San Antonio Fire & Police Pension Fund

Evaluation of Investment Policies, Procedures and Practices

April 2020

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Executive Summary

Pursuant to Section 802.109 of Texas Government Code, NEPC, LLC (NEPC) has been engaged by the San Antonio Fire & Police Pension Fund (SAFPPF), to conduct an independent evaluation of the appropriateness, adequacy and effectiveness of SAFPPF's investment policies, procedures and practices.

This Report covers five Evaluation Topics, broadly defined in Section 802.109 of the controlling Government Code:

1) An analysis of any investment policy or strategic investment plan adopted by the retirement system;
2) A detailed review of the retirement system's investment asset allocation;
3) A review of the appropriateness of investment fees and commissions;
4) A review of the retirement system's governance processes related to investment activities; and
5) A review of the retirement system's investment manager selection and monitoring process.

For each of the five Evaluation Topics, we have noted the Activities Completed, Standards for Comparison, Findings and Enhancement Recommendations SAFPPF may wish to consider for improvement.

Overview of Activities Completed:
The SAFPPF Staff provided all documents requested for review by NEPC, in a timely fashion. NEPC also followed up with numerous emails and telephone calls to further investigate the implementation of policies and procedures.

Overview of Standards of Comparison:
To prepare this Evaluation Report, NEPC assembled a Reviewing Team that consisted of:

Keith Stronkowsky, Senior Consultant, Lead Consultant for SAFPPF
Rhett Humphreys, Partner, Secondary Consultant for SAFPPF
Bill Bogle, Partner and Chief Compliance Officer
John Krimmel, Partner and Public Fund Team Consultant
Kevin Lau-Hansen, Research Consultant, Operational Due Diligence
Shalini Brown, Public Fund Senior Consulting Specialist

NEPC drew upon the firm's more than 30 years of experience in observing institutional investors like SAFPPF. We currently advise 376 clients, including 69 government-sponsored retirement systems ("Public Funds"). NEPC asked for a comparison review based on the experience of our most senior Public Fund Consultants, including John Krimmel who previously served as the Chief Investment Officer at two public retirement systems. We also received a review of our analysis by William Bogle, the NEPC Chief Compliance Officer and Head of Operational Due Diligence.

As a further standard of comparison, NEPC selected eight Texas Public Pension Fund peers of SAFPPF and examined the Investment Policy Statements and other publicly available documents as an additional source of industry prevailing practice alongside our experience with similar clients we work with directly.

<u>Overview of Findings</u>:
NEPC generally finds SAFPPF's policies, procedures and practices to be appropriate, adequate and effective when compared to industry prevailing practice.

<u>Overview of Enhancement Recommendations</u>:
NEPC did identify several areas that SAFPPF and its stakeholders may want to consider for improvement.

Recommendations:

1) **In its next annual review of the Investment Policy Statement (IPS) SAFPPF should make revisions to improve clarity and accountability within the document.** For additional detail and related findings, see Section 1, beginning on page 6.

2) **SAFPPF should conduct an informal annual review of capital market assumptions at least on an annual basis.** For additional detail see Section 1, page 6.

3) **SAFPPF should establish a more formal process of projecting and reporting on liquidity risk** as the alternative asset programs continue to be built out. This process should be a collaboration between Staff and the Investment Consultants. Language should also be added to the IPS that clarifies the process around the valuation of alternative assets. For further details see Section 2 (C) on page 12, and Section 2 (D), on page 15.

4) **The IPS states that the Investment Committee is to monitor and control investment expenses**. This language should be expanded to clearly define what type of report or analysis should be presented to the Board on at least an annual basis. For further details, see Section 3, on page 17.

Section 1. Investment Policy Statement Analysis and Compliance

Activities Completed:
To review the IPS for the SAFPPF, NEPC asked that Staff provide the most recent version. NEPC also audited Board minutes and any asset class and manager specific guidelines to confirm that they comply with the IPS.

Standard of Comparison:
To document that the structure of the IPS and the Plan's compliance with its IPS are consistent with prevailing practice, NEPC used a three-step evaluation process. The first step involved comparing the IPS to the recommended investment policy statements by the Government Financial Officers Association ("GFOA"), and the CFA Institute. The second step was to compare the System's IPS to the NEPC sample IPS template. This template applies NEPC's 33 years of experience in working with public fund clients on both the structuring of, and compliance with, their investment policy statements. The third step was to compare the Plan's IPS to the investment policy statements of similar Texas public pension plans.

Findings:
The latest revisions to the IPS took place in March 2019, with input from NEPC, Staff and the Board. Final revisions were completed over the subsequent months and the most recent version of the IPS was approved by the SAFPPF Board on July 31st, 2019. NEPC, as General Consultant, reviewed and endorsed the IPS.

The IPS is generally consistent with the following elements recommended by GFOA, the CFA Institute and the NEPC IPS template:

- Scope, purpose, investment objectives, investment philosophy/beliefs
- Governance
- Investment guidelines
- Asset allocation and rebalancing
- Internal controls
- Authorized intermediaries (custodians, depositories, broker/dealers, etc.)
- Risk management and objectives
- Performance standards and procedures
- Reporting and disclosure policy/procedures

Going back through SAFPPF Board Meeting minutes, we can see that the Plan is following the IPS in terms of pursuit of objectives, delegation of authority, decision making process, as well as the frequency and detail of monthly, quarterly, annual and other periodic reporting to the Board. As SAFPPF's General Investment Consultant, NEPC has directly observed, that the Board is adhering to the governance and compliance guidelines set forth in the IPS.

Enhancement Recommendations:
As noted in our findings, SAFPPF has a thorough and thoughtful IPS. However, improvements should be considered in the next IPS review cycle for the sake of additional clarity, accountability and efficiency:

1) The IPS states that an asset-liability study should be conducted at least every five years (industry standard) to determine the long-term targets and that annually, the targets are to

be reviewed for reasonableness in relation to significant economic and market changes or to changes in the Fund's long-term goals and objectives. For clarity, this annual review should be defined in the IPS as an asset allocation (or asset-only) study.

2) SAFPPF Investment Committee members are tasked with on-site due diligence trips and evaluations to provide review and oversight of any potential new investments for the Plan. NEPC recommends that this process be codified under the Roles and Responsibilities section of the IPS.

3) NEPC recommends adding language to the Roles and Responsibilities section of the IPS, to explicitly define the role of the Executive Director.

4) SAFPPF utilizes a General Consultant, as well as one or more Specialty Consultants across alternative asset classes and the emerging manager program. NEPC recommends language be added to the Roles and Responsibilities section of the IPS to clarify the use of Specialty Consultants.

5) SAFPPF has developed an Emerging Manager program with a dedicated level of assets and policy statement. For clarity, NEPC recommends language be added to the IPS that provides a broad definition and scope of the program.

6) As SAFPPF continues to build out its alternative asset programs, NEPC recommends that the Plan add language to the IPS that addresses liquidity risk, and that periodically (every three years) requires a comprehensive report on the liquidity of the Fund.

7) The Funding Policy is not directly articulated within the IPS. Instead SAFPPF has a separate Funding Policy document that is currently being revised. In our review we've found that it is not uncommon for public funds to have a separate Funding Policy and as such, recommend that this document be incorporated by reference into the IPS.

Section 2. Asset Allocation Review

2(A). Process for Determining Target Allocations

Activities Completed:

Review of the asset allocation guidelines in the IPS, and the most recent asset allocation and asset liability studies that were completed.

Standard of Comparison:

To ensure the Plan is following prevailing practices as it relates to the asset allocation process, NEPC used a two-step evaluation process. The first step involved comparing SAFPPF policies and practices to the prevailing practice of NEPC's clients. In the second step, several peer institutions (Texas Public Pension Plans) were compared to SAFPPF's asset allocation policies.

Findings:

SAFPPF has developed a clear process that allows for routine setting, monitoring, and review of both the asset allocation of the portfolio and the assets and liabilities of the SAFPPF. This process is consistent with prevailing practice among peer public pension funds. More specifically, the IPS states that "formal asset allocation studies should be conducted at least every five years to determine the long-term targets." As stated previously in Section 1, Enhanced Recommendations, of this Report, NEPC would define this type of study done as an asset-liability study instead of an asset allocation study. The forward-looking projections for the asset liability study are prepared by the Actuary, with input provided by the General Investment Consultant on capital market expected returns, volatilities and correlations. Both the Actuary and Consultant report their projections to SAFPPF Staff and Board. The strategic allocations can be found in the Executive Summary and General Investment Policies and Guidelines sections of the IPS.

Enhancement Recommendations:

As noted in our findings, SAFPPF has developed a detailed asset allocation and asset liability review process. The approach is robust and sufficiently detailed to maximize effectiveness. We recommend, as noted in Section 1, adding language for an informal review of capital market outlook on an annual basis to improve flexibility for SAFPPF to respond on the margins to rapidly changing market environments. This annual review may find cause for the Fund to consider minor changes to its asset mix more frequently than every five years. Frequent asset allocation changes, however, are not meant to be a tactical tool. Significant changes to the strategic asset allocation should not be made without careful consideration and are not expected to occur every year.

2(B). Expected Risk & Return Summary

Activities Completed:

NEPC reviewed the following documents.

- NEPC Asset Allocation Team process for developing expected risk and return forecasts
- SAFPPF Investment Policy Statement
- NEPC's 2020 Capital Markets Outlook and Asset Allocation Assumptions
- 2020 ALM Study Actuarial Valuation Report
- 2019 Actuarial Valuation Report

Standard of Comparison:

We compared the process by which SAFPPF sets and regularly assesses expected risk and return information with NEPC's experience with how similar public pension plans approach this process.

Findings:

As with most other public pension funds, SAFPPF relies on its General Consultant to provide capital market forecasts for expected returns, volatilities and correlations among the asset classes. Specialty Consultants also express their own view on market outlook in their strategic plans reported to the Board.

NEPC's capital market assumptions provided to SAFPPF are developed by NEPC's asset allocation team which consists of senior investment professionals as well as licensed actuaries. These assumptions are forward-looking and fundamentally based forecasts developed with proprietary valuation models to generate both an intermediate and long-term outlook. The long-term outlook represents a foundation on which to build a strategic allocation to meet long-term objectives. The intermediate outlook represents a planning horizon over which more dynamic asset allocation decisions can be developed.

Asset class forecasts are based on a combination of forward-looking analysis and historical data. Forecasts are produced for 22 traditional asset classes and 25 alternative strategies with both pre-tax and post-tax assumptions. Historical information dating back to 1926, which includes monthly index returns, cash rates, inflation rates, bond yields, and valuation metrics are utilized to both frame the current economic environment and serve as the foundation for the volatility and correlation assumptions for all asset classes. Volatility assumptions are based primarily on the long-term history of the asset class with some adjustments for the current environment, while correlation assumptions are based on a mix of both long-term history and current trend.

Expected return forecasts are based on current market prices and forward-looking estimates. The forward-looking estimates rely on a fundamental building blocks approach that broadly includes intermediate and long-term assumptions for economic growth, supply/demand dynamics, inflation, valuation changes, currency markets, forward-looking global yield curves, and credit spreads. The building blocks are specific to each major asset class and represent the primary drivers of future returns. For example, the equity forecast model is based upon assumptions for real earnings growth with adjustments incorporated for profit margin changes, inflation, dividend yield, and current valuations trending to long-term averages. Fixed income return forecasts are based upon changes in real interest rates and forward yield curves, with credit sectors including an assumption for changes in credit spreads and credit defaults. Alternative investment strategies are similarly built from the bottom up with a building blocks approach based upon public market beta exposures while also incorporating an appropriate risk premium for illiquidity.

The asset class assumptions are formally prepared annually but may be revised during the year should significant shifts occur within the capital markets. The review process is overseen by the Asset Allocation Committee, which includes the asset allocation team and various members of the consulting practice groups. The responsibilities of the Asset Allocation Committee include highlighting current market risks. While the formal process is earmarked for an annual cycle, NEPC regularly assesses markets and opportunities. Should return and risk expectations change, or an event take place, either domestically or abroad, that will have an impact on our clients' portfolios, NEPC makes clients aware as soon as possible and recommends actions accordingly.

In setting its asset allocation the SAFPPF Board considers the risk, reward and volatility of securities markets in setting the risk tolerance for the Fund. The Board also reviews the long-term characteristics of various asset classes, focusing on balancing risk with expected return. On the basis of the Board's time horizon and risk tolerance, the following asset allocation guidelines in Illustration 2.1 have been established.

Illustration 2.1

Asset Class	Policy Target	Minimum Allocation	Maximum Allocation
Large Cap Equities	15%	10%	20%
Small/Mid Cap Equities	3%	0%	5%
Int'l Equities	12%	9%	15%

Int’l Small Cap Equities	3%	0%	5%
Emerging Market Equities	6%	3%	9%
Private Equity	7%	0%	10%
Total Equity	46%		
Core Bonds	5%	0%	10%
High Yield	5%	0%	10%
Bank Loans	5%	0%	10%
Global Fixed Income	0%	0%	5%
Emerging Market Debt	7%	0%	10%
Unconstrained Fixed Income	3%	0%	6%
Private Debt	7%	0%	10%
Total Fixed Income	32%		
Real Estate	9%	5%	12%
Private Real Assets	3%	0%	6%
Total Real Assets	12%		
Hedge Funds	10%	5%	15%
Total Multi-Asset	10%		

SAFPPF 2020 capital market assumptions and expected rates of return and risk are presented for the 10- year and 30-year periods in Illustration 2.2 below. Risk is expressed as the expected standard deviation of the asset class and the total asset mix. Risk, as shown in the table is calculated using the correlation of assets and variance-covariance matrix based on the 2020 NEPC capital market expectations.

Illustration 2.2

Asset Class	Policy Target	10-year Expected Rate of Return	Expected Risk (Standard Deviation)
Large Cap Equities	15%	5.00%	16.50%
Small/Mid Cap Equities	3%	5.50%	20.00%
Int’l Equities	12%	6.00%	20.50%
Int’l Small Cap Equities	3%	6.40%	22.00%
Emerging Market Equities	6%	9.00%	28.00%
Private Equity	7%	9.40%	24.58%
Total Equity	46%		
Core Bonds	5%	2.50%	6.01%
High Yield	5%	4.10%	12.50%
Bank Loans	5%	4.80%	9.00%
Emerging Market Debt	7%	4.82%	12.40%
Unconstrained Fixed Income	3%	4.82%	3.92%
Private Debt	7%	6.70%	11.54%
Total Fixed Income	32%		
Real Estate	9%	5.74%	14.30%

Private Real Assets	3%	8.08%	20.28%
Total Real Assets	12%		
Hedge Funds	10%	5.0%	8.18%
Total Multi-Asset	10%		
Expected Return (10-year)	6.23%		
Expected Return (30-year)	7.25%		
Standard Deviation	12.58%		

Source: NEPC 2020 capital market expectations as of 1/1/2020.

The mix of assets in the above table is expected to achieve the plan's actuarial rate of return which is currently 7.25% over the next 30 years. It is important to note that capital market expectations are subject to change from year to year based on prevailing market conditions and the myriad of inputs considered when setting forward-looking capital market expectations.

2(C). Appropriateness of Selection and Valuation Methodologies of Alternative/Illiquid Assets

Activities Completed:

NEPC reviewed the following documents.

- Investment Policy Statement
- Asset Allocation study
- Alternative Asset strategic plans
- SAFPPF private market LP agreements
- Quarterly and annual private market LP statements for audit review

Standard of Comparison:

Alternative investments are defined in the Texas Government Code Sec. 815.3015 as "an investment in a private equity fund, private real estate fund, hedge fund, infrastructure fund, or another asset as defined by rule of the Board of Trustees." Thus, to gain an understanding of how illiquid assets are selected, measured, and evaluated, the above listed documents were reviewed.

Findings:

Having reviewed SAFPPF's most recent IPS, asset allocation study, and strategic plans for alternative asset classes, we find that the methodology for concluding that alternative investments were appropriate was sound given the Plan's size and expertise of staff and specialty consultants.

The selection of alternative asset managers is a coordinated effort between investment Staff, asset class Consultants and the Investment Committee. As stated in the IPS, the Investment Committee has delegated authority for individual investment selection(s) to the investment managers. The IPS also outlines the asset classes that SAFPPF can invest in, including the benchmarks for each asset class and the role that each asset class plays in the Plan's portfolio. This makes it clear to the reader how to measure the performance of the asset classes according to the benchmarks and according to the role that the asset classes play in the portfolio. Investment Practices and Guidelines for the asset classes also include information regarding the eligible types of investments and other attributes that should be considered when considering investments in alternative asset classes.

In relation to valuation, SAFPPF relies on the financial statements prepared and provided by third-party administrators and the auditors for each respective alternative investment. At least annually, each investment will have a fully audited valuation report.

Enhancement Recommendations:
The IPS does not specify a process around the valuation or confirmation of alternative assets valuations. NEPC recommends that language be added to the IPS that codifies the above process for valuing alternative assets.

2(D). Consideration and Incorporation of Future Cash Flow and Liquidity Needs

Actions Completed:
To assess the consideration and incorporation of future cash flow and liquidity, NEPC reviewed the most recent version of the IPS; the 2019 actuarial valuation report conducted by the System's Actuary, Segal Consulting; the 2020 asset-liability study conducted by SAFPPF General Consultant, NEPC; the most recent version of the funding policy; and the 2019 strategic plans for Private Equity, Private Debt and Real Assets.

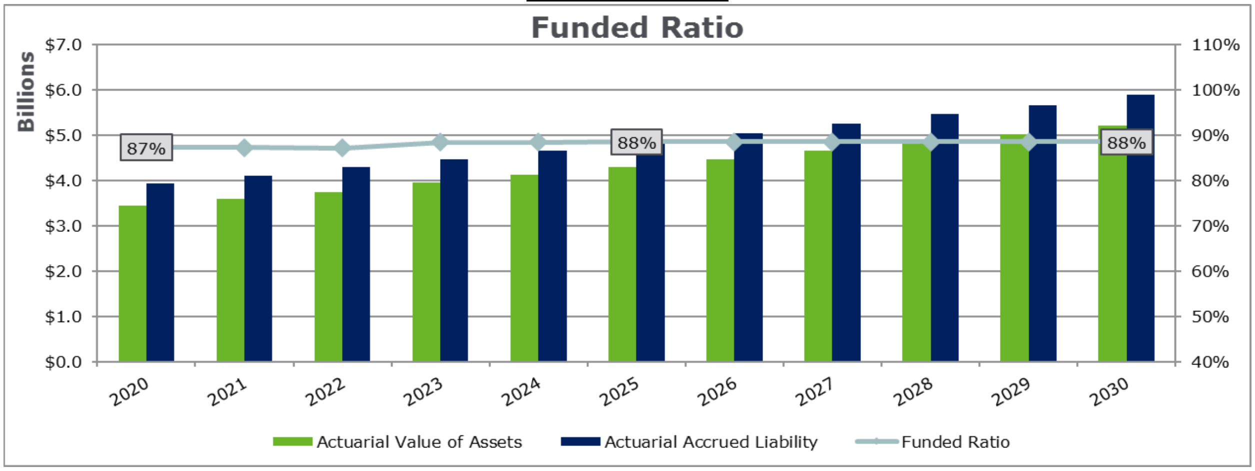
Standard of Comparison:
SAFPPF's asset allocation is a function of a mosaic of inputs, including but not limited to, actuarial evaluations, return objectives, risk tolerance, and liquidity needs. NEPC reviewed the investment policies of SAFPPF's Texas public pension fund peers and consulted with our internal Asset Allocation team who has the perspective of seeing what all our public fund clients are doing to address these issues and have actuarial backgrounds to speak to the processes and methodologies being used.

Findings:
The main focal point of the peer group policies with regards to liquidity was on structuring the investment portfolio, or asset allocation, to meet the Fund's needs. With regards to specific investments, the liquidity of the asset, vehicle, or fund was very often cited as a consideration in the selection of investments. Given the information available, it is difficult to make a fair comparison amongst Plans. While Policies around liquidity may be compared to peers and industry prevailing practice, it (liquidity) is mainly rooted within the funding needs of the individual Plan.

The Asset-Liability Study (ALM) done in March 2020, used scenario analysis to highlight the impact of shifting economic and market regimes on the Plan and its target asset allocation. These scenarios included expansionary, overextension, recessionary, stagflation, and goldilocks environments. Stochastic analysis was also applied to project the potential range of outcomes across funded status and amortization periods holding current assumptions in place (i.e. current target asset allocation, current contribution rates, 2020 capital market assumptions, etc.).

Key findings from the Asset-Liability Study (ALM) done in March 2020:
The fund had a projected funded status of 87.2%, as of January 1, 2020 and is projected to maintain this funded ratio over the next 10 years, despite potential investment return headwinds and level contribution rates creating an uneven path as both assets and liabilities are projected to grow at an average rate of 4.1% over the next 10 years (see Illustration 2.3).

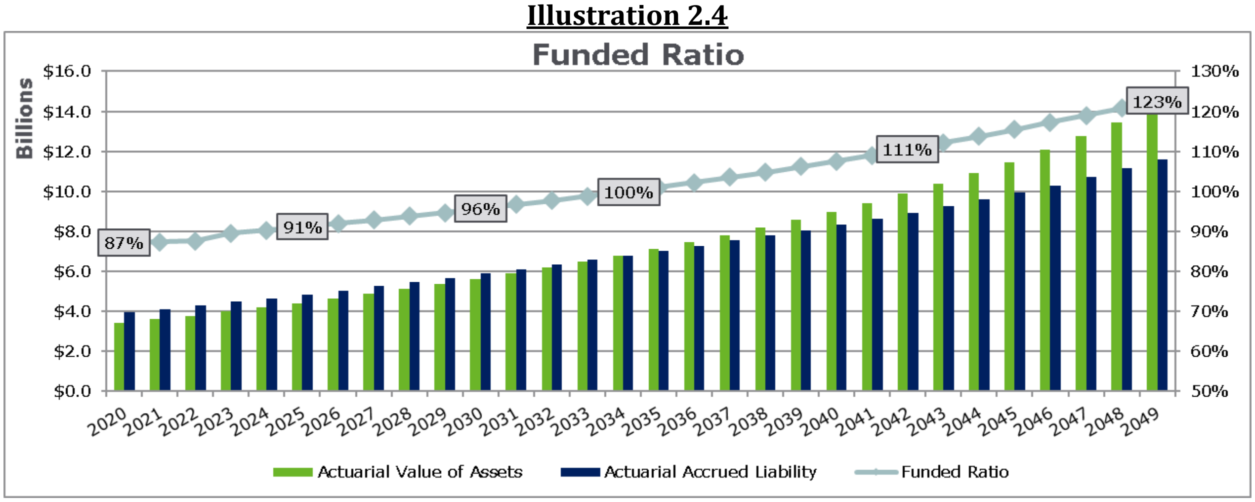
Illustration 2.3



*Assumes NEPC's 10-year return assumption for the Current Target allocation of 6.2% per annum.
- 6.2% return on assets + (–2.1% net cash flow) = 4.1% net asset growth
- 9.0% accrual/interest cost + (–4.9% benefit payments) = 4.1% net liability growth

Full funding is projected in 2034 (Illustration 2.4), as projected by the amortization period metric (i.e. all projected results such as investment returns, retirements, benefits, etc. are realized).

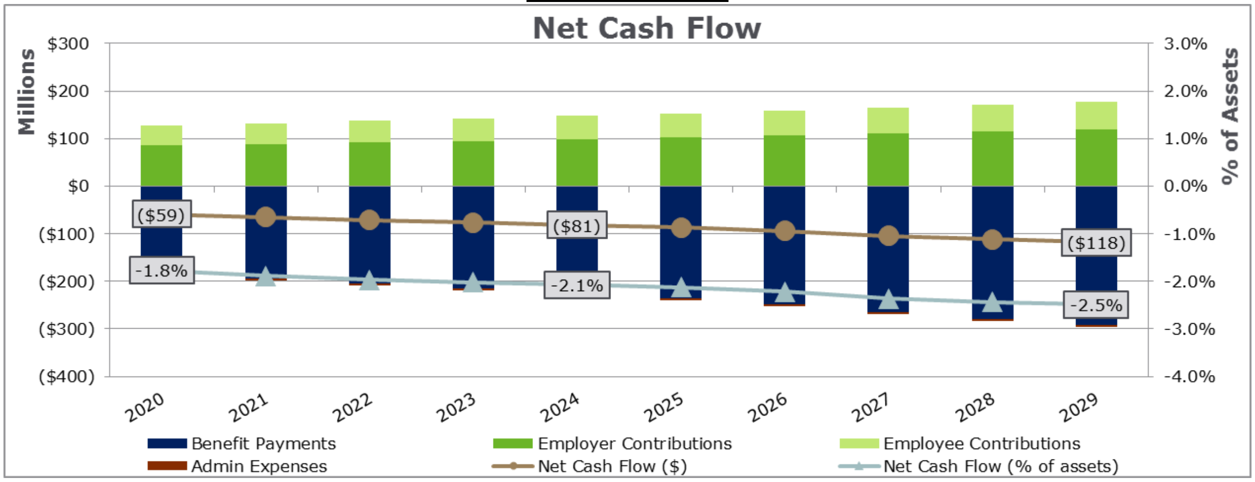
Illustration 2.4



*Assumes NEPC's 30-year return assumption for the Current Target allocation of 7.25% per annum

Net cash flow is expected to decline over the next 10-year period as benefit payment growth is projected to outpace contribution growth. Net cash flow can be considered the minimum required return to maintain current asset levels. The more negative net cash flow becomes, the more reliant the Plan becomes on investment returns, rather than contributions, to maintain funding levels. As a percent of assets, SAFPPF is expected to experience net cash flow of approximately -2.0%, per annum, over the next 10 years (Illustration 2.5). Negative cash flow, and the degree of it (i.e. 2%) is not uncommon for mature pension plans.

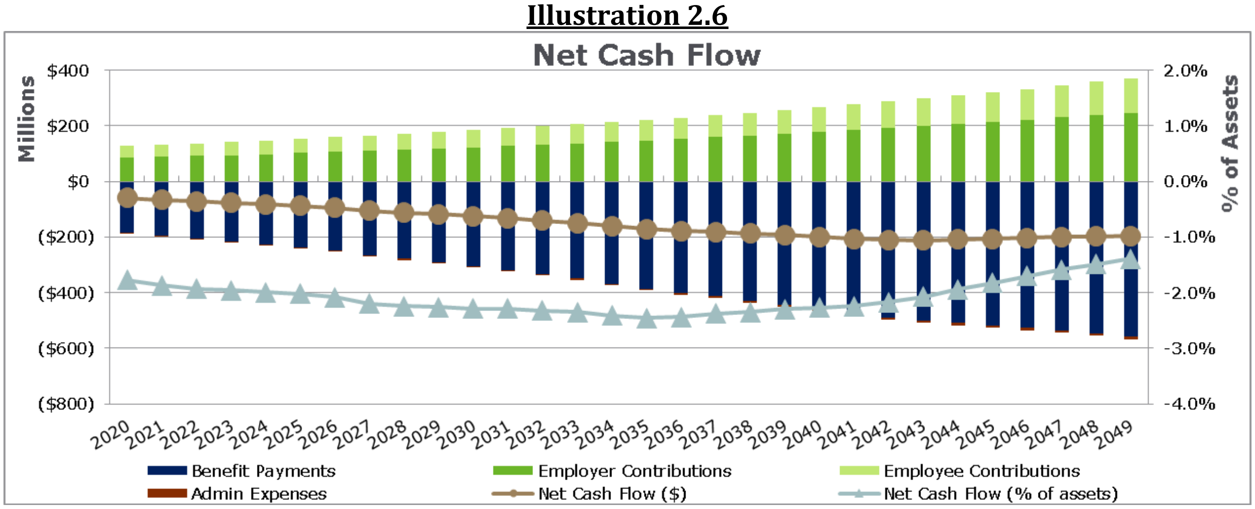
Illustration 2.5



*Assumes NEPC's 10-year return assumption for the Current Target allocation of 6.2% per annum.

Over 30 years, net cash flow is expected to maintain a similar range and rate (Illustration 2.6).

Illustration 2.6

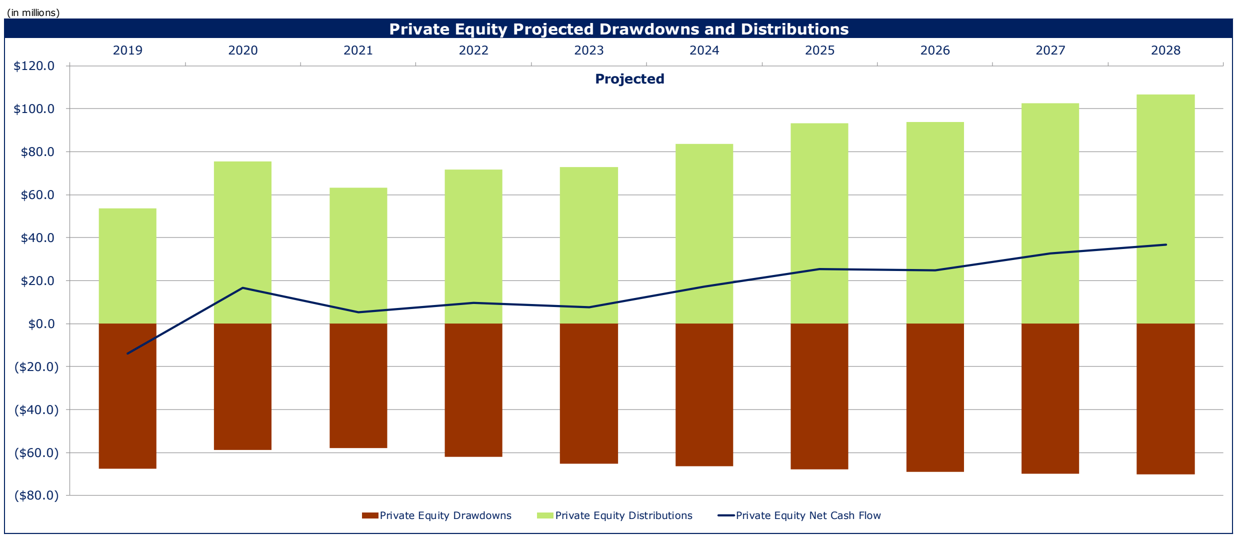


*Assumes NEPC's 30-year return assumption for the Current Target allocation of 7.25% per annum

The 2019 Strategic Plans for the private equity, private debt and real assets programs were also reviewed. These strategic plans provide a market outlook, snapshot of the current program, as well as projections on cash flows and commitments going forward. With regards to future commitments (typically reviewed annually), analysis is done on the historical commitment pace of the respective program, the unfunded commitments by vintage year, the reported valuations by vintage year, as well as the life-cycle of the funds in the program to identify the projected cash flows of the program. The historical projections are then combined with the future projections utilizing the manager's best estimate of cash flows to provide a basis of relating the projected value of the private equity program to the fund. As the investment pace is developed, consideration is also given to investment opportunities that are expected to be in the market during the period under review.

While the pacing plan provides a solid foundation for planning future commitments to private markets, like any model, it is limited by its inability to precisely forecast the future or any independent variable perfectly. However, the modeling exercise helps mitigate the risk of facing an unforeseen liquidity challenge due to a significant market displacement and helps to continuously recalibrate the program and maintain a reasonable path towards implementing a long-term asset allocation. All three programs (private equity, private debt, real assets) were projected to be net cash flow positive in the years ahead. A sample of this analysis for private equity can be found below (Illustration 2.7).

Illustration 2.7



	Projected									
Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Private Equity Drawdowns	($67)	($59)	($58)	($62)	($65)	($66)	($68)	($69)	($70)	($70)
Private Equity Distributions	$54	$76	$63	$72	$73	$84	$93	$94	$102	$107
Private Equity Net Cash Flow	($14)	$17	$5	$10	$8	$17	$25	$25	$33	$37

*Source: SAFPPF 2019 Private Equity Strategic Plan.

Staff also has a weekly process in place where they formally go over current cash levels, as well as any upcoming contributions or distributions to ensure the necessary liquidity is in place.

NEPC did not review or locate information relating to the hedge fund or real estate programs liquidity, or a formal liquidity study for the entire SAFPPF. That said, we believe the plan has ample liquidity to meet the current funding requirements of the Fund.

Enhancement Recommendations:
As stated previously in Section 1, as SAFPPF continues to build out its alternative asset programs, NEPC recommends that the Plan add language to the Risk Tolerance section of the IPS that periodically (every three years) requires a comprehensive report on liquidity risk.

Section 3. Review of the Appropriateness of Fees and Commissions Paid

Activities Completed:
NEPC reviewed and collected the following documents and data:

- Investment Policy Statement
- Externally advised manager fees and commissions data
- Investor manager agreements (contracts)
- Service provider fees

<u>Standard of Comparison</u>:
NEPC compared the Fund's investment policies to the policies of peers (peers are Texas Public Pension Funds in Appendix A). Externally managed advisor fees and private market fees were compared to industry averages using ubiquitously known vendors who specialize in aggregating fee data across public and private markets. Investment fees and commissions paid were sourced directly from the investment managers, and/or the Specialty Consultants for their respective asset classes, as well as SAFPPF staff. NEPC compared the brokerage language within SAFPPF's IPS and compared them to peers and industry prevailing practice.

<u>Findings</u>:
Investment Fees
The direct and indirect fees and commissions paid by the Fund include fees that are paid by the Fund and fees that are netted against returns. The Fund pays management fees, performance/carried interest, and brokerage fees. Additionally, the System pays custodian fees, security lending agent fees, investment consultant fees, and internal staff salaries.

The Board, Staff and Investment Consultants place an emphasis on fee savings in a variety of ways, including negotiations with managers during the selection process, leveraging existing relationships (e.g., fee break for certain asset levels), as well as leveraging their size and standing in the industry (both the Consultants and the Fund). Within alternative assets, fee savings can occur by investing in private funds at lower economic terms taking advantage of the size of capital invested. Another way for fee savings to occur is to invest in co-investment opportunities which can offer significant fee savings in comparison to only being invested in the standard commingled funds. The difference between the negotiated terms and the "headline" or standard fees charged over time can grow into meaningful amounts of fee savings to the Fund.

A listing, by traditional asset class, of all management fees paid by the Fund during the fiscal year is listed below in Illustration 3.1. Analysis shows that fees across equities are below the median, while fixed income fees are slightly above the median, for the respective broad universes being used for comparison. It should be noted that differences between SAFPPF's investment structure and that of the broad universes don't allow for an exact comparison, but in general we find SAFPPF's fees to be appropriate and within industry standards.

<u>Illustration 3.1</u>

Asset Class	Asset Value	Management Fees ($)	Fees	Median Universe Management Fee	Universe	Number of Observations
Domestic Equity	643,585,234	1,897,463	0.29%	0.50%	eVestment All US Equity	659
International Equity	761,685,815	4,179,752	0.55%	0.61%	eVestment Non-US Diversified Equity	325
Domestic Fixed Income	582,460,823	1,821,637	0.31%	0.25%	eVestment All US Fixed Income	538
International Fixed Income	276,359,900	1,707,445	0.62%	0.44%	eVestment All Global Fixed Income	183

Source: NEPC calculations, eVestment

In Illustration 3.2, we provide the median manager fee and carried interest across a broad universe for the respective alternative asset classes. Here to, it should be noted that differences between

SAFPPF's investment structure and that of the broad universes don't allow for an exact comparison, but in general we find SAFPPF's fees to be appropriate and within industry standards.

Illustration 3.2

Asset Class	Median Universe Management Fee	Median Universe Carried Interest	Universe	Number of Observations
Private Equity	2.00%	20.00%	Preqin Global Private Equity	2,468
Private Real Estate	1.50%	20.00%	Preqin Global Real Estate	525
Private Fixed Income	1.75%	20%	Preqin Global Private Debt	435
Private Real Assets	2.00%	20%	Preqin Global Private Real Asssets	299
Hedge Funds	1.40%	18%	JP Morgan	664

Source: Preqin

Lastly, a listing, by asset class, of all direct and indirect commissions and fees paid by the Fund during the fiscal year are listed below in Illustration 3.3

Illustration 3.3

Asset Class	Management Fees Paid From Trust	Management Fees Netted From Returns	Total Investment Management Fees	Brokerage Fees/Commisssions	Profit Share/Carried Interest	Total Direct and Indirect Fees and Comissions
Public Equity	$708,008	$5,369,207	$6,077,215	$835,826		$6,913,041
Fixed Income		$3,946,504	$3,946,504			$3,946,504
Hedge Funds		$4,886,822	$4,886,822		$4,006,389	$8,893,211
Real Assets		$1,549,323	$1,549,323		$2,152,004	$3,701,327
Private Equity		$4,282,704	$4,282,704		$662,658	$4,945,362
Private Debt		$2,043,424	$2,043,424		$2,706,852	$4,750,276
Real Estate		$2,459,295	$2,459,295		$4,006,389	$6,465,684
TOTAL	$708,008	$24,537,279	$25,245,288	$835,826	$13,534,292	$39,615,406

Total Investment Expenses	
Total Direct and Indirect Fees and Comissions	$39,615,406
Investment Services	
Custodial	$378,637
Investment Consulting	$1,030,000
Total	$1,408,637
Total Investmnet Expenses (Total Direct and Indirect Fees and Comissions + Investment Services)	**$41,024,042**

Source: NEPC calculations, Specialty Consultants, SAFPPF staff

Citing the Fund's 2018 Financial statements, we find that the itemization of fees related to administrative and investment expenses is thorough and within prevailing industry standard. This list includes expenses for investment management and custodial fees, securities lending fees, personnel costs, contractual services, as well as maintenance and utilities.

Enhancement Recommendations:

- The IPS states that the Investment Committee is to monitor and control investment expenses. This language should be expanded to clearly define what type of report or analysis should be presented to the Board on at least an annual basis.

- The annual review of investment fees should include a fee analysis based on peer group or industry averages for the relevant asset classes in aggregate as well as by investment strategy type.

Section 4. Review of Governance Processes Related to Investment Activities

Activities Completed:

To gain a complete overview of the Fund's Governance Processes Related to Investment Activities, NEPC reviewed the following documents listed below.

- SAFPPF Investment Policy Statement
- SAFPPF Board Minutes
- SAFPPF Standards of Conduct
- Texas Pension Review Board MET website
- https://www.ncpers.org/Files/2012_ncpers_best_governance_practices.pdf
- Texas Public Pension Fund peers

Standard of Comparison:

NEPC compared the governance structure of SAFPPF against governance information publicly available on the websites of the Texas Public Fund Pension peers (Appendix A). We also asked our NEPC colleagues for feedback on whether SAFPPF Board governance is consistent with leading and prevailing practice among the dozens of other U.S. public pension funds to whom our consultants advise with an eye towards some key elements of governance such as:

- Roles – clearly defined, separation of duties, authority and responsibility
- Policy – investment policy statement, funding policy, standards of conduct, etc.
- Education – experience, expertise, continuing education
- Operations – Board operations, committee structures, meeting frequency
- Reporting – frequency of reports (e.g., monthly/quarterly), monitoring of investments, etc.

Findings:

The Board of Trustees of the Fund is obligated to administer its pension fund for the exclusive benefit of fire fighters and police officers of the City of San Antonio, Texas, their qualified survivors and dependents. In performance of this obligation, the Board of Trustees is required to administer the Fund in accordance with Article 6243o, Vernon's Texas Civil Statutes, and other applicable state and federal laws and regulations.

According to the SAFPPF IPS, the purpose of the IPS is to assist the Board in effectively supervising, monitoring and evaluating the investment of Fund assets. Accordingly, the Investment Policy Statement:

1. Makes a clear distinction between the responsibilities of the Board and the service providers hired to help implement the Fund's Investment Policy – the investment consultant, the investment managers, and the custodian bank/trustee.

2. Describes the Fund's risk tolerance, as defined by the asset classes that are considered allowable investments and the percentage allocations to each asset class.
3. Sets forth the criteria to be placed on diversification of portfolio investments.
4. Describes the investment practices that apply to the individual portfolios managed by each of the investment managers.
5. Provides rate-of-return objectives and criteria to monitor and evaluate the performance results achieved by investment managers.
6. Establishes effective communication procedures between the Board and the investment managers, investment consultant, and bank custodian/trustee.
7. Creates a formal review process for reviewing the Investment Policy Statement.

To execute the Investment Policy Statement, SAFPPF has established a governance structure that includes a Board of Trustees, which delegates authority to the Committees (investment, legislative, personnel, financial disclosures, etc.), Investment Staff (executive director, chief investment officer, analysts), and to external vendors hired by the Board including Investment Consultants (general and specialty), a Retirement Actuary and a Custodian. Illustration 4.1 below breaks out the roles of each contributor to the governance process. Authority is characterized by Approval, Recommendation and Oversight.

Illustration 4.1

Investment Responsibility	Board of Trustees	Investment Committee	Investment Staff	Consultant
Investment Policy Statement	A	R	R	R
Asset Allocation & Risk Tolerance	A	R	R	R
Investment Structure	A	R	R	R
Investment Guidelines	A	R	O	R
Performance Benchmarks	A	O	O	R
Search, Selection, Termination of Investment Managers	A	R	R	R
Performance evaluation & Monitoring	O	O	O	O
Establish communication procedures between the IC, Investment Staff and Service Providers	O	A	N/A	N/A

A = approval authority, R = provides recommendation, O = provides oversight

The Board of Trustees

The Pension Fund is administered by a nine-member Board of Trustees (the Board), which includes two City Council members, the mayor or his appointee, two police officers, two firefighters, and two retirees. Terms, elections, qualifications of the Trustees are in accordance with Article 6243o, Vernon's Texas Civil Statutes, and other applicable state and federal laws and regulations.

As stated in the IPS, the Board of Trustees shall be responsible for the overall management of the assets of the Fund. The Trustees shall approve the IPS and provide overall direction in the execution of the IPS. The Trustees shall review and approve or disapprove investment recommendations governed by the Board prior to their execution. The Trustees may also review and recommend investment policy changes, deletions, or additions. The Trustees shall review, on an annual basis, investment results in relationship to investment expectations and actuarial assumptions and experience to determine if future changes are needed to either the IPS or the implementation of the IPS.

Qualifications of Board:

Jim Smith (Chairman)
Active Police Trustee
James A. Smith is a Sergeant (Supervisor) with the San Antonio Police Department (SAPD) and has served as Trustee on the San Antonio Fire & Police Pension Fund (SAFPPF) since 2010. For SAPD, he supervises and manages a unit of four detectives and one civilian in the Asset Forfeiture Unit. Before his election to SAFPPF, Smith served as an Executive Board member of the San Antonio Police Officers' Association (SAPOA). He currently also serves as First Vice President on the Board of Trustees for the Texas Association of Public Employee Retirement Systems. Smith has helped the SAFPPF achieve certain markers of excellence. For example, SAFPPF is a leader in funded ratio and amortization of all Texas pension funds with $1 billion or more in assets. At a Pension Review Board Meeting in November of last year, Smith received acknowledgments from Vice Chairman Keith Brainard and affirmation from Chairman Josh McGee about the generally excellent performance of SAFPPF. Smith is a graduate of Kent State University where he graduated in 1987. After graduation he was commissioned into the U.S. Army as a Second Lieutenant, Medical Service Corps officer. Jim remained on active duty until 1992 when he joined the San Antonio Police Department.

Dean R. Pearson (Vice Chairman)
Active Fire Trustee
Dean was first elected in April 2012 to serve as Active Fire Trustee of the Fire and Police Pension Fund and was re-elected in May 2013. He is currently a Fire Engineer in the San Antonio Fire Department. Dean currently serves on the Fund's Investment Committee, Personnel/Audit Committee, and is Chairman of the Disability Committee.

Justin Rodriguez (Mayoral Designee)
Elected Board Member
Born and raised in San Antonio, Justin is a proud lifelong resident of San Antonio's west side. He earned his bachelor's degree from the University of the Incarnate Word and his law degree from the University of Wisconsin-Madison. Justin began his career in public service as a juvenile prosecutor for the Bexar County District Attorney's Office where he worked diligently to assist young offenders in their rehabilitative efforts. Elected to the Board of Trustees of the San Antonio Independent School District in 2004, Justin served in that role for three years before being elected to the San Antonio City Council and representing District 7 for two terms from 2007-2011. Improving the quality of life for residents by enhancing educational outcomes and creating economic opportunities for hardworking families has always been his focus. In 2012, Justin was elected to the Texas House of Representatives. Serving three full terms as State Representative for House District 125, he was re-elected for a fourth term in 2018. During his time in the Legislature, Justin advocated for increased access to and affordability of higher education, voting rights, and accessible and affordable healthcare for all Texans. A strong advocate for San Antonio and Bexar County on the House Appropriations Committee, he sought and secured several leadership roles during his tenure including Deputy Whip for the House Democratic Caucus and was part of the leadership team of the Mexican American Legislative Caucus. On January 4, 2019, Justin was appointed to serve as Bexar County Commissioner for Precinct 2 and is filling the first two years of the unexpired

term of long-time Commissioner Paul Elizondo. For his service, Justin has been recognized as a "40 Under 40" Rising Star by the San Antonio Business Journal and was named one of the "20 Latino Democrats to Watch Over the Next 20 Years" by the Houston Chronicle.

Clayton Perry (Secretary)
Councilman
Clayton Perry was elected to San Antonio's City Council for District 10 in June 2017. Councilman Perry began his journey in Giddings, Texas. His father, Hays Perry owned a plumbing company where the younger Perry worked after school and during summers. After attending Giddings High School, he earned his Bachelor of Science in Building Construction from Texas A&M University in 1979. During his time at Texas A&M, Councilman Perry was a part of the Corps of Cadets in the Fight'n Texas Aggie Band. After receiving his degree, Councilman Perry began his career in the military as an Air Force Civil Engineer. He served almost 21 years and retired from Headquarters, Air Education and Training Command at Randolph Air Force Base as a Lieutenant Colonel in 2000. During this time, Councilman Perry earned his Master's Degree in Aerospace Technology from Embry Riddle. His most memorable accomplishment was in Europe where he programmed, designed, and oversaw construction of the facilities in support of the first Ground Launched Cruise Missile Wing at RAF Greenham Common in England. Councilman Perry has more than 30 years of experience in all aspects of construction including environmental engineering and remediation where he has been responsible for directing entire programs, project management, marketing and business development organizations within the industry. When he was not working on large-scale engineering and construction projects, Councilman Perry was active in his community. He served on his neighborhood association board and as president, Northeast Neighborhood Alliance member, membership secretary and secretary, and as the District 10 representative and chairman on the Building Standards Board, and 2017-2022 Bond Committee.

Adrian Rocha Garcia
Councilwoman
A life-long resident of San Antonio, Adriana Rocha Garcia, Ph.D. was raised in and continues to call Southwest San Antonio home. Dr. Garcia has a passion for working with organizations that help San Antonio's most underrepresented demographics. Raised in a Spanish-speaking household to parents with a first and second grade Mexican education, she became the first in her family with a college degree. Dr. Garcia received her Bachelor of Arts degree from the University of the Incarnate Word in San Antonio, Texas, to stay in town to care for her parents. Upon graduation from Incarnate Word, she was offered a job in the university's Office of Public Relations and completed her Master's Degree from the same university one year later. In 2004, she was in a cohort of 12 students accepted into the University of Texas at Austin's Doctoral Advertising program, where ten years and many miles later, she became one of the first Hispanics to earn a Ph.D. in Advertising from UT's prestigious Moody College of Communication. Dr. Garcia has held various administrative and consulting communications and marketing positions throughout her life, in organizations like SAMMinistries Furniture for A Cause, the San Antonio Hispanic Chamber of Commerce, the City of San Antonio, Southwest ISD, and Project QUEST. Today, Dr. Garcia is molding tomorrow's leaders as an Assistant Marketing Professor at Our Lady of the Lake University, where she teaches marketing in the School of Business and Leadership.

James Foster
Active Police Trustee

Jimmy Foster joined the police department in 1988. He was promoted to Detective in 1995 and is currently assigned to the Robbery Task Force Unit. He is currently serving a second term on the San Antonio Police Officer's Association as an Executive Board Member. Jimmy was currently elected to the San Antonio Fire & Police Pension Fund board, and serves on the Funds Legislative Committee, Investment Committee, and is Chairman of the Property Holding Corporation.

Harry Griffin
Retired Police Trustee
Assistant Chief of Police Harry Griffin retired in 2010 after 34 years of service with the San Antonio Police Department. Additionally, Harry served as a Board Member with the Fire and Police Pension Fund during the last 19 years of his service as a police office. Harry graduated from Texas State University in 1974 with a Bachelor of Science in Law Enforcement and from the 199th FBI National Academy in 1999. He served as a council member for the City of Selma Texas from 1990-2000, a suburb of San Antonio. Harry currently sits on the Board of Directors of the Center for Health Care Services, Bexar County's local mental health authority, and serves as Treasurer. The Center, a governmental entity, employs 800 mental health professionals and serves the 1.5 million persons residing in Bexar County Texas. Additionally, Harry was appointed to the Texas Risk Management Fund, in 2010, and serves on the Fund's Investment Committee. Harry was recently re-elected as the Police Retiree Representative for the San Antonio Fire and Police Pension Fund, to a four-year term beginning June 1, 2015. Harry serves on the Pension Fund's Disability Committee, Property Holding Corporation, and is Chairman of the Investment Committee.

Larry A. Reed
Retired Fire Trustee
Larry Reed is a Retired Fire Department Captain and represents the Retired Firefighters as Trustee on the Fire and Police Pension Fund. He previously served as the Active Firefighter Trustee from 1985-1999 and the Fund's Executive Director from 1999-2003. In addition, Larry was elected by Firefighter Pension Funds across Texas as a Director of the Texas Association of Public Employee Retirement Systems (TEXPERS) from 1998-2005. In 2010, he was again elected to the TEXPERS Board of Directors. He has also served on the Board of Directors of the Generations Community Federal Credit Union for over 20 years. Larry is a 1976 graduate of the University of Texas-San Antonio with a BBA in Finance. Larry currently serves on the Disability Committee, Investment Committee, and is Chairman of the Legislative Committee.

Vance Meade
Active Fire Trustee
Deputy Chief Vance Meade is a thirty-three-year veteran of the San Antonio Fire Dept currently overseeing all Communications, Budget, Wellness, HR, Applicant Processing, Payroll and IT for the department. He was elected in April 2020 to serve as an Active Fire Trustee of the Fire and Police Pension Fund and currently serves on the Fund's Legislative Committee and is Chairman of the Property Holding Corporation.

Structure of Board:
NEPC finds the structural composition of the SAFPPF Board similar to Texas Public Pension Fund peers and fairly consistent with Public Fund Trustee Boards.

Information and Training Available to Board:
Adequate information is available to the Board via readily accessible Board Meeting Agendas and Minutes. The Board is supported by education and training regarding the members' fiduciary responsibility. The 83rd Texas Legislature required the Pension Review Board (PRB) to establish a Minimum Educational Training (MET) Program for trustees and system administrators of Texas public retirement systems. The Core training is available to trustees on-line and is designed to cover the fundamental competencies of public pensions necessary for trustees and system administrators to successfully discharge their duties. The Core training courses are:

Benefits Administration – 45 minutes

Risk Management – 60 minutes

Ethics – 45 minutes

Governance – 45 minutes

Actuarial Matters – 90 minutes

Fiduciary Matters – 60 minutes

Investments – 90 minutes

All trustees must complete 7 credit hours of Core training in their first year and 4 credit hours of continuing education for each following two-year period. Compliance to the above requirements is tracked by the Executive Director.

Delegation of Authority
The Board delegates some responsibility to the Investment Committee, Investment Staff (executive director, chief investment officer, analysts) and external vendors hired by the Board including Consultants, an Actuary and a Custodian.

Investment Committee
The primary role of the Investment Committee is to develop and administer the investment policy. Other responsibilities of the Investment Committee are as follows:
1. To determine the appropriate levels of risk and return for the Fund.
2. To determine, with the assistance of its Investment Consultant, an investment manager structure (including the number and types of investment managers) and to recommend to the full Board the hiring and discharging of investment managers.
3. To determine the investment limitations (if any) that apply to the portfolios managed by investment managers. Although it is the intent of the Investment Committee to afford the investment managers full investment discretion regarding the individual securities they buy and sell, the Investment Committee may establish guidelines and limitations that address the risk levels to be maintained by the investment managers.
4. To monitor and evaluate the performance results achieved by the investment managers.
5. To establish effective communication procedures between the administrative staff, the investment managers, the investment consultant, the bank custodian/trustee, and the Investment Committee.
6. To monitor and control investment expenses.

Chief Investment Officer
The primary role of the Chief Investment Officer (CIO) is to assist the Board in the overall management of the assets of the Fund. Other responsibilities of the CIO are as follows:

1. Assisting the Board in developing and modifying policy objectives and guidelines, including the development of and recommendations on long-term asset allocation and the appropriate mix of investment manager styles and strategies.
2. To provide assistance in manger searches and selection, investment performance calculation and evaluation, and any other analysis associated with the proper execution of the Board's directives.
3. The CIO shall also communicate the decisions of the Board and Investment Committee to the investment managers, bank custodian, actuary, and consultant(s).
4. To provide oversight of the investment consultant(s), investment service providers, and personnel of the administrative staff.

Investment Consultants

SAFPPF retains several professional Investment Consultants (including NEPC, LLC as General Consultant) to assist and advise the Board and Staff in connection with the investment of Fund assets. The primary role of the Investment Consultant, pursuant to its contract with the Fund, is to provide objective, third-party advice, including, but not limited to:

1. Assisting the Board in making well-informed and well-educated decisions regarding the investment of Fund assets.
2. Assisting the Board in the development of investment policy guidelines that reflect the Board's tolerance for risk and rate-of-return objectives.
3. Assisting the Board in the development of an investment manager structure that provides adequate diversification with respect to the number and types of investment managers.
4. Assisting the Board in the identification of appropriate market benchmarks and manager "style groups" against which each investment manager shall be evaluated.
5. Assisting the Board in manager searches and selection of investment managers to implement the Fund's investment policy.
6. Assisting the Board in monitoring each investment manager. This includes the ongoing monitoring of (i) total fund and individual investment manager performance on a quarterly basis; (ii) each investment manager's adherence to its stated investment style, and (iii) organizational developments at each investment manager.
7. To provide timely information, written and/or oral, on investment strategies, instruments, managers and other related issues, as requested by the Board, the Investment Committee, or the CIO.
8. Act as a fiduciary to the Fund.

Retirement Actuary

The Board selects and retains an actuary for forecasting asset and liability growth and the many complex factors included in estimating future pension costs. These factors include, but are not limited to, interest rates, inflation, investment earnings, mortality rates, and employee turnover. The actuary will also assist the Board in setting the discount rate. These actuarial assumptions are reviewed approximately every five years during the actuarial experience study, and they are used as inputs for the asset allocation study.

Custodian

The Board selects the Fund's custodian with the primary function to hold custody of all the assets of the Fund, except for those investments which may be held elsewhere in accordance with applicable law and the investment's requirements. The custodian will also calculate investment performance and benchmark comparisons.

Enhancement Recommendations:
As previously stated in section 1, Analysis of Investment Policy, NEPC recommends adding language to the Roles and Responsibilities section of the IPS, to explicitly define the role of the Executive Director.

Section 5. Review of Investment Manager Selection and Monitoring Process

Activities Completed:
To gain a complete overview of the Fund's Investment Manager Selection and Monitoring Process, NEPC reviewed the following documents.

- Investment Policy Statement
- SAFPPF Standards of Conduct, Financial Disclosure and Conflicts Disclosures
- Government Finance Officers' Association – Selecting Third-Party Investment Professionals for Pension Fund Assets
- Custody and external investment manager statements
- Performance reports from Consultants

Standard of Comparison:
When reviewing SAFPPF's investment manager selection and monitoring process, NEPC was looking for processes that exhibited the following:

- A consistent and comprehensive process which describes the steps for investment selection and monitoring
- Addresses ethics and conflicts of interest that may present themselves
- And a monitoring process that strives to hold investment managers accountable to the agreements they made with the Fund

NEPC also reviewed the recommended resource provided by the Government Finance Officers' Association regarding "Selecting Third-Party Investment Professionals for Pension Fund Assets". While this resource was useful and comprehensive, NEPC recognizes that there is some understandable variability in investment manager selection and monitoring process between asset classes.

Findings:
In general, SAFPPF has thorough policies and processes in place with regards to investment manager selection and monitoring.

SAFPPF's IPS states that the Board shall be responsible for the overall management of the assets of the Fund, approve the IPS, and provide overall direction in the execution of the IPS. The Trustees shall also review and approve or disapprove investment recommendations governed by the Board prior to their execution. The Investment Committee, with the assistance of its Investment Consultants, determines the investment manager structure including the types and number of investment managers and recommends to the full Board the hiring and discharging of investment managers. The Chief Investment Officer (and Staff) assists the Board in developing and modifying policy objectives and guidelines, including the development of long-term asset allocation and the appropriate mix of investment manager styles and strategies, and with manager searches and selection.

The IPS describes the Board's investment philosophy (risk/return objectives, time horizon, etc.) which guides the Board's asset allocation and investment decisions. These philosophy statements place emphasis on making long-term asset allocation and investment decisions that are geared towards meeting the Fund's liabilities by achieving its long-term return goals and diversifying across asset classes and investment managers to maintain an appropriate level of risk to meet these objectives, as well as the management of costs.

Manager Selection Procedures

SAFPPF's IPS states that in selecting investment managers the Board will:

1. Retain "prudent experts" (a bank, insurance company, or investment advisor as defined by the Registered Investment Advisors Act of 1940).
2. Follow a due-diligence process so as to avoid selecting managers on an ad-hoc basis.
3. The due diligence process, at a minimum, will involve analyzing investment manager candidates in terms of certain:
    a. **Qualitative Characteristics**, such as key personnel, investment philosophy, investment strategy, research orientation, decision-making process, and risk controls.
    b. **Quantitative Characteristics**, such as CFA Institute-compliant composite return data, risk-adjusted rates of return (e.g., Sharpe Ratios), and certain portfolio characteristics, such as R2 in relation to an appropriate market index.
    c. **Organizational Factors**, such as type and size of firm, ownership structure, client-servicing capabilities, record of gaining and keeping clients, and fees.
4. Use industry recognized databases for screening purposes and to ensure an unbiased and objective search process.

Public Asset Classes Manager Selection

All publicly traded asset classes (equity and fixed income) are managed through external advisors. Sourcing, or identifying investment managers is a process undertaken by the Investment Committee, CIO and Investment Consultant. In addition to the "Manager Selection Procedures" outlined above, the General Consultant's research process identifies a "Focused Placement List", or "short list", of strategies (managers) that are expected to provide superior investment performance over time.

The four-step process for identifying these strategies include:

1. Universe Screening – Minimum inclusion criteria and screening are used to focus the analysis;
2. Quantitative Scoring – Proprietary quantitative analysis measuring the consistency and quality of alpha-only, net of fees returns;
3. Qualitative Research – Rigorous qualitative analysis of a strategy's key characteristics, focusing on identification of a clear and differentiating investment thesis to develop forward-looking conviction in future performance; and
4. Peer Review – Confirmation through careful peer review of each strategy by senior investment professionals to challenge each investment thesis and raise critical business issues.

The Board and Staff (Executive Director, CIO, investment analysts) also have the authority to include managers, in addition to this "short list" provided by the Consultant. These additions are similarly screened, compared for competitiveness and undergo further due diligence (by the Investment Consultant, CIO and investment analysts) and are ultimately included or excluded from the search based on this analysis. This consolidated list of candidates is presented to the

Investment Committee where a group of finalists is selected for further consideration and due diligence, including on-site trips and evaluations by Investment Committee members and Staff, and presentations to the Investment Committee, Staff, and Consultant(s) in San Antonio. Recommendations are then brought to the full Board for approval or disapproval.

Alternative Asset Classes & Specialty Consultants
The SAFPPF retains Specialty Consultants for Private Equity, Private Debt, Real Assets, Hedge Funds, Real Estate and an Emerging Manager program. In addition to the above, analysis in this category will also focus on different aspects and characteristics of the strategies given the nature of Alternative Assets. Discussions with Staff, and review of documents from prior searches reveal that the selection process is consistent with what is described above.

Investment Manager Monitoring Process
The IPS states that the Investment Committee, CIO and Investment Consultant are responsible for monitoring and evaluating the performance results achieved by the investment managers on a quarterly basis. Within the "Performance Measurement Guidelines" section of the IPS the Board has included a list of "objective standards" as part of the information that may be required to make future decisions to terminate contractual relationships.

Objective Standards

1. Extraordinary Events (Organizational Issues)
   Extraordinary events which may be evaluated prior to a termination decision include such things as--
   a) Ownership changes
   b) Key personnel departures
   c) Significant changes in the investment philosophy or the investment process
   d) Litigation or other regulatory matters
   e) Failure to comply with stated investment guidelines
   f) A change in the Fund's asset allocation

2. Long-Term Performance in Relation to Appropriate Market Index
   Long-term performance standards measure a manager's since-inception performance and a minimum of rolling five-year returns in relation to the market index that the manager is measured against. If a manager fails to generate a return premium in excess of the Performance Objective, then the Board may consider whether to terminate the contract with the manager.

3. Shorter-Term Performance in Relation to Appropriate Style Group and/or Style Benchmark
   Shorter-term performance standards incorporate a time period of at least three years. Each manager usually will be measured against the median return of a peer group of managers with similar investment styles. If a manager fails to generate a return in excess of the median return of the appropriate style group and/or the style benchmark (if applicable), then the Board customarily will consider whether to terminate the contract with the manager.

Performance is measured on an ongoing basis (monthly and quarterly) at the individual manager, asset class, and Fund level by the General Consultant. The Custodian and Specialty Consultants also calculate performance for their respective asset classes. Quarterly results are reviewed through regularly scheduled meetings with the Investment Committee and Staff.

As stated in the IPS under the "Investment Consulting Reporting Requirements" section, the investment consultant is required to provide the Board with periodic investment information for portfolio monitoring purposes. Generally, these are as follows:

Quarterly Requirements

1. A review of the current investment market environment.
2. The Fund's actual asset allocation relative to its target allocation.
3. The Fund's return relative to its Policy portfolio return and other public pension funds.
4. The Fund's risk adjusted returns relative to the Policy portfolio and other public pension funds.
5. Individual asset class performance relative to the benchmark.
6. Individual investment manager returns relative to their stated benchmark.
7. Any reportable events affecting any of the Fund's investment managers.

In addition to the above, at the investment manager level (public market assets), the reports provide returns of a universe of comparable investment strategies which allows for peer group comparisons. For alternative assets such as Private equity, Private Debt, Real Assets, and Real Estate, the focus is more centered on IRRs, time-weighted returns, investment multiples (e.g., total value to paid in capital (TVPI), multiple on invested capital (MOIC), distribution to paid in capital (DPI), etc.). Monthly review calls, and immediate access to the Specialty Consultant's database and research notes provides additional oversight in the Hedge Fund space.

Enhancement Recommendations:

As stated above, the analysis found that in general, SAFPPF has thorough policies and processes in place with regards to investment manager selection and monitoring.

Section 6. Technical Summary

Work Plan

As the general investment consultant for the San Antonio Fire and Police Pension Fund, SAFPPF has engaged us as an independent firm to help the Fund fulfill the requirements of Texas Government Code §802.109 which requires Texas public retirement systems with at least $100 million in assets to complete an Investment Practices and Performance Evaluation, once every 3 years.

The scope of work includes:

- Executive Summary
- Investment Policy Statement Analysis and Compliance
- Asset Allocation Review
- Process for Determining Target Allocations
- Expected Risk & Return Summary
- Appropriateness of Selection and Valuation Methodologies of Alternative and Illiquid Assets
- Consideration and Incorporation of Future Cash Flow and Liquidity Needs
- Review of the Appropriateness of Investment Fees and Commissions Paid
- Review of Governance Processes Related to Investment Activities
- Review of Investment Manager Selection and Monitoring Process
- Technical Summary

Company Overview
NEPC has been providing investment consulting services since 1986. We are one of the largest independent investment consulting firms in the industry. We advise 376 retainer clients with $1.1 trillion in assets[1]. Today, the firm has formal offices in Atlanta, Boston, Charlotte, Chicago, Detroit, Las Vegas, Portland and San Francisco. Our growth is attributed to the high quality results our clients have achieved and our high service model. We have a dedicated public fund team that advises 69 public funds representing $633 billion in assets. NEPC is a Limited Liability Company (LLC).

Since inception in 1986, NEPC has been 100% employee-owned and is therefore neither an affiliate nor a subsidiary of any organization. NEPC's equity plan is designed to ensure the continued stability of our professional staff by allowing future employees to share in the profits of the company and in the long-term appreciation of its equity. Today, ownership is shared among 41 Partners; and no single Partner owns more than 8% of the firm. Individual ownership percentages are not disclosed.

NEPC receives 100% of its revenue exclusively from providing advisory consulting and discretionary investment services to our clients, with approximately 85% of our revenue coming from traditional, advisory consulting services and the remaining 15% coming from discretionary investment services. NEPC does not have any conflicts of interest with SAFPPF.

Ownership of NEPC, LLC

Name of NEPC, LLC Owner	Owner Since
Richard M. Charlton, *Chairman Emeritus*	1986
Michael P. Manning, CFA, CAIA, *Managing Partner*	1998
Lenia Ascenso, *Partner*	2019
Samuel M. Austin, III, *Partner*	2017
William Y. Bogle, Partner, *Chief Compliance Officer*	1993
Ross A. Bremen, CFA, *Partner*	2008
Timothy R. Bruce, *Partner, Director of Portfolio Construction*	2014
Michael D. Cairns, CEBS, *Partner*	2011
Steven F. Charlton, CFA, *Director of Consulting Services*	2001
Kristen Colvin, CAIA, *Partner*	2019
KC Connors, CFA, CAIA, *Partner*	2010
Brian S. Donoghue, *Partner*	2013
John M. Elliot, *Partner*	2006
Sean W. B. Gill, CFA, CAIA, *Partner, Director of Private Markets Research*	2006
Kristi Hanson, CFA, *Partner, Director of Taxable Research*	2017
Karen Harding, CFA, *Partner*	2017
Rhett Humphreys, CFA, *Partner*	2006
Paul R. Kenney, Jr., CFA, *Partner*	2005
Christopher J. Klapinsky, CFA, *Partner, Director of Portfolio Strategy*	2008
John R. Krimmel, CPA, CFA, *Partner*	2012
Catherine M. Konicki, CFA, CAIA, *Partner*	1993
Christopher A. Levell, ASA, CFA, CAIA, *Partner*	2007
Kevin M. Leonard, *Partner*	2011

Christine A. Loughlin, CFA, CAIA, *Partner*	2007
Allan C. Martin, *Partner*	2005
Timothy F. McCusker, CAIA, CFA, FSA, *Chief Investment Officer*	2011
David W. Moore, *Partner*	2010
Douglas W. Moseley, *Partner*	2007
Phillip Nelson, CFA, *Partner, Director of Asset Allocation*	2018
Kristine Pelletier, *Partner*	2019
Scott F. Perry, CAIA, *Partner*	2012
James E. Reichert, CFA, *Partner*	2013
Kristin M. Reynolds, CFA, CAIA, *Partner*	2012
Brian Roberts, CAIA, *Partner*	2018
Jay E. Roney, CTP, *Partner*	2007
Sarah Samuels, *Partner, Director of Public Markets Research*	2019
Neil N. Sheth, *Partner, Director of Alternatives Research*	2012
Bradley S. Smith, CFA, CEBS, *Partner*	2012
Carolyn Smith, *Partner*	2008
Michael P. Sullivan, *Partner*	2017
Craig A. Svendsen, CFA, *Partner*	2009

Experience of Review Team that Prepared Evaluation Report for SAFPPF

Keith Stronkowsky
Senior Consultant, Lead Consultant for SAFPPF

Keith's consulting responsibilities include servicing public pension funds, endowments and foundations. He assists clients with overall plan design, including investment policy development and asset allocation, manager selection and performance monitoring, as well as asset and liability studies in conjunction with risk budgeting. He is also a member of the GAA Advisory Group.

Prior to joining NEPC in 2008, Keith was an Officer in the PrivateEdge Group at State Street Corporation where he was responsible for providing private equity consulting and performance reporting for institutional investors. Prior to working at State Street Corporation, Keith was an Associate at PanAgora Asset Management in the fixed income and tactical asset allocation departments.

Keith received an M.B.A. from Case Western Reserve University and a B.S. from Springfield College. Keith also holds the Chartered Financial Analyst designation.

Rhett Humphreys
Partner, Secondary Consultant for SAFPPF

Rhett started his investment career in 1996 and joined NEPC in 1997. His consulting responsibilities and background include servicing public pension plans, corporate pension plans, endowments, foundations, health-care entities, and Taft-Hartley pension funds. He works out of NEPC's Atlanta office.

While at NEPC, Rhett has served as a Research Analyst, Consultant, Practice Team Leader, and Management Group Leader. He led NEPC's national Public Fund Practice Team from March 2011 through August 2013, helping to ensure a singular focus by the team on issues related to US public funds. In September 2013, Rhett joined the NEPC Management Group and assumed leadership of the firm's Public Fund/Taft-Hartley Practice Group. As a 'player-coach,' his consulting responsibilities include state-wide funds and local municipalities.
Prior to joining NEPC in 1997, Rhett worked in Portfolio Accounting with State Street Bank and Trust Company with over $1.6 billion of client assets under his responsibility. Prior to that, he worked in the Investment Division of the Louisiana State Employees' Retirement System (LASERS) where he reported to the Chief Investment Officer. Before that, he worked as a Policy Analyst Intern for the Public Affairs Research Council of Louisiana, where his research was published. He is a veteran of the United States Army.

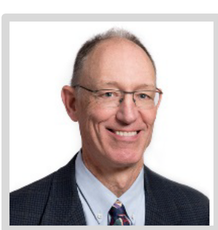
Rhett completed three degrees from Louisiana State University; he earned a B.A. in Sociology, a Master of Science in Finance, and a Master of Public Administration. While at LSU, he was admitted to Beta Gamma Sigma, named Who's Who Among American College and University Students, elected as the Graduate Student Association President, and served on the Chancellor's Strategic Planning Committee.

Rhett has earned the right to use the CFA designation. In January 2009, he was nominated as the Public Plan Consultant of the Year by Money Management Letter.

John R. Krimmel, CPA, CFA
Partner

John's investment career began in 1990, and he joined NEPC in 2010. At NEPC, John assists clients with the development of investment policies and objectives, the evaluation and selection of investment managers, and the measurement and analysis of investment performance. He is also a member of the Manager Diversity Program Advisory Committee. Prior to NEPC, John was a Senior Consultant and Senior Vice President at Callan Associates, with broad responsibility in all facets of client management including public, corporate and endowment and foundation clientele. While at Callan, John was a member of its Manager Research Committee and Alternatives Review Committee.

Prior to Callan, John was the Chief Investment Officer at the Kentucky Retirement System and at the State Universities Retirement System of Illinois. Early in his career he worked in Public Accounting at Deloitte and Touche, LLP. He served in the U.S. Coast Guard and was awarded a Commandant of the Coast Guard's Letter of Commendation. John has an M.S. in Accountancy from the University of Illinois and a B.S. in Accounting from Millikin University. John is a Certified Public Accountant and holds the Chartered Financial Analyst designation.



William Y. Bogle, IV
Partner, Chief Compliance Officer

Bill joined NEPC at its inception in January 1986. Today he is a Partner in the firm with two areas of responsibility: Compliance and Operational Due Diligence. He is a member of the firm's Management Group and Alternative Asset Committee.

As NEPC's Chief Compliance Officer, Bill is charged with monitoring external compliance requirements and developing internal control procedures. Responsibilities include interaction with regulators, client contracts, our Code of Ethics, confidentiality agreements and our Privacy Policy, employee personal trading, and gift/entertainment reporting.

Regarding Operational Due Diligence, Bill manages a team that evaluates hedge fund operations. This requires in-depth analysis of hedge fund managers to assess all facets of their trading, risk management, compliance and back office procedures. He meets with managers on a regular basis and attends industry conferences sponsored by organizations such as the Boston Hedge Fund Group and the Hedge Fund Business Operations Association.

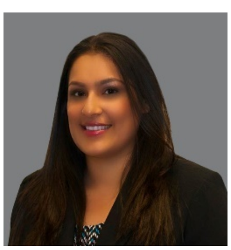
For many years Bill managed NEPC's own internal operations, including our performance measurement and client reporting process. This entailed monitoring all the investment managers and custodian banks employed by our clients and managing production of our quarterly performance reports. He was our liaison with State Street (formerly Deutsche Bank and Bankers Trust Company) for the ICC and was the chairman of the ICC Product Development Committee. For three years Bill assisted with CIPM program development as a consultant to the CFA Institute. Prior to joining NEPC, he worked as an Analyst for Berents Capital Management in Boston and for the Hartford Insurance Group. Bill received his M.B.A. in Finance from Babson College and his B.A. in Mathematics from Bates College.

Kevin Lau-Hansen
Senior Operational Due Diligence Analyst

Kevin joined NEPC in 2014 as an Analyst in NEPC's Operational Due Diligence group. At NEPC, Kevin assists with in-depth analysis of hedge funds including all aspects of a fund's infrastructure, trading and reconciliation, risk management, compliance, and management.

Prior to NEPC, Kevin was an Associate at Saigon Asset Management in Vietnam. In this capacity, he coordinated all aspects of Investor Relations for a $90mn alternative asset manager, including strategy and special projects.

Kevin earned his B.A. in International Relations at Connecticut College. He is currently pursuing the CFA (Chartered Financial Analyst) designation.



Shalini Brown
Senior Client Specialist

Shalini works with the Taft-Hartley and Public Fund consulting groups at NEPC on various technical projects such as manager searches, asset allocation, and other client specific initiatives. Shalini started at NEPC as an Analyst in 2010. Prior to joining NEPC in 2010, Shalini worked as an Equity Research Analyst at RBC Capital Markets. As a Research Analyst, Shalini was responsible for providing qualitative and quantitative market research and statistical analysis for clients. Prior to RBC Capital Markets, she worked as an Research Analyst for Prudential Equity Group where she developed strategic models to monitor and evaluate commodities and economic trends.

Shalini earned her B.A. in Business Administration from Goizueta Business School at Emory

University. She is pursuing the Chartered Alternative Investments Analyst (CAIA) designation.

Firm Qualifications

NEPC, LLC ("NEPC") has been providing investment consulting services since 1986. NEPC was founded on three main principles: strive to maintain independence, provide proactive counsel in an attempt to help our clients exceed their goals and objectives, and service our clients with seasoned professionals.

The commitment to our clients and guiding principles remains intact, recognizing that our efforts can enhance benefits for the millions of beneficiaries in our care. Our focus has led to favorable client satisfaction ratings relative to our nine largest competitors.

NEPC is one of the largest independent investment consulting firms in the industry. We have 292 employees and advise 376 retainer clients with $1.1 trillion in assets[1]. Our growth is attributed to the high quality results our clients have achieved and our high service model.

We have a dedicated public fund team that advises 69 public funds representing $633 billion in assets[2]. Our dedicated Public Fund Consulting Team has 15 Consultants and 7 Consulting Analysts nationally, with an average of 21 years of experience working with, and assisting, public fund clients with their unique challenges. This team has deep knowledge of state regulations, asset allocation, asset liability hedging as well as a proactive strategic approach, which understands the nuances specific to the public fund marketplace.

NEPC and our clients are award winning. NEPC's public fund clients have received numerous recognitions/awards over the years, including when two public fund clients won CIO's Industry Innovation Awards in 2016, when three public fund clients won Institutional Investor's Investor Intelligence Awards in 2016, when ten public fund clients were named on Trusted Insight's Top 30 Pension Fund Chief Investment Officers List in 2016, when one public fund client won two of CIO's Industry Innovation Awards in 2015, when three public fund clients were named on CIO Magazine's Power 100 List in 2015, and when three public fund clients won Institutional Investor's Investor Intelligence Awards in 2015.

[1] As of 6/30/2019, includes 59 clients with discretionary assets of $27.9 billion.
[2] As of 6/30/2019

Appendix A
SAFPPF Texas Public Fund Peers

- City of Austin Employees' Retirement System
  https://www.coaers.org/

- Austin Firefighters Relief & Retirement Fund
  https://www.afrs.org/

- Austin Police Retirement System
  https://www.ausprs.org/

- Dallas Police & Fire Pension System and Benefits
  https://www.dpfp.org/

- El Paso Fireman & Policemen's Pension Fund
  https://www.elpasofireandpolice.org/

- Fort Worth Employees Retirement Fund
  https://www.fwretirement.org/

- Houston Firefighters' Relief and Retirement Fund
  https://www.hfrrf.org/

- Houston Police Officers' Pension System
  https://www.hpops.org/

- Houston Municipal Employees Pension System
  http://www.hmeps.org/