



Active vs. Passive Investment Approaches

A response to requested information
from the Pension Review Commission

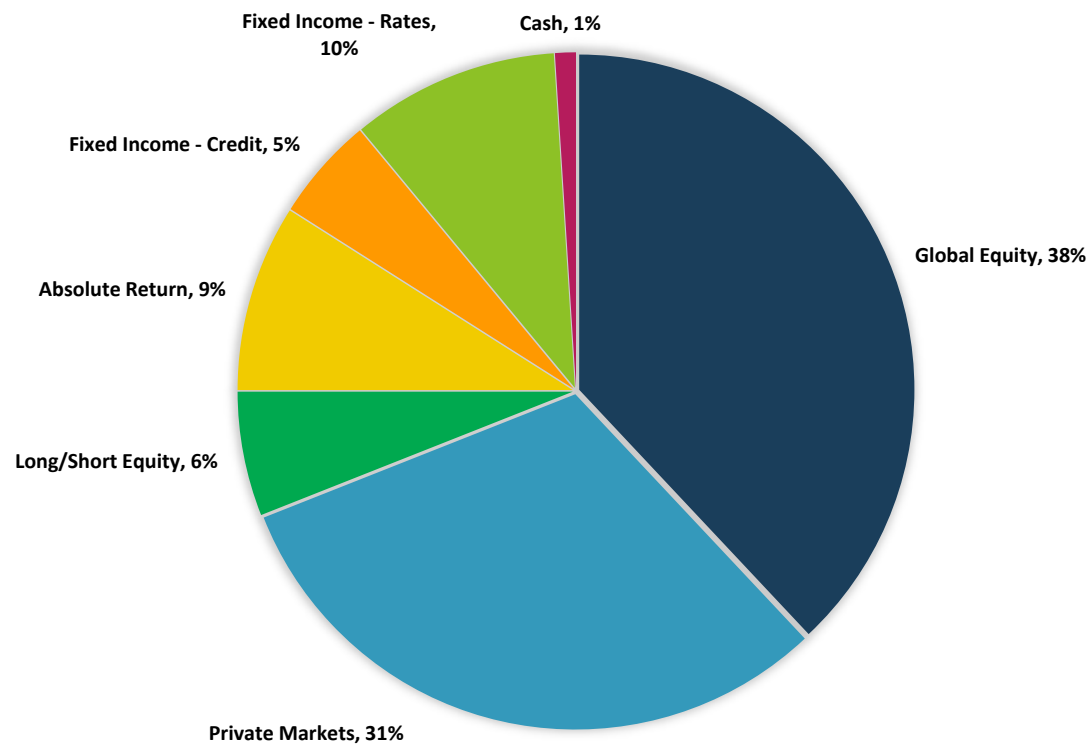
Summary of Request

- Compare advantages and disadvantages (costs and asset allocations) of current active investment approach to passive investment approaches
- Compare current active investment approach to other statewide retirement plans, including Nevada
- Costs to transition to a passive investment approach
 - Impact on retirement benefits
 - Impact on ability to fully amortize unfunded liabilities

Acknowledgment

- It's a reasonable and common request
- We utilize and regularly measure our investment approach to passive options
- We are here to be transparent and educate

FPPA Target Asset Allocation



It's Not Just About Returns It's Also About Managing Risks

As fiduciaries, our primary job is to manage risks

- Liabilities, contributions, funded status, liquidity

FPPA has strong governance and regularly undergoes a thorough asset liability study process to assess risks and determine an appropriate asset allocation and portfolio construction

Resources utilized:

- Actuary (GRS)
- Investment Consultant (Cambridge Associates)
- FPPA Staff
- Board of Directors

Unique from most public pension plans, FPPA manages different investment pools to more appropriately match the risks of its underlying plans

Risks need to be considered when trying to achieve differentiated returns

Comparison to Other Public Funds

Every state public retirement plan has some degree of active investment management, including Nevada

- RVK Survey of 72 public funds (0 are all passive, 3 are all active)

Nevada CIO Steven Edmundson would emphasize ... *“Every pension fund is unique and needs to be implemented to its own circumstances. Unique to its own liabilities, contributions, funded status, liquidity and resources.”*

Nevada is Underfunded with Negative Cash Flow

- Nevada needs to be more liquid and take more concentrated risks in the public markets
- FPPA is fully funded and has positive cash flow¹

Nevada has Legacy Restrictions on Investment Staff Resources

- Nevada needs to outsource private equity and real estate fund implementation
- FPPA internally implements private equity and real estate fund implementation

Active vs. Passive (Theoretical)

	<u>Active</u>	<u>Passive</u>
Implementation	Complex	Simple
Fees	Higher	Lower
Return Enhancement	Higher	Lower
Risk Management / Diversification	Higher	Lower
Institutional Access	Higher	Lower

KEY: Advantage / Disadvantage

FPPA vs. Passive (Historical)

Assumption Driven – Outcomes (therefore conclusions) will vary depending on assumptions

Primary assumptions for a passive approach are:

Equity / Fixed Income Split:	70% / 30%
Choice of Passive Indexes:	
Global Public Equity:	MSCI ACWI IMI ¹
Fixed Income:	Bloomberg Aggregate Bond ²
Time Period:	10 years ending 7/31/2023

1. Current long-term policy benchmark for Global Public Equity
2. Current long-term policy benchmark for Fixed Income

FPPA outperforms its passive option by 1.23% annualized (7.88% vs. 6.65%) with less volatility risk (see following chart)

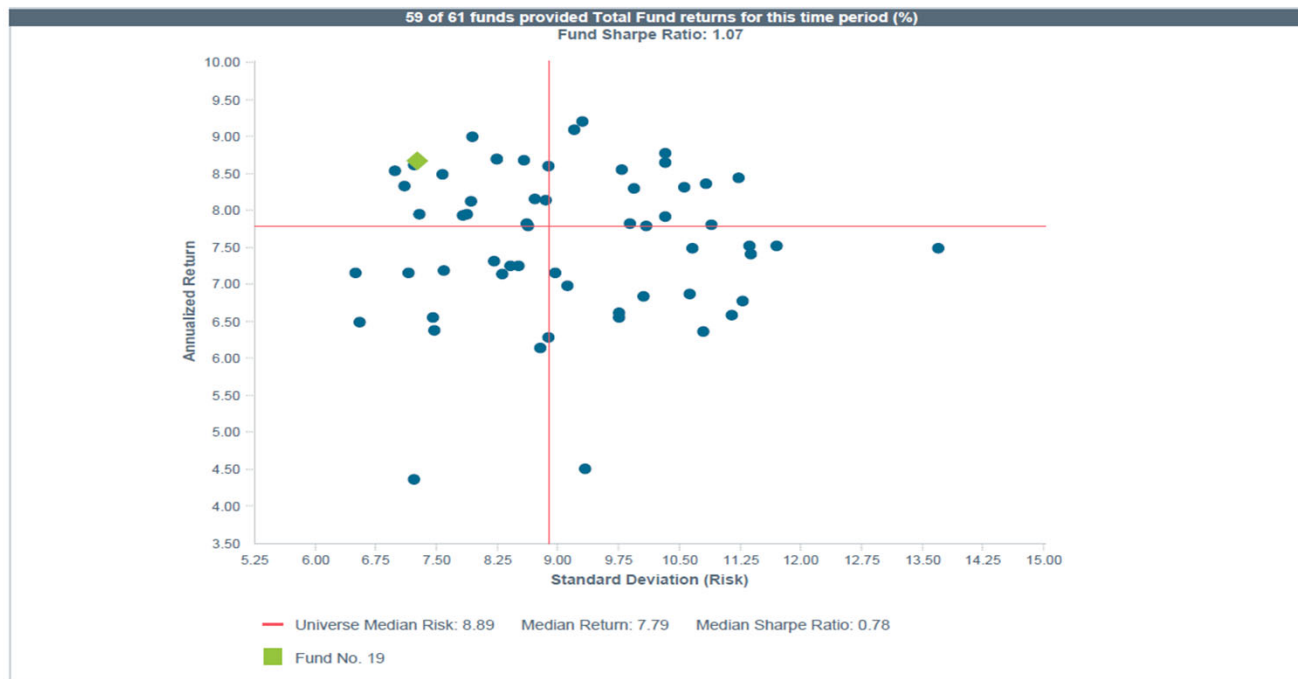
FPPA vs. Passive (Risk & Return)

Desired quadrant is upper left (higher returns with less risk)

FPPA is Fund No. 19

Risk/Return Analysis
10 Year Annualized Total Fund Returns vs. Standard Deviation

As of December 31, 2022



Funds with less history than the specified time period will not appear in the chart.

Transition Costs

Liquidation / transition of asset classes can be done with minimal transaction costs under following timelines:

<u>ASSET CLASS</u>	<u>TIMING</u>
Cash	Days
Fixed Income (Rates)	<1 Month
Global Public Equity	<1 Month
Fixed Income (Credit)	<3 Months
Real Estate	6-12 Months
Long/Short Equity	<2 years
Absolute Return	<2 years
Private Equity	15+ years

- Long/Short Equity and Absolute Return could be liquidated sooner by incurring fees of approximately 3% or \$28 million
- Private Equity could be liquidated sooner through a secondary sale incurring a discount of approximately 20% or \$355 million

FPPA vs. Passive (Prospective)

Via FPPA's most recent asset liability study process (2023), capital market expectations were utilized to determine a long-term expected rate of return

- FPPA's current long-term asset allocation has a 7.63% expected rate of return¹
- A passive 70% (equity) / 30% (fixed income) portfolio has a 7.04% expected rate of return²
- A decrease of 0.59% in expected rate of return, the liabilities of the plan would increase by approximately \$571 million and would drop the funded status from 100% to 91%³
- These changes would have a significant negative impact on FPPA's ability to pay base benefits and COLAs

1. See Appendix for expected rate of return analysis and capital market assumptions

2. Per Cambridge Associates (FPPA's Investment Consultant) using the same capital markets assumptions

3. Per GRS (FPPA's Actuary) and disclosed within FPPA's 2022 Annual Report

Fees

Fees Matter – It is critical that FPPA ensures we get what we pay for when paying any fee

- Fees are considered in our investment approach and investment decisions (among many factors) are based on a ***net of fees basis*** (*what is expected in risk/return after paying the fees*)
- Some asset classes cannot be done passively (*private equity & hedge funds*)
- All assumptions and historical performance are reported on a ***net of fees basis***
 - Net of management fees, incentive fees, carried interest, partnership expenses, consulting fees, due diligence travel, legal costs, investment staff salaries and benefits
 - For 2022, all fees totaled 1.58% of total average assets

Summary

- As fiduciaries, one of our primary responsibilities is to manage risks
- As fiduciaries, FPPA utilizes a thorough process and deploys significant resources in the development and implementation of its investment approach, including the continuous assessment on the appropriateness of using passive investment options
- As fiduciaries, FPPA's investment process and results are on a net of fees basis
- A shift to an entirely passive investment approach (*historically and prospectively*) would have a significant negative impact on FPPA's ability to pay base benefits and COLAs
- Every pension fund is *unique* and needs to be implemented to its own liabilities, contributions, funded status, liquidity and *resources*
 - FPPA is unique as a smaller fund, being fully funded and with a liquidity profile to support our current investment approach

Appendix A

Capital Market Assumptions

2021 & 2022 December Assumptions

Asset Class	2021 CA Intermediate Term		2022 CA Intermediate Term		2021 CA Long Term		2022 CA Long Term	
	Compound Return	Risk	Compound Return	Risk	Compound Return	Risk	Compound Return	Risk
Global Equities	6.6%	17.5%	7.2%	17.5%	5.8%	17.5%	7.4%	17.5%
Absolute return	5.5%	4.0%	6.4%	9.9%	5.5%	4.5%	6.0%	9.9%
Long/short	6.0%	13.2%	5.8%	13.2%	6.0%	13.2%	6.6%	13.2%
Private Markets	8.0%	19.0%	8.4%	19.0%	7.6%	19.0%	8.5%	19.0%
Fixed Income - Rates	2.4%	7.0%	4.7%	7.0%	3.7%	7.0%	5.2%	7.0%
Fixed Income - Credit	2.9%	7.6%	6.2%	8.9%	4.2%	7.6%	6.5%	8.9%
Cash	0.1%	2.0%	4.4%	2.0%	2.1%	2.0%	3.9%	2.0%
Inflation	2.4% US, 2.3% Global		3.0% US, 2.8% Global		2.5%		2.7%	

Appendix B

FPPA Strategic Asset Classes

2022 December Assumptions

	Long-Term Pool (LTP)	Glide Path Pool (GPP)	Short-Term Pool (STP)
Interim Target			
Intermediate-Term			
Compound Return	7.45%	6.91%	5.25%
Standard Deviation	13.32%	10.12%	6.22%
Probability of Achieving 7%	54.20%	48.90%	
Long-Term			
Compound Return	7.63%	7.13%	
Standard Deviation	13.32%	10.12%	
Probability of Achieving 7%	59.40%	52.50%	
Asset Allocation			
Global Equities	38%	17%	10%
Absolute return	9%	6%	
Long/short	6%	6%	
Private Markets	31%	30%	
Fixed Income - Rates	10%	30%	70%
Fixed Income - Credit	5%	6%	10%
Cash	1%	5%	10%