about the memo distributed yesterday or should that be put off until the next meeting.

TRUSTEE MACK asked to defer until the next meeting to discuss. He stated that he voted in the negative on the budget issue precisely because of his concerns about the compensation. He had not read that memo prior to his comments. He likes the ideas in that memo, and appreciates taking time to look at other plans.

TRUSTEE FISHER stated to just include it in the next meeting. He expressed his tremendous appreciation for Chair Moran. He learned a tremendous amount just talking to the Chair in the sidebars, the comments, and really appreciates all of his work. He knows that will continue, but wanted to publicly say "thank you."

VICE CHAIR BRADY stated that the asset allocation which is the target sometimes gets out of whack. The affected area may be caused by other areas. He continued that he is talking about the percentages and does not want the feeling of doing something just because. We should understand the freedom to be where you are is okay until the right opportunity comes along. Another good meeting, Mr. Chairman.

CHAIR MORAN stated appreciation for all the support over the years and wishes Craig all the best. He added that he gives his full support.

TRUSTEE RICHARDS thanked Chair Moran.

TRUSTEE MACK stated that his last comment is that this was a very productive meeting and is really appreciative of the work that the CEO and folks put in on the emerging manager program and some of the things that have been approved as policies. It gives a lot of latitude, but it also puts us in the right direction. Thank you.

TRUSTEE RUTHERFORD noted that we recognize how much work goes into putting together these meetings and validating the materials that provide the education, move the information, and bringing these panels together. She appreciated the fact that there is such good follow-up from the discussions and the requests made. It is the work everyone in this room does, and it is greatly appreciated. She thinks that everybody is incredibly responsive, and the quality of the products are outstanding.

CHAIR MORAN adjourned the meeting.

(Alaska Permanent Fund Corporation adjourned at 4:54 p.m.)

Attachment 7 -
APFC's Investment Policy –
Section V. Alaska In-State
Investment Policy

APFC Investment Policy

Adopted May 21, 2020, last amended on May 20, 2021

TABLE OF CONTENTS

SECTION

I. INTRODUCTION

A. Purpose

1. The purpose of this Investment Policy ("Policy") is to provide a formal plan for investing and managing the assets of the Alaska Permanent Fund and other state assets as prescribed by law ("Fund") to achieve the defined investment objectives. This Policy also defines the roles and responsibilities of the various parties involved in the investment process and facilitates external communication of the Policy. The appendices are incorporated into and form part of this Policy. Terms not defined within the body of the Policy have meanings assigned to them in the "Glossary," Appendix D of this document.

2. This document is not intended to be a static document and will be considered for possible amendment on an annual basis or any time the Board of Trustees ("Board") modifies the Alaska Permanent Fund Corporation's ("APFC") investment-related policies or asset allocation. Amendment of this Policy requires Board action as described in AS 37.13.080 and the APFC By-Laws ("By-Laws"). Following any Board approved amendment to this document, changes will be noted in Board meeting minutes and as soon as practicable this document will be amended to reflect the approved changes and posted on the APFC website.

B. Roles of the Board, Staff, Consultants, and Advisors

1. The Board has a responsibility to invest Fund assets in accordance with the Alaska Constitution and the prudent-investor rule provided in AS 37.13.120(a) – (e). The Board has adopted regulations (15 AAC 137.410 – 15 AAC 137.990), which define the eligible investments of Fund assets ("Regulations"). The Board has also adopted By-Laws, which delegate and empower the APFC Staff to invest and manage Fund assets consistent with the parameters of the Regulations and this Policy. Finally, through regularly scheduled and special meetings, the Board oversees the management of APFC Staff and Fund assets, and ensures that APFC has the resources needed to fulfill its objectives as effectively as possible.

2. The APFC Staff's task is to invest and manage Fund assets to fulfill the Fund's objectives, as specified by the Board, in this Investment Policy. Additionally, APFC Staff advises the Board about recommended changes to the asset allocation and this Policy to help the Fund achieve its objectives. Finally, APFC Staff, or external investment managers selected by APFC Staff, negotiates and executes all investment plans and strategies, performs risk-management functions, and helps prepare investment performance and other management reports.

3. External consultants provide advice and implementation assistance to the Board and APFC Staff related to investment programs at both the overall Fund level ("General Consultant") as well as for specific asset classes. The General Consultant also reports on the progress that the Fund is making with regard to specific investment programs and makes comparisons of Fund performance against its target benchmarks, including Fund peers.

4. Consistent with the Board's Charters and Governance Policies, up to three Investment Advisors are selected by the Board to provide education, advice, commentary, and discussion at Board meetings, or as requested by the Board.

II. TOTAL FUND & PORTFOLIO DESIGN PHILOSOPHY

A. Total Fund Objective

Consistent with the Legislature's findings regarding the purpose of the Alaska Permanent Fund (AS 37.13.020), the Board's objective is for the Fund to achieve the highest level of investment performance that is compatible with the Board's risk tolerance and prudent investment practices. Because of the perpetual nature of the Fund and the Legislature's finding that the Fund should benefit all generations of Alaskans, the Board maintains a long-term perspective when formulating this Policy and in evaluating Fund performance. To that end, the Board expects the Fund's design and performance will be evaluated using the following criteria:

1. **Investment Performance:** ability to generate an annualized return of CPI + 5% over a 10-year period ("long-term target")
2. **Investment Risk:** ability of the Fund to achieve the long-term target while conforming to the risk appetite approved by the Board, which can be found in Appendix C.

B. Total Fund Asset Mix

1. APFC's investment programs are organized by asset class and APFC Staff assist the Board in engaging in an asset allocation study for the Fund at least once every five (5) years to review asset classes, risk-return assumptions, and correlations of investment returns with applicable benchmarks and across asset classes. A key objective of the asset allocation study shall be the development, through quantitative and qualitative modeling techniques, of a diversified portfolio that specifies a "long-term target" position for each asset class. The total Fund portfolio mix will represent the portfolio that is expected to meet the Board's long-term target while conforming to the risk appetite approved by the Board.
2. Each asset class allocation percentage shall designate a "long-term target" position within the overall portfolio as well as maximum and minimum ranges around those targets, as outlined in Table1. Ranges are specified by a "green zone" which reflect normal expected variability around the targets, "yellow zone" which reflect potential remediation by APFC Staff according to prudent portfolio management over a reasonable period of time, and "red zone" which require Board approval of a remediation plan within 30 days. Ranges of these zones are expressed as percentages of the overall Fund. Details of the zones and compliance cure periods are provided in Appendix B.

Table 1: Asset Allocation (AA) Target Levels by Year as % of Fund

	Public Equity	Fixed Income	Private Equity	Real Estate	Private Income	Absolute Return	Risk Parity	Cash	Total Fund
Green Zone	+/- 5%	+/- 5%	+/- 5%	+/- 3%	+/- 5%	+/- 3%	+/- 1%	+/- 2%	
Yellow Zone	0 - 5%	0 - 5%	0 - 5%	0 - 3%	0 - 5%	0 - 3%	0 - 1%	0 - 2%	
FY2021	**39%**	**21%**	**15%**	**7%**	**9%**	**6%**	**1%**	**2%**	**100%**
FY2022	38%	20%	16%	8%	9%	6%	1%	2%	100%
FY2023	36%	20%	17%	9%	9%	6%	1%	2%	100%
FY2024	35%	19%	18%	10%	9%	6%	1%	2%	100%
FY2025	33%	18%	19%	12%	9%	6%	1%	2%	100%

Notes: *Green Zone: expressed as +/- to Target Allocation*

Yellow Zone: expressed as range beyond green zone

C. Total Fund and Asset Class Benchmarks

Each asset class is associated with a benchmark that describes in general terms the opportunity set and return characteristics associated with the asset class ("Policy Benchmark"). For certain private market asset classes, the Policy Benchmark serves as a proxy for expected returns rather than an approximation of the actual investments that will characterize the components of the portfolio. Note that the investment returns and Policy Benchmarks for Private Equity & Special Opportunities, Real Estate, and Infrastructure & Private Income are lagged by one quarter for performance calculation purposes, as is common practice among large institutional investors. Each asset class is also associated with a long-term return objective, which cumulatively reflects the Fund's long-term objective of CPI + 5% or better. The long-term return objectives and Policy Benchmarks for each asset class are reflected in Table 2.

Table 2: Benchmarks - Constituent Indices and Weights

		Public Equity	Fixed Income	Private Equity	Real Estate	Private Income	Absolute Return	Risk Parity	Fund Cash	Total Fund FY 2021	Total Fund FY 2022	Total Fund FY 2023	Total Fund FY 2024	Total Fund FY 2025
Asset Allocation (AA): Target Levels-FY 2021		**39.0%**	**21.0%**	**15.0%**	**7.0%**	**9.0%**	**6.0%**	**1.0%**	**2.0%**	**100.0%**				
Minimum Long-Term Return Target		CPI + 5.1%	CPI + 0.8%	CPI+10.05%	CPI + 4.0%	CPI + 4.2%	CPI + 2.75%	CPI + 3.95%	CPI	CPI + 5.0%				
Benchmark Index Weights	**BB ID**	**Asset Class / Portfolio Weights**								**Total Fund Weights**				
90 Day T-Bills	G0O1	-	5.00%	-	-	-	-	-	100.00%	**3.05%**	3.00%	3.00%	2.95%	2.90%
BB US Corporate	LUACTRUU	-	27.50%	-	-	-	-	-	-	**5.78%**	5.50%	5.50%	5.23%	4.95%
BB Gbl. Treasury ex-US Hedged	LGT1TRUH	-	10.00%	-	-	-	-	-	-	**2.10%**	2.00%	2.00%	1.90%	1.80%
BB US Agg	LBUSTRUU	-	27.50%	-	-	-	-	-	-	**5.78%**	5.50%	5.50%	5.23%	4.95%
BB US HY 2% Issuer Cap	LF89TRUU	-	10.00%	-	-	-	-	-	-	**2.10%**	2.00%	2.00%	1.90%	1.80%
Cambridge Pvt. Credit (Lagged)	n/a	-	-	-	-	40.00%	-	-	-	**3.60%**	3.60%	3.60%	3.60%	3.60%
Barclays US Securitzed Index	LD19TRUU	-	10.00%	-	-	-	-	-	-	**2.10%**	2.00%	2.00%	1.90%	1.80%
BB US TIPS	LBUTTRUU	-	5.00%	-	-	-	-	-	-	**1.05%**	1.00%	1.00%	0.95%	0.90%
Cambridge Pvt. Equity (Lagged)	n/a	-	-	100.00%	-	-	-	-	-	**15.00%**	16.00%	17.00%	18.00%	19.00%
Cambridge Gbl. Pvt. Infra. (Lagged)	n/a	-	-	-	-	60.00%	-	-	-	**5.40%**	5.40%	5.40%	5.40%	5.40%
HFRI Total HFOF Universe	HFRIFWI	-	-	-	-	-	100.00%	-	-	**6.00%**	6.00%	6.00%	6.00%	6.00%
JPM EMBI Gbl Diversified	JGENVUUG	-	2.50%	-	-	-	-	-	-	**0.53%**	0.50%	0.50%	0.48%	0.45%
JPM GBI-EM Gbl Diversified	JPGCCOMP	-	2.50%	-	-	-	-	-	-	**0.53%**	0.50%	0.50%	0.48%	0.45%
MSCI ACWI IMI	M1WDIM	100.00%	-	-	-	-	-	-	-	**39.00%**	38.00%	36.00%	35.00%	33.00%
NCREIF Property (Lagged)	NPPITR	-	-	-	85.00%	-	-	-	-	**5.95%**	6.80%	7.65%	8.50%	10.20%
MSCI US REIT (Lagged)	RMS G	-	-	-	15.00%	-	-	-	-	**1.05%**	1.20%	1.35%	1.50%	1.80%
HFRI Risk Parity Vol 12	HFRPV12I	-	-	-	-	-	-	100.00%	-	**1.00%**	1.00%	1.00%	1.00%	1.00%
Total		**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	100.00%	100.00%	100.00%	100.00%

D. Total Fund Performance Measurement and Reporting

1. The Board looks to its General Consultant as the primary source of quantitative evaluation of the performance of the Fund and its investment managers. As promptly as possible after the close of each calendar quarter, the General Consultant shall submit a report to the Board, Executive Director ("ED") and Chief Investment Officer ("CIO") analyzing the performance of the Fund, its asset classes and investment programs, including both internally and externally managed assets. The report shall include a comparison of total Fund performance with the Board's long-term investment objective, an analysis of the returns of each asset class as measured against established benchmarks; and an analysis of the returns of each manager or relevant groupings of managers as measured against relevant benchmarks. For the purpose of evaluating the value-added by the Fund's investment strategy, the report shall also compare the performance of the total Fund on a one-year basis to a passive benchmark that represents the following: (1) 60% MSCI ACWI IMI; (2) 20% Barclay Global Aggregate (less fees); (3) 10% FTSE EPRA/NAREIT Rental Index; (4) and 10% US TIPs. The General Consultant's report shall also address any special concerns or observations the General Consultant concludes should be brought to the attention of the Board, ED and CIO.

2. At each regular Board meeting, the General Consultant will also report on the investment performance of the Fund and each asset class in comparison with Fund peers (i.e., large US Public Funds and Endowment Funds). The comparative performance of the Fund and each asset class will be assessed and reported across multiple timeframes, including ten-year, five-year, three-year, and one-year. To the extent that peer comparisons may not be directly available for specific asset class comparisons, the General Consultant should use the Fund's Policy Benchmarks (see Table 2) as a proxy.

E. Total Fund Portfolio Implementation and Delegations

APFC Staff directs all investment activities through a delegation of investment authority in the By-Laws from the Board to the ED and then from the ED to specific APFC Staff, as deemed appropriate by the ED. The ED will convene a Public Markets Investment Committee and a Private Markets Investment Committee (together, the "APFC Investment Committee") on a regular basis in order to discuss and deliberate on investment decisions requiring the ED's authorization. The sole voting member of the APFC Investment Committee shall be the ED. The CIO will also convene an investment department investment committee ("Investment Department Investment Committee"). The Investment Department Investment Committee will meet regularly and will work with APFC Staff to make investment recommendations ("Investment Recommendations") to be considered for authorization by the ED during the APFC Investment Committee.

Approval of any Investment Recommendation referred by the Investment Department Investment Committee to the APFC Investment Committee requires the affirmative approval of the ED taking into consideration, in a collaborative manner, input from various functions at APFC (e.g. Legal, Finance, Operations, Admin, IT, and Risk). Investment Recommendations from the Investment Department Investment Committee to the APFC Investment Committee shall be in writing and Investment Decisions approved by the APFC Investment Committee shall also be in writing. Variations or the non-approval of an Investment Recommendation of the Investment

Department Investment Committee by the APFC Investment Committee shall be reported to the Board on a monthly basis.

F. Relationship of the Investment Policy with Regulations and Investment Guidelines

As required by AS 37.13.120(a), the Board has adopted Regulations specifically designating the types of investments in which Fund assets can be invested. All investments authorized by this Policy shall be limited to those authorized investments and in the manner prescribed by this Policy and AS 37.13.120.

The Investment Guidelines, attached as Appendix A, supplement the Investment Policy by providing operational guidelines for APFC's internally managed investment programs. The CIO, with the consent of the ED may update the Investment guidelines from time to time; updates will be provided to the Board at its next regularly scheduled meeting.

III. PUBLIC MARKETS

A. Public Equity

1. Objective

The objective of the Public Equity portfolio is to invest in publicly traded securities authorized in 15 AAC 137.440, to exceed the performance of a well-diversified pool of global equities embodied in the **MSCI ACWI IMI Index**, while maintaining risk similar to that of the benchmark. Performance of this portfolio will be evaluated quarterly, but success in achieving the long-term objective (see Table 2) will be measured, net of all costs and fees, on a one-year, three-year, five-year, and ten-year annualized basis.

2. Structure

Consistent with performance objectives, applicable tracking error guidelines, and other investment restrictions described in this Policy and Investment Guidelines, the Public Equity portfolio may include:

a. Actively and quasi-passively managed equity strategies to enhance the after-fee return of the portfolio relative to its assigned benchmark; and
b. Passively managed equity strategies to replicate, in a cost-efficient manner, the returns of a benchmark index.

3. Investment Strategy

The Public Equity portfolio will be managed by a mix of external active managers, external passive managers and internal managers. In the case of active external managers, each manager, through an investment manager agreement ("IMA"), will be directed to focus on a subset of the global equity market in which the manager has demonstrated an ability to provide risk-adjusted, after-fee returns in excess of its respective benchmark. Each external manager's IMA will also detail its strategy, performance objectives, permitted investments and restrictions.

The CIO may also approve the internal management of a portion of the Public Equity portfolio by APFC Staff. In place of an IMA, the CIO and ED will require the approval of and adherence to Investment Guidelines that cover the relevant aspects of the portion of the Public Equity portfolio internally managed by APFC Staff. The Director of Public Equity will have primary responsibility for executing the portfolio's investment strategy.

4. Rebalancing and Mandate Modification

The Director of Public Equity may, with the approval of the CIO, rebalance assets to, from, or between individual Public Equity portfolios.

Initiating or terminating external manager mandates requires the consent of CIO and ED and must conform to Section VIII of this Policy (Public Markets External Manager Selection).

5. Risk Limits and Portfolio Restrictions

The Director of Public Equity is responsible for managing the various risks incurred and adhering to the Investment Policy. In addition to general Policy requirements, the following asset class specific restrictions apply to this portfolio:

a. Risk Limits as detailed in Table 3, Section VII.
b. Short selling is prohibited by an internal or external manager of assets in this portfolio, unless authorized by the CIO and Chief Risk Officer ("CRO").
c. All derivatives in this portfolio must comply with Section VI (Authorized Use of Derivatives) of this Policy.
d. All externally managed mandates must comply with Section VIII (External Manager Selection) of this Policy.

B. Fixed Income

1. Objective

The objective of the Fixed Income portfolio is to provide income-oriented investment returns and diversify the risks of the Fund's equity-oriented programs. The Fixed Income portfolio invests in publicly traded and other liquid income-oriented investments authorized in 15 AAC 137.430, to meet or exceed the performance of the **Fixed Income Composite Benchmark**, while staying within predefined risk constraints. Performance of this portfolio will be evaluated quarterly, but success in achieving the long-term objective (see Table 2) will be measured, net of all costs and fees, on a one-year, three-year, five-year, and ten-year annualized basis.

2. Structure

Consistent with performance objectives, applicable tracking error guidelines, and other investment restrictions described in this Policy and Investment Guidelines, the Fixed Income portfolio may include:

a. Actively and quasi-passively managed income producing strategies that enhance the after-fee return of the Fixed Income portfolio relative to its assigned benchmark; and
b. Passively managed income producing strategies to replicate, in a cost-efficient manner, the returns of a benchmark index.

3. Investment Strategy

The Fixed Income portfolio will primarily be implemented by the CIO's internal APFC Staff, which may be supplemented by hiring external investment managers to manage portions of the Fixed Income portfolio which are not appropriate for internal management by APFC. Regarding the Fixed Income assets that are externally managed, each external manager, through an IMA, will be directed to focus on a subset of the Fixed Income portfolio in which the manager has demonstrated an ability to manage in relation to its respective benchmark. Each external manager's IMA will also detail its strategy, performance objectives, permitted investments, and restrictions. The Director of Fixed Income will have primary responsibility in executing the portfolio's investment strategy.

4. Rebalancing and Mandate Modification

The Director of Fixed Income may, with the approval of the CIO, rebalance assets to, from, or between individual Fixed Income portfolios.

Initiating or terminating external manager mandates requires the consent of the CIO and ED, and must conform to Section VIII of this Policy (Public Markets External Manager Selection).

5. Risk Limits and Portfolio Restrictions

The Director of Fixed Income is responsible for managing the various risks incurred and adhering to this Policy. In addition to general Policy requirements, the following asset class specific restrictions apply to this portfolio:

a. Risk Limits as detailed in Table 3, Section VII.
b. Short selling is prohibited by an internal or external manager of assets in this portfolio, unless authorized by the CIO and CRO.
c. All derivatives in this portfolio must comply with Section VI (Authorized Use of Derivatives) of this Policy.
d. All externally managed mandates must comply with Section VIII (Public Markets External Manager Selection) of this Policy.

C. Risk Parity

1. Objective

The objective of the Risk Parity portfolio is to deliver long-term returns that meet or exceed the performance of a 60% stock/40% bond portfolio through managers which seek to generate returns that are less correlated to global public markets utilizing allocation of risk rather than allocation of capital. Performance of this portfolio will be evaluated quarterly against the Hedge Fund Research **HFR 12% Vol Institutional Index**, but success in achieving the long-term objective (see Table 2) will be measured, net of all costs and fees, on a one-year, three-year, five-year, and ten-year annualized basis.

2. Investment Strategy

The Risk Parity portfolio will be managed by external managers, selected in accordance with the requirements of this Policy, that provide risk-balanced exposure to multiple sources of excess expected return. Each manager, through an IMA or limited liability fund, will detail its strategy, performance objectives, permitted investments and restrictions. The Director of Risk Parity will have primary responsibility in executing the portfolio's investment strategy and plans.

3. Risk Limits and Portfolio Restrictions

The Director of Risk Parity is responsible for managing the various risks incurred and adhering to this Policy. In addition to general Policy requirements, the following restrictions will apply to this portfolio:

a. Risk Limits as detailed in Table 3, Section VII.
b. Short selling is prohibited unless authorized by the CIO and CRO.
c. All derivatives in this portfolio must comply with Section VI (Authorized Use of Derivatives) of this Policy.
d. All externally managed mandates must comply with Section VIII (Public Markets External Manager Selection) of this Policy.

D. Total Fund Cash

1. Objective

The objective of the Total Fund Cash portfolio is to:

a. Be a source of funds available to meet the Fund's operational needs, including capital calls and appropriations from the Earnings Reserve Account to the State's general fund; and
b. Allocate a small portion of the Fund to an asset class that is nearly risk-free and experiences extremely low volatility.

Performance of this portfolio will be evaluated quarterly and will be measured against the risk and after-fee return of the **90 Day Treasury Bills Index**, but success in achieving the long-term objective (see Table 2) will be measured, net of all costs and fees, on a one-year, three-year, five-years, and ten-year annualized basis.

2. Investment Strategy

The Total Fund Cash portfolio will be internally managed at the direction of the CIO. The size and investment profile of this portfolio may fluctuate month-to-month to accommodate the Fund's liquidity requirements. The CIO will have primary responsibility in executing this portfolio's investment strategy.

3. Authorized Investments

The CIO may invest this portfolio in cash and the following cash equivalents:

a. US Treasuries with a maximum final maturity of 24 months;
b. Investment Grade US corporate bonds with a maximum final maturity of 24 months;
c. Reverse Repurchase Agreements ("Reverse Repo"), as authorized by 15 AAC 137.430(12);
d. SEC registered money market investment funds;
e. Other cash equivalents approved by the CRO and ED; and
f. Gold-backed exchange traded funds as authorized by15 AAC 137.460.

4. Risk Limits and Portfolio Restrictions

The CIO is responsible for managing the various risks incurred and adhering to this Policy. In addition to general Policy requirements, the following specific restrictions will apply to this portfolio:

a. Risk Limits as detailed in Table 3, Section VII.
b. At any point, 80% of the portfolio should be invested in instruments with a final maturity not exceeding 181 days.
c. Gold-backed exchange traded funds shall not exceed 50% of the Total Fund Cash portfolio at any time.
d. Short selling is prohibited in this portfolio.
e. All derivatives in this portfolio must comply with Section VI (Authorized Use of Derivatives) of this Policy.

E. Securities Lending

1. Authorized Investments

The ED is authorized to enter into a securities lending agreement with the Fund's custodian to lend domestic and non-domestic Public Equity and Fixed Income securities from the Fund's portfolio directly to borrowers for a fee in accordance with the following guidelines:

a. The Fund's custodian shall agree to indemnify the Fund against any direct loss from:
    i. a borrower default;
    ii. the reinvestment of cash collateral; and
    iii. the failure to comply with the terms and conditions of the lending agreements;
b. Collateral shall be required at a minimum of 102% of the market value of the loaned securities which are denominated in the same currency as the collateral provided by the borrower;

c. Collateral shall be required at a minimum of 105% of the market value of the loaned securities which are denominated in a currency other than the collateral provided by the borrower;

d. Collateral and loaned securities shall be marked-to-market daily; and

e. The investment of cash collateral posted by borrowers shall be restricted to those investment-grade securities permissible under the provisions of AS 37.13.120 and 15 AAC 137; unless the ED elects to have cash collateral released to the Fund to meet the Fund's liquidity needs rather than having it invested by the custodian.

IV. ALTERNATIVE INVESTMENTS

A. Private Equity and Special Opportunities

1. Objective

The objective of the Private Equity & Special Opportunities ("PESO") portfolio is to invest in illiquid growth-oriented assets authorized by 15 AAC 137.460 that are expected to generate risk-adjusted, after-fee returns that are superior to the Public Equity portfolio. Performance of this portfolio will be evaluated quarterly, in aggregate and based upon the vintage year, against the **Cambridge PE (Lagged)**, but success in achieving the long-term objective (see Table 2) will be measured, net of all costs, fees, and carry, on a one-year, three-year, five-year, and ten-year annualized basis.

2. Investment Strategy

PESO investment strategies include: venture capital, growth equity, leveraged buyouts, special opportunities, and distressed debt. PESO portfolio investments will be executed through capital commitments to limited liability funds managed by external investment managers, through co-investments alongside existing external managers, and direct investments into operating companies. Annually, APFC Staff will provide a pacing and investment plan for Board approval that reflects the current PESO exposures, assumptions, and outlook. The Deputy CIO-Private Markets & Alternatives will have primary responsibility in executing the PESO portfolio's investment strategy.

3. Diversification and Portfolio Restrictions

The Deputy CIO-Private Markets & Alternatives is responsible for managing the portfolio risks and adhering to this Policy. In constructing a diversified PESO portfolio, APFC Staff will consider the following characteristics: strategy, geography, industry, manager, investment size, leverage, vintage year, and market position. In addition to general Policy requirements, the following asset class specific restrictions apply to this portfolio:

a. Risk Limits as detailed in Table 3, Section VII.

b. All derivatives in this portfolio must comply with Section VI (Authorized Use of Derivatives) of this Policy.

c. The PESO portfolio shall be invested within the following strategy diversification ranges:

   i. Venture Capital – 5% to 45%;

ii. Buyouts/Acquisition – 25% to 70%;
iii. Specialized Funds/Investments – 0% to 50%;

d. No more than 20% of the PESO Portfolio shall be invested with a single Investment Manager/General Partner.
e. No more than 20% of the PESO Portfolio shall be invested in publicly traded securities; and
f. Following the public listing of any shares of a portfolio company held by an APFC controlled investment vehicle, such shares shall be either liquidated consistent with SEC regulations within a reasonable period of time, not to exceed eighteen months, or written approval to continuing holding such public securities must be received from the ED on a quarterly basis.
g. Without the written approval of the ED and CIO, the PESO Portfolio will not directly acquire a controlling interest in a portfolio company.

B. Real Estate

1. Objective

The objective of the Real Estate portfolio is to generate a risk-adjusted return comprised of an attractive level of current income and capital appreciation, while contributing to diversification of the Fund. Performance of the Real Estate portfolio will be evaluated quarterly against a custom benchmark comprised of **85% NCREIF Property Benchmark (Lagged) and 15% MSCI US REIT Index**, but success in achieving the long-term objective will be measured, net of all costs, fees, and carry, on a one-year, three-year, five-year, and ten-year annualized basis.

2. Investment Strategy

Real Estate investments, as authorized in 15 AAC 137.450, shall primarily target:

a. Directly-held income producing, core real estate globally;
b. Directly-held build-to-core or other non-core properties;
c. Equity and debt funds that invest predominantly in real estate strategies (e.g. core, core-plus, value-added, and opportunistic);
d. Publicly traded funds (e.g. ETFs or Index), or securities (e.g. REITs, CMBS, or other structured product), where the underlying investments consist of real estate;
e. Private funds, or securities (e.g., REITs, CMBS, or other structured product), where the underlying investments consist of real estate; and
f. Co-investments alongside an existing Real Estate manager.

The Director of Real Estate will have primary responsibility in executing the portfolio's investment strategy.

3. Diversification and Portfolio Restrictions

The Director of Real Estate is responsible for managing the various risks incurred and adhering to this Policy. In constructing a diversified Real Estate portfolio, APFC Staff will consider the following characteristics: investment type, property type, geography, manager, and leverage. In addition to general Policy requirements, the following will apply to this portfolio:

a. Risk Limits as detailed in Table 3, Section VII.
b. All derivatives in this portfolio must comply with Section VI (Authorized Use of Derivatives) of this Policy.
c. No more than 60% of the directly-held Real Estate portfolio shall be invested in "non-core" real estate (value-add and opportunistic).
d. The directly-held portion of the Real Estate portfolio will target the following property types: Multifamily, Industrial, Office, Hotel, and Retail with maximum weightings for each property type measured against NCREIF NPI benchmark weightings. Except for the 10% carve-out for other property described in (e) of this section, maximum risk ceilings of 1.5x the benchmark weighting shall apply for each property type measured against the FY2025 target allocation for the Real Estate portfolio.
e. In recognition that APFC Staff may pursue some niche property types that are not included in property types of the NCREIF NPI, the directly-held portion of the Real Estate portfolio may, with the consent of the CIO, include up to 10% in property types not included in the NCREIF NPI.
f. No more than 35% of the Real Estate portfolio shall be invested with a single investment manager/general partner as measured against the FY2025 target allocation for the Real Estate portfolio.
g. Leverage on investments in the directly-held portion of the Real Estate portfolio shall be limited by investment type as follows:

   i. Core real estate leverage is limited to 65% of the gross asset value of the investment at the time of debt placement; however, this limit can be increased to 67.5% when including transaction fees and expenses;"
   ii. Non-Core real estate leverage is limited to 65% of the gross asset value of the investment at the time of debt placement or 65% of the project cost on build-to-core investments; however, this limit can be increased to 67.5% when including transaction fees and expenses; and
   iii. Portfolio-wide leverage is limited to 40% of the gross asset value of the directly-held Real Estate portfolio.

Infrastructure and Private Credit and Income Opportunities Portfolio

The Infrastructure and Private Credit and Income Opportunities portfolio will be comprised of two separate investment strategies in accordance with the Policy requirements below:

C. Infrastructure Portfolio

1. Objective

The objective of the Infrastructure portfolio is to provide attractive risk-adjusted returns that have inflation-protection characteristics and exhibit low correlations with other major asset classes, as authorized by 15 AAC 137.460. Performance of the Infrastructure portfolio will be evaluated quarterly against the **Cambridge Global Private**

Infrastructure Index (Lagged), but success in achieving the long-term objective (see Table 2) will be measured, net of all costs, fees, and carry, on a one-year, three-year, five-year, and ten-year annualized basis.

2. Investment Strategy

Infrastructure investments involve the purchase of critical assets with high barriers to entry and, due to the "essential services" nature of the assets, often result in low elasticity of demand. Infrastructure investments may include energy infrastructure, transportation, water infrastructure, telecommunications, social infrastructure (e.g. lotteries, student housing, prisons), other infrastructure (e.g. protected income stream assets, other interests of infrastructure issuers, infrastructure-related assets), other real assets (e.g. timberlands, agricultural farmlands, leasable hard assets), and any other tangible or intangible asset that possesses similar characteristics as those outlined in this section.

Infrastructure investments will be executed through long-term commitments to limited liability funds managed by external investment managers, through co-investments alongside existing Infrastructure managers and direct investments into operating companies. Additionally, investments in publicly-traded stocks of companies whose business profile includes ownership of infrastructure assets (Listed Infrastructure) may be included in the portfolio. Annually, APFC Staff will provide a pacing and investment plan for Board approval that reflects the current exposures, assumptions, and outlook. The Deputy CIO-Private Markets & Alternatives will have primary responsibility in executing the portfolio's investment strategy and plans.

3. Risk Limits and Portfolio Restrictions

The Deputy CIO-Private Markets & Alternatives is responsible for managing the various risks incurred and adhering to investment policy. In constructing a diversified Infrastructure portfolio, APFC Staff will consider the following characteristics: drivers of underlying assets' cash flow, industry sector, geography, manager, strategy, investment size, and company concentration. In addition to general Policy requirements, the following will apply to this portfolio:

- Risk Limits as detailed in Table 3, Section VII.
- All derivatives in this portfolio must comply with Section VI (Authorized Use of Derivatives) of this Policy.
- Investments in multiple limited liability investment vehicles managed by the same manager are permitted, however, combined investments with a single manager shall not exceed 30% of the total Infrastructure portfolio.
- APFC assets invested with each manager shall not represent more than 30% of that manager's AUM.

D. Private Credit and Income Opportunities

1. Objective

The objective of the Private Credit and Income Opportunities portfolio is to provide attractive risk-adjusted returns that generate a high level of income and potentially provide for capital appreciation, while safeguarding principal, as authorized by 15 AAC 137.460. Performance of the Private Credit and Income Opportunities portfolio will be evaluated quarterly against the **Cambridge Private Credit Index (Lagged)**, but success in achieving the long-term objective (see Table 2) will be measured, net of all costs, fees, and carry, on a one-year, three-year, five-year, and ten-year annualized basis.

2. Investment Strategy

Private Credit and Income Opportunities investments involve the ownership of higher yielding, illiquid investment debt opportunities that cover a range of risk/return profiles. The Private Credit portion of this portfolio shall target externally managed limited liability funds, co-investments, and direct investments into operating companies that target one or more of the following strategies: direct lending, subordinated and mezzanine lending, distressed debt, and opportunistic credit-oriented funds, with flexibility to pursue illiquid and liquid strategies. The Income Opportunities portion of this portfolio shall include investments such as: timberlands, asset-based lending, structured credit, life settlements, leasing and royalty strategies, and special situations that share the common characteristic of being private markets investments with an objective of income generation and downside protection, but which do not fit neatly into other portfolios. Certain portfolios within Private Credit and Income Opportunities may also include some liquid credit exposures to complement the private investments in this portfolio. Annually, APFC Staff will provide a pacing and investment plan for Board approval that reflects the current exposures, assumptions, and outlook. The Deputy CIO-Private Markets & Alternatives will have primary responsibility in executing the portfolio's investment strategy.

3. Risk Limits and Portfolio Restrictions

The Deputy CIO-Private Markets & Alternatives is responsible for managing the various risks incurred and adhering to this Policy. In constructing a diversified Private Credit and Income Opportunities portfolio, APFC Staff will consider the following characteristics: credit profile, geography, manager, strategy, investment size, and company concentration. In addition to general policy aspects, the following will apply to this portfolio:

1. Risk Limits as detailed in Table 3, Section VII.
2. All derivatives in this portfolio must comply with Section VI (Authorized Use of Derivatives) of this Policy.
3. Investments in multiple vehicles managed by the same manager are permitted, however, combined investments with a single manager shall not exceed 30% of the Private Income portfolio.
4. APFC assets invested with each manager shall not represent more than 30% of that manager's AUM.

E. Absolute Return

1. Objective

The objective for the Absolute Return portfolio is to deliver reasonably consistent and accretive returns that are largely uncorrelated with traditional, market-driven asset classes. Performance of the Absolute Return portfolio will be evaluated quarterly against the **HFRI Total HFOF Universe benchmark**, but success in achieving the long-term objective (see Table 2) will be measured, net of all costs, fees, and carry, on a one-year, three-year, five-year, and ten-year annualized basis. The long-term objective for this portfolio is to generate a return similar to the total Fund with a correlation to the total Fund of less than fifty percent (50%), as measure over rolling 36-month periods.

2. Investment Strategy

The Absolute Return portfolio will invest directly into comingled limited liability funds as authorized by 15 AAC 137.460. The managers of these funds will invest in public or private securities and other financial instruments and may use leverage consistent with other managers of similar strategies. It is not uncommon for the legal terms of these limited liability funds to have restrictions on liquidity, including redemption windows (e.g. monthly, quarterly, annually), notice periods (e.g. 30, 60, or 90 days), lock-ups (e.g. soft, hard), gates (e.g. investor-level, fund-level), and, at times, withdrawal fees. With the written consent of the CIO and ED, and the approval of investment guidelines, a portion of the Absolute Return portfolio may be internally managed and invested in gold-backed exchange traded funds as authorized by 15 AAC 137.460.

The Absolute Return portfolio, whether internally or externally managed, shall pursue one or more of the following investment strategies:

a. Relative Value, including equity market neutral, fixed income arbitrage, and convertible arbitrage;
b. Event-Driven, including merger arbitrage, distressed securities/discounted bank debt, and special situations;
c. Directional/Tactical/Opportunistic, including long-short equity, managed futures, and global macro; and
d. Commodities, including gold-backed exchange traded funds.

The Deputy CIO-Private Markets & Alternatives will have primary responsibility in executing the Absolute Return portfolio's investment strategy.

3. Risk Limits and Portfolio Restrictions

The Deputy CIO-Private Markets & Alternatives is responsible for managing the various risks incurred and adhering to this Policy. In constructing a diversified Absolute Return portfolio, APFC Staff will consider the following characteristics: manager, strategy, investment size, leverage, correlation with other assets of the Fund, and liquidity. In addition to general Policy Requirements, the following restrictions will apply to this portfolio:

a. Risk Limits as detailed in Table 3, Section VII;

b. Relative Value Managers in the range of 0 – 75%;
c. Event Driven Managers in the range of 0 – 50%;
d. Directional/Tactical/Opportunistic Managers in the range of 0 – 75%;
e. Commodities, including gold-backed exchanged traded funds in the range of 0 – 50%;
f. At least 50% of the portfolio shall be capable of being liquidated within a 12-month period; and
g. APFC assets invested with each internal or external manager shall not represent more than 30% of that manager's AUM.

V. ALASKA IN-STATE INVESTMENT POLICY

A. Objective and Considerations

To implement the requirements of AS 37.13.120(c), the Board believes the Fund should have an in-state investment policy that maintains the investment integrity of the Fund and is both proactive and impartial. As such, any internal in-state investment decision made by APFC Staff should include the following considerations:

1. Honor AS 37.13.120(c): Prescribes that if an Alaskan investment has equivalent risk and expected return comparable to or better than a similar non-Alaskan investment, the Alaskan investment should be preferred.

2. Require Compelling Risk-Adjusted Returns: To honor the prudent investor rule provided in AS 37.13.120(a), any Alaskan investment contemplated by APFC must be attractive on a stand-alone basis.

3. Ensure Fund Diversification: In order to provide sufficient risk diversification as required under AS 37.13.120(c), Board approval is required for any in-state investment that would exceed 1% of the Fund, at the time of investment.

4. Seek Participation by Another Institutional Investor: In order to ensure that an Alaskan investment opportunity is attractive on a stand-alone basis and satisfies the institutional quality requirements of 15 AAC 137.420, APFC should generally seek to invest into an Alaskan investment alongside of at least one of its peers (i.e., a large institutional investor, which may include endowments, foundations, sovereign wealth funds, or public or private pension funds).

B. In-State Investment Targets

For the APFC Staff to identify and invest the Fund in additional compelling in-state investments, the following investment targets and guidelines are set to promote compliance with AS 37.13.120(c):

1. By 2021, at least 3% of the Fund should be invested in-state;

2. By 2022, at least 4% of the Fund should be invested in-state;

3. By 2023, at least 5% of the Fund should be invested in-state;

For purposes of this section, a Fund investment will be considered "invested in-state" if,

1. An external investment manager has an office in Alaska and the employee(s) that is primarily responsible for management of the asset(s) is based in Alaska; or
2. An external investment manager with offices outside of Alaska makes an investment in Alaska, such as an investment in a portfolio company or investment project located in Alaska.

The Fund's investments managed internally by APFC Staff will not be included in achieving these targets.

VI. AUTHORIZED USE OF DERIVATIVES

A. Objective

The purpose of this section of the Policy is to establish the permitted uses and the limitations on the use of derivatives and establish procedures for managing risks associated with derivatives. The requirements and limitations of this section of the Policy shall apply to all derivatives transactions executed by APFC Staff and all external managers with authority to buy or sell a derivative as an agent on behalf of the of the Alaska Permanent Fund. This section of the Policy does not apply to investments in a limited liability investment vehicle in which derivatives are in the name of the limited liability investment vehicle and the liability is limited to the amount invested.

B. Derivatives Definition; Scope

1. As defined in 15 AAC 137.990(6), "Derivative" means "an instrument whose value, usefulness, and marketability is dependent upon or derives from an underlying asset; classes of derivatives include futures contracts, options, forward contracts, including currency forward contracts, swaps, and options on futures."
2. Both exchange-traded and over the counter ("OTC") derivative instruments are under the scope of this Policy. The principal risk of derivatives strategies comes from the potential to lever the portfolio and to express a view on a security or risk factor without committing capital commensurate with the exposure. To mitigate this risk, the successful and prudent use of derivatives depends on:
    a. Well-defined uses for derivatives, and avoidance of leverage;
    b. Manager-by-manager limits on economic exposures through derivatives; and
    c. Investment manager internal control and defined procedures for managing risk.

C. Permitted Uses

1. Permitted uses of derivatives include:
    a. Hedge and control risks of Fund portfolios so they better align with benchmarks and objectives;
    b. Efficiently manage portfolio exposures synthetically as opposed to trading underlying securities;

c. Build portfolios with targeted risk and return characteristics that otherwise could not be efficiently created with securities; and
d. Facilitate rebalancing.

D. Derivatives Risk Management and Compliance

1. Derivative Pre-Approval Requirement

All derivatives strategies, whether internally or externally managed, are prohibited unless specifically allowed in writing for a permitted use as a part of an investment manager's guidelines.

The use of derivatives by an external manager shall be conditioned upon the finding by the CIO and CRO that the external manager:

a. Has demonstrated investment expertise in the use of derivatives for the strategy they have been selected to implement;
b. Has appropriate risk management and valuation policies and procedures in place;
c. Has legal and investment experience to limit downside effects of the proposed derivatives; and
d. Has demonstrated the ability to effectively monitor and control the use of derivatives and has agreed to provide monthly derivative exposure reports which detail:
    i. Total derivative exposures on a gross and net basis,
    ii. Total collateral/margin postings on gross and net basis, and
    iii. A list of authorized counterparties and exposure by counterparty.

2. Derivative Recourse Limitations

For externally managed portfolios, all liability created by the use of derivatives in the name of the Fund must be limited to the total value of the portfolio being managed by the external manager. To ensure this requirement is met, approval of the IMA/External Manager guidelines by General Counsel is required.

3. Counterparty and other Requirements

a. The counterparty to any OTC derivative transaction must have a credit rating of at least A- (Standard and Poor's) or A3 (Moody's), unless an exception is approved in writing by the CIO and CRO;
b. The net market value, net of all collateral postings, of all OTC derivatives for any individual counterparty may not exceed 30 basis points of the total market value of the Fund.;
c. Selling (writing) uncovered options is prohibited;
d. The net of long and short dollar exposures to assets or currencies, whether derived from physical or derivative securities, must be less than or equal to the dollar market value of the portfolio, except for very small, inadvertent, or temporary amounts that occur in the normal course of portfolio management or authorized by the CRO;

e. The gross dollar exposures of a portfolio in the Fund from physical and derivative securities (futures, options, swaps) cannot exceed 300% of the market value of the aggregate underlying portfolio at all times unless authorized by the CRO; and
f. If derivatives are used by a manager to actively manage currency exposure, net short exposure to any single currency remains within limits established for that manger's strategy.

VII. RISK MANAGEMENT & OVERSIGHT

Recognizing the relationship between return and risk, APFC consciously and deliberately assumes various risks in pursuit of its return objectives. The goal of risk management is to understand, analyze and manage these risks. The risk management function strives to create risk awareness, establish and formalize a risk management framework, and ensure risks incurred are within the Board's risk appetite. This Policy outlines the Boards' approved risk management framework, which includes the salient investment risk parameters and thresholds.

A. Risk Parameters and Measures

APFC Staff will establish a framework for measuring absolute risk of the Fund and each asset class, as well as relative risks in comparison to established benchmarks. This framework should generally include quantifiable estimates of active and relative risk. APFC Staff will monitor and produce reports as appropriate for the Board, ED, CIO, and APFC Staff.

The salient risk parameters are listed below. Related tolerances and associated ranges are provided in Table 3.

Asset Allocation Limits – Target allocation levels are determined for each asset class based on quantitative modeling and qualitative inputs. Disciplined alignment to these targets is essential, albeit ensuring limited flexibility to cater to changing markets and other factors.

Future Commitments - Future commitments are a function of committed capital to private investments and essentially reflect a contingent cash draw liability. Monitoring and limiting future commitments relative to the Fund's overall size is important.

1. Active Risk - Tracking error is a measure of how closely a portfolio follows the index to which it is benchmarked. Tracking error is calculated for this purpose on an ex-ante basis using a holdings-based risk analytical system.

2. Relative Risk Limit - Relative Value at Risk (RVaR) provides a comparison of portfolio risk relative to benchmark risk and is measured as a ratio of Portfolio VaR to benchmark VaR.

In addition to relative measures, multiple risk parameters including concentration, credit, market, and liquidity risks are monitored and controlled.

1. Downside Risk - Downside risk is risk of significant loss of capital. Staff will actively monitor the Fund's downside risk relative to the risk benchmark using scenario analysis and stress testing.

2. Proxy Securities and Indices - If necessary and prudent, as determined by the CRO, APFC Staff will employ index proxies to approximate the economic characteristics of specific

investments to the extent that the terms and conditions of those investments or the underlying holdings (in the case of the funds) are not readily available or where the complexity of the underlying investment renders empirical measurement impractical.

3. Private Market Asset Holdings - APFC Staff will actively monitor the portion of the Fund invested in private market asset holdings to ensure that the percent of the total fund invested in private markets adheres to the private investment limits.

B. Credit Ratings for Fixed Income Securities

Credit ratings by the three major ratings agencies, Standard & Poor's, Moody's and Fitch will be the primary source of credit ratings for Fixed Income securities in the Fixed Income and Total Fund Cash portfolios, subject to the following:

1. In case of split ratings, the 'Bloomberg Barclays Middle Rating' methodology shall be applied (i.e. if all three agencies rate a security, the middle rating is adopted; if only two agencies rate a security, the most conservative (lowest) rating is used; if only one rates a security, that single rating is used).
2. If none of the three agencies have assigned a rating, ratings by other agencies and or implied ratings may be used with CRO approval.
3. If no agency ratings are available and a rating cannot be implied, it shall be categorized as 'Unrated'.

C. Legal Risk Management

Legal documentation for all internally managed public and private investments will be reviewed, negotiated and approved by APFC General Counsel prior to execution by the ED. APFC General Counsel shall be responsible for determining when outside legal counsel should be engaged to assist in the review and negotiation of Fund investment matters, subject to applicable statutes and rules adopted by the Office of the Attorney General.

D. Permitted Use of Leverage

APFC Staff and external managers, consistent with the requirements of 15 AAC 137.500 and this Policy (including the risk parameters established by the asset allocation ranges), is authorized to use leverage for an investment of Fund assets, provided that such leverage is non-recourse to APFC or the Fund as described in AS 37.13.120(b) and 15 AAC 137.500.

E. Foreign Exchange Risk

1. External managers and APFC Staff may, with prior approval of the CIO, transact in any foreign exchange instrument (including currency futures and forward contracts, options, and swap agreements), to implement their investment strategies, contingent upon such transactions being consistent with this Policy and the requirements of 15 AAC 137.480.
2. APFC Staff shall analyze foreign exchange risk regularly and present quarterly to the Board. This analysis includes both internal hedging and external foreign exchange overlay manager positioning and performance.

F. Risk Compliance, Monitoring, and Reporting

The APFC Staff assigned to each Asset Class in this Policy will have primary responsibility to ensure adherence to all aspects of this Policy. Additionally, the CRO and risk management team will be responsible for monitoring compliance of Fund investment activity. The Chief Risk Officer will provide the Board and APFC Staff with a comprehensive risk profile of the Fund on a regular basis. At a minimum, this includes the Daily Risk Dashboard and more detailed quarterly updates. The quarterly reports to the Board shall include the levels for most of the salient risk parameters described in this Policy.

G. Risk Parameters and Limits

Table 3: Asset Allocation (AA) Target Levels

	Public Equity	Fixed Income	Private Equity	Real Estate	Private Income	Absolute Return	Risk Parity	Cash	Total Fund	Low	High	Low	High
Future Outstanding Commitments[1]	0.0%	0.0%	10.0%	3.0%	5.0%	2.0%	0.0%	0.0%	20.0%	0%	115%	0%	125%
Benchmark	M664204USN	BBGEMBUSD	CAMB_PE	RE_2021	CAM_PI	HFRIPROXY	HFRI_RP	LEH3MO_TB	LHJPMSUSD				
Tracking Error	3.5%	2.5%							4.0%	n/a	115%	n/a	125%
Relative VaR[2]	100.0%	100.0%							100.0%	0%	125%	0%	140%
% of Asset Allocation													
Single Name / Issuer[3]	4%	4%	2%	10%	2%	n/a	n/a	n/a		0%	115%	0%	125%
Single Sub-Industry[4]	20%	20%	30%	n/a	30%	n/a	n/a	n/a		0%	115%	0%	125%
Single Country - EX US	10%	10%	20%	20%	20%	n/a	n/a	n/a		0%	115%	0%	125%
Total EX US	50%	30%	50%	50%	50%	n/a	n/a	n/a					
Single Fund Investment[5]	5%	10%	10%	10%	10%	15%	50%	n/a		0%	115%	0%	125%
Proportion of Ownership[6]	5%	n/a	n/a	5%	5%	n/a	n/a	n/a		0%	115%	0%	125%
Rating - Below Inv Grade	n/a	25%	n/a	n/a	n/a	n/a	n/a	0%		0%	115%	0%	125%
Rating - Below A- & Unrated	n/a	50%	n/a	n/a	n/a	n/a	n/a	0%		0%	115%	0%	125%
Rating - Unrated	n/a	5%	n/a	n/a	n/a	n/a	n/a	0%		0%	115%	0%	125%
FX - Proportion Unhedged	50%	30%	50%	50%	50%	n/a	n/a	n/a		0%	115%	0%	125%
Liquidity - Proportion w/o Weekly Liq	10%	10%	100%	100%	100%	100%	100%	5%		0%	115%	0%	125%
Liquidity - Proportion w/o Monthly Liq	2%	2%	100%	100%	100%	100%	70%	0%		0%	115%	0%	125%
Liquidity - Proportion w/o Quarterly Liq	0%	0%	100%	100%	100%	40%	30%	0%		0%	115%	0%	125%
Cash & Equivalents	2%	10%	5%	5%	5%	n/a	n/a	100%		0%	115%	0%	125%
MINIMUM Cash & Equivalents	0%	0%	0%	0%	0%	n/a	n/a	30%		85%	115%	75%	125%

All Targets are Maximum Permitted except-Minimum Cash

Notes:

1 % of Total Fund
2 Ratio of Portfolio VaR to Benchmark VaR
3 Single Name / Issuer: represents security level exposure as a percent of the portfolio to single entity or operating company.
US Treasury & Govt Agencies are exempt. For Private Assets, the limit applies at the time of investment or cost basis.
4 Definition: GICS Sub-Industry
5 Single Fund Investment: represents exposure to an external fund or externally managed strategy based vehicle.
6 Proportion Ownership: For Real Estate and Private Income, the limit is only applicable to the REIT and listed infrastructure portfolios.

VIII. PUBLIC MARKETS EXTERNAL MANAGER SELECTION

A. Manager Search and Selection

This section of the Policy applies to discretionary mandates assigned to external investment managers to transact and manage public market assets on behalf of the Fund (i.e. through an IMA). The Board has authorized APFC Staff to hire new investment managers upon conclusion of an appropriate search with the assistance of a qualified consultant, which can include the Board's General Consultant, contingent upon the search and hiring process adhering to the following steps:

1. Setting of relevant search criteria by APFC Staff of applicable manager qualifications;
2. Identification, with the assistance of the consultant, of a list of potential managers that are qualified to provide the investment management services needed, based on the qualifications and other search criteria established by APFC Staff;
3. Evaluation by a review committee established within the consultant's organization of the list of potential, qualified managers identified for recommendation of consideration by APFC Staff;
4. Informing the CIO of managers recommended by the General Consultant's review committee;
5. Selection by APFC Staff of between three and five finalists from those recommended by the consultant's review committee. This process may include, as part of due diligence, on-site visits by APFC Staff. Presentations to APFC Staff by the recommended managers are at the election of the CIO and ED;
6. Analysis by APFC Staff including a detailed recommendation to the CIO and ED, considering manager-specific characteristics as well as portfolio considerations;
7. Approval of the new manager or advisor by the CIO and ED, assignment of benchmarks as appropriate, and determination of the initial amount to be placed under management with the manager;
8. A manager shall also be required to execute a written IMA with the APFC. The IMA shall address matters of performance, compensation, term/termination, investment guidelines, among others, as the APFC and the manager consider necessary and appropriate. The use of derivatives, if any, within externally managed mandates shall conform to the Derivatives section of this Policy and be explicitly detailed in the IMA; and
9. Review and approval by the CRO and General Counsel of the proposed IMA is required prior to execution.

B. Special Situations

In certain special circumstances, the ED and CIO has the authority to modify or waive the criteria in the selection and hiring process outlined above. Even in such instances, the ED and

CIO retains the final manager selection authority. Use of an alternative manager search process may be considered when any one or more of these conditions exist:

1. A manager under consideration for hire has already been vetted in a significant manner either through a search process with a qualified consultant, or the manager is already employed in a manager capacity by APFC;
2. The skill for which the manager is being considered is related in a substantive manner to the role the manager already fulfills for APFC or was the subject of a manager search that first identified this manager;
3. It is in the best interest of the Fund to move more quickly than the typical search procedure permits; or
4. Due to confidentiality or specificity of the investment strategy or structure, use of the typical search procedure is not prudent.

The CIO and ED are required to report use of the alternative manager search and selection process, along with the rationale for the use, at the next regularly-scheduled Board meeting.

C. Monitoring and Evaluation of Managers

1. The Board expects APFC Staff to monitor the performance of the Fund's external managers, using the quarterly quantitative performance reports prepared by the General Consultant and Asset Class-specific Advisors in the case of Private Markets and Alternative Investments. Monitoring manager performance may also include review of other quantitative and qualitative aspects based on on-site visits to the manager's offices, discussions with other clients of the manager, media reports and other feedback.
2. The CIO and ED shall report to the Board any special concerns or observations they may have with respect to the performance of a manager no later than the next regular meeting of the Board.
3. The Board authorizes the CIO and ED to terminate an investment manager. If the CIO and ED terminate or give notice of unsatisfactory performance to a manager, they shall inform the Board of the actions and rationale at the next regularly scheduled Board meeting.

Appendix A: Investment Guidelines

Objective

The objective of the APFC Investment Guidelines is to supplement the Investment Policy by providing operational guidelines for APFC's internally managed investment programs. The ED may update this Appendix from time-to-time; updates will be provided to the Board at its next regularly scheduled meeting.

A. Alaska Direct Alternative Credit Investment Guidelines

In fiscal year 2018, APFC Staff established an in-house hybrid liquid / illiquid alternative credit effort named Alaska Direct Alternative Credit (or "ADAC"). Investments included in ADAC will be (i) non-investment grade high yield ETF's and individual bonds and cash ("Liquid Portfolio") and (ii) co-investments with Private Credit managers and working capital cash ("Private Portfolio"). The following guidelines apply to ADAC:

c. **ADAC shall be included in the Special Opportunities / Income Opportunities category.**

d. **Size and Funding Schedule**

   e. $500 million funded at inception, initially invested in Liquid Portfolio.
   f. Following inception, additional funds will be invested into ADAC through cash transfers to the Liquid Portfolio and capital calls into the Private Portfolio for co-investments, or working capital or organizational expenses for the Private Credit Co-Investment Vehicle.
   g. Funding of additional cash transfers to the Liquid Portfolio will be done at no greater than a 1:1 ratio with cumulative Private Portfolio capital calls.
   h. Invested capital of $1,000 million targeted to be funded within 24 months of inception.

e. **Portfolio Control and Decision Making**

   c. Private Income team will have discretion over portfolio-wide decisions including: (i) percentage of portfolio invested in Liquid vs. Private Portfolio, (ii) retaining APFC Fixed Income team as manager of the Liquid Portfolio, and (iii) individual investment decisions in the Private Portfolio.

f. **Liquid Portfolio and Benchmark**

   e. Liquid Portfolio, initially 100% of ADAC, ultimately scaling down to less than 50%, will be managed by the APFC Fixed Income team at inception.
   f. Targeted maximum allocation will be the greater of $750 million and 75% of ADAC NAV.
   g. Targeted minimum allocation will be 25% of ADAC NAV.
   h. ETF Account within Liquid Portfolio benchmarked to Barclays US High Yield Index (after July 1, 2018 to allow for an initial ramp-up).
   i. Individual securities portfolio will favor BB-B over CCC-rated securities and will be benchmarked to the Barclays BB High Yield Index (after July 1, 2018 to allow for an initial ramp-up). A relatively high tracking error to this index will be tolerated with the aim of outperformance over a full market cycle.

g. Private Portfolio and Benchmark

e. Private Portfolio, initially 0% of ADAC, ultimately scaling to greater than 50%, will be managed by the Private Income team.

f. Targeted maximum allocation will be 75% of ADAC NAV.

g. Targeted minimum allocation will be 25% of ADAC NAV (after initial, 24-month ramp-up).

h. Private Portfolio will target having a minimum of $100 million committed within 12 months of inception and a minimum of $250 million within 24 months of inception.

i. Co-investment opportunities will be primarily sourced through existing managers.

j. Maximum commitment per co-investment of $75 million without ED written approval.

k. Private Portfolio will be benchmarked to CPI + 500 bps.

h. Overall ADAC Portfolio Benchmarks

b. Barclays US High Yield Index (relatively high tracking error to this index will be tolerated with the aim of outperformance over a full market cycle).

c. A long-term target of CPI + 400 bps.

i. Tenor and Termination

f. This is an evergreen strategy with realized gains re-invested, which means the size of ADAC will be equal to invested capital, *plus* cumulative realized/unrealized gains, *minus* cumulative realized/unrealized losses.

g. The CIO, with ED consent, may choose to invest additional capital at any time.

h. The CIO, with Executive Direct consent, may choose to terminate the strategy at any time. Upon termination, available cash will be distributed from ADAC, the Liquid Portfolio will be sold within 180 days, and the Private Portfolio will cease making new commitments (with the exception of follow-on investments to existing portfolio holdings and investments to which a written commitment to invest has already been executed; both to be pursued only with written consent of the ED) and will distribute proceeds upon any partial or full realization of existing investments.

B. U.S. Large Cap Low P/E

In the fall of 2019, APFC Public Equity Staff established an internally traded deep value strategy. The following guidelines apply to this strategy:

1. Benchmark

The performance benchmark is the Russell 1000 Value Index.

2. Risk Limit

The portfolio will be included within the Total Public Equities' Tracking Error and Relative VaR limits. The allocation limit to the strategy will conform to the limits set in the Public Equities investment guidelines.

3. Concentration Risk

When originally purchasing securities for this strategy, the securities will all be equally weighted and from the lowest valuation quintile of the Russell 1000 index. The portfolio will be rebalanced every 12 months to ensure that the securities that make up this portfolio remain equally weighted and at least 90% of the securities are in the lowest valuation quintile of the Russell 1000 index. At all times, the portfolio will have a minimum of 100 securities.

4. **Allowable Investments**
   The strategy will invest in U.S. listed equity securities from the Russell 1000 Index.

5. **Shorting, Leverage, and Derivatives**
   Not applicable at this time.

6. **Liquidity Risk**
   The strategy is expected to be fairly liquid. For example, at $500mm in AUM the portfolio is estimated to trade 95% on day 1 and 99% by day 3, under normal market conditions.

7. **Portfolio Size Limit**

   The portfolio size shall be limited to a maximum of 1% of APFC's total fund NAV.

C. Gold Exchange Traded Fund Strategy

In the fall of 2020, APFC Absolute Return Staff established the APF Real Overlay account for the implementation of the Gold ETF strategy.

1. **Allocation Size**
   The size of the Gold Exchange Traded Fund strategy will range between 0% and 50% of the size of the Absolute Return portfolio.
   At the security level, APFC's position in any given ETF will not exceed 10% of the ETF's Total Assets, without separate CIO approval.

2. **Eligible Securities**
   U.S. listed ETF products issued by a major ETF sponsor such as iShares, State Street, VanEck, etc. The program will invest in ETFs backed by physical gold on an unlevered basis, e.g. will not invest in derivatives-based ETFs. Currently identified examples of ETFs that fit these criteria are IAU US, GLDM US, OUNZ US.

3. **Benchmark**
   The performance benchmark is the LBMA Gold Price (BB - GOLDLNPM Index).

D. Internally Managed Tactical Tilt Portfolio Investment Strategy and Guidelines

APF Tactical Tilt was started in 2015 within the Public Equity portfolio with the objective to implement "our own" insights gained from possessing a historical market perspective and with exposure to lots of data and information. It was an attempt to add value in ways the Fund's external public equity managers are either not set up for or not able to. The Strategy was also thought to be complementary to the bottom up stock selection strategies employed by our external managers.

1. **Benchmark**
The benchmark is MSCI ACWI IMI net (BB ID: M1WDIM)

2. **Primary Objective**
Achieve excess returns from top down selection decisions emphasizing sectors/industries, countries/regions, and style factors that represent greater appreciation potential relative to the broad market represented by the benchmark.

3. **Secondary Objectives**
Control risk in Public Equity portfolio - as market conditions warrant.

   Implement same day rebalancing with little cost or friction – with respect to maintaining Fund's target policy weights and cash flow needs

4. **Investment Philosophy & Process**
The foundation of this Strategy rests on successful top down allocation decisions across broad segments of public equity markets. The strategy is based on the belief that we can identify segments of the market which are either mispriced or attractively priced, trading at or near the low end with respect to their respective historic cycle, and/or are likely to benefit from a favorable turn in economic and market conditions.

5. **Portfolio Manager:** Director of Public Equity

6. **Portfolio Size:** Maximum 15% of overall Public Equity

7. **Tracking Error:** Maximum contribution to overall Public Equity Tracking Error (TE) of 100 bps (subject to Public Equity being within its TE limits)

8. **Allowable Investments**
Public equity ETFs, other externally managed public equity funds. Single stock holdings are not permitted.

9. **Derivatives**
Use of derivatives will require approval of CIO (except when derivatives are part of ETFs or other funds)

Deviation from these guidelines would require CIO and CEO approval. Overall compliance to IPS is required.

Appendix B: Limit Ranges & Compliance Cure Periods

The Green Zone Operating Range ("Green Zone") concept is designed to indicate the Board approved operating risk limits.

A. The Green Zone is the Board-approved CIO operating range.

B. The Yellow Zone is the Board approved ED operating range.

1. The Chief Risk Officer ("CRO") will notify the CIO and ED promptly upon entry into a Yellow Zone.

2. The CIO will respond by requesting ED approval to operate within the Yellow Zone.

3. With ED approval, the CIO may operate within a Yellow Zone for up to 90 consecutive days or, if longer, until the next Board meeting following entry into a Yellow Zone.

4. The CRO will notify the Board (i) when approaching 90 days of operating within a Yellow Zone and (ii) monthly thereafter.

5. Following Board notification, a Trustee may request in writing a meeting to discuss an extension to continue operating within the Yellow Zone.

6. The Board may grant the CIO and ED an extension to continue operating within a Yellow Zone. Between Board meetings, unless a Trustee requests a meeting, the Board Chair may grant the CIO and ED an extension to continue operating within a Yellow Zone.

C. The Red Zone is the operating range that requires Board approval.

1. The CRO will notify the Board upon entry into a Red Zone.

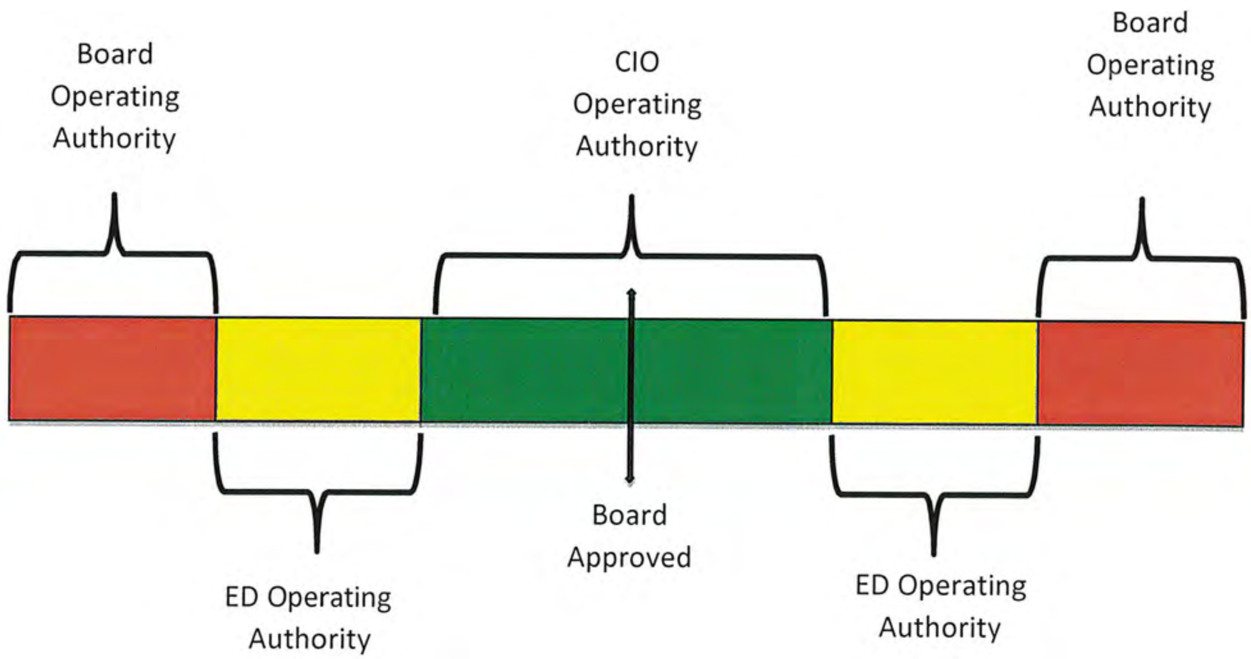
2. The CIO and ED will respond to the Board with an action plan.

3. Absent Board approval, operating within a Red Zone is limited to 30 consecutive days (plus the time needed to notice a Board meeting).

4. The Board has the authority to approve operating within a Red Zone, beyond 30 days.

Even though the Fund is expected to operate most of the time within the Green Zone, the Fund may periodically be within a Yellow Zone, and there may be times when the Fund will be within a Red Zone. The zones are designed to increase transparency and awareness; they should not be viewed as explicit violations. Each year a historical report showing periods of operating within the Yellow and Red Zones will be included in Board meeting packets.

Visual Display of Green Zone Concept



Appendix C: Risk Appetite

The risk appetite approved by Board on December 2, 2020 is defined in terms of (a) a Risk Tolerance Portfolio and (b) Liquidity level.

a. Risk Tolerance Portfolio (RTP)
    i. The RTP is comprised of an 80% equity, 20% bond reference portfolio with the following constituents: 80% MSCI ACWI IMI, 8% BB US AGG, 8% BB US CORP, 4% BB GLBL TRS ex-US.
    ii. The maximum risk of the APFC portfolio shall not exceed that of the RTP based on two parameters:
        - 1. Value at Risk (VaR): 1-year time horizon, 1 standard deviation, using 10 year constant-weighted historical monthly data.
        - 2. Drawdown: Recession Global Financial Crisis from Dec 2007 to Mar 2009
    iii. The private equity risk estimate computed by Aladdin will be adjusted downward (reduced) by adjusting the private equity exposure to 75% of actual exposure when comparing to RTP.
b. Liquidity level
    i. The combined allocated to public equities, fixed income, and cash will not be lower than 40%.

Appendix D: Glossary

AAC means the Alaska Administrative Code.

ADA means the Americans With Disabilities Act of 1990.

Advisors and **Board Advisors** mean the investment professionals who comprise the Board's Investment Advisory Group.

APFC and **Corporation** mean the Alaska Permanent Fund Corporation, established under AS 37.13.040.

AS means Alaska Statutes.

BB means Bloomberg.

Board means the Board of Trustees of the APFC.

CMBS means commercial mortgage-backed securities.

CFO means the APFC's Chief Financial Officer.

CIO means the APFC's CIO.

Consultant means the Board's investment consultant(s), not including Board Advisors.

CPI means the Consumer Price Index.

CRO means Chief Risk Officer

Custodian means the APFC's custodian.

Days means calendar days.

ED means the APFC's Executive Director.

FoF means fund-of-funds.

Fund and **Permanent Fund** mean the Alaska Permanent Fund, established under Article IX, Section 15, of the Alaska Constitution, and described in AS 37.13.010.

IMA means investment management agreement.

Investment Manager and Manager mean investment manager(s) retained by the APFC.

IRR means internal rate-of-return.

Long-Term means over one or more business cycles.

MBS means mortgage-backed securities.

RBM means Strategic Risk Benchmark.

Staff means the APFC Investment Staff and, where the context requires, also means or includes the Executive Director and/or other APFC Staff.

TE means Tracking Error.

Trustees means the members of the APFC's Board of Trustees.

VaR means Value at Risk.

Appendix E: Previous Investment Policy Adoption & Amendments

The previous APFC Investment Policy was adopted or amended effective as follows:

Adopted: May 27, 2010

Amended: September 30, 2010 (§14.9 added)

Amended: December 1, 2010 (§9.1 revised; new §11.1 added and prior §§11.1-11.3 and subsections thereunder renumbered; and §18.2.4 revised)

Amended: May 20, 2011 (§18A added)

Amended: September 30, 2011 (§§ 8, 8.2, 8.3, 8.5, 9.2, 9.3.1, 9.4.1, 11.3.1, 15.3, and 15.4 revised)

Amended: December 8, 2011 (§11.3.2 revised)

Amended: February 22, 2012 (§20 revised)

Amended: April 23, 2012 (§§16.3.1 and 16.3.2 revised; and Specific Policy Modifications for Tysons Corner Phase I Project and Mariner Frontier Fund, L.P. added)

Amended: February 27, 2013 (§§ 15.2, 15.3, and 15.4 revised)

Amended: May 22, 2013 (§§9.5.4, 9.5.5,12.4, 12.6, 13.2, 13.3.1, 13.3.3, 14.9.4.10, 16.1.2, 16.1.3, 16.1.4, 16.2, 16.3, 16.3.1, 18A, 23.2, and 23.5 revised; Specific Policy Modification for Mariner Frontier Fund, L.P. revised; Specific Policy Modification for Crestline AK Permanent Fund, L.P. added; and Addendum re Internal Investment Managers added)

Amended: May 23, 2013 (§§ 3.1, 3.3, 5.3, 6, 8 (including Table 8a), 8.1 revised; §8.2 deleted; §§ 8.3-8.5 renumbered (as §§ 8.2-8.4) and newly-renumbered §§ 8.2-8.4 revised; and §§ 9.2, 9.3.1, 9.4.1, 10, 11.3.1, and 22.2 revised)

Amended: February 26, 2014 (§§23.3.1, and 23.2 revised; and Addendum re Internal Investment Managers revised)

Amended: May 21, 2014 (§14.9.4.10 (including Table 14.9.4.10.1) revised)

Amended: December 10, 2014 (§§ 8, 9.3.1, 11.3.2, 14.2.2, and Table 14.5.4.1revised)

Amended: May 19, 2015 (§§ 15 and 16, including conforming changes in other sections revised)

Amended: September 27, 2016

Amended: December, 2016 (§§ 9, 10 and 12, including conforming changes in other sections revised)

Amended: May 23, 2018, complete re-write of the Policy and Guidelines. Changes to be effective on July 1, 2018

Amended: September 27, 2018 (§ 5, Alaska Investment Policy was revised)

Amended: May 21, 2020, complete rewrite of the Investment Policy changes effective July 1, 2020

Amended: September 24, 2020 Amended § III D total fund cash and § IV E absolute return to authorize investment in gold ETFs.

Amended: May 20, 2021 amended: (1) § II A to include reference to Risk Appetite approved by the Board on December 9, 2020; (2) § IV A 3 to include a new subsection (g), which is a control restriction in place of existing10% ownership restriction; (3) § IV B 3 G to increase authorized leverage on core real estate; (4) § VII G update table 3 risk parameters to include clarifications and changes to existing limits; (5) Appendix A to include most recent Investment guidelines approved by the ED; and (6) add Appendix C to include Risk Appetite parameters approved by the Board on December 9, 2020.

Alaska Permanent Fund Corporation

RESOLUTION OF THE BOARD OF TRUSTEES OF THE ALASKA PERMANENT FUND CORPORATION SUPPORTING AN IN-STATE EMERGING MANAGER PROGRAM

RESOLUTION 18-03

Private equity and venture capital investors combine investment capital with the application of operational expertise and other resources designed to support growth of the underlying operating companies and drive returns on invested capital. Because private equity and venture capital investments typically catalyze investment from other sources and require legal, advisory, accounting and other support services, prudent investment activity in Alaska should have a positive multiplier effect.

To encourage the growth of this positive impact within Alaska, consistent with the requirements of Alaska Statute 37.13.120(c), the Alaska Permanent Fund Corporation should target a portion of its private equity and venture capital investments at opportunities within Alaska that provide a rate of return on investment consistent with the expected risk/return profile of similar investments outside of Alaska.

Because the sourcing, selection, and ongoing active support of emerging private equity and venture capital fund managers is time and resource-intensive, APFC staff should outsource day-to-day management of this program while retaining oversight responsibility.

NOW THEREFORE BE IT RESOLVED that the Trustees direct the Executive Director to create an In-State Emerging Manager Program consistent with the following guidance:

1) APFC staff should conduct a targeted request for information ("RFI") in order to identify and select a discretionary fund-of-funds manager with demonstrable expertise in:
   - identifying capable and promising private investment firms;
   - supporting the growth and development of emerging investment firms; and
   - monitoring and reporting on the activity of underlying managers and investments.

2) The RFI should establish expected standards and targeted characteristics of underlying fund managers. Such characteristics are expected to include:
   - an in-State investment strategy designed to deliver returns consistent with similar investments outside of the state;
   - a business presence in Alaska; and
   - an ability to raise additional capital from other institutional sources.

3) Following the RFI, APFC staff is directed to design and negotiate an investment management agreement with the selected fund-of-funds manager. The agreement will establish the rights and responsibilities of the parties and govern the manager's relationship with the APFC.

4) The initial capital commitments and investments made through this program will be up to $200 million and will be a part of the Fund's allocation to Private Equity and Special Opportunities, which includes tracking the performance of this program against the benchmarks used to evaluate the performance of this asset class. It is anticipated that APFC will renew its investment commitments to investment partners that demonstrate success during the initial phase of this investment program.

PASSED AND APPROVED by the Board of Trustees if the Alaska Permanent Fund Corporation, this 27th day of September, 2018.

/s/
Bill Moran
Chairman, Board of Trustees
Alaska Permanent Fund Corporation

ATTEST:

/s/
Angela M. Rodell, Corporate Secretary

APFC ALASKA PERMANENT FUND CORPORATION

801 W 10TH SUITE 302 | JUNEAU, AK 99801
907.796.1500 | apfc.org

Attachment 9 Pages from Board of Trustees Meeting Packet – December 2021

SUBJECT: Review of Alaska In-State Program Barings

ACTION:__________

DATE: December 8, 2021

INFORMATION:____X_____

Background:

Barings, a Global Investment Manager, will present to the Board an overview of the Alaska Future Fund. The overview will include goals, typical criteria and parameters of investment deals, target industries and regions, and a current portfolio overview.

Biographies of Attendees:

Mina Pacheco Nazemi (Co-Head of Funds & Co-Investments)

Mina Pacheco Nazemi is a Co-Head of the Funds & Co-Investments team and serves on both the investment committee and valuation committee. She is also responsible for originating, underwriting and monitoring primary fund, direct/co-investments, and secondary fund opportunities for private equity and real assets. Mina has worked in the industry since 1998 with experience as a General Partner and Limited Partner investor in private markets and focused on underwriting direct/co-investment opportunities. Prior to joining the firm in 2017, Mina held several leadership and investment positions including Co-Founder and Partner at Aldea Capital Partners and Partner and Investment Committee Member at GCM Grosvenor Customized Fund Investment Group (formerly Credit Suisse CFIG). She is an alumna of Sponsors for Education Opportunity (SEO) and Robert Toigo Foundation. She also is a board member of the Pan American Development Fund and serves on the investment committee for the City of Hope. Additionally, Mina is a current Finance Fellow for The Aspen Institute. Mina holds a Bachelor of Arts with honors in Economics and Political Science from Stanford University and her Master of Business Administration from Harvard Business School.

Allen Ruiz (Managing Director, Funds & Co-Investments)

Allen Ruiz is a member of Barings' Funds & Co-Investments team and is responsible for originating, underwriting and monitoring funds and co-investments. Allen has worked in the industry since 2007 and has experience investing in and managing private equity assets as a direct investor and as a Limited Partner. Prior to joining the firm in 2017, Allen was a Director and founding team member at Aldea Capital Partners, where he focused on sourcing and underwriting direct/co-investment opportunities. Prior to Aldea, he was a VP at Meruelo Investment Partners, executing direct private equity and public market investments. Prior to Meruelo, Allen was an Investment Associate at the Credit Suisse Customized Fund Investment Group. Allen holds a B.S. in Business Administration from the University of California at Riverside and an M.B.A from Harvard Business School.

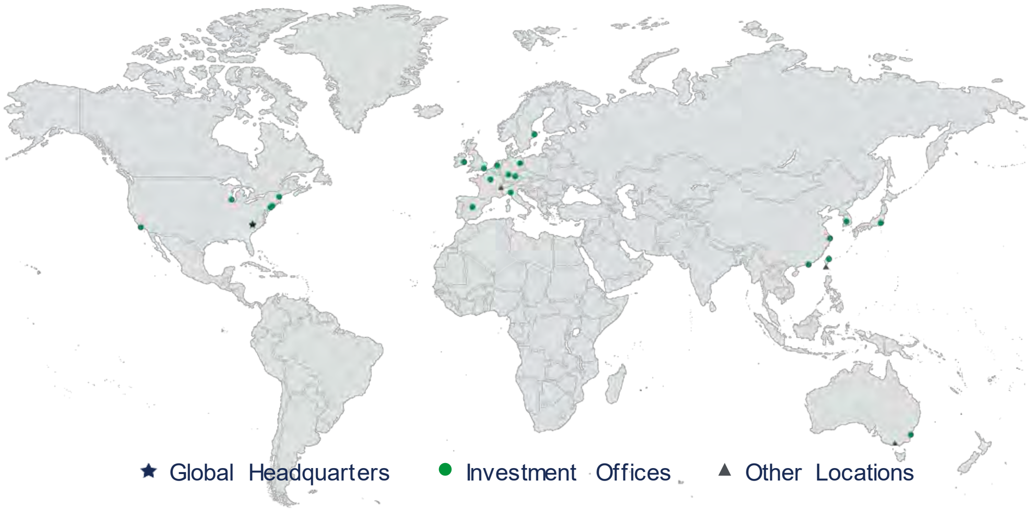
BARINGS

Alaska Future Fund

December 2021

21-1935609

- Barings is a **GLOBAL INVESTMENT MANAGER** sourcing differentiated opportunities and building portfolios across public and private fixed income, real estate and specialist equity markets
- A subsidiary of **MASSMUTUAL**, we have the financial stability and flexibility to take a long-term approach
- Our **GLOBAL FOOTPRINT** gives us a broad perspective and the ability to truly partner with our clients to invest across North America, Europe and Asia Pacific
- We are committed to **SUSTAINABLE PRACTICES AND RESPONSIBLE INVESTMENT** as we aim to serve our clients, communities and employees



$387+B

ASSETS UNDER MANAGEMENT

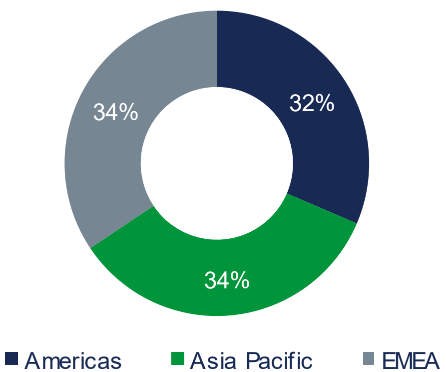
1,200+

EXTERNAL CLIENTS

1,800+

PROFESSIONALS GLOBALLY

EXTERNAL AUM BY REGION[1]



1. Includes third party, external AUM only.

All figures are as of September 30, 2021 unless otherwise indicated. Assets shown are denominated in USD. Percentages may not equal 100 due to rounding.

Global Investment Capabilities

Barings leverages its **DEPTH AND BREADTH OF EXPERTISE** across public and private markets to help meet our clients' evolving investment needs

PUBLIC

PUBLIC FIXED INCOME[1]

Provides access to strategies ranging from investment grade to high yield across developed and emerging markets

INVESTMENT GRADE
$123.6 B AUM

HIGH YIELD BONDS & LOANS[3]
$61.9 B AUM

SPECIAL SITUATIONS[4]
$0.9 B AUM

STRUCTURED CREDIT
$23.5 B AUM

GLOBAL SOVEREIGN DEBT & CURRENCIES
$13.8 B AUM

PUBLIC EQUITIES & MULTI ASSET[2]

Aims to deliver superior risk-adjusted returns through fundamental analysis and high-conviction, high-active share solutions

GLOBAL & INTERNATIONAL EQUITIES
$3.4 B AUM

EMERGING MARKET EQUITIES
$9.3 B AUM

SMALL CAP EQUITIES
$3.9 B AUM

MULTI ASSET
$2.9 B AUM

PRIVATE

PRIVATE CREDIT

Offers a diverse range of private debt financing solutions by partnering with our broad industry network

GLOBAL PRIVATE FINANCE
$32.5 B AUM

INFRASTRUCTURE & PRIVATE PLACEMENTS
$42.5 B AUM

REAL ESTATE[5]

Provides a broad spectrum of solutions across private real estate debt and equity

REAL ESTATE DEBT[6]
$32.3 B AUM

REAL ESTATE EQUITY
$16.2 B AUM

PRIVATE EQUITY[5]

Leverages our global presence in an effort to identify unique risk-adjusted return opportunities

DIRECT PRIVATE EQUITY
$2.6 B AUM

FUNDS & CO-INVESTMENTS
$5.3 B AUM

MULTI STRATEGY

Utilize our expansive asset market coverage to offer solutions such as income, target return and absolute return

1. Excludes the Korean fixed income strategy totaling $1.7 billion in AUM.
2. Excludes the Korean domestic equities strategy, which has $10.0 billion in AUM and other equities of $0.9 billion.
3. Includes the EM Corporate Debt strategy, which has $6.6 billion in AUM.
4. Represents dedicated special situation accounts and does not include assets managed in other diversified credit accounts.
5. Projected AUM figures.
6. Includes real estate debt assets that are managed as part of affiliated fixed income portfolios.

All figures are as of September 30, 2021 unless otherwise indicated. Assets shown are denominated in USD.

Barings Funds and Co-Investments Platform Overview

With over 30 years of experience, the FCI platform has a long, established history of building customized private market portfolios

PLATFORM HIGHLIGHTS

$7.9B
Committed Capital

$8.0B
Distributions

18
Investment Professionals

219
Exited Investments

538
Investments

2,700+
Sponsor Relationships

900+
Deals Assessed in 2020

BROAD CAPABILITIES

Diverse team of 18 investment professionals,

Diversified global platform

Institutional presence: history, scale, access

CUSTOMIZED APPROACH

Client centric portfolio development

Single client funds and commingled structures

Cost effective access

DATA-DRIVEN PLATFORM

Proprietary investment rating/tracking system

Quarterly data collection, monitoring, analytics

Integrated portfolio management

INSTITUTIONAL STRENGTH

Long-term institutional capital

Ongoing investment in people, systems and infrastructure

Strong alignment of interest and consistent allocations

The information included has not been reviewed or audited by independent public accountants. Certain information included herein has been obtained from sources that Barings Alternative Investments believes to be reliable but the accuracy of such information cannot be guaranteed.
Past performance is not indicative of future results.
As of June 30, 2020. All $ are denominated in USD.

BARINGS

Barings In-State Capabilities

Developing In-State Investment Programs

Properly designed in-state investment programs can provide significant impact beyond financial returns

- CIO & Internal Staff
- Board & Trustees
- Plan Providers
- Plan Observers
- Local Companies
- Local Constituents
- Plan Beneficiaries

1. DELIVER MARKET RETURNS

- *Well designed programs with proper execution can potentially deliver market levels of return*

2. STRENGHTEN ECONOMIC BASE

- *Effective allocation of capital supports long-term job growth, helps produce quality jobs, can advance new technologies and can accelerate economic output within the state*

3. CREATE PROPER INVESTMENT ECOSYSTEM

- *Program awareness and visibility can bring public and private capital to the table to find creative solutions for in-state challenges*

4. ATTRACT ADDITIONAL CAPITAL AND TALENT

- *In-state programs can have a multiplier effect on attracting additional private market capital and attracting talent to lead enterprises*

5. ENHANCE THE STATE'S REPUTATION

- *Increased economic activity and proper transparency can build credibility with in-state constituents and out-of-state players*

In-State Program Considerations

In addition to maintaining integrity of a robust investment process, Barings FCI believes the following topics are critical to designing a successful in-state program

CLEARLY DEFINE MISSION & PROGRAM OBJECTIVES	CONTINUOUS MANAGER & STAFF COLLABORATION	GENERATE PROGRAM VISIBILITY & AWARENESS
MATCH INVESTMENT TARGETS & IN-STATE ECONOMIC LANDSCAPE	SIZE CAPITAL & PACING TO INVESTMENT OPPORTUNITY	UTILIZE DEEP GP NETWORKS & ATTRACT PARTNERS
FOLLOW INVESTMENT GUIDELINES & ALLOW CREATIVITY	EXECUTE & COMMUNICATE WITH IN-STATE CONSTITUENTS	CREATE MEASUREABLE REPORTING METRICS THAT ALIGN WITH OBJECTIVES

Alaska Future Fund Overview

BARINGS

Our Goals

The Alaska Future Fund is designed to, first, generate returns for APFC and its stakeholders, while growing partnerships and fostering more private market opportunities within the state.

OVERALL GOAL:
ACHIEVE STRONG INVESTMENT RETURNS FOR APFC AND APFC STAKEHOLDERS

1. **Strengthen Alaskan Economy**
   Strengthen Alaska's economic base by fostering the creation and retention of companies and industries within the state

2. **Attract Investments**
   Attract additional capital and investments to the state

3. **Encourage Partnerships**
   Encourage partnerships within the state with multiple public, non-profit, and/or private players

Target Industries / Region

The Alaska Future Fund looks to invest in businesses and projects that support core sectors of the Alaskan economy alongside a General Partner, including, but not limited to, natural resources, transportation and infrastructure.

NATURAL RESOURCES

INDUSTRIES

Oil & Gas, Metals & Mining, Fisheries and Wildlife Conservation

TRANSPORTATION

INDUSTRIES

Shipping, Aviation, Warehousing and Logistics

INFRASTRUCTURE

INDUSTRIES

Ports, Airports, Midstream Energy, Telecommunications and Power

IN-STATE REQUIREMENTS

Alaska - Based

Businesses / Private Market Funds / Projects Headquartered in Alaska

Local Operations

Businesses / Private Market Funds with a Significant Alaskan Presence

Local Expansion

Businesses / Projects with a Bona Fide Plan to Initiate, Expand, or Consolidate Operations in Alaska

Typical Deal Criteria

Below are typical deal criteria and parameters for the Alaska Future Fund

STAGE / COMPANY SIZE

- Seek to invest in established cashflow positive companies and Real Asset projects with limited permitting risk (pre-revenue projects ok depending on situation)
    - See prior slide for industry / regional focus
- Will typically not invest in Venture Capital (i.e. technology startup) investment opportunities
- Will consider a wide range of companies, generally from $10M to $1B+ in total enterprise value

INVESTMENT SIZE

- Typical investment size target of at least $5 million on behalf of the Alaska Future Fund
    - Diversification limits / targets at the top-end of investment size to vary by investment type
- Barings maintains deep relationships with large investment groups that can lead opportunities and/or bring additional capital into potential opportunities within the state
- Barings has the capacity to invest additional capital managed by the firm (case-by-case dependent)

INVESTMENT TYPES / STRUCTURE

- Target market rate Real Asset / Private Equity returns across our investments
- The Alaska Future Fund will primarily invest as LP investors into Private Equity Funds and into direct Co-investment opportunities alongside lead investors
- Barings is also able to co-lead investment opportunities with aligned investment partners / targets
- The Alaska Future Fund can invest in equity and/or structured securities with appropriate pricing

BARINGS

Alaska Future Fund Portfolio Overview and Activity

The Alaska Future Fund continues to source and execute attractive opportunities within the state of Alaska.

DEAL ORIGINATION AND FUNNEL

- Notable calling effort to local businesses, organizations, intermediaries and sponsors that are active within the state
- Completed several roadshows and diligence trips to Alaska
- Barings has evaluated a notable number of investment opportunities on behalf of the Alaska Future Fund
- On average 10-20 active investment opportunities at different stages of diligence / review

DEPLOYMENT

- Disciplined deployment has resulted in <5% approval rates to date
- The Alaska Future Fund has committed approximately 50% of its total capital (through December 8th, 2021)
- Additional investments in late stages of diligence and/or pending close to take commitment level over 2/3rds of the program size within 30-60 days
- Capital deployment on plan with program objectives

PIPELINE SNAPSHOT

- Deal Pipeline mostly concentrated in the Lower-Mid Market (<$250M Total Enterprise Value)
- Active deal opportunities across targeted sectors, including but not limited to:
    - Infrastructure; Real Asset / Services; Natural Resources; and Transportation

PORTFOLIO BREADTH AND SCALE

- The current (incl. pending close) Alaska Future Fund portfolio companies generate aggregate revenues in excess of half a billion USD per year in Alaska
- The current (incl. pending close) Alaska Future Fund portfolio companies employ over 1,000 Alaskans
    - At steady-state / mature employment, these same companies will likely add hundreds of additional jobs in the state
- Deal partners / sponsors across existing (incl. pending close) portfolio: 60% from Lower-48 and 40% Alaska-based

BARINGS

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SUBJECT:	Review of Alaska In-State Program McKinley	ACTION:__________
DATE:	December 8, 2021	INFORMATION:____X_____

BACKGROUND:

McKinley Management, LLC, a privately held, Alaska-based firm has worked as an APFC manager since 1999, will present to the Board an overview of investing in Alaska. The presentation will include investment criteria, target sectors, fund performance, and target portfolio.

Biographies of Attendees:

Rob Gillam (Chief Executive Officer & Chief Investment Officer)

Mr. Robert A. Gillam serves as McKinley Management, LLC's Chief Executive Officer and Chief Investment Officer. Rob has been with the firm since 1994 in roles including sales, portfolio manager, and head of international investments. He is the principal strategist behind McKinley Capital innovations including Non-U.S., MEASA, Global Healthcare, the Engineering and Solutions platform, and most recently, Private Investment. As CEO/CIO, Rob is responsible for the firm's business strategy and investment process. He is supported by a robust management team and a governing Board of Directors. Rob established McKinley Capital's Scientific Advisory Board chaired by Dr. Harry Markowitz, Ph.D, winner of the Nobel Prize in Economics and founder of Modern Portfolio Theory.

Rob is an Advisory Board Member of the Jacobs Levy Equity Management Center for Quantitative Financial Research at the Wharton School. He sits on the Wharton Global Family Alliance and the Rasmuson Foundation investment committee. Rob has written numerous pieces of research including Investing in Global Equity Markets with Particular Emphasis on Chinese Stocks co-authored with Dr. Harry Markowitz, Ph,D., Dr. John Guerard Jr., Ph.D., and Dr. Shijie Deng. A noted speaker, Rob has been featured on the Bloomberg Invest forum, at the Milken Institute Global Conference, and the Institute for Fiduciary Education.

Rob holds a Bachelor's Degree in Finance from the Wharton School at the University of Pennsylvania, and is a CFA. Rob, his wife, and two sons reside in Anchorage, Alaska where he enjoys fly-fishing, hiking, and wilderness adventures. A third-generation Alaskan, Rob is passionate about his home state and the unique opportunities found in the Last Frontier.

McKINLEY ALASKA
PRIVATE INVESTMENT, LLC

DECEMBER 2021

INVEST IN ALASKA

Local Opportunities. Global Solutions.

PREPARED FOR:
ALASKA PERMANENT FUND CORPORATION
BOARD OF TRUSTEES MEETING

Alaska
Power
Feed
Connect

Local Opportunities.

Global Solutions.

McKINLEY ALASKA
PRIVATE INVESTMENT, LLC

Alaska is highly strategic for companies dedicated to responsibly power, feed and connect our planet.

Photo credit: www.astra.com

Na'-Nuk Investment Fund 1 Overview

McKINLEY ALASKA
PRIVATE INVESTMENT, LLC

- A First Fund backed by 30 years of institutional experience
- $117M in a commingled bottom-line fund
- Lead investment of $100MM from Alaska Permanent Fund Corporation (APFC)
- Targets a rate of return and risk profile consistent with similar investments made outside of Alaska
- Investment team offers 100+ years of combined industry experience plus intimate Alaska knowledge
- Investment strategy built around co-investing with experienced capital and strategic partners
- NIF investors may also co-invest alongside fund investments when appropriate
- Investments include venture capital, private equity, and growth equity capital

Investment Criteria

Risk/ Return

Rigorous filtering for opportunities which we believe can produce a 3x+ MOIC*

Alaska Connection

We target opportunities where we believe our local knowledge and experience produce an advantage

Best in Class**

Opportunities align with McKinley's internal expertise or are attractive to our operating and financial partners

* MOIC is calculated based on current data and cannot be guaranteed. Each prospective investor is advised and encouraged to seek the advice of such prospective investor's own legal, tax, and business advisor(s) with respect to the legal, tax, and other implications of an investment. No one security or investment is profitable all the time and there is always the possibility of selling it at a loss. ** We attempt to engage well-known industry partners which we believe to be best in class in their respective industries.

Target Sectors

Power

Energy
- Support affordable and clean energy
- Optimize, enhance, and monitor traditional energy production

Mining and Exploration
- Alaska's mineral resources will be the backbone of energy transition infrastructure

Feed

Food Systems
- Alaska remains one of the world's leading supplier of sustainable seafood
- Expand mariculture production
- Solutions that help protect our food systems from climate change disruption

Connect

Transportation and Logistics
- Alaska is a global air cargo hub
- Improving reliability and reducing cost of delivery to Alaska's communities

Arctic and Situationally Relevant Technology
- Aerospace, aviation, and connectivity

Tourism
- Alaska is a leading global destination.

The McKinley Advantage

Proprietary Deal Flow	Investment Expertise
• Alaska Network • Global Connectivity • Best-In-Class Partners* • Portfolio Funds	• Trusted Alaskan Partner • Operational Backbone - McKinley Capital - McKinley Research • Customer Connections

* We attempt to engage well-known industry partners which we believe to be best in class in their respective industries.

Notable Co-Investors

ADVANCE

WEXFORD

RRG

KLEINER PERKINS

AIRBUS VENTURES

canaan partners

OATV

Emerson Collective

As of 09/30/21. Not a complete list of co-investors. Logos shown are used with express written permission of listed companies. A full list of co-investors is available upon request.

McKINLEY ALASKA
PRIVATE INVESTMENT, LLC

Fund 1 Performance

* Source: Provided by Fund Administrator Cornerstone as of 6/30/21. IRR is calculated based on current data and cannot be guaranteed; ** as of 11/17/21.

McKINLEY ALASKA
PRIVATE INVESTMENT, LLC

$~90MM
Capital Committed/ Invested**

9
Investments

122%
Gross IRR*

1.62x
Gross MOIC*

1
IPO

5
Board and LPAC Seats

Na'-Nuk Investment Fund 2 Overview

- Fully capture opportunities
- Fund 1 expects to be fully committed by end of Q4 2021, one year earlier than projected
- Alaska private equity opportunities frequently exceed $100MM in enterprise value
- Platform investments seeking to realize value through consolidation need significant follow-on capital
- Fund 1 early-stage fund winners will likely generate significant mid-to-late-stage venture opportunities

McKINLEY ALASKA
PRIVATE INVESTMENT, LLC

Fund 2: Target Portfolio

$250MM
Target Fund Size

15-20
Portfolio Investments

3x+
Target Fund Level Return*

* This is an estimation of what the model portfolio could include but is not a guarantee. Actual portfolio investments may vary and are at the discretion of McKinley Alaska's investment team and methodology. Each prospective investor is advised and encouraged to seek the advice of such prospective investor's own legal, tax, and business advisor(s) with respect to the legal, tax, and other implications of an investment. No one security or investment is profitable all the time and there is always the possibility of selling it at a loss.

McKinley Management, LLC

McKinley is a group of Alaska-rooted and globally-connected investment and research experts who help our clients achieve their individual and unique goals.

McKinley Capital Management, LLC
McKinley Research Group, LLC
McKinley Alaska Private Investment, LLC

mckinleymgmt.com

MCKINLEY
MANAGEMENT, LLC

Our Team

- 65+ employees
- Anchorage, Alaska headquarters with offices in Juneau, Alaska and Chicago, Illinois
- Focused on providing outstanding and customized service
- Strict confidentiality, data governance, and state-of-the-art cybersecurity between all business units
- Winner of 2020 Best Places to Work in Money Management from *Pensions & Investments®* magazine and 2021 Best Workplaces Alaska from *Alaska Journal of Commerce®*
- Award-winning culture provides best-in-class pedigree, tenure, and continuity and stability for clients

Our Corporate Commitment: Education, Community Service, Sustainability

- An intrinsic part of our Alaska culture and our business
- Education: University of Alaska Data Science and Artificial Intelligence Lab, summer internships, career development
- Community: Charity of Choice Program provides cash, in-kind project, and technology for one year; adopt-a-road, citywide clean-up, food drives, and Alaska non-profit investment management fee
- Sustainability: Ongoing environmental, social and governance research, certification and client-specific implementation
- Firmwide commitment to Alaska and contributing to Alaska organizations

“

The single most important resource in our state is the APFC and its staff.

- Rob Gillam

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APFC ALASKA PERMANENT FUND CORPORATION

Private Equity Fund Commitments | 06/30/2021

Investment	Currency	Vintage Year	Commitment (USD)
Actera Partners II LP	USD	2012	5,000,000
Advantech Capital LP	USD	2016	10,300,000
Advantech Capital II LP	USD	2018	23,900,000
Advent International GPE VII-B LP	USD	2012	60,000,000
Advent International GPE VIII	USD	2016	60,000,000
Advent International GPE IX LP	USD	2019	60,000,000
Advent Latin American V-E LP	USD	2009	5,000,000
Advent Latin American VI-G LP	USD	2014	15,000,000
Advent Latin American VII SCSp	USD	2021	30,000,000
Alaska Future Fund LP	USD	2019	100,000,000
Alchemy Special Opportunities Fund III LP	GBP	2014	19,100,446
Altas Partners Holdings II LP	USD	2019	50,000,000
Altitude Life Science Ventures Fund II LP	USD	2015	50,000,000
Altitude Life Science Ventures Side Fund II LP	USD	2015	90,000,000
Altitude Life Science Ventures Fund III LP	USD	2018	50,000,000
Altitude Life Science Ventures Side Fund III LP	USD	2019	50,000,000
Altitude Life Science Ventures Fund IV LP	USD	2020	60,000,000
Altitude Life Science Ventures Side Fund IV LP	USD	2020	60,000,000
American Industrial Partners Capital Fund VI LP	USD	2015	10,000,000
ARA Fund I LP	USD	2019	40,000,000
Ara Fund II LP	USD	2021	40,000,000
Arch Venture Fund VIII LP	USD	2014	101,283,756
Arch Venture Fund VIII Overage LP	USD	2015	100,000,000
Arch Venture Fund IX LP	USD	2016	50,000,000
Arch Venture Fund IX Overage LP	USD	2016	50,000,000
Arch Venture Fund X LP	USD	2018	25,000,000
Arch Venture Fund X Overage LP	USD	2018	25,000,000
Arch Venture Fund XI LP	USD	2021	25,000,000
Archer Capital Fund V LP	AUD	2011	13,380,391
Austin Ventures X LP	USD	2008	14,500,000
Bain Capital Asia Fund II LP	USD	2011	20,000,000
Bain Capital Asia Fund III LP	USD	2016	20,000,000
Bain Capital Asia Fund IV LP	USD	2019	40,000,000
Bain Capital Europe Fund V SCSp	EUR	2018	29,407,497
Bain Capital Fund IX LP	USD	2006	27,000,000
Bain Capital Fund IX Coinvestment Fund LP	USD	2006	13,000,000
Bain Capital Fund X LP	USD	2007	33,000,000
Bain Capital Fund XII LP	USD	2017	25,000,000
Bain Capital Fund XIII LP	USD	2021	25,000,000
Bain Capital Venture Fund 2009	USD	2009	20,000,000
Bain Capital Venture Fund 2012 LP	USD	2012	12,000,000
Bain Capital Japan Middle Market Fund LP	JPY	TBD	13,514,731

Investment	Currency	Vintage Year	Commitment (USD)
Battery Ventures X LP	USD	2013	25,000,000
Battery Ventures X Side Fund LP	USD	2013	11,000,000
Battery Ventures XI LP	USD	2016	25,000,000
Battery Ventures XI Side Fund LP	USD	2016	11,100,000
Battery Ventures XII LP	USD	2018	23,000,000
Battery Ventures XII Side Fund LP	USD	2018	13,000,000
Battery Ventures XIII LP	USD	2021	23,000,000
Battery Ventures XIII Side Fund LP	USD	2021	13,000,000
Battery Ventures Select I LP	USD	2021	20,000,000
BC European Capital IX	EUR	2010	51,790,222
Berkshire Fund VIII LP	USD	2011	18,500,000
Berkshire Fund IX LP	USD	2016	34,300,000
Berkshire Fund X LP	USD	2021	40,000,000
BlackRock AK Private Equity Co-Investment Fund LP	USD	2014	100,000,000
BlackRock Private Opportunities Fund III LP	USD	2014	100,000,000
Blackstone Capital Partners VI LP	USD	2008	72,000,000
Blackstone Capital Partners VII LP	USD	2016	25,000,000
Boyu Capital Fund II LP	USD	2013	18,600,000
Boyu Capital Fund IV LP	USD	2018	65,000,000
Boyu Capital Fund V LP	USD	2021	40,000,000
Boyu Capital Growth Fund I LP	USD	2021	10,000,000
Canaan VII LP	USD	2005	6,000,000
Canaan VIII LP	USD	2007	20,500,000
Canaan IX LP	USD	2011	27,500,000
Canaan X LP	USD	2015	32,500,000
Canaan XI LP	USD	2017	38,100,000
Canaan XII LP	USD	2021	30,000,000
Capital Constellation LP	USD	2018	300,000,000
Capitalworks Private Equity Fund II LP	USD	2013	10,000,000
Carlyle International Energy Partners LP	USD	2013	199,078,535
Carlyle International Energy Partners II SCSP	USD	2020	25,000,000
Carlyle Partners VI LP	USD	2013	30,000,000
Catalyst Investors III LP	USD	2011	20,000,000
Catalyst Investors IV LP	USD	2015	45,000,000
Centerbridge Capital Partners LP	USD	2006	34,090,909
Centerbridge Capital Partners II LP	USD	2010	60,000,000
Centerbridge Capital Partners III LP	USD	2015	105,000,000
Centerbridge Capital Partners IV LP	USD	TBD	75,000,000
Centerbridge Special Credit Partners II LP	USD	2012	20,000,000
Centerbridge Special Credit Partners III LP	USD	2016	24,000,000
Centerbridge Special Credit Partners III-Flex LP	USD	2017	56,000,000
Champ Ventures 7	AUD	2010	17,079,507

Investment	Currency	Vintage Year	Commitment (USD)
Charlesbank Credit Dislocation Overage Fund LP	USD	2021	25,000,000
Charlesbank Credit Opportunities Fund II LP	USD	2020	50,000,000
Charlesbank Equity Fund VIII LP	USD	2014	10,000,000
Charlesbank Equity Fund IX LP	USD	2017	48,200,000
Charlesbank Equity Fund X LP	USD	TBD	50,000,000
Charlesbank Technology Opportunities Fund LP	USD	2020	45,000,000
Chequers Capital XVI	EUR	2011	30,537,472
Chequers Capital XVII	EUR	2017	27,433,741
CL Advisory Invest A (Crestline AK)	USD	2015	100,000,000
CL Advisory Invest B (Crestline AK)	USD	2015	100,000,000
CL Advisory Investments II (Crestline AK II)	USD	2020	100,000,000
Clearlake Capital Partners IV LP	USD	2015	25,000,000
Clearlake Capital Partners V LP	USD	2017	50,000,000
Clearlake Capital Partners VI LP	USD	2020	50,000,000
Clearlake Opportunities Partners (E) LP	USD	2015	25,000,000
Clearlake Opportunities Partners II LP	USD	2019	25,000,000
Constellation Generation IV Fund-A LP	USD	2021	50,000,000
CVC Capital Partners VII LP	EUR	2017	42,525,228
CVC Capital Partners VIII LP	EUR	2021	35,577,000
DCM VI LP	USD	2008	20,000,000
DCM IX LP	USD	2019	50,000,000
DCM Ventures China Fund (DCM VII) LP	USD	2013	22,000,000
Dyal III Commingled (US Investors LP)	USD	2015	250,000,000
Dyal Capital Partners IV LP	USD	2018	25,000,000
EnCap Energy Capital Fund VIII LP	USD	2010	30,000,000
EnCap Energy Capital Fund VIII Co-Investors LP	USD	2011	10,011,201
EnCap Energy Capital Fund IX LP	USD	2012	30,000,000
EnCap Energy Capital Fund X LP	USD	2015	35,000,000
EnCap Energy Capital Fund XI LP	USD	2017	50,000,000
EnCap Flatrock Midstream Fund III LP	USD	2014	12,500,000
EnCap Flatrock Midstream Fund IV LP	USD	2017	37,400,000
Exponent Private Equity Partners LP	GBP	2004	20,795,002
Exponent Private Equity Partners II LP	GBP	2007	25,622,375
Flagship Pioneering Fund VII LP	USD	2021	45,000,000
Fortissimo Capital Fund IV (B) LP	USD	2015	14,500,000
Fortissimo Capital Fund V LP	USD	2020	20,000,000
Genstar Capital Partners V LP	USD	2007	30,000,000
Genstar Capital Partners VII LP	USD	2015	23,000,000
Genstar Capital Partners VIII LP	USD	2017	25,000,000
Genstar Capital Partners IX LP	USD	2019	15,000,000
Genstar Capital Partners X LP	USD	2021	25,000,000
Glendon Opportunities Fund LP	USD	2014	45,000,000

Investment	Currency	Vintage Year	Commitment (USD)
Glendon Opportunities Fund II LP	USD	2017	55,000,000
Goodwater Capital Fund	USD	2020	50,000,000
Goodwater Infinity II LP	USD	2021	40,000,000
Green Equity Investors VII LP	USD	2016	50,000,000
Green Equity Investors VIII LP	USD	2021	35,000,000
GTCR Fund X LP	USD	2010	65,000,000
GTCR Fund XI LP	USD	2013	90,000,000
GTCR Fund XII LP	USD	2017	65,000,000
GTCR Fund XIII LP	USD	2021	75,000,000
H.I.G. Advantage Buyout Fund LP	USD	2017	40,000,000
H.I.G. Capital Partners VI LP	USD	2020	35,000,000
H.I.G. Growth Buyouts & Equity Fund III LP	USD	2019	35,000,000
H.I.G. Middle Market LBO Fund II LP	USD	2014	10,000,000
H.I.G. Middle Market LBO Fund III LP	USD	2019	70,000,000
Harvest Partners VII LP	USD	2015	35,000,000
Harvest Partners VIII LP	USD	2019	20,000,000
Helios Investors II LP	USD	2010	5,000,000
Hellman & Friedman Capital Partners VII LP	USD	2009	80,000,000
Hellman & Friedman Capital Partners VIII LP	USD	2015	110,000,000
Hellman & Friedman Capital Partners IX LP	USD	2019	60,000,000
Highland Capital Partners VIII	USD	2009	15,000,000
HitecVision VI LP	USD	2011	20,000,000
HitecVision VII LP	USD	2014	20,000,000
Hunter Holdings I LP	USD	2018	37,991,103
HV Holtzbrinck Ventures Fund V GmbH & Co	EUR	2012	21,492,764
HV Holtzbrinck Ventures Fund VI SCS	EUR	2015	25,996,494
HV Holtzbrinck Ventures Fund VII GmbH & Co.	EUR	2018	27,732,330
HV Holtzbrinck Ventures Fund VIII GmbH & Co.	EUR	2020	41,561,386
HV Holtzbrinck Ventures Co-Investment Fund I	EUR	2016	21,505,617
Incline Aviation A/B LP	USD	2017	20,000,000
Incline Elevate Fund LP	USD	2019	14,600,000
Incline Equity Partners IV LP	USD	2017	11,000,000
Incline Equity Partners V LP	USD	2021	18,950,000
Index Ventures Growth II LP	EUR	2011	12,895,162
Index Ventures Growth III LP	EUR	2015	23,219,805
Index Ventures Growth IV LP	USD	2018	27,100,000
Index Ventures Growth V LP	USD	2020	29,680,000
Index Ventures VI LP	EUR	2012	14,128,729
Index Ventures VII LP	EUR	2014	15,273,008
Index Ventures VIII LP	USD	2016	18,000,000
Index Ventures IX LP	USD	2018	22,000,000
Index Ventures X LP	USD	2020	24,900,000

Investment	Currency	Vintage Year	Commitment (USD)
Industrial Growth Partners IV LP	USD	2011	20,000,000
Industrial Growth Partners V LP	USD	2016	21,968,571
Insight Venture Partners Coinvestment II LP	USD	2010	15,000,000
Insight Venture Partners Coinvestment III LP	USD	2014	25,600,000
Insight Venture Partners VI LP	USD	2007	15,700,000
Insight Venture Partners VII LP	USD	2011	41,400,000
Insight Venture Partners VIII LP	USD	2013	65,000,000
Insight Venture Partners IX LP	USD	2014	35,000,000
Insight Venture Partners X LP	USD	2017	25,000,000
Insight Venture Partners XI LP	USD	2020	50,000,000
Institutional Venture Partners XIII LP	USD	2010	15,000,000
Institutional Venture Partners XIV LP	USD	2012	23,500,000
Institutional Venture Partners XV LP	USD	2015	48,600,000
Institutional Venture Partners XVI LP	USD	2017	50,000,000
Institutional Venture Partners XVII LP	USD	2021	25,000,000
Jade Equity Investors LP	USD	2020	35,000,000
JMI Equity Fund VI LP	USD	2007	22,700,000
JMI Equity Fund VII LP	USD	2011	30,000,000
JMI Equity Fund VIII LP	USD	2015	37,250,000
JMI Equity Fund IX LP	USD	2018	75,000,000
JMI Equity Fund X LP	USD	2021	60,000,000
Kelso Investment Associates VIII LP	USD	2007	35,000,000
Kelso Investment Associates IX LP	USD	2015	125,000,000
Kelso Investment Associates X LP	USD	2018	100,000,000
KKR Asian Fund II LP	USD	2012	17,300,000
KKR China Growth Fund LP	USD	2010	18,000,000
KPS Special Situations Fund IV LP	USD	2013	12,750,000
KPS Special Situations Fund V LP	USD	2020	78,300,000
KPS Special Situations Mid-Cap Fund LP	USD	2020	25,000,000
KRG Capital Partners Fund IV LP	USD	2009	10,915,200
L Catterton Buyout VIII LP	USD	2016	50,000,000
L Catterton Buyout IX LP	USD	2020	50,000,000
L Catterton Growth III LP	USD	2016	30,000,000
L Catterton Growth IV LP	USD	2019	75,000,000
L Catterton Latin American II LP	USD	2017	25,000,000
L Catterton Latin American III LP	USD	2021	50,000,000
Lee Equity Partners Fund III LP	USD	2019	55,000,000
Lightspeed China Partners IV LP	USD	2019	10,000,000
Lightspeed China Partners Select I LP	USD	2019	10,000,000
Lightspeed Venture Partners IX LP	USD	2011	10,000,000
Lightspeed Venture Partners X LP	USD	2014	18,000,000
Lightspeed Venture Partners XI LP	USD	2016	15,000,000

Investment	Currency	Vintage Year	Commitment (USD)
Lightspeed Venture Partners XII LP	USD	2018	25,000,000
Lightspeed Venture Partners XIII LP	USD	2020	25,000,000
Lightspeed Venture Partners Select LP	USD	2014	4,500,000
Lightspeed Venture Partners Select II LP	USD	2016	9,500,000
Lightspeed Venture Partners Select III LP	USD	2018	50,000,000
Lightspeed Venture Partners Select IV LP	USD	2021	50,000,000
M/C Venture Partners VI LP	USD	2006	15,000,000
Marlin Equity IV LP	USD	2013	32,000,000
Marlin Equity V LP	USD	2017	105,000,000
Marlin Heritage LP	USD	2014	18,100,000
Marlin Heritage II LP	USD	2017	46,500,000
Marlin Heritage Europe LP	EUR	2016	66,873,708
Marlin Heritage Europe II LP	EUR	2020	73,370,861
Mayfield XIV	USD	2012	4,750,000
Mayfield XV	USD	2016	5,800,000
Mayfield XVI LP	USD	2021	7,640,000
Mayfield Select	USD	2016	1,600,000
Mayfield Select II LP	USD	TBD	6,750,000
Menlo Ventures X LP	USD	2006	30,000,000
Na'-Nuk Investment Fund LP	USD	2020	100,000,000
Nautic Partners VIII LP	USD	2016	12,400,000
Nautic Partners IX LP	USD	2019	15,000,000
New Enterprise Associates 13 LP	USD	2009	50,000,000
New Enterprise Associates 14 LP	USD	2012	25,000,000
New Enterprise Associates 15 LP	USD	2015	25,000,000
New Enterprise Associates 16 LP	USD	2017	25,000,000
New Enterprise Associates 17 LP	USD	2019	30,000,000
NG Capital Partners II LP	USD	2013	6,785,000
NGP Agribusiness Follow-On Fund LP	USD	2014	25,000,000
NGP Natural Resources XI LP	USD	2014	250,000,000
NGP Natural Resources XII LP	USD	2017	40,000,000
Nordic Capital VII LP	EUR	2007	36,818,023
Nordic Capital IX LP	EUR	2017	40,812,386
NorthEdge Capital Fund I LP	GBP	2012	21,627,668
NorthEdge Capital Fund II LP	GBP	2016	27,483,183
NorthEdge Capital Fund III LP	GBP	TBD	21,829,046
NorthEdge Capital SME Fund I LP	GBP	2018	12,091,641
Novalpina Capital I SCSp	EUR	2017	58,557,544
Oak Investment Partners XI LP	USD	2004	12,500,000
Oak Investment Partners XII LP	USD	2006	28,300,000
Oak Investment Partners XIII LP	USD	2009	50,000,000
Odyssey Investment Partners IV LP	USD	2009	40,000,000

Investment	Currency	Vintage Year	Commitment (USD)
Odyssey Investment Partners V LP	USD	2014	50,000,000
Odyssey Investment Partners VI LP	USD	2021	50,000,000
ONCAP IV LP	USD	2016	27,300,000
One Equity Partners VII LP	USD	2019	75,000,000
Onex Partners II LP	USD	2006	35,000,000
Onex Partners III LP	USD	2008	45,000,000
Onex Partners IV LP	USD	2014	40,000,000
Onex Partners V LP	USD	2017	100,000,000
Orchid Asia V LP	USD	2011	20,000,000
Pamlico Capital III LP	USD	2013	35,000,000
Patria Private Equity Fund VI LP	USD	2017	75,000,000
Permira V LP	EUR	2013	36,187,358
Permira VI LP	EUR	2016	102,629,620
Permira VII LP	EUR	2020	83,927,067
Providence Equity Partners VIII LP	USD	2018	50,000,000
Providence Strategic Growth IV LP	USD	2020	25,000,000
Providence Strategic Growth V LP	USD	TBD	25,000,000
Quad-C Partners VII LP	USD	2006	19,100,000
Quad-C Partners VIII LP	USD	2011	30,000,000
Quad-C Partners IX LP	USD	2017	70,000,000
Quad-C Partners X LP	USD	TBD	22,000,000
Quantum Energy Partners V LP	USD	2008	35,000,000
Quantum Energy Partners VI LP	USD	2014	25,000,000
Quantum Energy Partners VII LP	USD	2017	20,800,000
Quantum Energy Partners VII Co-Investment Fund LP	USD	2017	5,589,016
Quantum Parallel Partners V-C LP	USD	2014	10,800,000
Quantum Parallel Partners VI-C LP	USD	2015	10,885,000
Redview Capital LP	USD	2016	10,300,000
Redview Capital II LP	USD	2018	23,900,000
Ridgemont Equity Partners II LP	USD	2015	78,100,000
Ridgemont Equity Partners III LP	USD	2019	75,000,000
Sentinel Capital Partners IV LP	USD	2008	11,000,000
Sentinel Capital Partners V LP	USD	2014	20,250,000
Sentinel Capital Partners VI LP	USD	2017	70,000,000
Sentinel Junior Capital I LP	USD	2018	15,000,000
Sequoia China Growth Fund VI LP	USD	2020	40,000,000
Sequoia China Venture Fund VIII LP	USD	2020	2,000,000
Sequoia Global Growth Fund III - China Annex Fund LP	USD	2020	24,985,946
Sequoia Global Growth Fund III - Endurance Partners LP	USD	2018	150,000,000
Sequoia Global Growth Fund III - US/India Annex Fund LP	USD	2020	24,985,946
Sequoia US Growth Fund IX	USD	2020	20,000,000
Sequoia US Venture Fund XVII LP	USD	2020	6,154,734

Investment	Currency	Vintage Year	Commitment (USD)
Southvest Fund V LP	USD	2005	10,000,000
Southvest Fund VI LP	USD	2009	18,100,000
Southvest Fund VII LP	USD	2016	35,300,000
Spark Capital IV LP	USD	2013	13,000,000
Spectrum Equity Investors V LP	USD	2005	20,000,000
Spectrum Equity Investors VI LP	USD	2008	40,000,000
Spectrum Equity VII LP	USD	2014	40,000,000
Spectrum Equity VIII LP	USD	2017	40,000,000
Spectrum Equity IX LP	USD	2020	40,000,000
Summit Partners Growth Equity Fund VIII-A LP	USD	2010	54,500,000
Summit Partners Growth Equity Fund IX LP	USD	2016	30,000,000
Summit Partners Growth Equity Fund X LP	USD	2019	40,000,000
Summit Partners Reinvestment Fund LP	USD	2020	15,100,000
Summit Partners Venture Capital Fund III-A LP	USD	2010	5,500,000
Summit Partners Venture Capital Fund IV-A LP	USD	2016	14,400,000
Summit Partners Venture Capital Fund V LP	USD	2021	20,000,000
TA Atlantic & Pacific VII LP	USD	2012	30,000,000
TA X LP	USD	2006	6,300,000
TA XI LP	USD	2009	70,000,000
TA XII-A LP	USD	2015	75,000,000
TA XIII LP	USD	2019	75,000,000
TA XIV LP	USD	TBD	60,000,000
TA Select Opportunities Fund LP	USD	2020	65,000,000
TCV VI LP	USD	2006	26,000,000
TCV VII LP	USD	2008	50,000,000
TCV VIII LP	USD	2013	30,000,000
TCV IX LP	USD	2016	65,000,000
TCV X LP	USD	2019	60,000,000
TCV XI LP	USD	2021	65,000,000
TDR Capital III	EUR	2013	29,432,883
The Resolute Fund II LP	USD	2007	40,000,000
The Resolute Fund III LP	USD	2013	38,300,000
The Resolute Fund IV LP	USD	2018	40,000,000
The Resolute Fund V LP	USD	2021	50,000,000
Third Rock Ventures II LP	USD	2010	25,000,000
Thoma Bravo Discover Fund III LP	USD	2021	10,000,000
Thoma Bravo Fund XII LP	USD	2016	40,000,000
Thoma Bravo Fund XIII LP	USD	2019	40,000,000
Thoma Bravo Fund XIV LP	USD	2021	10,000,000
TowerBrook Investors IV LP	USD	2012	45,400,000
TPG Growth V LP	USD	TBD	50,000,000
Trident V LP	USD	2009	25,000,000

Investment	Currency	Vintage Year	Commitment (USD)
Trident VI LP	USD	2014	33,500,000
Trident VII LP	USD	2017	80,000,000
Trident VIII LP	USD	2020	75,000,000
Trident Capital Fund VII LP	USD	2010	15,000,000
Vestar Capital Partners V LP	USD	2005	35,000,000
Vista Equity Endeavor Fund I LP	USD	2017	40,000,000
Vista Equity Endeavor Fund II LP	USD	2019	40,000,000
Vista Equity Partners Fund IV LP	USD	2011	20,000,000
Vista Equity Partners Fund V LP	USD	2014	40,000,000
Vista Equity Partners Fund VI LP	USD	2016	50,000,000
Vista Equity Partners Fund VII LP	USD	2019	40,000,000
Vista Foundation Fund II LP	USD	2013	22,000,000
Vista Foundation Fund III LP	USD	2016	50,000,000
Vista Foundation Fund IV LP	USD	2020	50,000,000
Warburg Pincus Private Equity XI LP	USD	2013	35,000,000
Warburg Pincus Private Equity XII LP	USD	2016	22,000,000
Wellspring Capital Partners V LP	USD	2010	15,000,000
WestView Capital Partners III LP	USD	2013	15,250,000
WestView Capital Partners IV LP	USD	2017	17,900,000
Whitehorse Liquidity Partners I LP	USD	2016	100,000,000
Whitehorse Liquidity Partners II LP	USD	2018	50,000,000
Whitehorse Liquidity Partners III LP	USD	2019	50,000,000
Wicks Capital Partners IV LP	USD	2011	20,000,000
Wind Point Partners VII-A LP	USD	2008	40,000,000
Wynnchurch Capital Partners IV LP	USD	2015	8,300,000
Wynnchurch Capital Partners V LP	USD	2020	17,500,000
Y Combinator ES20 LLC	USD	2020	15,200,000
Y Combinator YCC20 LP	USD	2020	34,800,000

Total Commitments:	**$**	**14,114,904,812**
Cummulative Contributions*:	**$**	**11,940,027,642**
Cummulative Distributions*:	**$**	**10,430,978,378**
Remaining Fair Market Value:	**$**	**13,147,659,449**

**Includes liquidated investments*

All figures stated in USD

APFC ALASKA PERMANENT FUND CORPORATION

Private Equity Direct Investments | 06/30/2021

Investment	Currency	Vintage Year	Total Investment (USD)
Achieve3000	USD	2015	3,000,000
Banca Farmafactoring	EUR	2015	21,262,549
Capstone Logistics	USD	2020	37,500,000
Captive Resources	USD	2019	25,000,000
Codiak Biosciences	USD	2016	15,520,742
Compuware Corporation	USD	2014	5,000,000
Cranemere Group	USD	2018	57,147,712
Denali Therapeutics**	USD	2015	148,880,161
Dental Corporation of Canada	USD	2018	27,937,123
DigiCert	USD	2019	19,267,812
DoIT Software	USD	2019	7,246,377
EnCap Investments	USD	2015	99,763,697
Foundation Consumer Brands	USD	2021	46,500,000
Foundation Health	USD	2017	29,445,254
H.I.G. CCS-CMGC Co-Investors LP	USD	2018	23,000,000
HealthSun Health Plans	USD	2016	20,000,000
HUB International**	USD	2018	41,147,312
HV Charlotte Holdings	USD	2012	68,000,000
Indigo Agriculture**	USD	2016	68,621,552
Infobip	USD	2020	42,000,000
InnovaCare Health	USD	2019	25,000,000
Juno Therapeutics	USD	2014	128,920,610
Klaviyo	USD	2020	30,040,000
Magnetar	USD	2013	29,422,615
Ministry Brands	USD	2016	8,000,000
National Resilience**	USD	2020	15,676,955
Netskope	USD	2018	40,095,000
NGP Camino Co-Investment XII	USD	2018	35,055,347
Premia Re	USD	2016	72,500,000
Project Antares	USD	2018	75,146,348
Project Polaris***	USD	2016	30,136,370
Repertoire Immune Medicines**	USD	2020	28,201,283
Riverstone Energy Limited	GBP	2013	424,096,780
Rubrik	USD	2017	40,030,000
Sana Biotechnology**	USD	2019	50,325,861
Senvion Wind Energy Solutions	USD	2015	75,423,833

Investment	Currency	Vintage Year	Total Investment (USD)
Smartfit Escola de Ginástica e Dança	USD	2019	36,644,248
Sound Physicians	USD	2018	39,994,587
Starwood Capital Group	USD	2017	25,441,947
Tessera Therapeutics**	USD	2020	20,188,043
US LBM Holdings	USD	2015	20,134,994
Varo Energy	USD	2013	45,971,927
Vir Bio	USD	2017	60,000,000
Vista Holdings Group	USD	2015	149,824,377
York Co-Investment	USD	2014	5,000,000

Total Investment*:	**$**	**2,317,511,416**
Cumulative Distributions*:	**$**	**2,558,768,736**
Remaining Fair Market Value:	**$**	**3,046,392,354**

**Includes liquidated assets*

***Additional investment via CL Advisory Invest*

****Additional investment via BlackRock AK Private Equity Co-Investment Fund*

All figures stated in USD

Attachment 11

APFC ALASKA PERMANENT FUND CORPORATION

Board of Trustees - Monthly Performance Report - December 31, 2021

Returns are provided by Callan LLC, are annualized for periods greater than one year, and are net of fees after 7/1/2020. Also see "Notes and References" below.

			(A)	(B)	(C)	(D)	(E)	(F)	(G)
		12/31/21 Market Value*	1 Month	3 Months	FYTD (6 Months)	CYTD (12 Months)	1 Year (12 Months)	3 Years (36 Months)	5 Years (60 Months)
1	**TOTAL FUND ●**	**84,530,250,849**	**2.06%**	**3.15%**	**5.95%**	**18.72%**	**18.72%**	**15.51%**	**12.12%**
2	Passive Index Benchmark[1] ●		3.07%	4.95%	4.24%	13.23%	13.23%	15.28%	10.78%
3	Performance Benchmark[2] ●		2.01%	3.80%	6.07%	17.21%	17.21%	15.09%	11.48%
4	Total Fund Return Objective[3]		0.70%	2.81%	5.02%	12.04%	12.04%	8.54%	7.92%
5	**PUBLIC EQUITY**	**31,200,429,907**	**4.53%**	**4.92%**	**4.34%**	**20.53%**	**20.53%**	**21.16%**	**14.66%**
6	MSCI ACWI IMI		3.97%	6.10%	4.92%	18.22%	18.22%	20.20%	14.12%
7	**INTERNATIONAL EQUITY**	**8,172,269,254**	**4.07%**	**0.49%**	**-2.16%**	**8.18%**	**8.18%**	**14.84%**	**10.93%**
8	MSCI ACWI IMI EX-US		4.15%	1.64%	-0.96%	8.53%	8.53%	13.62%	9.83%
9	**GLOBAL EQUITY**	**11,876,120,902**	**4.78%**	**5.37%**	**5.00%**	**21.31%**	**21.31%**	**22.12%**	**15.11%**
10	MSCI ACWI IMI		3.97%	6.10%	4.92%	18.22%	18.22%	20.20%	14.12%
11	**DOMESTIC EQUITY**	**11,151,648,903**	**4.59%**	**7.87%**	**8.80%**	**30.40%**	**30.40%**	**25.26%**	**16.80%**
12	RUSSELL 3000 INDEX		3.94%	9.28%	9.17%	25.66%	25.66%	25.79%	17.97%
13	**FIXED INCOME**	**16,647,587,551**	**0.17%**	**0.16%**	**0.25%**	**-0.45%**	**-0.45%**	**5.83%**	**4.38%**
14	FIXED INCOME BENCHMARK[4]		0.10%	0.15%	0.26%	-0.44%	**-0.44%**	**5.06%**	**3.83%**
15	**US FIXED INCOME AGGREGATE**	**4,952,044,670**	**-0.20%**	**0.07%**	**0.13%**	**-1.32%**	**-1.32%**	**5.50%**	**3.96%**
16	BB AGGREGATE		-0.26%	0.01%	0.06%	-1.54%	-1.54%	4.79%	3.57%
17	**US INVESTMENT GRADE CORPORATE**	**4,606,675,580**	**0.06%**	**0.31%**	**0.30%**	**-0.68%**	**-0.68%**	**8.47%**	**5.78%**
18	BB CORPORATE		-0.08%	0.23%	0.23%	-1.04%	-1.04%	7.59%	5.26%
19	**NON US FIXED INCOME**	**1,378,728,731**	**-0.66%**	**-0.13%**	**-0.23%**	**-2.38%**	**-2.38%**	**2.92%**	**2.85%**
20	BB GLOBAL TREASURY EX-US		-0.78%	0.06%	0.13%	-1.72%	-1.72%	3.06%	2.96%
21	**GLOBAL HIGH YIELD**	**1,720,098,544**	**1.71%**	**0.61%**	**1.41%**	**4.98%**	**4.98%**	**8.24%**	**5.77%**
22	BB US HIGH YIELD 2% ISSUER CAP		1.87%	0.69%	1.59%	5.26%	5.26%	8.81%	6.28%
23	**EMERGING MARKET DEBT**	**892,969,560**	**1.63%**	**-1.81%**	**-3.72%**	**-5.48%**	**-5.48%**	**3.77%**	**3.48%**
24	EMD BENCHMARK[5]		1.48%	-1.49%	-3.37%	-5.32%	-5.32%	4.03%	3.78%
25	**TIPS**	**845,738,825**	**0.35%**	**2.44%**	**4.49%**	**6.41%**	**6.41%**	**8.37%**	**5.38%**
26	BB US TIPS		0.32%	2.36%	4.16%	5.96%	5.96%	8.44%	5.34%
27	**FIXED INCOME CASH**	**974,969,192**	**0.01%**	**0.03%**	**0.04%**	**0.08%**	**0.08%**	**1.31%**	
28	90 DAY T-BILLS		0.01%	0.01%	0.02%	0.05%	0.05%	0.99%	
29	**DOMESTIC STRUCTURED PRODUCTS**	**1,275,477,420**	**-0.12%**	**-0.29%**	**-0.22%**	**-1.12%**	**-1.12%**		
30	BB US SECURITIZED		-0.09%	-0.39%	-0.30%	-1.04%	-1.04%		
31	**ABSOLUTE RETURN**	**4,771,845,680**	**1.54%**	**0.51%**	**3.06%**	**5.57%**	**5.57%**	**6.86%**	**5.94%**
32	HFRI TOTAL HFOF UNIVERSE		1.24%	0.52%	0.13%	10.26%	10.26%	10.84%	7.09%
33	**RISK PARITY**	**821,409,389**	**2.20%**	**3.90%**	**4.51%**	**11.16%**	**11.16%**		
34	HFRI RISK PARITY 12% VOL		3.10%	3.40%	3.28%	10.71%	10.71%		
35	**TOTAL FUND CASH**	**2,122,508,428**	**0.01%**	**-0.02%**	**0.03%**	**0.13%**	**0.13%**		
36	90 DAY T-BILLS		0.01%	0.01%	0.02%	0.05%	0.05%		
37	**PRIVATE EQUITY & SPECIAL OPPS ●**	**16,187,867,751**	**N/A**	**4.27%**	**16.06%**	**53.85%**	**53.85%**	**26.96%**	**26.15%**
38	CAMBRIDGE PRIVATE EQUITY ●			5.01%	17.17%	48.82%	48.82%	24.50%	21.29%
39	**PRIVATE EQUITY ●**	**10,965,612,434**	**N/A**	**6.97%**	**20.28%**	**62.76%**	**62.76%**	**32.97%**	**29.05%**
40	CAMBRIDGE PRIVATE EQUITY ●		N/A	5.01%	17.17%	48.82%	48.82%	24.50%	21.29%
41	**SPECIAL OPPORTUNITIES ●**	**5,113,908,437**	**N/A**	**-0.44%**	**8.31%**	**38.23%**	**38.23%**	**17.21%**	**20.63%**
42	CAMBRIDGE PRIVATE EQUITY ●		N/A	5.01%	17.17%	48.82%	48.82%	24.50%	21.29%
43	**IN-STATE EMERGING MANAGERS ●**	**108,346,880**	**N/A**	**-20.27%**	**8.50%**	**30.36%**	**30.36%**		
44	CAMBRIDGE PRIVATE EQUITY ●		N/A	5.01%	17.17%	48.82%	48.82%		
45	**REAL ESTATE ●**	**6,602,949,987**	**N/A**	**4.73%**	**9.15%**	**9.72%**	**9.72%**	**3.34%**	**3.34%**
46	REAL ESTATE CUSTOM[6] ●			4.62%	9.69%	15.77%	15.77%	8.58%	7.96%
47	**RE EQUITY INVESTMENTS ●**	**5,057,338,637**	**N/A**	**5.06%**	**7.47%**	**4.16%**	**4.16%**		
48	NCREIF TOTAL INDEX ●		N/A	5.23%	9.01%	12.15%	12.15%		
49	**RE DEBT INVESTMENTS ●**	**271,896,127**	**N/A**	**3.91%**	**7.37%**	**13.62%**	**13.62%**	**11.46%**	
50	NCREIF TOTAL INDEX ●		N/A	5.23%	9.01%	12.15%	12.15%	6.72%	
51	**REITS ●**	**1,273,715,223**	**N/A**	**3.89%**	**18.48%**	**40.73%**	**40.73%**	**10.89%**	**7.41%**
52	MSCI US REIT ●		N/A	0.98%	13.09%	37.16%	37.16%	10.10%	6.84%
53	**PRIVATE INCOME**	**6,175,652,157**	**N/A**	**1.37%**	**7.08%**	**19.92%**	**19.92%**	**9.52%**	**11.42%**
54	PRIVATE INCOME CUSTOM[7] ●			2.19%	6.79%	16.64%	16.64%	7.62%	7.63%
55	**INFRASTRUCTURE ●**	**2,774,727,976**	**N/A**	**0.72%**	**6.66%**	**24.00%**	**24.00%**	**9.89%**	**13.46%**
56	CAMBRIDGE GLOBAL PVT INFRASTRUCTURE ●		N/A	2.23%	6.20%	14.77%	14.77%	7.62%	8.07%
57	**PRIVATE CREDIT ●**	**1,670,541,245**	**N/A**	**2.42%**	**8.57%**	**19.38%**	**19.38%**	**8.48%**	**8.77%**
58	CAMBRIDGE PRIVATE CREDIT ●		N/A	2.12%	7.68%	19.47%	19.47%	7.53%	6.89%
59	**INCOME OPPORTUNITIES ●**	**1,730,382,936**	**N/A**	**1.48%**	**6.43%**	**14.79%**	**14.79%**	**9.85%**	**7.02%**
60	PRIVATE INCOME CUSTOM[7] ●		N/A	2.19%	6.79%	16.64%	16.64%	7.62%	7.63%

			(A)	(B)	(C)	(D)	(E)	(F)	(G)
		12/31/21 Market Value*	1 Month	3 Months	FYTD	CYTD	1 Year	3 Years	5 Years
61	PUBLIC EQUITY	31,200,429,907	4.53%	4.92%	4.34%	20.53%	20.53%	21.16%	14.66%
62	MSCI ACWI IMI		3.97%	6.10%	4.92%	18.22%	18.22%	20.20%	14.12%
63	INTERNATIONAL EQUITY	8,172,269,254	4.07%	0.49%	-2.16%	8.18%	8.18%	14.84%	10.93%
64	MSCI ACWI IMI EX-US		4.15%	1.64%	-0.96%	8.53%	8.53%	13.62%	9.83%
65	Macquarie Emerging Markets	224,346,678	3.33%	1.39%	-8.23%	-0.74%	-0.74%	15.95%	14.54%
66	JP Morgan Emerging Markets	371,892,341	0.98%	-3.34%	-9.24%	-4.89%	-4.89%	15.09%	13.66%
67	Mondrian Investment Partners	363,168,827	2.83%	-1.14%	-11.11%	-5.38%	-5.38%	9.32%	7.66%
68	SSGA MSCI Emerging Markets	143,517,194	1.87%	-1.39%	-9.26%	-2.43%	-2.43%	11.10%	9.86%
69	William Blair Emerging Markets	347,848,735	3.14%	-2.34%	-10.08%	-5.63%	-5.63%	16.53%	13.60%
70	MEASA Fund	107,992,593	-4.31%	-8.13%	-1.06%	20.04%	20.04%	10.79%	
71	MSCI Emerging Markets Index		1.88%	-1.31%	-9.30%	-2.54%	-2.54%	10.94%	
72	DFA Emerging Markets Value	805,513,611	4.39%	-0.14%	-2.99%	12.96%	12.96%	8.60%	8.58%
73	MSCI Emerging Markets Value Index		3.55%	-0.41%	-5.46%	4.00%	4.00%	7.09%	7.03%
74	DFA Emerging Markets Small Cap	258,458,179	3.77%	0.87%	-2.60%	14.93%	14.93%	14.34%	10.46%
75	MSCI Emerging Markets Small Cap Index		4.21%	1.33%	-0.86%	18.75%	18.75%	16.46%	11.47%
76	Trustbridge Emerging Markets	154,544,544	-3.95%	-7.12%	-22.26%	-23.01%	-23.01%	11.22%	13.71%
77	MSCI China Index ND		-3.15%	-6.06%	-23.13%	-21.72%	-21.72%	7.76%	9.36%
78	Wells Capital	133,616,399	1.79%	0.60%	-11.44%	-7.88%	-7.88%	16.96%	14.91%
79	MSCI China All Shares Idx (USD Net Div)		-1.52%	-2.53%	-15.53%	-12.91%	-12.91%	14.66%	8.08%
80	Mellon MSCI World ex-USA	172,409,849	5.08%	3.18%	2.55%	13.01%	13.01%	13.90%	9.70%
81	DFA International Large Cap	629,038,276	5.41%	2.58%	1.98%	14.30%	14.30%	13.14%	9.19%
82	MSCI World ex US		5.08%	3.14%	2.46%	12.62%	12.62%	14.07%	9.63%
83	DFA International Small Cap Value	615,077,655	6.32%	1.12%	2.39%	17.12%	17.12%	12.81%	7.36%
84	MSCI World ex-USA Small Cap Value Index		5.37%	0.72%	0.84%	13.27%	13.27%	12.59%	8.30%
85	DFA International Small Company	481,893,465	4.96%	1.44%	2.21%	14.92%	14.92%	16.01%	10.67%
86	SSGA International Developed Small Cap	411,990,935	4.23%	0.35%	1.21%	11.24%	11.24%	16.56%	11.33%
87	MSCI World ex-USA Small Cap Index		4.24%	0.39%	1.11%	11.14%	11.14%	16.27%	11.03%
88	Acadian Asset Mgmt	447,128,061	6.65%	3.39%	3.92%	19.73%	19.73%	11.75%	10.34%
89	MSCI World ex US Value		6.05%	1.91%	0.81%	13.26%	13.26%	8.66%	5.69%
90	LSV International Large Cap	918,781,724	5.55%	1.31%	-0.14%	13.29%	13.29%	9.76%	7.31%
91	Schroders International Large Cap	744,465,017	5.27%	2.69%	-0.19%	14.11%	14.11%	11.46%	7.97%
92	MSCI All Country World ex-USA Value Index		5.32%	1.24%	-1.11%	10.46%	10.46%	8.24%	6.00%
93	Johnston International Large Cap	408,503,810	2.01%	-3.39%	-2.28%	1.51%	1.51%	23.14%	17.60%
94	JP Morgan International Large Cap	432,081,360	3.14%	4.05%	4.33%	11.42%	11.42%	24.63%	16.41%
95	MSCI World ex-USA Growth Index		4.15%	4.27%	4.02%	11.57%	11.57%	19.11%	13.37%
96	GLOBAL EQUITY	11,876,120,902	4.78%	5.37%	5.00%	21.31%	21.31%	22.12%	15.11%
97	MSCI ACWI IMI		3.97%	6.10%	4.92%	18.22%	18.22%	20.20%	14.12%
98	AQR Global Equity	1,166,579,004	5.49%	7.66%	5.73%	18.28%	18.28%	17.81%	12.17%
99	SSGA MSCI World	186,322,035	4.32%	7.85%	7.92%	22.22%	22.22%	21.99%	15.38%
100	CDAM Global Equity	648,133,780	4.61%	6.06%	10.21%	27.67%	27.67%	23.83%	
101	MSCI World Index		4.27%	7.77%	7.76%	21.82%	21.82%	21.70%	15.03%
102	SSGA Russell Fundamental Developed Lrg Co	1,478,035,760	5.94%	5.58%	4.68%	23.21%	23.21%	17.81%	12.11%
103	Russell Fundamental Dvlpd Lrg Co Index		6.01%	5.64%	4.82%	23.77%	23.77%	18.06%	12.29%
104	Lazard Asset Management	1,080,703,291	4.59%	4.94%	5.06%	17.74%	17.74%	18.36%	12.72%
105	McKinley Capital Management	420,066,273	2.95%	6.57%	6.50%	20.14%	20.14%	28.54%	18.94%
106	RBA Global Equity	483,749,451	4.89%	7.20%	5.51%	19.41%	19.41%	20.88%	
107	WCM Global Equity	506,485,745	2.40%	6.45%	7.30%	16.08%	16.08%	30.47%	
108	MSCI All-Country World Index		4.00%	6.68%	5.55%	18.54%	18.54%	20.38%	14.40%
109	APF Tactical Tilts	2,324,136,167	4.17%	3.99%	3.31%	22.79%	22.79%	26.27%	16.76%
110	SSGA MSCI ACWI IMI	701,759,116	3.96%	6.10%	4.98%	18.37%	18.37%	20.33%	14.32%
111	APF Global Equities	148,663,478	2.87%	3.18%	2.08%	18.48%	18.48%	16.86%	
112	Arrowstreet Global Equity	1,469,765,261	4.62%	4.85%	4.05%	22.15%	22.15%	22.66%	
113	Longview Global Equity	1,261,719,736	6.69%	4.32%	5.74%	21.00%	21.00%	16.50%	
114	MSCI All-Country World IMI		3.97%	6.10%	4.92%	18.22%	18.22%	20.20%	14.12%
115	DOMESTIC EQUITY	11,151,648,903	4.59%	7.87%	8.80%	30.40%	30.40%	25.26%	16.80%
116	RUSSELL 3000 INDEX		3.94%	9.28%	9.17%	25.66%	25.66%	25.79%	17.97%
117	Mellon S&P 500	1,927,442,685	4.48%	10.98%	11.56%	28.47%	28.47%	26.49%	18.71%
118	S&P 500 Index		4.48%	11.03%	11.67%	28.71%	28.71%	26.07%	18.47%
119	Mellon FTSE RAFI US Large Cap	1,154,302,739	5.92%	8.95%	8.11%	32.04%	32.04%	22.20%	14.27%
120	FTSE RAFI US 1000 Index		5.94%	8.96%	8.12%	31.60%	31.60%	22.07%	14.19%
121	AGI - Large Cap	671,252,923	0.55%	9.07%	10.49%	24.96%	24.96%	37.56%	25.66%
122	SSGA Large Cap	507,283,655	2.55%	9.54%	8.83%	25.60%	25.60%	33.09%	24.52%
123	DSM - Large Cap	821,532,781	1.62%	5.66%	3.86%	22.01%	22.01%	30.20%	24.30%
124	CastleArk - Large Cap	231,696,035	2.87%	12.63%	12.61%	29.69%	29.69%	33.43%	24.88%
125	APF SPDR Yield	566,464,659	7.12%	7.86%	6.82%	34.69%	34.69%	20.09%	12.83%
126	APF SPDR Momentum	289,077,240	5.05%	8.64%	8.24%	26.56%	26.56%	20.94%	13.42%
127	APF SPDR Low Vol	507,058,928	7.44%	10.91%	10.58%	28.85%	28.85%	21.51%	14.95%
128	APF R1000 Low Vol	9,992,862							
129	Russell 1000 Growth Index		2.11%	11.64%	12.93%	27.60%	27.60%	34.08%	25.32%
130	Russell 1000 Index		4.05%	9.78%	10.01%	26.45%	26.45%	26.21%	18.43%
131	Lyrical - Large Cap	789,794,195	6.48%	7.22%	5.76%	28.65%	28.65%	22.26%	11.35%
132	SKBA - Large Cap	346,698,408	6.38%	5.53%	4.29%	21.93%	21.93%	15.56%	10.62%
133	LSV - Large Cap Value	827,841,973	6.30%	6.16%	3.84%	26.53%	26.53%	17.00%	10.48%
134	APF Domestic Equity	481,656,561	4.68%	5.91%	6.58%	34.56%	34.56%		
135	APF R1000V Low Vol	9,990,141							
136	Russell 1000 Value Index		6.31%	7.77%	6.93%	25.16%	25.16%	17.64%	11.16%
137	Mellon S&P 400	19,754,132	5.08%	8.02%	6.13%	24.30%	24.30%	21.73%	13.12%
138	S&P 400 Index		5.08%	8.00%	6.09%	24.76%	24.76%	21.41%	13.09%
139	Jennison Associates LLC	321,866,683	2.66%	3.83%	5.48%	23.41%	23.41%	29.67%	18.41%
140	Russell 2000 Index		2.23%	2.14%	-2.31%	14.82%	14.82%	20.02%	12.02%
141	RBC Asset Mgmt	215,444,724	4.52%	8.79%	8.98%	26.18%	26.18%	26.95%	16.97%
142	Eagle Asset Mgmt	205,961,434	1.63%	-0.77%	-3.34%	1.67%	1.67%	23.33%	18.25%
143	Russell 2000 Growth Index		0.44%	0.01%	-5.64%	2.83%	2.83%	21.17%	14.53%
144	Russell 2000 Index		2.23%	2.14%	-2.31%	14.82%	14.82%	20.02%	12.02%
145	T Rowe Price	375,776,256	3.89%	5.84%	5.85%	23.15%	23.15%	19.71%	11.25%
146	Pzena Investment Mgmt	624,389,712	5.28%	5.14%	4.68%	29.57%	29.57%	18.19%	8.57%
147	Russell 2000 Value Index		4.08%	4.36%	1.24%	28.27%	28.27%	17.99%	9.07%
148	Russell 2000 Index		2.23%	2.14%	-2.31%	14.82%	14.82%	20.02%	12.02%
149	APF US Tactical Tilts	246,370,180	5.07%	6.40%					
150	Russell 3000 Index		3.94%	9.28%					

		12/31/21 Market Value*	(A) 1 Month	(B) 3 Months	(C) FYTD	(D) CYTD	(E) 1 Year	(F) 3 Years	(G) 5 Years
151	**FIXED INCOME**	16,647,587,551	0.17%	0.16%	0.25%	-0.45%	-0.45%	5.83%	4.38%
152	FIXED INCOME BENCHMARK[4]		0.10%	0.15%	0.26%	-0.44%	-0.44%	5.06%	3.83%
153	**US FIXED INCOME AGGREGATE**	4,952,044,670	-0.20%	0.07%	0.13%	-1.32%	-1.32%	5.50%	3.96%
154	BB AGGREGATE		-0.26%	0.01%	0.06%	-1.54%	-1.54%	4.79%	3.57%
155	**APF Fixed Income - Aggregate**	4,952,044,670	-0.20%	0.07%	0.13%	-1.32%	-1.32%	5.50%	3.96%
156	**US INVESTMENT GRADE CORPORATE**	4,606,675,580	0.06%	0.31%	0.30%	-0.68%	-0.68%	8.47%	5.78%
157	BB CORPORATE		-0.08%	0.23%	0.23%	-1.04%	-1.04%	7.59%	5.26%
158	**APF Corporate Bonds**	4,606,675,580	0.06%	0.31%	0.30%	-0.68%	-0.68%	8.47%	5.78%
159	**NON US FIXED INCOME**	1,378,728,731	-0.66%	-0.13%	-0.23%	-2.38%	-2.38%	2.92%	2.85%
160	BB GLOBAL TREASURY EX-US		-0.78%	0.06%	0.13%	-1.72%	-1.72%	3.06%	2.96%
161	**Rogge Global Partners**	304,318,126	-0.79%	-0.18%	-0.17%	-2.11%	-2.11%	3.23%	3.05%
162	**APF Global Government Bonds**	1,074,410,605	-0.62%	-0.12%	-0.25%	-2.46%	-2.46%	2.80%	2.86%
163	**GLOBAL HIGH YIELD**	1,720,098,544	1.71%	0.61%	1.41%	4.98%	4.98%	8.24%	5.77%
164	BB US HIGH YIELD 2% ISSUER CAP		1.87%	0.69%	1.59%	5.26%	5.26%	8.81%	6.28%
165	**Oaktree High Yield**	732,030,644	1.26%	0.15%	1.05%	4.61%	4.61%	8.62%	5.79%
166	**APF High Yield**	489,611,458	2.32%	1.06%	1.83%	5.06%	5.06%	7.36%	
167	**Capital Guardian High Yield**	498,456,441	1.77%	0.84%	1.53%	5.31%	5.31%	8.01%	5.85%
168	**EMERGING MARKET DEBT**	892,969,560	1.63%	-1.81%	-3.72%	-5.48%	-5.48%	3.77%	3.48%
169	EMD BENCHMARK[5]		1.48%	-1.49%	-3.37%	-5.32%	-5.32%	4.03%	3.78%
170	**Ninety One EMD BL**	193,160,810	1.63%	-2.12%	-4.53%	-5.65%	-5.65%		
171	**PGIM EMD BL**	338,609,503	1.44%	-1.83%	-3.44%	-5.44%	-5.44%		
172	EMD Benchmark[5]		1.48%	-1.49%	-3.37%	-5.32%	-5.32%		
173	**Payden EMD HC**	185,309,915	1.92%	-1.17%	-1.95%	-2.13%	-2.13%		
174	JPM EMBI Global Diversified		1.40%	-0.44%	-1.14%	-1.80%	-1.80%		
175	**Colchester EMD LC**	175,885,691	1.69%	-2.12%	-5.21%	-8.72%	-8.72%		
176	JPM GBI-EM Global Diversified		1.56%	-2.53%	-5.56%	-8.75%	-8.75%		
177	**TIPS**	845,738,825	0.35%	2.44%	4.49%	6.41%	6.41%	8.37%	5.38%
178	BB US TIPS		0.32%	2.36%	4.16%	5.96%	5.96%	8.44%	5.34%
179	**APF TIPS**	845,738,825	0.35%	2.44%	4.51%	6.49%	6.49%	8.74%	5.56%
180	BB US TIPS		0.32%	2.36%	4.16%	5.96%	5.96%	8.44%	5.34%
181	**FIXED INCOME CASH**	974,969,192	0.01%	0.03%	0.04%	0.08%	0.08%	1.31%	
182	90 DAY T-BILLS		0.01%	0.01%	0.02%	0.05%	0.05%	0.99%	
183	**APF Fixed Income Cash**	974,969,192	0.01%	0.03%	0.04%	0.08%	0.08%	1.31%	
184	**DOMESTIC STRUCTURED PRODUCTS**	1,275,477,420	-0.12%	-0.29%	-0.22%	-1.12%	-1.12%		
185	BB US SECURITIZED		-0.09%	-0.39%	-0.30%	-1.04%	-1.04%		
186	**APF Dom Struc Prod**	1,275,477,420	-0.12%	-0.29%	-0.22%	-1.12%	-1.12%		
187	**ABSOLUTE RETURN**	4,771,845,680	1.54%	0.51%	3.06%	5.57%	5.57%	6.86%	5.94%
188	HFRI TOTAL HFOF UNIVERSE		1.24%	0.52%	0.13%	10.26%	10.26%	10.84%	7.09%
189	**RISK PARITY**	821,409,389	2.20%	3.90%	4.51%	11.16%	11.16%		
190	HFRI RISK PARITY 12% VOL		3.10%	3.40%	3.28%	10.71%	10.71%		
191	**PanAgora**	430,413,513	1.53%	2.71%	2.68%	8.87%	8.87%		
192	**Bridgewater All Weather**	390,995,876	2.93%	5.22%	6.56%	13.79%	13.79%		
193	**TOTAL FUND CASH**	2,122,508,428	0.01%	-0.02%	0.03%	0.13%	0.13%		
194	90 DAY T-BILLS		0.01%	0.01%	0.02%	0.05%	0.05%	0.99%	1.14%
195	**APF Internal Cash**	1,748,716,170	0.00%	0.01%	0.02%	0.07%	0.07%		
196	**APF Operating Cash**	373,792,258	0.06%	0.11%	0.14%	0.56%	0.56%	1.02%	1.13%

#		12/31/21 Market Value*	(A) 1 Month	(B) 3 Months	(C) FYTD	(D) CYTD	(E) 1 Year	(F) 3 Years	(G) 5 Years
197	**PRIVATE EQUITY & SPECIAL OPPS ●**	16,187,867,751	N/A	4.27%	16.06%	53.85%	53.85%	26.96%	26.15%
198	CAMBRIDGE PRIVATE EQUITY ●			5.01%	17.17%	48.82%	48.82%	24.50%	21.29%
199	**PRIVATE EQUITY ●**	10,965,612,434	N/A	6.97%	20.28%	62.76%	62.76%	32.97%	29.05%
200	CAMBRIDGE PRIVATE EQUITY ●			5.01%	17.17%	48.82%	48.82%	24.50%	21.29%
201	**Pathway Capital Mgmt - Direct PE**	5,218,103,672	N/A	10.03%	26.47%	63.61%	63.61%	35.09%	31.51%
202	**HarbourVest Legacy**	1,383,191,827	N/A	-4.47%	-0.28%	62.17%	62.17%	38.61%	35.06%
203	**Pathway Capital Mgmt - PE**	4,009,441,439	N/A	7.82%	22.86%	61.67%	61.67%	30.92%	27.36%
204	**BlackRock Co-investment Funds**	259,532,316	N/A	5.03%	10.15%	49.41%	49.41%	21.45%	24.33%
205	**Ara Fund I**	51,487,487	N/A	33.24%	46.65%	99.76%	99.76%		
206	**Ara Fund II**	6,950,092	N/A	-1.31%					
207	**TPG Growth V**	22,502,202	N/A						
208	**Arctos Sports I**	13,966,060	N/A						
209	**SPECIAL OPPORTUNITIES ●**	5,113,908,437	N/A	-0.44%	8.31%	38.23%	38.23%	17.21%	20.63%
210	CAMBRIDGE PRIVATE EQUITY ●			5.01%	17.17%	48.82%	48.82%	24.50%	21.29%
211	**IN-STATE EMERGING MANAGERS ●**	108,346,880	N/A	-20.27%	8.50%	30.36%	30.36%		
212	CAMBRIDGE PRIVATE EQUITY ●			5.01%	17.17%	48.82%	48.82%		
213	**Barings AK**	34,779,110	N/A	0.00%	5.16%	0.00%	0.00%		
214	**McKinley AK**	73,567,770	N/A	-27.80%	4.15%	33.78%	33.78%		
215	**REAL ESTATE ●**	6,602,949,987	N/A	4.73%	9.15%	9.72%	9.72%	3.34%	3.34%
216	REAL ESTATE CUSTOM[6] ●			4.62%	9.69%	15.77%	15.77%	8.58%	7.96%
217	**RE EQUITY INVESTMENTS ●**	5,057,338,637	N/A	5.06%	7.47%	4.16%	4.16%		
218	NCREIF TOTAL INDEX ●			5.23%	9.01%	12.15%	12.15%		
219	**RE EQUITY SEPARATE ACCTS & DIRECTS ●**	3,953,936,247	N/A	4.60%	6.49%	1.98%	1.98%	-0.83%	0.83%
220	**L&B Realty Advisors**	1,751,550,832	N/A	1.82%	3.83%	-3.60%	-3.60%	-1.41%	0.74%
221	**Sentinel Real Estate**	508,877,151	N/A	2.64%	5.20%	7.67%	7.67%	4.49%	1.03%
222	**LaSalle - United Kingdom**	101,734,507	N/A	69.30%	34.33%	-402.18%	-402.18%	-36.31%	-21.75%
223	**Lincoln Industrial**	250,365,576	N/A	12.46%	33.86%	56.00%	56.00%	24.09%	20.69%
224	**CB Richard Ellis - Europe**	132,709,768	N/A	-1.25%	1.13%	-2.13%	-2.13%	-1.64%	5.55%
225	**CS Capital**	451,103,329	N/A	3.28%	4.89%	6.25%	6.25%	12.76%	13.23%
226	**Heitman Direct**	610,386,361	N/A	0.64%	-1.27%	-1.37%	-1.37%		
227	**APF RE Direct**	147,208,722	N/A	6.78%	8.41%				
228	**RE EQUITY DEVELOPMENT**	118,257,003	N/A						
229	**Greystar Dev**	118,257,003	N/A						
230	**RE EQUITY FUNDS & CO-INVESTS**	985,145,387	N/A	7.73%	13.19%	27.62%	27.62%	10.30%	
231	**HIG Europe RE II**	61,295,680	N/A	4.49%	11.15%	34.06%	34.06%	21.22%	
232	**Harbert Europe RE V**	78,401,207	N/A	3.49%	14.98%	24.14%	24.14%	3.33%	
233	**Brookfield RE III**	239,715,837	N/A	4.81%	6.85%	21.16%	21.16%		
234	**Realterm Log Inc**	241,123,958	N/A	12.82%	22.02%				
235	**Clarion Gables**	312,955,908	N/A	9.45%	14.81%				
236	**CG Riverwalk**	25,247,075	N/A						
237	**CG Union Market**	26,405,721	N/A						
238	**RE DEBT INVESTMENTS ●**	271,896,127	N/A	3.91%	7.37%	13.62%	13.62%	11.46%	
239	NCREIF TOTAL INDEX ●			5.23%	9.01%	12.15%	12.15%	6.72%	
240	**RE DEBT SEPARATE ACCTS ●**	188,858,495	N/A	3.14%	6.21%	9.99%	9.99%	7.69%	
241	**Heitman Capital**	67,441,082	N/A	4.47%	7.31%	10.49%	10.49%	7.85%	
242	**Mesa West**	121,417,413	N/A	2.38%	5.67%				
243	**RE DEBT FUNDS & CO-INVESTS ●**	83,037,632	N/A	4.39%	8.05%	15.05%	15.05%		
244	**KAROD**	83,037,632	N/A	4.39%	8.05%	15.05%	15.05%		
245	**REITS ●**	1,273,715,223	N/A	3.89%	18.48%	40.74%	40.74%	10.89%	7.41%
246	MSCI US REIT ●			0.98%	13.09%	37.16%	37.16%	10.10%	6.84%
247	**AEW Dom RE Securities**	1,160,545,416	N/A	3.70%	18.28%	40.72%	40.72%		
248	**Mellon MSCI US REIT**	113,160,630	N/A						

			(A)	(B)	(C)	(D)	(E)	(F)	(G)
		12/31/21 Market Value*	1 Month	3 Months	FYTD	CYTD	1 Year	3 Years	5 Years
249	**PRIVATE INCOME ●**	6,175,652,157	N/A	1.37%	7.08%	19.92%	19.92%	9.52%	11.42%
250	PRIVATE INCOME CUSTOM[7] ●			2.19%	6.79%	16.64%	16.64%	7.62%	7.63%
251	**INFRASTRUCTURE ●**	2,774,727,976	N/A	0.72%	6.66%	24.00%	24.00%	9.89%	13.46%
252	CAMBRIDGE GLOBAL PVT INFRA ●			2.23%	6.20%	14.77%	14.77%	7.62%	8.07%
253	**PRIVATE INFRASTRUCTURE**	2,501,187,890	N/A	0.69%	6.70%	24.89%	24.89%		
254	CAMBRIDGE GLOBAL PVT INFRA ●			2.23%	6.20%	14.77%	14.77%		
255	GIP II	106,384,903	N/A	3.78%	8.76%	20.45%	20.45%	3.64%	8.94%
256	Gateway IFR	53,769,827	N/A	-3.52%	5.14%	12.07%	12.07%	-4.50%	0.05%
257	LS Power III	171,211,557	N/A	-0.80%	1.24%	7.81%	7.81%	14.16%	21.61%
258	North Haven	32,092,316	N/A	1.69%	8.31%	6.15%	6.15%	-8.42%	1.40%
259	GIP III	267,019,357	N/A	2.58%	5.35%	18.80%	18.80%	3.88%	6.08%
260	GIP III Canary	110,258,585	N/A	-0.63%	5.69%	60.40%	60.40%	4.84%	13.57%
261	CIM Fund II	283,788,900	N/A	3.47%	7.70%	23.89%	23.89%	16.07%	
262	IFR Actis Energy 4	57,047,471	N/A	0.60%	3.58%	7.68%	7.68%	14.19%	
263	IFR GIP III Zenith	198,408,587	N/A	2.84%	3.16%	17.28%	17.28%	22.89%	
264	IFR Encap FM IV	5,897,057	N/A	3.77%	5.41%	11.08%	11.08%	8.89%	
265	IFR Infrared V	57,364,932	N/A	-0.39%	5.25%	10.62%	10.62%	1.25%	
266	IFR NHIP II Bison	44,816,687	N/A	-0.01%	-0.02%	-0.07%	-0.07%	-7.59%	
267	IFR GIP III Stetson	15,855,031	N/A	N/A	N/A	N/A	N/A	N/A	
268	IFR EFM Moda	6,012,868	N/A	3.47%	3.68%	17.58%	17.58%	19.17%	
269	North Haven India	34,294,305	N/A	11.99%	15.26%	19.26%	19.26%		
270	IFR KKR Infrastructure III	114,192,526	N/A	6.27%	6.84%	8.96%	8.96%		
271	IFR Energy Spec VIII	23,460,027	N/A	0.84%	-4.31%	-4.06%	-4.06%		
272	LS Power Bolt	88,196,669	N/A	-0.11%	24.14%	72.12%	72.12%		
273	IFR LS Power IV	181,586,356	N/A	-19.74%	4.85%	202.31%	202.31%		
274	IFR EQT IV	153,862,476	N/A	3.92%	9.86%	21.91%	21.91%		
275	IFR Meridiam III	18,399,272	N/A	112.53%	134.61%	113.90%	113.90%		
276	IFR EQT IV Co-Invest	51,314,512	N/A	-0.25%	2.11%	38.97%	38.97%		
277	IFR Peppertree VIII	73,320,177	N/A	4.20%	22.64%	26.34%	26.34%		
278	IFR NHIP III	111,961,672	N/A	4.46%	6.94%	20.67%	20.67%		
279	IFR GIP IV	87,712,316	N/A	-1.23%	-5.38%				
280	IFR KKR Teemo II	22,431,125	N/A	-3.26%					
281	Encap ETF	18,645,309	N/A	-1.76%					
282	IFR Digital II	33,490,978	N/A	13.42%					
283	IFR EQT Infra V	13,482,583	N/A						
284	IFR NHIP III Tele	42,731,956	N/A						
285	IFR Actis V	167,428	N/A						
286	IFR HIG Infra	1,472,857	N/A						
287	**LISTED INFRASTRUCTURE ●**	273,540,085	N/A	0.98%	6.16%	16.14%	16.14%	6.41%	7.22%
288	S&P GLOBAL LISTED INFRASTRUCTURE ●			1.29%	3.44%	22.13%	22.13%	5.78%	5.02%
289	Lazard Listed Infrastructure	273,540,085	N/A	1.05%	6.24%	16.22%	16.22%	8.67%	10.66%
290	FTSE Core Developed Infra (Hedged)			-0.53%	2.00%	13.71%	13.71%	9.43%	9.49%
291	**PRIVATE CREDIT ●**	1,670,541,245	N/A	2.42%	8.57%	19.38%	19.38%	8.48%	8.77%
292	CAMBRIDGE PRIVATE CREDIT ●			2.12%	7.68%	19.47%	19.47%	7.53%	6.89%
293	Crestline Credit Opportunities Fund	205,675,276	N/A	5.94%	16.74%	19.97%	19.97%	3.72%	5.37%
294	Audax III Mezzanine Debt	10,430,389	N/A	2.60%	8.61%	22.96%	22.96%	15.24%	11.51%
295	Crestline Opps Fund	104,446,129	N/A	1.05%	7.13%	8.41%	8.41%	8.23%	9.53%
296	Pathway Capital Mgmt - Direct PC	959,240,040	N/A	2.67%	8.50%	21.48%	21.48%	12.64%	11.21%
297	Audax IV Mezzanine Debt	22,553,271	N/A	3.33%	9.01%	16.05%	16.05%	11.54%	
298	Aurelius II	233,100,519	N/A	-0.84%	5.21%	20.05%	20.05%	5.82%	
299	Crestline SLF II	60,707,671	N/A	2.03%	6.44%	17.28%	17.28%		
300	CL Opps Fund IV	40,216,109	N/A	2.48%	5.29%	17.15%	17.15%		
301	Ares SSG SLO III	4,237,733	N/A						
302	Crestline SLF III	16,023,698	N/A						
303	**INCOME OPPORTUNITIES ●**	1,730,382,936	N/A	1.48%	6.43%	14.79%	14.79%	9.85%	7.02%
304	PRIVATE INCOME CUSTOM[7] ●			2.19%	6.79%	16.64%	16.64%	7.62%	7.63%
305	American Homes 4 Rent II	167,010,782	N/A	6.16%	18.15%	28.48%	28.48%	12.37%	7.08%
306	Twin Creeks Timber	104,967,126	N/A	0.70%	1.39%	1.01%	1.01%	-0.34%	-0.88%
307	INC Athyrium III	14,361,745	N/A	-2.26%	-0.86%	4.96%	4.96%	7.57%	
308	INC Broadriver III	73,636,435	N/A	1.30%	4.08%	7.95%	7.95%	1.99%	
309	APF ADAC	1,035,174,727	N/A	1.38%	6.09%	11.36%	11.36%	8.09%	
310	Activate Capital	82,180,142	N/A	-11.87%	-0.90%	38.52%	38.52%		
311	INC OCM Power Opps V	62,292,209	N/A	3.34%	-2.71%	-1.16%	-1.16%		
312	TSSP Agriculture	22,239,659	N/A	-1.16%	13.09%	13.47%	13.47%		
313	Sprott Lending II	52,982,939	N/A	1.23%	3.84%	9.00%	9.00%		
314	Whitehorse Liquid IV	33,054,345	N/A	14.58%	29.24%				
315	Kicking Horse CoInvest	44,486,871	N/A	3.55%	6.54%				
316	INC Viva 3	28,037,760	N/A	6.68%	8.04%				
317	INC Incline Av II	9,928,318	N/A	8.51%					

NOTES and REFERENCES

*	**Market Values**	Reported market values represent total fund holdings consistent with Financial Statements as of December 31, 2021, consisting of:	
		99.13%	Alaska Permanent Fund
		0.87%	Alaska Mental Health Trust
	All Benchmarks	All benchmarks listed by name reflect the current applicable benchmark per Investment Policy or by manager contract (where applicable). Benchmark returns greater than one month may include different or additional indices applicable during the periods referenced. These can be found in the previous Investment Policies and Monthly Peformance Reports.	
	All Returns	All returns are provided by Callan LLC, are annualized for periods greater than one year, and are net of fees as of July 1, 2020.	
•	**Lagged Returns**	For investments within the following asset classes, returns are lagged one quarter. Composites that incorporate these investments and benchmarks associated are also lagged one quarter.	
			Real Estate
			Private Equity and Special Opportunities
			Private Income
1	**Passive Benchmark**	60%	MSCI All-Country World Index IMI
	09/30/2016 to date	20%	BB Global Aggregate Index
		10%	FTSE EPRA/NAREIT Rental Index
		10%	US TIPs
2	**Performance Benchmark**	38.0%	MSCI ACWI IMI
	07/01/2021 to date	16.0%	Cambridge Private Equity (1 Q Lagged)
		6.8%	NCREIF Total Index (1 Q Lagged)
		6.0%	HFRI Total HFOF Universe
		5.5%	BB US Corporate
		5.5%	BB US Aggregate
		5.4%	Cambridge Global Private Infrastructure (1 Q Lagged)
		3.6%	Cambridge Private Credit (1 Q Lagged)
		3.0%	90 Day T-Bills
		2.0%	BB US High Yield 2% Issuer Cap
		2.0%	BB Global Treasury ex-US Hedged
		2.0%	BB US Securitized
		1.0%	BB US TIPS
		1.2%	MSCI US REIT (1 Q Lagged)
		1.0%	HFRI Risk Parity 12% Vol
		0.5%	JPM EMBI Global Diversified
		0.5%	JPM GBI-EM Global Diversified TRI
3	**Total Fund Return Objective**	100%	Consumer Price Index (All Urban Consumers, U.S. City Average, All Items, Unadjusted Index) plus 5%
4	**Fixed Income Benchmark**	27.5%	BB US Aggregate
	07/01/2020 to date	27.5%	BB US Corporate
		10.0%	BB US Securitized
		10.0%	BB US High Yield 2% Issuer Cap
		10.0%	BB Global Treasure ex-US Hedged
		5.0%	BB US TIPs
		5.0%	90 Day T-Bills
		2.5%	JPM EMBI Global Diversified
		2.5%	JPM GBI-EM Global Diversified
5	**EMD Benchmark**	50%	JPM EMBI Global Diversified
	09/30/2016 to date	50%	JPM GBI-EM Global Diversified
6	**Real Estate Custom Benchmark**	85%	NCREIF Property (1 Q Lagged)
	07/01/2020 to date	15%	MSCI US REIT (1 Q Lagged)
7	**Private Income Custom Benchmark**	60%	Cambridge Global Private Infrastructure (1 Q Lagged)
	07/01/2020 to date	40%	Cambridge Private Credit (1 Q Lagged)

APFC Material Non-Public Information Handling Policy

Background

During the course of their work, APFC employees may come into possession of material non-public information (MNPI). For the purposes of this policy, non-public information is any information that is not available in the public domain (from, e.g., press releases, publicly-available government reports, financial statements filed with government agencies, and other information published in media sources). Non-public information is considered "material" if it has "market significance" such that the dissemination of such information is likely to affect the issuing company's stock price or the ability of the company to obtain loans or other types of financing or is likely to be considered important by reasonable investors in deciding whether to purchase or sell publicly registered debt or equity of the particular company.

The misuse and mishandling of MNPI could subject both APFC and its employees to civil, regulatory and criminal exposure as well as reputational harm. More specifically, the use of MNPI to trade in securities either personally or on behalf of another is prohibited under Section 10(b) of the Securities Exchange Act of 1934. This prohibited conduct is commonly referred to as "insider trading." Insider Trading laws encompass (1) trading by an insider while in possession of MNPI; (2) trading by a non-insider while in possession of MNPI, where the MNPI was disclosed by an insider in violation of his or her duty to keep it confidential; and (3) disclosing MNPI to others. Similar insider trading prohibitions exist in most of the international markets that host exchanges for the buying and selling of publicly-traded securities.

This policy sets forth procedures governing the handling of MNPI. Its objective is to limit the possession of MNPI to select APFC employees so that MNPI will never be in the possession of any APFC staff who: (1) directly buy and sell publicly traded securities; or (2) supervise external investment managers who buy and sell public traded securities on APFC's behalf.

General MNPI Restrictions and Requirements

1. Access to MNPI is limited to the Executive Director, the Chief Investment Officer, the Chief Risk Officer, the General Counsel, and, with respect to particular investment opportunities, Private Market employees assigned to conduct due diligence and Information Technology employees assigned to create network folders to safeguard MNPI.

2. All APFC employees in possession of MNPI are prohibited from engaging in insider trading, aiding and abetting insider trading, or otherwise using MNPI for personal gain.

3. All APFC employees in possession of MNPI are prohibited from disclosing the MNPI to any individuals not included in Item 1.

4. All APFC employees in possession of MNPI are required to safeguard the MNPI and prevent its disclosure to individuals not authorized to access the MNPI, including other employees of APFC.

5. All APFC employees are required to promptly report to the General Counsel any misuse or improper dissemination of MNPI, including by parties not employed by APFC.

MNPI Quarantine and Documentation Procedures

1. When an APFC employee becomes aware that he/she will come into possession of MNPI, that employee is required to promptly report the expected receipt of MNPI to the General Counsel. In making this report, the employee should be prepared to provide, to the extent available, the following information:
   a. the date select APFC staff will come into possession of the MNPI;
   b. the names of the APFC staff who will require access to the MNPI to analyze the prospective investment; and
   c. the date this information will cease to constitute MNPI (generally, when the information will be publicly disclosed).

2. The APFC staff who is taking a lead role on the investment/transaction that involves MNPI is responsible for working with an APFC IT employee to create a network folder to store electronic records that include MNPI but is only accessible by the APFC employees identified in 1(b) as needing access to the MNPI (including IT staff that administer these accounts).

3. The APFC staff who is taking a lead role on the investment is also responsible for ensuring that any hard copy of records that contain MNPI are stored in a secure area in the office and locked when not in use.

4. All APFC staff who gain access to MNPI are prohibited from using e-mail, text messages, or any other electronic media to convey information that includes MNPI, unless the MNPI is described in such media through the use of a code name that will avoid inadvertent disclosure of the MNPI.

5. Once the investment or transaction that includes MNPI is completed and the possession of the MNPI is no longer required, all records containing the MNPI shall be destroyed by all APFC Staff that were exposed to such MNPI and this information shall be conveyed to the General Counsel (or an APFC employee designated by the General Counsel for such purpose).

6. Once the MNPI becomes public or otherwise ceases to constitute MNPI, this development will be conveyed to the General Counsel (or an APFC employee designated by the General Counsel for such purpose) and the requirement to quarantine and secure the MNPI will cease to apply.

7. The General Counsel (or an APFC employee designated by the General Counsel for such purpose) shall create a record of APFC's possession of all MNPI, consistent with the procedures outlined above, including:

   (a) the date APFC comes into possession of the MNPI;

   (b) the names of APFC employees who gained access to the MNPI; and

(c) the date the MNPI become public or otherwise ceases to constitute MNPI.

Approved on this 26th day of February, 2020.

Angela M Rodell

Angela Rodell, Chief Executive Officer