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DATE: June 6, 2018

TO: Board of Retirement

FROM: Donald C. Kendig, CPA,
Retirement Administrator

**SUBJECT: Consideration of Board of Supervisors Letter Dated April 17, 2018 –
APPROPRIATE ACTION**

Recommended Action

1. Receive and file the Board of Supervisors letter dated April 17, 2018 with gratitude for the Fresno County Board of Supervisors expressing their position on our investment strategy and sharing their understanding of our investment consulting relationship with Verus and GFOA best practices.

Alternative Actions

1. Receive and file the Board of Supervisors letter dated April 17, 2018; and,
2. Issue a formal response in a written letter.

Fiscal and Financial Impacts

There are no financial impacts to any of the above actions. Each action comes with a different level of acknowledgement and staff effort.

Background

The two boards held a joint meeting on March 22, 2018 where a top level presentation on 1) FCERA's investment policy, currently designed to take less risk than the average plan; 2) FCERA's Risk Tolerance and factors that drive it; 3) FCERA's peers' balance sheets, liabilities, revenue sources, pension contribution levels, and demographics; and, 4) the impact of drawdowns on contributions. This presentation was given in the context of FCERA's asset liability study whereby it would be considering potential asset allocation strategies with varying degrees of risk. The joint meeting was an opportunity to educate both boards on these factors and to solicit the County's position on investment options and various levels of risk. It was a successful meeting.

Executive Summary

No formal, written response is requested or necessary. We are public entities and accepting their letter publicly, with gratitude, should be sufficient. The discussion that follows responds to their positions and understandings, and if desired by the Board, makes up the substantive contents of a formal written response in letterform, if so desired.

First and foremost, the Board of Retirement, and FCERA's staff and investment consultant, thank the Board of Supervisors (BoS) for communicating their position on FCERA's investment strategy. It is very helpful to explicitly know what our sponsors desire.

Second, FCERA would like to assure the BoS that it has received, heard, and understands its position on FCERA's investment strategy and that FCERA knows and follows GFOA best practices for its financial services.

Discussion

Discussion of the specific contents of the letter follows:

Position

1. FCERA acknowledges that the BoS would like to see our investment and risk more in line with other 1937 Act county pension systems. Our goal is always to be in the top quartile, if not the top decile (10%). The goal of limiting plan sponsor drawdowns is not always mutually exclusive. Had the market cycles continued to match what was experienced in 2008, we might have done both. FCERA acknowledges that the BoS favors more risk taking, provided it is aimed at achieving the "moving target" of top quartile and top decile returns and it comes with the risk of larger drawdowns. FCERA would like the BoS to be aware that it will not necessarily be able to, or desire to, create a portfolio that is a composite of the 19 peers in the 37 Act, but can endeavor to create a portfolio with similar, or better, risk return characteristics based on the forward looking market assumptions available to us today. Also, more risk taking going forward could result in bottom quartile performance, if the market declines and other plans take a lower relative risk taking stance.
2. FCERA acknowledges that the BoS would like to see our allocation to Equities increased, understanding that this creates a potential for larger drawdowns and increased volatility.
3. FCERA acknowledges that there are differences between the actuary's 30-year earnings expectations and Verus' 10-year earnings expectations. The actuary provided FCERA with a 58% confidence level that it would achieve a 7% assumed earnings based on our current asset allocation (found on page 14 of its most recent economic experience study, excerpts attached) over the next 30 years. Given the difference in time periods, closely aligning the two are not possible. One recommendation that actuaries drive home again-and-again is to, first determine a satisfactory level of risk taking by, and volatility of, a plan, utilizing a consultant's 10-year forecast, and then allow the actuary to recommend the earnings assumption that results. Actuaries caution against doing this backwards, attempting to find an asset allocation that is targeted at a predetermined assumption rate. This can cause a plan to "overreach" for return and harm its fiscal viability... think outsized drawdowns from outsized volatility. Given that short-term expectations are lower than long-term expectations at this time, the BoS desire to match the assumed rate of return, based on shorter-term expectations, could cause an allocation that takes on more risk/volatility than is necessary to achieve the current assumed rate of return of 7.0% over the next 30 years. While overshooting this target would result in a very desirable excess, it increases the chances of further deficiency.

As always, the Board of Retirement will balance the desires of its sponsors with the expectations of the markets and the overarching fiduciary responsibility to provide a fiscally sound plan.

Understanding

In regards to the Government Financial Officers Association (GFOA) best practices and our current consulting relationship, the following information should be helpful in providing a complete understanding. The GFOA, founded in 1906, represents public finance officials throughout the United States and Canada. The association's more than 19,300 members are federal, state/provincial, and local finance officials deeply involved in planning, financing, and implementing thousands of governmental operations in each of their jurisdictions. GFOA's mission is to promote excellence in state and local government financial management. GFOA has accepted the leadership challenge of public finance. To meet the many needs of its members, the organization provides best practice guidance, consulting, networking opportunities, publications including books, e-books, and periodicals, recognition programs, research, and training opportunities for those in the profession.

FCERA is a member of the GFOA and sends members of its staff to annual training and other programs. FCERA also participates in and has garnered, for over 20 years, recognition in the GFOA's Popular and Comprehensive Annual Financial Reporting programs.

The standards and best practices pointed out by the BoS are not new to FCERA. The GFOA issues best practice advisories in nine (9) major topics that include a topic for "Pension and Benefit Administration," in addition to "Procurement Practices" found under "Financial Management". The GFOA provides a wealth of guidance and invites all public officials to review it (<http://www.gfoa.org/best-practices>). (Expanded listing attached.)

Under Pension and Benefit Administration, Understanding Pension Fund Investment Risk, references an excellent report endorsed by the GFOA covering the many risks FCERA and its consultant consider when determining investment strategies (http://www.nctr.org/pdf/address_risk.pdf) "Statements of Key Investment Risks and Common Practices to Address Those Risks" (attached).

Back to the "Procurement of Financial Services Best Practice," FCERA acknowledges it and knows it. The simple fact that Verus (previously Wurts and Associates) has been advising FCERA for the last 15 years does not mean no RFPs have been contemplated or issued. A brief chronological:

May 8, 2002 – Under the minutes of the April 3, 2002 Committee Reports Section, Board member Peterson reported that several Consultant [Responses] had been received for the replacement of Pension Consulting Alliance.

June 5, 2002 – Under the minutes of the May 8, 2002 Committee Reports Section, Board member Peterson reported that investment consultant interviews have been set for May 28, 2002.

May 28, 2002 – No records easily found for the meeting with consultant interviews.

July 7, 2002 – Under the minutes of the June 5, 2002 Committee Reports Section, Chairperson Papaleo stated that a special retirement board meeting will be held after the Consultant interviews on June 19, 2002 to discuss the retirement administrator position.

June 19, 2002 – No records easily found for the meeting with consultant interviews.

January 1, 2005 – A first amendment to agreement was found effective January 1, 2005, indicating that Wurts entered into an agreement July 1, 2002. Staff could not locate that original contract performing a server search on “*Wurts*”.

May 7, 2008 – An RFP was approved by FCERA for Investment Consultant.

- [http://www2.co.fresno.ca.us/9200/attachments/agendas/2008/050708/Item 25 050708 RFP for Investment Consultant Services Memo.pdf](http://www2.co.fresno.ca.us/9200/attachments/agendas/2008/050708/Item%2025%20050708%20RFP%20for%20Investment%20Consultant%20Services%20Memo.pdf)
- [http://www2.co.fresno.ca.us/9200/attachments/agendas/2008/050708/Item 25 050708 Investment Consultant RFP.pdf](http://www2.co.fresno.ca.us/9200/attachments/agendas/2008/050708/Item%2025%20050708%20Investment%20Consultant%20RFP.pdf)

September 17, 2008 – Received presentations from Mercer, NEPC, and Wurts and received 6 proposals total. A motion was made by Chair Jolly, seconded by Trustee Hackett, to direct Administration to retain Wurts and to work on a contract that excludes travel expenses. Staff will be providing the contract and an analysis at the June 20, 2018 meeting, as it remains in effect.

- [http://www2.co.fresno.ca.us/9200/attachments/agendas/2008/091708%20Regular/Item 11 091708 Investment Consultant Memo.pdf](http://www2.co.fresno.ca.us/9200/attachments/agendas/2008/091708%20Regular/Item%2011%20091708%20Investment%20Consultant%20Memo.pdf)
- [http://www2.co.fresno.ca.us/9200/attachments/agendas/2008/091708%20Regular/Item 11 091708 Summary of Responses.xls](http://www2.co.fresno.ca.us/9200/attachments/agendas/2008/091708%20Regular/Item%2011%20091708%20Summary%20of%20Responses.xls)
- [http://www2.co.fresno.ca.us/9200/attachments/agendas/2008/091708%20Regular/Item 11 091708 Consultant Assessment.xls](http://www2.co.fresno.ca.us/9200/attachments/agendas/2008/091708%20Regular/Item%2011%20091708%20Consultant%20Assessment.xls)
- <http://www2.co.fresno.ca.us/9200/attachments/Minutes/2008/091708/Item%2004%200100108%20091708%20Agenda%20Minutes.pdf>

July 19, 2017 – Staff proposed the engagement of Cortex Applied research to aide in the conduct of a request for proposal for non-discretionary services. A motion was made by trustee cade, seconded by trustee Gomez to continue the consideration of the general investment consultant search until after the asset/liability study is complete. The Board further directed Staff to review the current Verus contract and bring it back for further consideration and to survey the SACRS Administrators on their RFP and Contracting practices for General Investment Consultant and other key service providers. Staff has completed the survey and will be presenting the findings and a review of Verus’ contract when the discussion is brought back for the RFP.

- <http://www2.co.fresno.ca.us/9200/Attachments/Agendas/2017/20170719/20170719-6B-RFP4GeneralConsultant-Compiled.pdf>
- <http://www2.co.fresno.ca.us/9200/attachments/agendas/2017/20170802/20170802-5A-20170719RegularMeetingMinutes.pdf>

It is also important to note that FCERA has incorporated the GFOA's best practice recommendation into its Due Diligence Policy

(<http://www.fcera.org/Attachments/policies/20180221DueDiligencePolicy.pdf>)

the most pertinent part stating under III. 2) e):

e) The Board believes periodically reviewing its contracts with primary service providers represents good fiduciary practice. The Board further recognizes the issuing of a Request for Proposal (RFP) on a required specified frequency, regardless of the circumstances, may not represent an efficient use of FCERA resources, and may have other unintended consequences. Accordingly, for each of the primary service providers listed below, contracts will be issued for a triennial period with, at the Board's discretion, two additional one-year periods may be issued. The Retirement Administrator will, at least every five years, provide the Board with a recommendation as to whether FCERA should formally review the contracts in question by issuing a RFP, or by initiating other appropriate forms of inquiry:

- i. Actuary,
- ii. General Investment Consultant,
- iii. External legal counsel(s),
- iv. Custodian,
- v. Financial auditor.

Staff hopes that the above information provides a good history of the consultant relationship.

Attachments

1. Board of Supervisors Letter dated April 17, 2018
2. Excerpted pages from Segal's July 1, 2012 through June 30, 2015 Actuarial Experience Study-Economic Assumptions for June 30, 2016 Actuarial Valuation (pages 8-18)
3. Statements of Key Investment Risks and Common Practices to Address Those Risks Report
4. Best Practices Advisory List Expanded for Financial Management and Pension and Benefit Administration
5. Procurement of Financial Services Best Practice



County of Fresno

BOARD OF SUPERVISORS

Chairman
Sal Quintero
District Three

Vice-Chairman
Andreas Borgeas
District Two

Brian Pacheco
District One

Buddy Mendes
District Four

Nathan Magsig
District Five

Bernice E. Seidel
Clerk

April 17, 2018

Fresno County Employees' Retirement Association Board Members
7772 N. Palm Ave.
Fresno, CA 93711

Dear Members of the Retirement Board:

The Fresno County Board of Supervisors (BOS) would like to take this opportunity to share its position on the FCERA investment strategy:

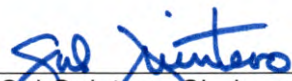
- 1) The BOS would like to see investments and risks more in line with other 1937 Act county pension systems. The overall investment goal should be for the fund to generate a rate of return that is as close to the 25 percentile of all pension plans in the United States over a 5 to 10 year horizon. The current investment strategy has a goal to limit the drawdowns to the plan sponsor to a minimum. The current rate of return at the low end of the pension universe is achieving the opposite goal. It is risky to be an outlier.
- 2) Investments in Equities should increase. Historically equities have provided the greatest return on investment over the life of pension plans.
- 3) The actuary assumes a 7% rate of return yet the FCERA board's current investment strategy reflects an assumed rate of return much lower. The investment strategy assumed rate of return and discount rate need to be more closely aligned.

It is our understanding that the consultant overseeing the investment managers performance and developing the fund's investments allocation has been under contract for over 15 years. In addition, it is also our understanding that the Fund's actuary has been under contract for close to 10 years. The Government Finance Officers Association (GFOA) recommends that governments review their financial services contracts every five years and use a competitive process for the procurement of financial services. A competitive procurement process can provide an opportunity for the government to obtain market competitive rates and negotiate preferable terms and conditions and/or service enhancements along with a possible new perspective that a new vendor may provide. The County of Fresno complies with this recommendation by performing Request for Proposals (RFPs) every five years. New contracts for services typically are for 3 years with two 1-year extensions with the understanding that an RFP will be issued at the end of the 5-year period.

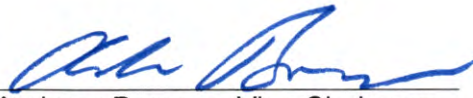
Thank you for your consideration.

Sincerely,

Fresno County Board of Supervisors



Sal Quintero, Chairman
District Three



Andreas Borgeas, Vice-Chairman
District Two



Brian Pacheco, Supervisor
District One



Ernest Buddy Mendes, Supervisor
District Four



Nathan Magsig, Supervisor
District Five

B. INVESTMENT RETURN

The investment return assumption is comprised of two primary components, inflation and real rate of investment return, with adjustments for expenses and risk.

Real Rate of Investment Return

This component represents the portfolio's incremental investment market returns over inflation. Theory has it that as an investor takes a greater investment risk, the return on the investment is expected to also be greater, at least in the long run. This additional return is expected to vary by asset class and empirical data supports that expectation. For that reason, the real rate of return assumptions are developed by asset class. Therefore, the real rate of return assumption for a retirement association's portfolio will vary with the Board's asset allocation among asset classes.

Following is FCERA's current target asset allocation and the assumed real rate of return assumptions by asset class. The first column of real rate of return assumptions are determined by reducing Verus' total or "nominal" 2016 return assumptions by their assumed 2.00% inflation rate. The second column of returns (except for Infrastructure, Hedge Fund, Private Credit and Private Equity) represents the average of a sample of real rate of return assumptions, where each firm's nominal returns have been reduced by that firm's assumed inflation rate. The sample includes the expected annual real rates of return provided to us by Verus and by eight other investment advisory firms retained by Segal's California public sector retirement clients. We believe these averages are a reasonable forecast of long term future market returns.¹

¹ Note that, just as for the inflation assumption, in general the time horizon used by the investment consultants in determining the real rate of return assumptions is shorter than the time horizon we use for the actuarial valuation.

**FCERA’s Target Asset Allocation and Assumed Arithmetic Real Rate of Return
Assumptions by Asset Class and for the Portfolio**

<u>Asset Class</u>	<u>Percentage of Portfolio</u>	<u>Verus’ Assumed Real Rate of Return⁽¹⁾</u>	<u>Average Real Rate of Return from a Sample of Consultants to Segal’s California Public Sector Clients⁽²⁾</u>
Large Cap U.S. Equity	14%	5.00%	5.80%
Small Cap U.S. Equity	3%	5.00%	6.52%
Developed International Equity	12%	8.70%	6.89%
Emerging Markets Equity	7%	11.60%	8.88%
U.S. Core Fixed Income	5%	1.30%	0.76%
High Yield Fixed Income	5%	5.60%	3.55%
Global Bonds	7%	0.90%	0.41%
Bank Loans	5%	2.50%	2.34%
TIPS	4%	0.90%	0.41%
Emerging Market Debt	5%	5.60%	4.52%
Real Estate	5%	3.80%	4.48%
Commodities	3%	3.60%	4.14%
Infrastructure	3%	3.80%	3.80% ⁽³⁾
Hedge Funds	8%	4.40%	4.40% ⁽³⁾
Private Credit	8%	7.70%	7.70% ⁽³⁾
Private Equity	<u>6%</u>	<u>9.00%</u>	<u>9.00%</u> ⁽³⁾
Total Portfolio	100%	5.48%	5.03%

⁽¹⁾ Derived by reducing Verus’ total rate of return assumptions by their assumed 2.00% inflation rate.

⁽²⁾ These are based on the projected arithmetic real returns provided by the investment advisory firms serving the county retirement associations of Fresno, Sonoma, Alameda, Contra Costa, Mendocino, Ventura, the LA City Employees’ Retirement System, the East Bay Municipal Utility District Retirement Plan and the LA Fire & Police Pensions. These return assumptions are gross of any applicable investment expenses.

⁽³⁾ For these asset classes, the Verus’ assumption is applied in lieu of the average because there is a larger disparity in returns for these asset classes among firms surveyed and because using Verus’ assumption should more closely reflect the underlying investments made specifically for FCERA.

The above are representative of “indexed” returns and do not include any additional returns (“alpha”) from active management. This is consistent with the Actuarial Standard of Practice (ASOP) No. 27, Section 3.8.3.d, which states:

“Investment Manager Performance - Anticipating superior (or inferior) investment manager performance may be unduly optimistic (pessimistic). The actuary should not assume that superior or inferior returns will be achieved, net of investment expenses, from an active

investment management strategy compared to a passive investment management strategy unless the actuary believe, based on relevant supporting data, that such superior or inferior returns represent a reasonable expectation over the measurement period.”

The following are some observations about the returns provided above:

1. The investment consultants to our California public sector clients have each provided us with their expected real rates of return for each asset class, over various future periods of time. However, in general, the returns available from investment consultants are projected over time periods shorter than the duration of a retirement plan’s liabilities.
2. Using a sample average of expected real rates of return allows FCERA’s investment return assumption to reflect a broader range of capital market information and should help reduce year to year volatility in FCERA’s investment return assumption.
3. Therefore, we recommend that the 5.03% portfolio real rate of return be used to determine FCERA’s investment return assumption. This is 0.20% lower than the return that was used three years ago in the full review to prepare the recommended investment return assumption for the June 30, 2013 valuation. The difference is due to changes in FCERA’s target asset allocation (-0.14%), changes in the real rate of return assumptions provided to us by the investment advisory firms (-0.22%) and the effect of the interaction between those two changes² (0.16%).

For funding purposes, the real rate of return assumption for the portfolio needs to be adjusted for investment expenses expected to be paid from investment income. As noted earlier in this report, FCERA has applied a new stand-alone administrative expenses assumption and used that in the development of employer and member contributions starting with the June 30, 2014 valuation so that payment of those expenses would not result in a reduction in the net income available from investment. (The recommended administrative expenses assumption can be found in Section III.C of this report.)

² This includes the joint effect of the changes in FCERA’s target asset allocation and the changes in the average real rate of return assumptions for each asset category as provided to us by the investment advisory firms.

Investment Expenses

The following table provides the investment expenses in relation to the actuarial value of assets for the five years ending June 30, 2015.

Investment Expenses as a Percentage of Actuarial Value of Assets
(All dollars in 000's)

Fiscal Year Ended	Actuarial Value of Assets ⁽¹⁾	Investment Expenses ⁽²⁾	Investment %
6/30/2011	\$3,151,541	\$14,934	0.47
6/30/2012	3,333,856	14,817	0.44
6/30/2013	3,539,367	15,154	0.43
6/30/2014	3,828,862	15,795	0.41
6/30/2015	4,093,377	16,374	<u>0.40</u>
		Average	0.43

⁽¹⁾ *As of the beginning of the plan year.*

⁽²⁾ *Excludes securities lending expenses. Because we do not assume any additional net return for this program, we effectively assume that any securities lending expenses will be offset by related income.*

The average investment expenses percentage over this five-year period is 0.43% of the actuarial value of assets. Based on this experience, we believe a future expense assumption of 0.45% is reasonable.

Note related to investment expenses paid to active managers – As cited above under Section 3.8.3.d of ASOP No. 27, the effect of an active investment management strategy should be considered “net of investment expenses...unless the actuary believes, based on relevant data, that such superior or inferior returns represent a reasonable expectation over the measurement period.”

In our prior studies, we have not taken into account whether some or all of the investment expenses paid to active managers might have been offset by additional returns (“alpha”) earned by that active management. In this study, we have developed one possible measure of “alpha” during the last several years as part of a discussion in a later section entitled “Alternative Investment Return Assumption”. However, at this point in our discussion, we will continue to use the current approach of treating any “alpha” that may be identified as an increase in the risk adjustment and corresponding confidence level in developing the investment return assumption rather than as an offset to any related active management expenses.³

³ As noted earlier, Actuarial Standard of Practice (ASOP) No. 27, Section 3.8.3.d states “Investment Manager Performance - Anticipating superior (or inferior) investment manager performance may be unduly optimistic (pessimistic). The actuary should not assume that superior or inferior returns will be achieved, **net of investment expenses**, from an active investment management strategy compared to a passive investment management strategy unless the actuary believe, based on relevant supporting data, that such superior or inferior returns represent a reasonable expectation over the measurement period.” (emphasis added). We believe this means that assuming only enough superior return to cover related investment expenses would not require the relevant supporting data referenced in ASOP No. 27.

Risk Adjustment

The real rate of return assumption for the portfolio is adjusted to reflect the potential risk of shortfalls in the return assumptions. FCERA's asset allocation determines this portfolio risk, since risk levels are driven by the variability of returns for the various asset classes and the correlation of returns among those asset classes. This portfolio risk is incorporated into the real rate of return assumption through a risk adjustment.

The purpose of the risk adjustment (as measured by the corresponding confidence level) is to increase the likelihood of achieving the actuarial investment return assumption in the long term. The 5.03% expected real rate of return developed earlier in this report was based on expected mean or average arithmetic returns. This means there is a 50% chance of the actual return in each year being at least as great as the average (assuming a symmetrical distribution of future returns). The risk adjustment is intended to increase that probability somewhat above the 50% level. This is consistent with our experience that retirement plan fiduciaries would generally prefer that returns exceed the assumed rate more often than not. Note that, based on the investment return assumptions recently adopted by systems that have been analyzed under this model, we observe a confidence level generally in the range of 51% to 55%.

Three years ago in the last full review of the economic assumptions, the Board adopted an investment return assumption of 7.25%. That return implied a risk adjustment of 0.68%, reflecting a confidence level of 59% that the actual average return over 15 years would not fall below the assumed return, assuming that the distribution of returns over that period follows the normal statistical distribution.⁴

Comment: As noted earlier, concurrent with the implementation of GASB 67 and 68, FCERA has included a stand-alone administrative expenses assumption in the development of employer and member contributions starting with the June 30, 2014 valuation so that payment of those expenses would no longer result in a reduction in the net income available from investments. As a result of introducing the stand-alone administrative expenses assumption, there was in effect a further increase in the risk adjustment from 0.68% to 0.80% and in the confidence level from 59% to 61% effective with the June 30, 2014 valuation because the investment assumption was kept unchanged at 7.25% (even though

⁴ Based on an annual portfolio return standard deviation of 10.80% provided by Wurts (i.e., Verus) in 2013. Strictly speaking, future compounded long-term investment returns will tend to follow a log-normal distribution. However, we believe the Normal distribution assumption is reasonable for purposes of setting this type of risk adjustment.

contributions are collected from the employer and member to defray the administrative expenses so that they do not have to be paid from investment income.)

In our model, the confidence level associated with a particular risk adjustment represents the likelihood that the actual average return would equal or exceed the assumed value over a 15-year period. For example, if we set our real rate of return assumption using a risk adjustment that produces a confidence level of 60%, then there would be a 60% chance (6 out of 10) that the average return over 15 years will be equal to or greater than the assumed value. The 15-year time horizon represents an approximation of the “duration” of the fund’s liabilities, where the duration of a liability represents the sensitivity of that liability to interest rate variations.

If we use the same 59% confidence level from our last full study for the June 30, 2013 valuation to set this year’s risk adjustment, based on the current long-term portfolio standard deviation of 10.70% provided by Verus, the corresponding risk adjustment would be 0.67%. Together with the other investment return components, this would result in an investment return assumption of 6.91%, which is lower than the current assumption of 7.25%.

Based on the general practice of using one-quarter percentage point increments for economic assumptions, we evaluated the effect on the confidence level of other alternative investment return assumptions. In particular, a net investment return assumption of 7.00%, together with the other investment return components, would produce a risk adjustment of 0.58%, which corresponds to a confidence level of 58%. While this is slightly lower than the confidence level of 59% used in FCERA’s last full study for the June 30, 2013 valuation, we note that the 58% confidence level is still above the confidence levels of 51% to 55% as determined for other public retirement systems in California that use this model to study the investment return assumption.

The table below shows FCERA’s investment return assumptions and for the years when this analysis was performed, the risk adjustments and corresponding confidence levels compared to the values for prior studies.

Historical Investment Return Assumptions, Risk Adjustments and Confidence Levels Based on Assumptions Adopted by the Board

<u>Year Ending June 30</u>	<u>Investment Return</u>	<u>Risk Adjustment</u>	<u>Corresponding Confidence Level</u>
2006	8.16%	1.25%	66%
2007 - 2009	8.00%	1.16%	65%
2010 - 2012	7.75%	1.05%	64%
2013 (Full Study)	7.25%	0.68%	59%
2014 – 2015 (Interim Study)	7.25% ¹	0.80%	61%
2016 (Recommended)	7.00% ¹	0.58%	58%

¹ *These investment return assumptions are gross of administrative expenses.*

As we have discussed in prior years, the risk adjustment model and associated confidence level is most useful as a means for comparing how FCERA has positioned itself over periods of time.⁵ The use of a 58% confidence level should be considered in context with other factors, including:

1. As noted above, the confidence level is more of a relative measure than an absolute measure, and so can be reevaluated and reset for future comparisons.
2. The confidence level is based on the standard deviation of the portfolio that is determined and provided to us by Verus. The standard deviation is a statistical measure of the future volatility of the portfolio and so is itself based on assumptions about future portfolio volatility and can be considered somewhat of a “soft” number.
3. A lower level of inflation should reduce the overall risk of failing to meet the investment return assumption. Lowering the confidence level to some extent could be justified as consistent with the change in the inflation assumption.
4. A confidence level of 58% (which is associated with a 7.00% investment return assumption) is still above the general range of 51% to 55% as determined for most of Segal’s other California public retirement system clients under this risk adjustment model.

⁵ In particular, it would not be appropriate to use this type of risk adjustment as a measure of determining an investment return rate that is “risk-free.”

5. Most public retirement systems that have recently reviewed their investment return assumptions have considered adopting more conservative investment return assumptions for their valuations, mainly to maintain the likelihood that future actual market return will meet or exceed the investment return assumption.
6. As with any model, the results of the risk adjustment model should be evaluated for reasonableness and consistency. This is discussed in the later section on “Comparison with Other Public Retirement Systems”.

Taking into account the factors above, our recommendation is to reduce the net investment return assumption from 7.25% to 7.00%. As noted above, this return implies a 0.58% risk adjustment, reflecting a confidence level of 58% that the actual average return over 15 years would not fall below the assumed return.

Recommended Investment Return Assumption

The following table summarizes the components of the investment return assumption developed in the previous discussion. For comparison purposes, we have also included similar values from the last full and interim studies.

Calculation of Net Investment Return Assumption			
<u>Assumption Component</u>	<u>June 30, 2016 Recommended Value</u>	<u>June 30, 2014 Interim Study Adopted Value</u>	<u>June 30, 2013 Full Study Adopted Value</u>
Inflation	3.00%	3.25%	3.25%
Plus Portfolio Real Rate of Return	5.03%	5.23%	5.23%
Minus Expense Adjustment ¹	(0.45%)	(0.43%)	(0.55%)
Minus Risk Adjustment	<u>(0.58%)</u>	<u>(0.80%)</u>	<u>(0.68%)</u>
Total	7.00%	7.25%	7.25%
Confidence Level	58%	61%	59%

¹ The expense adjustment for June 30, 2013 includes both investment and administrative expenses whereas the expense adjustments for June 30, 2014 and 2016 include only investment expenses.

Based on this calculation, we recommend that the investment return assumption be decreased from 7.25% to 7.00% per annum.

Comparing with Other Public Retirement Systems

One final test of the recommended investment return assumption is to compare it against those used by other public retirement systems, both in California and nationwide.

We note that 7.25% is still one of most common investment return assumptions among those California public sector retirement systems. In particular, the 7.25% assumption is used by eight county employees retirement systems (including FCERA's current assumption). However, to our knowledge no other California county employees retirement system has yet adopted a 7.00% investment return assumption.

The following table compares the FCERA recommended net investment return assumptions against those of the nationwide public retirement systems that participated in the NASRA 2015 Public Fund Survey for 125 large public retirement funds in their 2014 valuations:

Assumption	FCERA	NASRA 2015 Public Fund Survey		
		Low	Median	High
Net Investment Return	7.00%	6.50%	7.75%	8.50%

The detailed survey results show that more than one-half of the systems that have an investment return assumption in the range of 6.75% to 7.75%. The survey also notes that several plans have reduced their investment return assumption during the last year, and others are considering doing so. State systems outside of California tend to change their economic assumptions less frequently and so may lag behind emerging practices in this area.

In summary, we believe that both the risk adjustment model and other considerations indicate a lower earnings assumption. The recommended assumption of 7.00% continues to provide for similar risk margin within the risk adjustment model as compared to the last study and is consistent with FCERA's current practice relative to other public systems.

Alternative Investment Return Assumption

The recommended investment return assumption of 7.00% provided above has been developed by reflecting the investment expenses paid for active management without any offsetting “credit” for any “alpha” earned by that active management. As noted earlier, the “net of investment expenses” text in Section 3.8.3.d of ASOP No. 27 would allow the Board to anticipate such “alpha” so as to offset some of the investment expenses that were reflected in developing the investment return assumption. That alternative is developed in this section.

Based on Verus quarterly investment report as of June 30, 2015, below is a table which presents one possible measure of the “alpha” earned by the active management strategy by comparing actual returns to the returns generated by the benchmark (“passive”) portfolio.

Fiscal Year Ended 6/30	Plan Fund Return (Gross of Expenses)	Benchmark Portfolio Return	Historical Alpha (Gross of Expenses)
Prior 1-year	0.1%	-2.1%	2.2%
Prior 3-year avg.	9.8%	8.4%	1.4%
Prior 5-year avg.	10.1%	9.4%	0.7%
Prior 10-year avg.	7.1%	5.7%	1.4%

This measure of historical alpha gross of investment expenses appears to be consistently greater than the historical investment expenses of less than 0.50% that were shown earlier in this report. If this relationship is expected to continue in the long term then, as cited earlier, under ASOP No. 27 that expectation could support some reduction in the future investment expenses component of the investment return assumption.⁶ Accordingly, we have developed for the Board’s consideration an assumption incorporating that expectation, where a future expectation of “alpha” is used to offset a portion of the investment expense component of the investment return assumption. That approach is shown in comparison to our recommended assumption and the comparable values from the last full and interim studies.

⁶ In theory any future expected “alpha” would offset only the investment expenses for active management. While we have not been provided with an allocation of investment expense between active and passive management, we understand that a clear majority of investment expenses are associated with active management.

Calculation of Net Investment Return Assumption

Assumption Component	June 30, 2016 Alternative (Partial offset of Investment Expenses)	June 30, 2016 Recommended Value	June 30, 2014 Interim Study Adopted Value	June 30, 2013 Full Study Adopted Value
Inflation	3.00%	3.00%	3.25%	3.25%
Plus Portfolio Real Rate of Return	5.03%	5.03%	5.23%	5.23%
Minus Expense Adjustment ¹	(0.25%)	(0.45%)	(0.43%)	(0.55%)
Minus Risk Adjustment	<u>(0.53%)</u>	<u>(0.58%)</u>	<u>(0.80%)</u>	<u>(0.68%)</u>
Total	7.25%	7.00%	7.25%	7.25%
Confidence Level	57%	58%	61%	59%

¹ The expense adjustment for June 30, 2013 includes both investment and administrative expenses whereas the expense adjustments for June 30, 2014 and 2016 include only investment expenses.

Based on the above, we are presenting this alternative assumption that would maintain the current 7.25% per annum investment return assumption should the Board decide to anticipate “alpha” which may be available from active management of the portfolio and use that anticipation of alpha to offset some of the expected investment expenses in the development of the investment return assumption.

While we believe this alternative assumption is reasonable under the governing ASOP No. 27, there are some cautionary factors for the Board to consider:

1. Because the expected return is a long term assumption, any anticipated alpha must also be expected to persist in the long term. The Board may want to consult with Verus on that issue.
2. The Board also may want to consult with Verus as to whether the measure of alpha developed above is appropriate for this context.
3. Any anticipation of alpha is by its nature a less conservative assumption, i.e., one with a lower margin for future adverse deviation. All else equal, that will increase the risk of future actuarial losses on investments and associated cost increases.

Endorsed by:



PUBLIC PENSION SYSTEMS

Statements of Key Investment Risks and Common Practices to Address Those Risks

July 2000

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FOREWORD

Recently, risk management has become a greatly debated topic in the investment community primarily due to the well-publicized errors and losses incurred by various investment funds. In order to prevent the recurrence of such errors and losses, several organizations have developed various investment risk management guidelines or standards. Most of these standards and guidelines, however, are not specifically oriented to the unique perspective of public pension systems. Because of this, a group of public pension system chief investment officers (CIOs) became concerned that their funds would, over time, start to be measured against these newly developed standards or guidelines by auditors or other external parties even though many of the practices were not applicable to them as public pension fund fiduciaries.

As a result of their concerns, the CIOs asked the Association of Public Pension Fund Auditors (APPFA) to consider participating in a joint project with them to develop a risk document specifically with the intent of identifying common risks faced by public pension systems and the practices being utilized to address those risks. APPFA supported the project and appointed a committee to work with the CIOs.

The APPFA committee members involved in this effort were:

Stuart Cagle	Teachers' Retirement System of Louisiana
Shannon Davidson	Missouri State Employees' Retirement System
Ken Kasper	New York State Teachers' Retirement System
David Maurek	Public Employees' Retirement Association of Colorado
Brad Wakeman	Massachusetts Pension Reserves Investment Management Board

The original CIO's involved in this effort were:

Rick Dahl	Missouri State Employees' Retirement System
Bob Maynard	Idaho Public Employees' Retirement System
Joe Vet	New York State Teachers' Retirement System
Bob Storer	State of Alaska Department of Revenue (currently Executive Director - Alaska Permanent Fund)

Nancy Everett (CIO) and Curt Mattson (Manager of Investment Operations) of the Virginia Retirement System, as well as Dennis Anderson (Investment Auditor) of the Public Employees Retirement Association of Colorado and Sally Dungan, formerly of the Massachusetts Pension Reserves Investment Management Board, also participated significantly in the project.

After several telephone conference calls and group e-mails, the committee met in Denver, CO, on January 13 -14, 2000 to discuss the overall goals of the project and to create an outline for the document. At the meeting two primary goals were set for the document:

1. Develop an inclusive document that would be applicable and useful to as many public pension plans, large and small, as possible.
2. Develop a document that would take a “top down” approach to addressing investment risk. In other words, the document should identify the broadest and most significant risk first and then identify subordinate risks in order of decreasing magnitude until there was a consensus that some level of immateriality had been reached or that the risk was too specific and, therefore, not applicable to the majority of public pension systems

This brainstorming meeting resulted in an outline for the document. After the meeting, text was added to the outline. Numerous drafts of the new risk document were developed, modified and exchanged via e-mail and conference calls among the combined group until a final draft was agreed upon in early May 2000. The draft was immediately distributed to the entire APPFA membership, as well as an extensive list of CIOs and other individuals within the investment community, for comment. Agreed upon comments and changes were incorporated into the document and the final version was completed in July 2000.

Since its completion, the document has been officially endorsed by the APPFA membership, the National Association of State Retirement Administrators (NASRA) and The National Council on Teacher Retirement (NCTR). In addition, CIOs from various public pension systems have also endorsed the document. These endorsements should not be construed to suggest that every public pension system should implement every practice identified within the risk document or that by addressing all the risks within the document, a public pension system is guaranteed to avoid any problems associated with its investment program. Instead, these endorsements should be interpreted to suggest that the document is a good starting point and provides general guidance to the public pension system community in identifying key investment risks and common practices and procedures used to address those risks.

INTRODUCTION

Public pension systems (Systems) face a number of risks in undertaking necessary investment activities. Some risks, such as normal market volatility, are generally unavoidable. Some risks, such as investing in emerging markets, are knowingly assumed and are necessary to implement certain investment policies. Other risks, such as legal exposure to some forms of liability, are unnecessary and avoidable.

Controlling or eliminating these risks has become a topic of great interest as well-publicized errors by investment funds have captured public and professional attention. In response, a number of organizations have discussed or promulgated risk principles, guidelines, standards, and other directives for various professional organizations. Very few, however, have been specifically oriented to the public pension system community or have approached the problem from the perspective of the basic disciplines and purposes of public pension systems.

This document is intended to provide general guidance for Systems, or auditors of those Systems, in addressing issues of risk and the practices and procedures used to address those risks. In other words, this document is intended as a template for analyzing and addressing the particular risks that are faced by individual public pension systems. Accordingly, it identifies the key investment risks associated with large public pension systems and common practices to address, manage, and, to the extent possible, control those risks. While common practices may be appropriate for most Systems, in many instances a particular fund's posture or resources might require lesser or greater actions given that fund's particular analysis of the potential impact of a particular risk and the cost (including time and complexity) of fully addressing that particular risk. Common practices only address common situations – to the extent that each fund has unique situations that distinguish it from others, the examples used in this document would be inapplicable.

It should also be understood this document is not intended to be an exhaustive list of all risks that public pension systems may potentially encounter. Nor is it intended to be a comprehensive checklist of all the procedures a public pension system should incorporate to address the identified risks. The practices listed in this document are simply common and proven approaches that may help Systems assess their approach to addressing similar issues. They are termed “points of focus for action.” They are things that can be done to mitigate risk; but there may be numerous alternative methods and procedures to address the identified risks effectively. Consequently, the description of the key risks and possible actions are intended as examples, not as standards or prescriptions.

It is recognized that this document might be used as a resource during periodic audits of the risk controls of public pension systems. If so, the auditor should keep in mind that this document only describes existing common practices, not necessarily best practices. There are usually many ways and, in the context of specific Systems, there might be better ways, to address the risks described. *The primary question is whether the actions taken by the pension*

fund effectively mitigate the risk and not whether they follow the examples published in this report. An auditor must also be mindful of the concepts of materiality of the risk being addressed and cost/benefit analysis in determining the adequacy of the actions taken.

To further assist an audit or evaluation, references to other documents and publications are included that provide supplemental, and in some cases more specific, information regarding actions that can be taken to address risk. This is not a blanket endorsement of everything contained in those references, although they are largely relevant. Consequently, the same cautions should be exercised when using the references. Professional judgment must be used to extract only what is relevant to the entity being examined.

ASSUMPTIONS

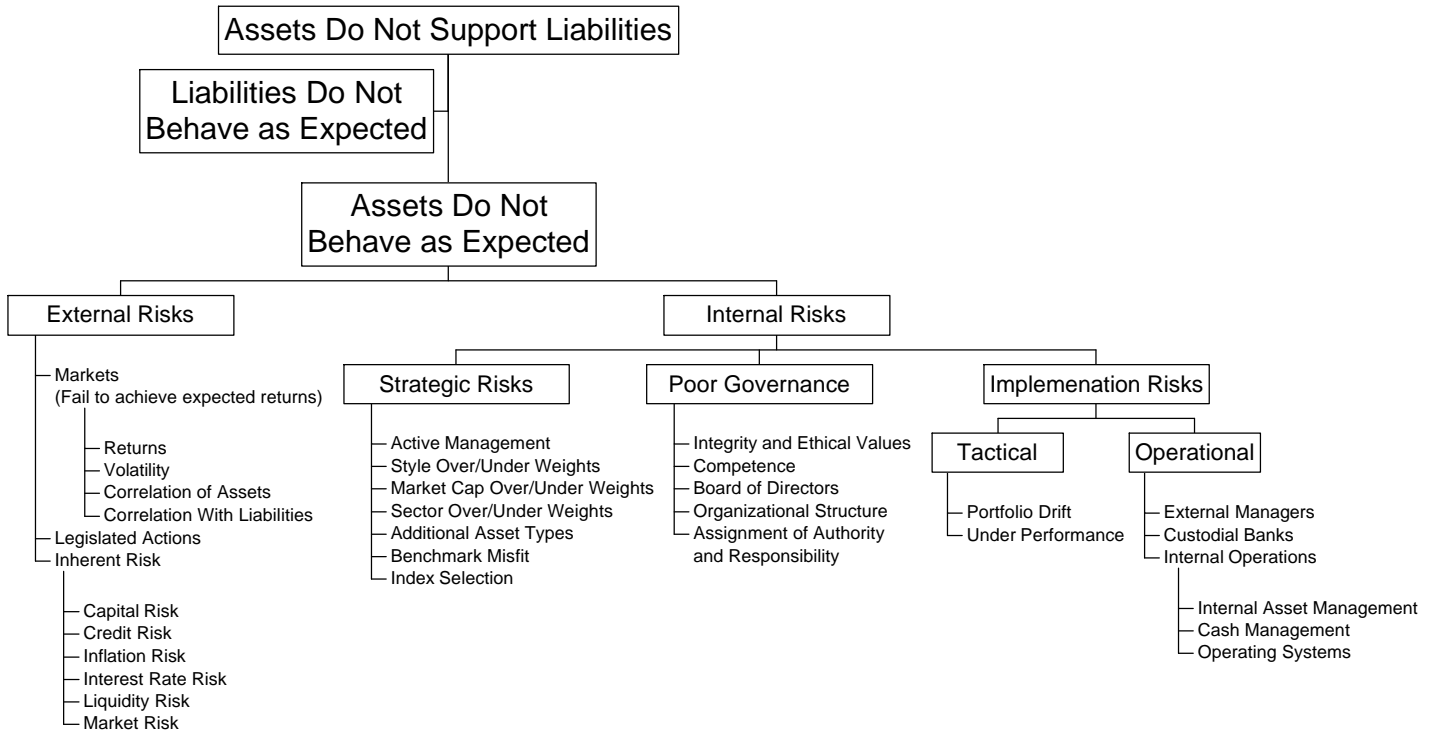
The content of this document is based on the following assumptions regarding public pension systems:

1. Public pension systems use common basic investment approaches – primarily, the core discipline of developing a long-term asset allocation and adhering to that asset allocation over long periods of time.
2. Public pension systems are long-term investors, not short-term traders and are, therefore, able to commit to their asset allocations and ride out fluctuations in the financial markets.
3. Public pension systems rarely have substantial short or leveraged positions and typically hold “long” positions in public securities and private investments.
4. Public pension systems diversify by using a number of asset classes, styles, managers, and approaches.
5. Public pension systems generally attempt to maximize investment return while minimizing or eliminating exposure to unintended or uncompensated risk.

To the extent that a particular organization’s structure and/or operations result in these assumptions being inappropriate, the risks and common practices identified in this document may not be applicable.

The organization of this document takes a “top down” or tiered approach to identifying investment risks within public pension systems. The broadest and most significant risk (or primary risk) is stated first and then the subordinate risks are identified in order of decreasing importance until some level of immateriality is reached. The risks identified at the top “tier” are universal within the public pension system universe and, as we work our way down, become less common. The following chart outlines the key risks identified in this document:

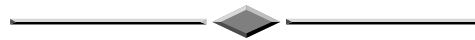
KEY RISK FRAMEWORK



ASSETS DO NOT SUPPORT LIABILITIES

The primary risk to a defined benefit public pension system is that the assets will not support the liabilities. After all, *the underlying purpose of any defined benefit pension system is to pay current and future benefits to its members.* These benefit obligations cannot be met without the appropriate level of available assets. All other investment risks associated with a public pension system are ultimately just a sub-category of this primary risk.

Two major sub-categories of risk fall directly below the primary risk identified above. The first is that the liabilities of the pension fund will not behave as expected, and the second is that the assets will not behave as expected. Numerous factors, ranging from market volatility to demographic changes to policy changes that increase benefits, can cause the assets and liabilities of a pension system to behave unexpectedly. Without proper planning and management, these unexpected behaviors may ultimately affect whether or not the system's assets will support the liabilities.



POINTS OF FOCUS FOR ACTION

Public pension plans commonly use three basic procedures at the highest level to address and manage the risk of assets not supporting liabilities.

- **Actuarial review:** Reviews periodically performed by an actuary mainly to evaluate the trends of the liability components of the system and their relationship to existing assets. It should be noted that while not yet a common practice, it is becoming increasingly more common for public pension systems to hire an additional independent actuary to review or audit the work performed by the original actuary (actuarial audits).
- **Asset/liability studies:** Studies generally performed periodically to identify changes in the relationships between the assets and liabilities of a pension fund.
- **Asset allocation models:** Models generally constructed by the System's investment staff and/or investment consultant and approved by the Board of Trustees to achieve diversification among asset classes in the most appropriate way to provide the best opportunity for producing sufficient returns to meet the expected liabilities. In many instances, the asset allocation exercise is part of a comprehensive asset/liability study.

Numerous risks are potential contributors to the liabilities of a public pension system not behaving as expected, and there are numerous common practices for managing those risks. The purpose of this document, however, is to focus on the *investment* risks associated with the assets of a public pension system. Therefore, risk management concerns and actions associated with the liabilities of a pension system are not discussed in detail. *It must be understood, however, that the risks associated with liabilities can be as detrimental to a public pension system as the risks associated with assets, and Systems should manage these risks accordingly.*

ASSETS DO NOT BEHAVE AS EXPECTED

Simply stated, this is the risk that the return needed to meet the liabilities is not produced due to unexpected behavior of the investments chosen. This unexpected behavior could result from a wide variety of factors, ranging from internal operational issues to external market forces.

In fact, all the investment risks that could have a material effect on a public pension system stem from assets not behaving as expected or planned. Therefore, all the risks identified in the remainder of this document focus on risks that can cause assets not to behave as expected.

The specific risk that may ultimately cause assets to not behave as expected can be placed into two general categories: external and internal influences.

[See COSO Internal Control Integrated Framework (1992), Evaluation Tools - Risks, p. 23]

EXTERNAL RISKS

Markets Fail to Achieve Expected Returns

With the assumption that public pension systems are long-term investors and employ some sort of asset allocation mechanism to diversify assets, this risk is not that the actual annual returns of any given asset class will not meet the expected annual returns. This particular risk is intrinsic to the assets themselves and mitigated by using such factors as expected volatility and correlation in diversifying the portfolio. In fact, it is assumed that all classes of assets will perform significantly differently than expectations over particular periods of time.

Instead, this is the risk that the long-term behavior of one or more of the asset types turns out to be significantly different than expected due to unforeseen market, economic, or political factors. These deviations from expectations may result from any or all of the following:

- The long term returns of the asset type.
- The long term volatility of the asset type.
- The asset type's correlation or behavior in relation to other asset types.
- The behavior of the entire asset allocation in relation to the liabilities of the plan.

Failures in base assumptions could, over time, result in a significant under funding of the system.



POINTS OF FOCUS FOR ACTION

Most public pension systems use three primary vehicles to address these risks.

Asset Allocation Reviews: Periodic asset allocation reviews take a prospective approach to managing market risk by examining the appropriateness of the set of assumptions that are being used in the allocation model.

Long-term Performance Measurement: This is conducted for each asset type and the portfolio as a whole. Performance measurement can be referred to as a retrospective approach to managing the risk because it evaluates the historical returns and volatility of each asset type, as well as the historical correlation among the asset types. By evaluating the historical performance numbers, market trends may be identified which could help the plan sponsor avoid long-term unexpected market behavior.

Periodic Actuarial Reviews: These studies track the actual behavior of the assets as matched against the actual behavior of the liabilities and quantify the ongoing difference of the impact of any unexpected behavior. If unfavorable trends develop, then the asset allocation or other factors affecting the future behavior of the system (e.g., contribution rates) can be adjusted.

Legislated Actions

A public pension system is predicated on assumptions regarding long-term rates of return and the application of present value concepts to promised future benefits. Any change to the realization or fulfillment of these assumptions by virtue of legislated action may substantially impact the financial health and economic viability of the system. Examples include laws that limit what asset types public pension systems may own and legislation that increases benefit formulas without considering available assets.

Another example that could seriously affect the assets of a System is legislation that artificially increases the interest rate assumption, with the intended effect of a reduced contribution from the employer. A shortage in the expected contributions can obviously upset the balance between assets and liabilities and ultimately cause a System to be under funded. The added risk of this type of legislation is that it would most likely require a higher level of investment risk be taken in order to support the new assumptions.

The key risk in any of these examples is that a radical change is made without understanding the effects on the program being changed, with the attendant risks of trend chasing, confusion, and lack of long-term focus.



POINTS OF FOCUS FOR ACTION

Sudden adverse legislative changes are sometimes unavoidable for public pension systems; however, Systems can take certain steps to minimize the likelihood that such situations will occur.

Investment Policy: A well-organized and documented investment policy that has been approved by an appropriate governing body is key to avoiding sudden and frequent overhauls of the investment program by various political bodies. An unorganized and haphazardly executed investment program will likely find itself subject to periodic overhauls initiated by outside sources as it experiences intermittent periods of poor performance.

Education: Educating legislative members and constituents about the system is also an effective mechanism for managing this risk. The more knowledgeable these groups are about the key investment concepts employed by a public pension system the less likely they are to pursue adverse changes that may negatively affect the investment plan. This education is often accomplished through regular communications from the System. In addition, other educational materials, such as the investment policy and strategy of the system, are often made available.

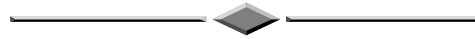
Legislative Liaison: Most public pension systems have some sort of monitoring and communication process in place to keep in touch with proposed legislation or other actions that may affect the System's assets. Early awareness and effective communication enables the System to educate the public and lawmakers on the potential effects of the legislation before its passage.

[See Public Pension Plan Operations and Administration, Government Finance Officers Association (1992), Relations with the Legislature, p. 59]

Inherent Risks

All investments are subject to one or more types of inherent risk. It is expected and necessary to assume some level of risk in order to achieve needed returns. For example, some inherent risks present in common investment vehicles follows:

- Capital Risk - The risk of losing the original investment.
- Credit Risk - The risk that the issuer will not make scheduled payments.
- Inflation Risk - The risk that the investment will return below the rate of inflation.
- Interest Rate Risk - The risk that changes in interest rates will decrease values.
- Liquidity Risk - The risk that the investment cannot be readily converted to cash at prevailing or assumed prices.
- Market Risk - The risk that adverse market shifts will cause losses.



POINTS OF FOCUS FOR ACTION

As indicated, these risks are inherently present and are usually knowingly assumed when investing. Usually, they cannot be avoided; however, one way to mitigate these risks is by utilizing the principle of diversification. This way, for example, if one company or industry falters, the threat to the overall fund will be minimized.

Asset Allocation and Diversification: An asset allocation policy sets targets and ranges for asset classes, thereby diversifying the portfolio among unrelated investments. The asset allocation process considers three major factors: expected return, expected risk, and correlation. From there, a fund may require diversification within those asset classes for management styles (e.g., active v. passive) and sectors or industries. Within sectors or styles, a fund may further diversify and set limits by company, issuer, manager, or counter-party. See Table 1 for an example.

Table 1 Asset Allocation Example

Asset Class	Target	Range	Further Diversification
Domestic Equity	44.0%	40-48%	
U.S. Stocks			Diversify by size (capitalization) or by style (e.g., growth vs. value).
			Diversify by sector (e.g., capital goods, transportation, energy, financial, technology, utilities, etc.).
			Diversify by company (e.g., Not more than a fixed percentage of total assets in any one company).
Passive:	34.0%		
S & P 500 Index			
Russell 3000 Index			
Russell 1000 Value			
Active:	10.0%		
Large Cap			
Small Cap			
International Equity	15.0%	10-20%	
Passive EAFE Index	9.0%		
Active	5.0%		Diversify by country and currency (e.g., Not more than a fixed percentage of assets may be invested in certain countries).
Emerging Market Equity	1.0%	0-2%	Diversify by country and currency.
Fixed Income	35.0%	30-40%	
Domestic Fixed Income	25.0%	17-32%	Diversify among US Treasury, federal agencies, corporate, etc.
Mortgages	7.0%	3-10%	Diversify by geographic region.
International Fixed Income	3.0%	2-5%	Diversify by country and currency.
Real Estate	5.0%	3-9%	Diversify by geographic region and property type (e.g., residential, retail, office, industrial, etc.).
Alternative Investment	1.0%	0-2%	Diversify by early, mid and late stage ventures and diversify over time.

This table is for illustrative purposes only to show varying levels of possible diversification.

It is important to examine diversification from a total portfolio perspective. The total portfolio must be diversified but each program or individual portfolio may not have to be. In fact, some types of diversification within parts of the portfolio may be counterproductive in the context of the entire portfolio. Diversifying a real estate portfolio into energy producing regions, for example, would be counterproductive if the public equity portfolio was overloaded with energy stocks. Similarly, the benefits of diversification may be practically non-existent after a certain level. For example, as illustrated in Table 1, a fund may have a large passive equity portfolio and several external active equity managers, each managing a relatively small portion of the total portfolio. Because these externally managed portfolios are so small, diversification within them may not be necessary. In fact, pension system's often hire managers to focus on specific areas (e.g., small cap, growth stocks, value, emerging markets, etc.). This is fine, as long as all individual portfolios blend into the total portfolio to form a well-diversified fund. It should be noted, however, that many public pension systems' diversification options may be highly restricted by governing laws.

[See Risk Standards for Institutional Investment Managers and Institutional Investors (1996), Risk Standard #8: Setting Risk Limits]

[See Pension CAFR's, Government Finance Officers Association (1996), Investment Summary, p. 32]

[See Pension Fund Investing, Government Finance Officers Association (1987), Diversification and Portfolio Balance, p. 19]

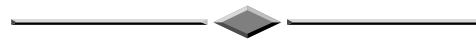
INTERNAL RISKS

Strategic Risks

Strategic decisions, as they pertain to public pension investment plans, can be defined as decisions, usually made by the board, to move away from underlying policy benchmarks. For example, assume a pension fund employs a simplified asset allocation model of 50% domestic equities, 35% fixed income, and 15% international equities and adopts the Russell 3000, Lehman Bond Aggregate, and EAFE, respectively, as the policy benchmarks for this base allocation. This fund could meet its asset allocation objective and policy benchmarks by simply indexing the appropriate percentage of all its funds into the Russell 3000, the Lehman Bond Aggregate, and EAFE.

Using this strategy, the risk of not achieving the policy benchmark returns less transaction costs, would be minimal, almost non-existent. However, any decision to move away from this strategy increases the risk that returns will not meet the returns of the policy benchmark, which may ultimately result in assets not meeting the expected long-term performance assumptions. Examples include decisions to overweight or underweight particular styles (e.g., a bias toward a value or growth style in U.S. equities), and overweight or underweight to market capitalization (e.g., overweighting small capitalization stocks) and sectors or regions (e.g., underweight a particular country in an international equity portfolio). Despite the risk involved in moving away from policy benchmarks, most Systems do take actions to deviate from the policy for the simple reason that they believe the rewards of achieving incremental return exceed the incremental risk of performing below benchmark returns.

Another issue is a potential flaw in the underlying benchmarks themselves. No benchmark is a perfect reflection of the underlying general market. Even the S&P 500, often used as a reflection of large cap U.S. stocks, has substantial international exposure. The choice of a particular small cap U.S. index can result in widely different returns over periods of time, such as differences in the performance of the S&P 600 and the Russell 2000 (common small capitalization U.S. benchmarks). Potential problems in this area are magnified as the indices being used to replicate markets which are less liquid and more inefficient (such as international emerging markets) are utilized. While over longer periods of time these differences in performance may become less significant; they are an area of potential concern over shorter time periods.



POINTS OF FOCUS FOR ACTION

Manage the Risk: Ultimately, most Systems do not choose to avoid the risk associated with strategic decisions. Instead, they elect to manage the risk. Managing the risk begins with clearly defining the policy benchmarks established for the fund and the acceptable level of deviation from these established benchmarks. Some Systems establish benchmarks at the strategic level as well as the policy level. Again, using the Russell 3000 as a policy benchmark, a fund may strategically decide to own a disproportionate number of value stocks in their portfolio and therefore, decide to incorporate a tailor-made benchmark to reflect their decision to be overweight with value stocks. Benchmarks may be further defined at the specific manager level. Regardless of the number of benchmarks established on different levels, they normally are clearly defined and should ultimately roll up into the overall policy benchmarks.

[See Risk Standards for Institutional Investment Managers and Institutional Investors (1996), Risk Standard #7: Identification and Understanding of Key Risks]

[See Risk Standards for Institutional Investment Managers and Institutional Investors (1996), Risk Standard #19: Independent Review of Methodologies, Models and Systems]

Long-term Performance: Monitoring the long-term performance of the strategic decisions is another way Systems manage the risk that the strategies will not provide the anticipated returns for the System. The impact of strategic decisions usually only becomes apparent over a period of years. Individual annual returns for strategies may be volatile when compared to the returns of the underlying asset class or policy benchmarks. For example, a decision to overweight small cap equities may under perform the general equity market for several years in a row. A long-term performance measurement system can monitor these return variances or risks by simply tracking the impact of these particular strategies over time and comparing them to the alternative of investing in the broad asset class or policy benchmark. Performance measurement is usually conducted by a pension fund's outside consultants and/or staff in formal periodic reports to the board.

[See Application for Public Pension Principles Achievement Award, Public Pension Coordinating Council, (1998), Investment Principle C: Investment Performance Evaluation Principle]

[See Pension CAFR's, Government Finance Officers Association (1996), Investment Results, p. 29]

Poor Governance

Governance risk, in this context, refers to the risk that the board, staff, or agents of a public pension system will, either intentionally or unintentionally through their management actions or lack thereof, cause the assets of the System to under perform expectations. Agents of a public pension system include external consultants, money managers, auditors, actuaries, and legal counsel.

Characteristics of poor governance may include incompetence, poorly or improperly defined roles, poor communications, failure to meet fiduciary responsibilities, lack of ethical standards, and inconsistency.



POINTS OF FOCUS FOR ACTION

The focus here is the control environment, which is the foundation for the entire internal control system within the organization. The control environment defines the character of the organization and affects the attitudes of all individuals towards governance and control. It consists of several elements including: integrity and ethical values, competence, a qualified board of directors and executive staff, a rational organizational structure, and proper assignment of authority and responsibility. Without this foundation, other components of the control system often fail.

Integrity and Ethical Values

Code of Ethics: Public pension systems often develop and adopt their own code of ethics to address the need for ethical standards within the organization. Others may recognize a more general set of ethics from their state government or other organization. Some Systems may not officially “adopt” a code of ethics but may address many of the ethical issues in personnel manuals, trustee handbooks, and other internal policies and documents.

[See COSO Internal Control Integrated Framework (1992), Evaluation Tools - Control Environment: Integrity and Ethical Values, p. 5]

Fiduciary Responsibility: Good governance of public pension systems also includes the understanding of fiduciary responsibilities by boards, staff, and agents of the system. For most boards, fiduciary responsibilities are defined and imposed through state laws and regulations pertaining to the system (including direct or indirect references to trust law). Mission statements, plan documents, and other internal documents may further define the fiduciary responsibility of the board. Many times the fiduciary responsibility of staff members and agents are also defined and imposed in state laws and regulations and other methods similar to the boards’. Staff’s fiduciary responsibilities may also be defined through written policies and guidelines approved by the board. In the case of agents to the system, their fiduciary responsibilities are normally defined and acknowledged in writing. This is usually accomplished through contracts and written agreements between the system and its agents.

[See Application for Public Pension Principles Achievement Award, Public Pension Coordinating Council (1998), Investment Principle B: Fiduciary Standards Principle]

[See Risk Standards for Institutional Investment Managers and Institutional Investors (1996), Risk Standard #1: Acknowledgement of Fiduciary Responsibility]

[See Pension Fund Investing, Government Finance Officers Association (1987), Fiduciary Responsibility, p. 7]

Competence

Hiring Practices: Methods used to help ensure a competent staff include establishing good hiring practices, conducting effective periodic evaluations, and providing an attractive working environment. Most public pension systems operate under public rules and personnel policies or have their own defined standards and procedures.

[See COSO Internal Control Integrated Framework (1992), Evaluation Tools - Control Environment: Human Resource Policies and Practices, p.16]

[See Application for Public Pension Principles Achievement Award, Public Pension Coordinating Council (1998), Investment Principle D: Minimum Qualifications Principle]

Training: Another method to help ensure the competency of staff and trustees is to provide an appropriate orientation for new board members and staff and continuing education for all board members and staff. New board members are often initially educated through an orientation process and receive on-going education by attending appropriate conferences and seminars. In addition, the investment staff and agents of the system may use portions of board meetings to further educate the board on investment related issues.

[See Risk Standards for Institutional Investment Managers and Institutional Investors (1996), Risk Standard #6: Adequate Education, Systems and Resources, Back-up and Disaster Recovery Plans]

[See Pension Fund Investing Government Finance Officers Association (1987), Keep Up with the Investment Industry, p. 30]

Outside Experts: Another method of managing the risk of poor governance is by hiring outside experts. Most Systems rely on outside experts such as actuaries, attorneys, auditors, authorities on governance issues, and consultants, when necessary.

A structured and methodical evaluation process, often involving the advice of consultants, is often used to ensure the competency of agents hired by public pension systems. In addition, other agents of the same profession may be hired to periodically review the work of the agent retained by the public pension system.

[See Public Pension Plan Operation and Administration, Government Finance Officers Association (1992), Consultants to the System, p. 17]

[See Pension Fund Investing, Government Finance Officers Association (1987), Retain Professional Expertise, p. 2]

[See Risk Standards for Institutional Investment Managers and Institutional Investors (1996), Risk Standard #19: Independent Review of Methodologies, Models and Systems]

[See Statement on Internal Auditing Standards No. 18, The Institute of Internal Auditors (1997), Use of Outside Service Providers]

Board of Directors

Good governance of a public pension system usually begins with a competent governing board. The criteria for the selection of most public pension boards are usually set by the governing statute or other authority establishing the public pension system.

[See COSO Internal Control Integrated Framework (1992), Evaluation Tools - Control Environment: Board of Directors or Audit Committee, p. 8]

[See Public Pension Plan Operations and Administration, Government Finance Officers Association (1992), The Retirement Board, p. 5]

[See Pension Fund Investing, Government Finance Officers Association (1987), Trustees' Investment Responsibilities, p. 1]

Organizational Structures

Organizational structures will vary among public pension systems, depending upon their approach (e.g., whether investments are managed externally, internally or a combination of both). Regardless of the approach, the structure should be clearly defined and key positions identified.

[See Risk Standards for Institutional Investment Managers and Institutional Investors (1996), Risk Standard #4: Clearly Defined Organizational Structure and Key Roles]

[See COSO Internal Control Integrated Framework (1992), Evaluation Tools - Control Environment: Organizational Structure, p. 13]

Assignment of Authority and Responsibility

Written Policy: Another practice used to reduce the risk of poor governance is the development and adoption of written policy statements. For example, investment policy statements often address some or all of the following issues:

Legal and Statutory Framework

Sole Interest of Beneficiaries, Prudence Standards, Fiduciary Duty

Investment Goals

General Return Goals, Specific Risk and Return Objectives, Risk Tolerance, Identification of Liabilities, Asset Allocation Procedures and Principles, Allocations, Limits, and Rebalancing

Investment Structure

Overall Standards, Direct Board Responsibilities, Delegated Board Functions, Employees, Consultants, Advisors, Asset Managers, Custodians and other Support Groups, Standards for Selection, Fees, Procedure for Selection, Monitoring and Review Procedures, Risk Controls, Policies, and Procedures

Asset Class Policies

Objectives, Allowable Investments, Prohibited Activities, Styles, Benchmarks, Derivatives

Other Policies

Proxy Voting, Corporate Governance Policies, Ethics, Disclosures, Soft Dollar, Securities Lending, Personnel, etc.

Written and approved policy statements serve as an educational tool for new investment staff and board members and help ensure seamless transitions during staff and board turnover. In addition, having written and approved policy statements in place helps prevent sudden inappropriate changes to the investment plan in reaction to temporary or transient events.

[See Risk Standards for Institutional Investment Managers and Institutional Investors (1996), Risk Standard #2: Approved Written Policies, Definitions, Guidelines and Investment Documentation]

[See Application for Public Pension Principles Achievement Award, Public Pension Coordinating Council (1998), Investment Principle A: Investment Objectives and Policies Principle]

[See Pension Fund Investing, Government Finance Officers Association (1987), Investment Policies, p. 4]

Implementation Risk

This is the risk that policies and procedures may not be implemented properly. Public pension systems may develop and adopt the ideal asset/liability mix, asset allocation model, and investment policies and strategies, but if staff or agents of the system do not effectively implement the mix and strategies, then assets may ultimately not support the liabilities generated by the System. Causes of ineffective implementation fall into two general categories: *tactical failure* and *operational failure*. Implementation risk and common practices to address the risk are discussed below in terms of these two general categories.

Tactical Failure

Two general sources of tactical failure may prevent a public pension system from achieving the benefits that would accrue from following its long-term investment strategy. First is the risk that the actual allocation of assets does not conform to the asset allocation strategy. Second is the risk that the actual return experienced through investment in specific assets does not meet the returns of the asset classes of which they are a part.

Portfolio Drift

For various reasons, a public pension system may not follow the underlying asset allocation defined in its investment plan. For example, a typical policy asset allocation may be 50% U.S. equities, 15% international equities, and 35% fixed income. Due to market movements (for example, a significant stock market decline), the assets may shift to 40% U.S. equities, 10% international equities, and 50% fixed income. Particularly after a significant change in the market, a fund may remain in this overweight to fixed income position for a prolonged period of time and, as a result, realize returns far below that expected from the policy asset allocation. As discussed below, the primary discipline used to address this concern is the process of *rebalancing*.



POINTS OF FOCUS FOR ACTION

The primary discipline used here is an expressed rebalancing procedure. For example, many Systems incorporate ranges around an expressed policy asset allocation that, when violated, will trigger either a direct reallocation of assets to more closely align with the policy asset allocation or trigger a review of conditions to determine whether a rebalancing of assets should occur. As part of this process, most Systems will include a direct comparison of the actual allocation with the policy allocation, with associated ranges, in the formal board reports.

Under Performance

Three types of tactical decisions may cause the actual returns of specific assets to under perform the asset class of which they are a part. First, as discussed above, strategic decisions may be undertaken; second, the actual allocation of assets to managers or accounts may not reflect the strategic allocations, which creates a misfit between the individual account benchmarks and the overall strategic objective, and third, the managers may under perform the asset class.

Strategic Decisions: The risks associated with strategic decisions discussed above may be the result of decisions to:

- Add asset types not included in the underlying asset classes (e.g., private equity, private debt, or emerging markets).
- Tilt the characteristics of an asset class (e.g., more or less small capitalization stocks).
- Take actions to try to reduce risk (e.g., hedging international currency risk).

Manager Misfit: The System may hire the wrong manager or type of manager to fulfill a particular segment of the asset allocation strategy. For example, a manager is hired to implement a strategic decision of overweighting small value stocks and the manager turns out to be a small growth manager. Another example would be where a manager is given a particular benchmark and that benchmark does not reflect the segment of the asset allocation strategy for which it was intended (Benchmark Misfit).

Manager Under Performance: The external or internal managers hired by a public pension system to actively attempt to gain returns higher than those available by passively investing in the markets themselves may under perform the asset class. The actual returns could be significantly different, and lower, than those in the general market due to the manager's investment decisions.

A public pension system may hire three general types of managers to manage funds: managers of publicly traded securities, managers of private equity and debt, and managers of derivative securities.

▪ ***Managers of Publicly Traded Securities***

Public pension systems often hire active managers (both on-staff and outside institutions) to manage public and private investments. These managers are hired to outperform the alternative passive investment. This adds another level of potential disparity, and risk, in achieving the desired long-term returns: the difference in performance and results of the active managers from that achieved by the passive alternative investment in that asset type. In particular, it could lead to substantial under performance over a period of time from that contemplated by the underlying investment strategy.

This risk could arise in four ways: First, the active managers could be true to their style or discipline, but the results of that style or discipline could have unintended consequences (such as performance significantly different than the benchmark used for that manager). Second, the actual benchmark used, when combined with other similar managers or accounts, does not fit the profile of the overall strategic objective or benchmark for that portion of the fund. Third, managers could drift from their particular style when making individual investment decisions and thereby, achieve returns that are different, and lower, than that of the benchmark they were assigned. A fourth way is through operational failure and is discussed later.

Unlike the long-term nature of the asset allocation and strategic policy risks, the impact on the value of the portfolio as a result of adverse events due to an individual manager's investment activities can occur relatively quickly, sometimes in a matter of days or weeks. Unusual market conditions could invalidate a manager's underlying assumptions by which they choose stocks, bonds, or other individual investments. This "quicker" pace of adverse valuation consequences usually affects only those managers who deal in the public markets, with its liquidity and daily pricing. Private investment portfolios usually have a more leisurely time frame for recognizing changes in valuation, as discussed in the next section.

▪ ***Managers of Private Equity and Debt***

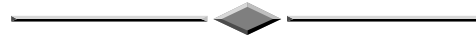
Investments in private equities, private real estate, and private commercial mortgages will most likely go awry at a slower pace. This usually happens over periods of months, not days, since the underlying investments in companies or properties are not valued as frequently.

▪ ***Managers of Derivative Securities***

Typically, public pension systems do not have significant exposure to derivative instruments that could swiftly change the risk profile of the fund. Many derivative exposures are simple and direct substitutes for the underlying instrument. For example, the use of certain futures and forwards markets, such as the S&P 500 Futures Market, is practically interchangeable for holdings in the underlying security or securities. As a result, the risk management procedures for managers with publicly traded portfolios would suffice for tracking those positions if they could materially impact the portfolio.

The concern is with exotic instruments that have express or hidden leverage features or significant elements of optionality. These features could make the standard characteristic measurements (such as duration, beta, etc.) inapplicable for large market moves or, through express or implied leverage, result in a cascading effect from relatively small or marginal market moves. The task for a public pension system is to determine if those types of

instruments are in the portfolio and, if they are, whether the aggregate exposure to the overall portfolio is such that additional and more detailed tracking mechanisms and other risk control measures are required.



POINTS OF FOCUS FOR ACTION

Concentrate on hiring quality managers and then monitoring three factors: people, process, and performance. Monitoring should occur on an ongoing basis or through separate periodic evaluations.

Due Diligence in Hiring: As it relates to portfolio managers, risk management begins with the good hiring practices. Most public pension systems have a formalized due diligence process in place to determine external manager candidates that will incorporate the desired investment styles and disciplines to meet the objectives of the System's strategies. This process often includes the use of an independent investment consultant to assist in the search for managers that meet the criteria established by the system. The same prudence is usually exercised by public pension systems when hiring staff to internally manage funds.

The hiring process also usually includes the development of a contract that includes guidelines for the management of the specific portfolio. The guidelines usually include language that addresses:

- The objective of the portfolio;
- The benchmark the portfolio will be measured against;
- The desired characteristics of the portfolio; and
- The allowable, and possibly prohibited investments for the portfolio.

Guidelines help to further ensure that the managers adhere to the strategy and discipline for which they were hired. For internally managed portfolios, while there may not be a written contract involved, guidelines are usually documented and approved by members of the management team or the board.

[See Application for Public Pension Principles Achievement Award, Public Pension Coordinating Council (1998), Investment Principle E: Manager Performance Objectives Principle]

[See Pension Fund Investing, Government Finance Officers Association (1987), Managing the Managers, p. 24]

[See Risk Standards for Institutional Investment Managers and Institutional Investors (1996), Risk Standard #5: Consistent Application of Risk Policies]

People: Many Systems also meet face-to-face on a periodic basis with the external management team. These meetings are generally conducted by internal staff, the external asset consultant or both. These meetings provide the System with a better understanding of the day-to-day operations of the external manager and the manager's business continuity, including resources and staff turnover. In addition, portfolio theory is often discussed to reassure the system that the manager is still a proper fit for the management niche for which they were originally hired.

Monitoring the Process: Once the hiring process is complete, a key risk management practice is to ensure that a manager is performing in accordance with a desired style or discipline (the reason they were hired in the first place). Also, Systems will normally put measurement systems in place to assure that the style or discipline is having the expected result (performance in relationship to a benchmark or passive investment alternative).

A public pension system's investment consultant or staff, independent of the portfolio management function, usually tracks a manager's adherence to the guidelines on a periodic basis. Further, they may provide the board with a formal report identifying discrepancies in the portfolios and reasons for, or actions relating to, those discrepancies. The compliance monitoring can be accomplished with special software designed to generate exception reports when a portfolio violates an established guideline or manually by periodically examining portfolio characteristics and trading activity for compliance with guidelines.

[See Risk Standards for Institutional Investment Managers and Institutional Investors (1996), Risk Standard #17: Due Diligence, Policy Compliance and Guideline Monitoring]

[See Risk Standards for Institutional Investment Managers and Institutional Investors (1996), Risk Standard #9: Routine Reporting, Exception Reporting and Escalation Procedures]

Monitoring Performance: Even if a manager's portfolio adheres to the guidelines and style expected, the individual securities chosen could under perform the market or sector for which manager was hired. This risk is typically tracked separately, and reasons for under performance are monitored, identified, and discussed with corrective action taken if necessary. This is usually done prospectively (the manager anticipates future events that could impact the style or discipline) and retroactively (analyzes reasons for present and past under performance to determine if the manager is still competent in implementing that discipline).

The retroactive check is accomplished through performance monitoring. In addition to the performance reports generated by the manager, on a regular basis staff and/or the asset consultant may produce their own set of reports for monitoring performance to aid in determining the reasons for over performance or under performance. Formal reports to the board may include such items as performance compared to market benchmarks, the analysis of the performance (attribution analysis), and a comparison to similar managers (peer analysis).

These types of reports should help the board guard against terminating managers simply because their style was "out of favor."

[See Risk Standards for Institutional Investment Managers and Institutional Investors (1996), Risk Standard #12: Risk Measurement and Risk/Return Attribution Analysis]

Tactical Failure Summary

Sound hiring practices, periodic compliance monitoring, and continuous performance analysis are usually sufficient to prevent actions by individual managers that may cause material impacts to the overall risk profile of the portfolio. In combination, these practices collectively ensure that the characteristics and performance of the overall portfolio, both as a

whole and in its individual parts, will perform in a manner that comports with that expected by the strategic policies adopted by the board.

Thus, for those Systems performing these types of checks, it is unlikely that portfolio performance will drift too far from what would be generated by the strategic allocation without the deviation being identified by one of the independent checks in place. Such a variation must be reflected in one or all of the following: the characteristics of the holdings, the reaction of those holdings to market movements, or deviations from peers with similar mandates.

The practices mentioned above are generally tailored for the management of publicly traded securities; however, they may also be applied to the management of private debt and equity as well as derivatives. In the case of private debt and equity, the monitoring, reporting and due diligence process is more difficult in that no publicly traded exchange exists to set prices and create performance comparatives. In addition, the effect of a longer lifecycle associated with many private investments requires a separate timeline for performance considerations. To address these issues, some Systems have considered placing a greater emphasis on up-front due diligence, structure, and the strategic nature of private investments. In addition, in some cases, a specialist is utilized to help in the design and monitoring of these programs. Most Systems address the risk associated with derivatives by establishing guidelines that prevent individual managers from investing in the exotic or leveraged types that carry risk that is not understood or is too difficult to monitor. If a system chooses to include the riskier types of derivatives in their investment strategy in any material amount, then specific risk management procedures are normally developed to address the additional risk.

Operational Failure

The risk of operational failure is not primarily concerned with investment strategy or tactics, but management and operational issues used in the implementation process of the strategy or tactic. Operational failures often result from a breakdown in systems, procedures, personnel, or processes. One common approach to avoiding potential operational failure is for the management of public pension systems to implement procedures that ensure achievement of the following control objectives (as identified by General Standard 300, *Standards for the Professional Practice of Internal Auditing*):

- 1) The reliability and integrity of information.
- 2) Compliance with established policies, procedures, laws, and regulations.
- 3) The safeguarding of assets.
- 4) The economical and efficient use of resources.
- 5) The accomplishment of established objectives and goals for operations and programs.

Operational failure can occur in three major areas within a public pension system: external managers, custodial banks, and internal operations. Pension system management usually takes a consistent approach to managing and monitoring each of these relationships. They do not assume, for example, that internal managers generate less risk simply because they

are part of the organization. On the other hand, they do not assume that external managers and custodians pose less risk because they are reputable industry experts. Things can go wrong in any environment, and, as a result, most public pension systems address risk through a systematic and steady approach.

[See Risk Standards for Institutional Investment Managers and Institutional Investors (1996), Risk Standard #5: Consistent Application of Risk Policies]

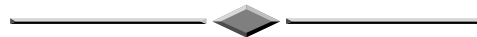
External Managers

The management of operational risk associated with external managers focuses on activities by the manager that change the assets held in their account, primarily buying or selling securities. Assuming the controls of the custodial bank are functioning properly (an assumption addressed later), then the operational failure of the external manager can basically only be the result of three actions:

- A security is inappropriately sold;
- A security is inappropriately purchased; or
- An intended sale or purchase of a security is not accomplished.

These actions are all the result of the manager not complying with the guidelines and strategies set forth by the public pension system.

The possibility always exists that an external manager, either intentionally or unintentionally, will not adhere to the guidelines or strategy for which they were hired. As discussed above, an adequate monitoring process should mitigate the risk of noncompliance by the manager; however, for the monitoring process to be effective, the data monitored must be timely, available, and accurate. Therefore, an operational risk associated with external managers is that timely and reliable information is not available or that the information is inaccurate. Obviously, if a System is monitoring inaccurate or dated holdings and trade data, then the risk of not detecting the noncompliance features of the actual portfolio increases. Generally, the longer a portfolio is allowed to be out of compliance with the established guidelines and strategies, then the more likely the returns of the portfolio will not live up to expectations.



POINTS OF FOCUS FOR ACTION

Separation of Authority from Custody: The legal custody of a public pension system's assets is usually maintained through a custodial bank. Securities are held at the custodial bank in the custodian's name on the public pension system's behalf. Managers do not have direct control over those assets and must perform their activities through the custodial accounts. When a security is purchased or sold, the custodian must receive instructions from the manager to receive or deliver the security (usually on a "delivery vs. payment" basis).

Therefore, it is very difficult for the manager to obtain more funds than authorized by the System. Consequently, each external manager creates a limited amount of operational risk with regard to the overall public pension system because they only have access to the funds assigned them by the System.

If, for example, an external manager's building is destroyed and all records and capabilities are lost, the public pension system still has all of its securities under separate control. In addition, public pension systems can, at any time, "freeze" an external manager's account and prevent future access by the manager, which is often done upon termination of a manager. All that is lost is the opportunity cost of the added value that may have come from future decisions by the manager. Opportunity cost concerns can be limited by immediately transferring the securities to another manager's account, which is also frequently done upon the termination of a manager.

Finally, an external manager does not have the ability to move cash and securities out of the pension system's account to another destination, either within that custodian's system or outside the system. A manager only has control over the movement of securities and cash within the account. An attempt or request for this unauthorized type of movement should automatically trigger a request by the custodian for independent authorization from both the external manager's and public pension system's staff.

Reconciliation: The accuracy of the holdings and transactions is usually assured through a monthly reconciliation of the data by the external manager and custodian or by the pension system from data provided from the external manager and the custodian. The reconciliation process helps to ensure the integrity and timeliness of the data used by the System during the monitoring process.

[See Risk Standards for Institutional Investment Managers and Institutional Investors (1996), Risk Standard #11: Valuation Reconciliation, Bid/Offer Adjustments and Overrides]

Due Diligence: Public pension systems also manage the risk of external manager operational failure by incorporating good hiring practices and conducting periodic due diligence reviews as discussed above. During the hiring process the System should take steps to ensure the external manager has adequate resources and qualified personnel to enable them to disseminate timely and accurate information. The on-going due diligence reviews help the System identify significant changes in the manager's organizational structure, ownership, personnel, or available resources that may affect future operational performance.

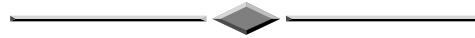
[See Risk Standards for Institutional Investment Managers and Institutional Investors (1996), Risk Standard #17: Due Diligence, Policy Compliance and guideline monitoring]

[See Risk Standards for Institutional Investment Managers and Institutional Investors (1996), Risk Standard #18: Comparison of Manager Strategies to Compensation and Investment Activity]

[See Risk Standards for Institutional Investment Managers and Institutional Investors (1996), Risk Standard #20: Review Process for New Activities]

Custodial Banks

A system must be in place to ensure that the assets of a public pension system are maintained safely, securely, and with the appropriate legal protection. This task falls primarily to custodial banks. Therefore, a key component of managing operational risk by public pension systems is the quality of the custodial system. The custodial system needs to be accurate and provide staff the ability to access holdings, pricing, and transaction information on a regular and timely basis.



POINTS OF FOCUS FOR ACTION

Again, a key to obtaining quality reliable service from a custodial bank begins with the hiring process. While there are noted exceptions, the majority of public pension systems control the selection of their custodian. In those cases, most employ some sort of structured due diligence process when selecting their custodial bank, which could include the use of an independent external consultant. The process, in many cases will be similar to that used to select external managers.

In essence, public pension systems rely on three basic mechanisms to assure the continued viability of the custodial operation once the hiring process is complete. The first is a comprehensive annual financial examination of the custodial records conducted by an independent accounting and/or auditing firm. The second is thorough process of monthly reconciliation that generally takes place between the individual portfolio managers and the custodian. The third is through the periodic use of the System and its key components by internal staff.

Independent Audit: The financial statements of virtually all public pension systems are audited annually by an independent auditor. These audits are usually either conducted by a state government's audit agency or an independent certified public accounting firm hired by the system. Because the custodial bank plays such a material role in the operations of the System, the auditors must obtain a certain level of assurance that custodial operations are sufficient. The auditor can obtain this level of assurance by physically reviewing and testing the controls and procedures of the custodian's operations or by obtaining an independent report. The independent report should be prepared in accordance with the Auditing Standards Board Statements on Auditing Standards No. 70, "Reports on the Processing of Transactions by Service Organizations" (SAS 70 report).

Because of the expense involved with physically reviewing and testing the controls and procedures of the custodian's operations, most auditors opt to obtain a SAS 70 report for the custodian. It is important to note that a SAS 70 report that only contains descriptions of the policies and procedures at the custodial bank and the auditor's assessment as to whether such policies and procedures are suitably designed is not sufficient to reduce the pension system auditor's assessment of control risk. However, a SAS 70 report that also states that

the policies and procedures were tested, and that they were operating effectively to achieve the related control objectives during the period is expressly designed to reduce the assessment of control risk by users of the custodial system. The external auditors of a public pension system are allowed to use this latter type of SAS 70 report as a substitute for performing their own evaluation of the reliability of a custodian's operating system.

[See Statements on Auditing Standards No. 70, Auditing Standards Board (1992), Reports on the Processing of Transactions by Service Organizations]

Reconciliation: The second ongoing check of the reliability of the custodial systems is the requirement that each portfolio manager and custodian reconcile the account positions on a monthly basis. This procedure involves the comparison of the custodian's security positions, prices, and valuations with the same information as recorded by each manager. Any discrepancies are duly noted and resolved on a timely basis. Differences in pricing sources may sometimes be allowed once identified, but there is usually no tolerance for any difference in the size of the position (or units held). Many public pension systems often withhold payment for asset managers or custodial services if either party fails to perform its reconciliation function on a timely basis. This monthly reconciliation function is usually monitored independently by the public pension system's internal staff.

The reconciliation process helps to assure that any material breakdown in the custodial system between annual audits will be identified on a timely basis. Corporate governance actions (stock splits, dividends, interest, warrants, etc.) will also be monitored through the valuation and unit holding comparisons.

Periodic Reviews: In many cases, where sufficient internal staff are available, many public pension systems also perform periodic reviews of the portfolios and transactions on a periodic basis. The potential benefit of this is to serve as a third check on the reliability and accuracy of the custodial system. These reviews often validate the accuracy of account valuations, currency positions, and periodic transactions. A significant breakdown in the custodial system should be revealed in this type of review and most significant errors in record keeping, corporate governance, and pricing should also be captured. To accomplish the periodic reviews, the data provided by the custodian should possess certain qualities to enable pension staff to perform their operating, reporting, and compliance functions. The necessary qualities include:

- The data must be relevant to the needs of the pension system staff.
- The data must be current, timely, and accessible to pension system staff.
- The data must be complete and accurate.

[See COSO Internal Control Integrated Framework (1992), Evaluation Tools – Information and Communication, p. 31]

Internal Operations

Thus far, we have addressed the operational risks associated with external agents, but the internal operations of the System are also exposed to operational risk. Such operational risk is present in areas of internal asset management, cash management, and operating systems to protect data integrity.

Internal Asset Management: In many public pension systems, internal staffs serve as asset managers. Most of the operational risks of internal management are the same as if the assets were being managed externally. These risks include cash movements in and out of the portfolios and compliance with the portfolio's intended strategy. However, some additional concerns are brought about by the practice of internal management. First, the monthly reconciliation process between external managers and the custodian is no longer naturally present and, thus, a process to help ensure data integrity is lost. Second, a layer of oversight may be eliminated with internal management since the investment officers who were responsible for monitoring the compliance of the external managers may now be managing internal portfolios and obviously cannot monitor the compliance of their own portfolio. A public pension system needs to address these additional concerns when implementing procedures to internally manage assets.

Cash Management: Another internal operational risk involves cash management. Cash management involves the movement of cash between accounts, or into and out of the portfolio either for distribution to beneficiaries or to fund external asset managers at the appropriate level. The risk is that unauthorized movements of cash will be made or that inappropriate amounts of cash will be distributed.

Operating Systems: Finally, there is the risk that the internal operating systems necessary to support the investment activity, for both internally and externally managed assets, will fail. For example, a communication link often exists between the pension system and custodian, which allows the pension system instant access to portfolio data. Internal computer systems may go down or the building in which the public pension system is located may suffer a catastrophe.



POINTS OF FOCUS FOR ACTION

As stated above, the operational risks of internal asset management are similar to the risks of external management; therefore, many of the risk management practices are similar. Hiring practices are again important. The pension system must diligently pursue competent individuals to ensure the fund is managed in accordance with the intended strategy. In addition, operational guidelines are usually put in place for each individual internally managed portfolio.

[The following points of focus address major areas of concern. For more specific information, see Trading Control, The Institute of Internal Auditors (1998); and Auditing Investments Handbook, The Institute of Internal Auditors (1999)]

Accounting System: A public pension system with internal asset management usually implements its own investment accounting system to accomplish the task of reconciling monthly investment data with the custodial bank. The investment accounting software tracks all positions and transactions of an internally managed portfolio and the data can be reconciled with the monthly activity reported by the custodial bank. In addition, standard reports should be issued pursuant to a fixed distribution list to facilitate ongoing monitoring.

[See Risk Standards for Institutional Investment Managers and Institutional Investors (1996), Risk Standard #9: Routine Reporting, Exception Reporting and Escalation Procedures]

[See Public Pension Plan Operation and Administration, Government Finance Officers Association, (1992), Financial Management of the System, p. 35.]

Segregation of Duties: To successfully implement the investment accounting process, the pension system normally segregates duties between the management of the portfolio and the record keeping or accounting function associated with the portfolio. Basically, this means that the individual responsible for making trading decisions for the portfolio is not responsible for affirming the trades or entering the trade data into the accounting system. In addition, the portfolio manager under this approach is not involved in the monthly reconciliation process between the internal investment accounting system and the custodial system.

The separation of duties can also reduce the risk associated with cash management. The individual responsible for managing an internal portfolio typically does not also have the authority to transfer funds from the custodial accounts. Often two signatures (one from fiscal services and one from non-asset manager investment staff) are required to initiate cash movement from the custodian. In addition, the custodian will often be required to contact an additional staff member, perhaps the chief investment officer or chief financial officer, before completing the cash movement request.

[See Risk Standards for Institutional Investment Managers and Institutional Investors (1996), Risk Standard #3: Independent Risk Oversight, Checks and Balances, Written Procedures and Controls]

Independent Oversight: To address the potential lack of independent oversight, public pension systems often assign individuals who are independent of the portfolio management function to monitor the portfolio for compliance with established guidelines. An external investment consultant, an internal audit group, other staff (e.g., compliance officer), or a combination can perform the monitoring function.

[See Risk Standards for Institutional Investment Managers and Institutional Investors, Risk Standard #3: Independent Risk Oversight, Checks and Balances, Written Procedures and Controls]

Business Continuity Plan: The risk associated with the internal operating systems of a public pension system may be limited because the “official” holdings and books of records are usually maintained off site at custodial banks. Nonetheless, public pension systems usually take steps to minimize the chances of failed internal operating systems. Regular back-ups of important internal data are usually performed and stored off site to preserve the data. In addition, a back-up connection line to the custodial bank and other essential communication links are often installed to ensure reliable data is available at all times. Finally, most pension plans develop some sort of disaster recovery plan to ensure the operating systems can be up and running as soon as possible in the unlikely event of a total breakdown in computer systems, building malfunctions, and other catastrophes.

[See Control Objectives for Information and Related Technology (COBIT), Information Systems Audit and Control Foundation (1996). DS 4: Ensure Continuous Service]

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Best Practices/Advisories

GFOA Best Practices identify specific policies and procedures that contribute to improved government management. They aim to promote and facilitate positive change or recognize excellence rather than merely to codify current accepted practice. GFOA has emphasized that these practices be proactive steps that a government should be taking. Best practices are applicable to all governments (both large and small). Best practices are approved by the GFOA executive board and represent the official position of the organization.

GFOA Advisories identify specific policies and procedures necessary to minimize a government's exposure to potential loss in connection with its financial management activities. For many advisories, GFOA will be providing specific recommendations on how to avoid risk or loss, either proactively or retroactively, in response to current events or trends. Advisories are approved by the GFOA executive board and represent the official position of the organization.

[Complete List of GFOA Best Practices and Advisories \(Alphabetical\)](#)

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Selecting and Managing Municipal Advisors

Best Practice

The Government Finance Officers Association (GFOA) recommends that issuers hire a municipal advisor prior to the undertaking of a debt financing unless the issuer has sufficient in-house expertise and access to current bond market information.

Committee: Governmental Debt Management

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Selecting and Managing Underwriters for Negotiated Bond Sales

Best Practice

The Government Finance Officers Association (GFOA) recommends that, unless the issuer has sufficient in-house expertise and access to market information, it should hire an outside municipal advisor prior to undertaking a negotiated debt financing in order to assist the government with evaluating proposals from underwriters, selecting the underwr

Committee: Governmental Debt Management

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Procuring Actuarial Services**Best Practice**

GFOA recommends that state and local governments take the following steps to obtain high-quality actuarial services for their public retirement plans: 1) identify the actuarial services required; 2) establish selection criteria; 3) develop a clear and concise request for proposals (RFP); 4) determine, to the degree possible, the level of indepen

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Retirement and Benefits Administration

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Procurement of Financial Services**Best Practice**

GFOA recommends that governments review their financial services contracts every five years and use a competitive process for the procurement of financial services.

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➤ **Performance Management**

➤ **Grants Management**

➤ **Succession Planning**

Pension & Benefit Administration

▼ **Pension Policy, Governance, and Management**

Communicating Health-Care Benefits to Employees and Retirees**Best Practice**

GFOA recommends that governments develop effective communication strategies that support their health-care benefit goals, including:

Committee: Retirement and Benefits Administration

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Sustainable Pension Benefit Tiers**Best Practice**

GFOA recommends that jurisdictions considering new benefit tiers examine the following issues: A government's authority to revise its pension benefits, the overall goals it wants to accomplish by doing so, and the effect of such changes on the workforce; and the financial impacts resulting from changes to pension plan design, as well as the effe

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Developing a Policy to Participate in Securities Litigation Class Actions**Best Practice**

A considerable number of Plans have not been filing proof of claim forms to participate in settlements in which they have eligible claims and, as a result, are forfeiting money.² Therefore, GFOA recommends that every Public Pension Plan develop and adopt a policy setting forth procedures for monitoring and partic

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Developing a Policy for Retirement Plan Design Options**Best Practice**

GFOA recommends that state and local governments have a policy statement that will guide their on-going plan design decisions.

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OPEB Governance and Administration**Best Practice**

GFOA recommends that sponsoring governments establish a clear, well-documented governance structure to guide governing bodies and plan administrators. This structure should:

Committee: Retirement and Benefits Administration

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Governance of Public Employee Postretirement Benefits Systems

Best Practice

GFOA recommends that the state or local government or other designated governing entity establish rules of governance for its post-retirement benefit systems that define the key elements necessary for trustees and other fiduciaries to fulfill their responsibilities, in accordance with fiduciary standards.

Committee: Retirement and Benefits Administration

[Read more](#)

Preparing an Effective Summary Plan Description

Best Practice

GFOA recommends that all state and local government pension plans prepare an SPD that completely, accurately, and clearly describes the significant components of the pension plan for participants.

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Deferred Retirement Option Plans

Advisory

GFOA recommends that governments exercise extreme caution in considering DROP plans and that prior to approving such plans they conduct a structured decision-making process that includes, at minimum, the following steps:

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Evaluating the Use of Early Retirement Incentives

Advisory

GFOA recommends that governments exercise extreme caution if considering ERIs. Governments should take several actions prior to the decision to offer an ERI in terms of (1) goal-setting, (2) cost/benefit analysis, and (3) budgetary analysis. Governments should also develop an implementation plan.

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Educating Employees about the Adequacy of Retirement Benefits

Best Practice

GFOA recommends that government employers and plan administrators educate employees about retirement income and include the following considerations when preparing the education program.

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▼ Funding Practices

The Role of the Actuarial Valuation Report in Plan Funding

Best Practice

Using the Actuarial Report to Make Appropriate Decisions

Committee: Accounting, Auditing, and Financial Reporting
Retirement and Benefits Administration

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Core Elements of a Funding Policy

Best Practice

GFOA recommends that every state and local government that offers defined benefit pensions and/or OPEB formally adopt a funding policy that provides reasonable assurance that the cost of those benefits will be funded in an equitable and sustainable manner.

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▼ Defined Benefit Plans

Asset Allocation for Defined Benefit Plans

Best Practice

GFOA recommends that state and local government retirement systems establish, within their overall investment policy, an asset allocation plan that is based on the following best practices:

Committee: Retirement and Benefits Administration

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Design Elements of Defined Benefit Retirement Plans

Best Practice

Should a public sector employer choose to provide a defined benefit plan, GFOA recommends that pension administrators and finance professionals consider the following essential elements in their plan design:

Committee: Retirement and Benefits Administration

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Hybrid Retirement Plan Design

Best Practice

GFOA recommends that governments that choose to provide a hybrid retirement benefit plan address key points related to plan design, funding policies, board governance, plan conversion, and participant education.

Key plan design considerations.

Committee: Retirement and Benefits Administration

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Responsible Management and Design Practices for Defined Benefit Pension Plans

Advisory

GFOA recommends that under no circumstance should state and local government plan sponsors engage in pension contribution holidays or make insufficient contributions.

Committee: Retirement and Benefits Administration

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Enhancing Reliability of Actuarial Valuations for Pension Plans

Best Practice

Because actuarial information directly affects the funded level and sustainability of pension plans, the GFOA developed this new best practice to urge pension plan fiduciaries to take appropriate steps to ensure that all information provided to the actuary is accurate and up to date. The best practice also provides guidance on how to engage actuaries and additional services that finance officers should consider having the actuary perform.

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Pension Obligation Bonds

Advisory

GFOA recommends that state and local governments do not issue pension obligation bonds.

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Sustainable Funding Practices for Defined Benefit Pensions and Other Postemployment Benefits (OPEB)

Best Practice

GFOA recommends that government officials ensure that the costs of DB pensions and OPEB are properly measured and reported. Sustainability requires governments that sponsor or participate in DB pension plans, or that offer OPEB, to contribute the full amount of their actuarially determined contribution (ADC) each year.

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Governmental Budgeting and Fiscal Policy
Retirement and Benefits Administration

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▼ Defined Contribution Plans

Asset Allocation for Defined Contribution Plans

Best Practice

GFOA recommends that public employers as plan sponsors work actively with the plan administrators to provide investment options and education to help employees who participate in defined contribution plans attain their income replacement goals in retirement.

Committee: Retirement and Benefits Administration

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Defined Contribution Retirement Plan Design

Best Practice

Should an employer choose to provide a defined contribution (DC) plan as the primary retirement vehicle, GFOA recommends that retirement administrators and finance professionals include the following design elements:

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Hybrid Retirement Plan Design

Best Practice

GFOA recommends that governments that choose to provide a hybrid retirement benefit plan address key points related to plan design, funding policies, board governance, plan conversion, and participant education.

Key plan design considerations.

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Monitoring and Disclosure of Fees for Defined Contribution Plans

Best Practice

GFOA recommends that plan sponsors make sure that DC plan costs are reasonable and appropriate, compared with plans of similar size, structure, and service levels, and that they provide plan participants with meaningful and accessible information about fees and expenses. These policies and practices should ensure that plan sponsors:

Committee: Retirement and Benefits Administration

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Participant Education Guidance for Defined Contribution Plans

Best Practice

GFOA recommends that public plan sponsors make sure high-quality investment education is provided to defined contribution plan participants who are allowed to direct their investments. To accomplish this goal:

Committee: Retirement and Benefits Administration

[Read more](#)

Brokerage Window Options for Defined Contribution Retirement Plans

Advisory

GFOA recommends that state and local governments exercise extreme caution when considering whether to offer a brokerage window option in conjunction with a defined contribution retirement plan. Such options should be offered only after:

(a) careful review by the governing board;

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Defined Contribution Plan Fiduciary Responsibility

Best Practice

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✔ OPEB

Establishing and Administering an OPEB Trust

Best Practice

GFOA recommends creating a qualified trust fund to prefund OPEB obligations. To ensure that the trust is established and administered properly, governments should consult qualified legal counsel and fully understand the following issues:

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OPEB Governance and Administration

Best Practice

GFOA recommends that sponsoring governments establish a clear, well-documented governance structure to guide governing bodies and plan administrators. This structure should:

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Other Postemployment Benefits (OPEB) Bonds

Advisory

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Ensuring Other Postemployment Benefits (OPEB) Sustainability

Best Practice

GFOA recommends that governments ensure OPEB sustainability by evaluating key items specifically related to OPEB, including the structure of benefits offered, the associated benefit cost-drivers, and clear communication to stakeholders.²

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Sustainable Funding Practices for Defined Benefit Pensions and Other Postemployment Benefits (OPEB)

Best Practice

GFOA recommends that government officials ensure that the costs of DB pensions and OPEB are properly measured and reported. Sustainability requires governments that sponsor or participate in DB pension plans, or that offer OPEB, to contribute the full amount of their actuarially determined contribution (ADC) each year.

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Governmental Budgeting and Fiscal Policy
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Health Care

Communicating Health-Care Benefits to Employees and Retirees

Best Practice

GFOA recommends that governments develop effective communication strategies that support their health-care benefit goals, including:

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Strategic Health-Care Plan Design

Best Practice

GFOA recommends that plan sponsors consider developing and formally adopting a long-term, strategic plan that includes guiding principles and key objectives for managing health-care costs and improving participant wellness.

Committee: Retirement and Benefits Administration

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Complying with the Affordable Care Act

Best Practice

The Government Finance Officers Association (GFOA) recommends that state and local government employers that sponsor group health plans implement a process for reviewing federal health-care benefit requirements *at least quarterly* to ensure that they are aware of any newly issued or soon-to-be issued regulations.

Committee: Retirement and Benefits Administration

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Patient Protection and Affordable Care Act Compliance

Best Practice

The Government Finance Officers Association (GFOA) recommends that state and local government employers that sponsor group health plans implement a process for reviewing federal health-care benefit requirements at least quarterly to ensure that they are aware of any newly issued or soon-to-be issued regulations.

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Pension Investments

Understanding Pension Fund Investment Risk

Best Practice

GFOA endorses the report developed jointly by the Association of Public Pension Fund Auditors and selected chief investment officers of public pension funds, entitled "Public Pension Systems: Statements of Key Investment Risks and Common Methods to Address those Risks." By reviewing this report, governing and managing fiduciaries responsible for

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Investment Policies for Tax-Deferred Retirement Savings Plans

Best Practice

GFOA recommends that the governing bodies of the tax deferred retirement savings plans establish and adhere to a formal investment policy governing the selection and monitoring of investments made available by the plan.

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Investment Policies for Defined Benefit Plans

Best Practice

GFOA recommends that defined benefit plans establish and adhere to a formal investment policy to regulate and monitor the system's investment program. Such a policy should be viewed as a long-term governing document.

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Public Employee Retirement System Investments

Best Practice

GFOA recommends that fiduciaries adhere to the following best practices regarding investments:

1. Pension fund fiduciaries should establish a written investment policy that lays out formal policies and procedures to regulate and monitor the system's investment program. The investment policy should:

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Commission Recapture Programs

Advisory

A pension plan should first determine whether a commission recapture program will actually produce lower costs overall. If the pension plan's board of trustees decides to have such a program, or if it is required by law, GFOA recommends the following guidelines for proper administration.

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Selecting Investment Advisers for Pension Fund Assets

Advisory

GFOA has consistently recommended that state and local governments exercise caution in their selection of investment advisers for pension plan assets. This is particularly important because the fiduciary responsibility for pension plan assets cannot be delegated to an investment adviser.

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Using Alternative Investments for Public Employee Retirement Systems and OPEB Established Trusts

Advisory

GFOA recommends that state and local governments exercise extreme prudence and appropriate due diligence be exercised in the use of alternative investments in public pension and OPEB portfolios.

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Investment Fee Policies for Retirement Systems

Best Practice

To minimize the impact of investment management fees on portfolio returns, the GFOA developed this best practice, which recommends that retirement systems, especially those that use alternative investment strategies, adopt an investment management fee policy that will allow the retirement system to negotiate the lowest competitive fee possible while looking out for the system's long-term earning potential. The best practice also provides recommendations to governments about strategies to reduce investment fees.

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Actuarial Services

Procuring Actuarial Services

Best Practice

GFOA recommends that state and local governments take the following steps to obtain high-quality actuarial services for their public retirement plans: 1) identify the actuarial services required; 2) establish selection criteria; 3) develop a clear and concise request for proposals (RFP); 4) determine, to the degree possible, the level of indepen

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Actuarial Audits

Best Practice

The GFOA recommends that public pension plan fiduciaries:

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Pension Reporting

Disclosures of Pension Funding Obligations in Official Statements

Best Practice

GFOA recommends that issuers implement appropriate procedures when determining the level of information that needs to be disclosed about their pension funding obligations relative to their financial position.

Committee: Governmental Debt Management
Retirement and Benefits Administration

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Technology

Treasury and Investment Management

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BEST PRACTICE

Procurement of Financial Services

BACKGROUND:

Governments rely on a variety of vendors to provide essential financial services, including:

- Banking services
- Trustee/custodial
- Securities broker/dealer
- Underwriting and other debt related services
- Financial advisory
- Merchant services
- Investment advisory services

These industries are subject to constantly changing regulations, technologies, and market conditions. As a result, governments must provide regular due diligence of all financial service providers. Part of ongoing due diligence includes regular competition for the procurement of services.

RECOMMENDATION:

GFOA recommends that governments review their financial services contracts every five years and use a competitive process for the procurement of financial services. A competitive procurement process provides an opportunity for the government to obtain market competitive rates and negotiate preferable terms and conditions and/or service enhancements in financial service contracts. It also gives the government an opportunity to take advantage of technology enhancements, service changes, or evolution in the market. Identifying a regular schedule for soliciting competitive bids for financial service providers also helps reduce the risk of a government becoming too reliant on one vendor.

With every competitive procurement process, governments should define the scope of the procurement opportunity, identify specific evaluation criteria, and prepare a strategy to evaluate responses. Evaluation criteria should specifically address the following:

- **Product and service breadth, depth and quality** – the service provider's ability to provide solutions that meet the government's specific needs.
- **Quality of servicing staff** – the individual experience, skills, and qualifications of the staff members who will provide services on the account, if selected, and their ability to meet the government's needs.
- **Financial strength** – the service provider's profitability, operating history, and net capital (which should be of sufficient size to satisfy service requirements).
- **Service capacity** – the provider's ability to process sufficient transaction volumes and dollars of throughput.
- **Regulatory standing** – the provider's status with the applicable regulatory agency.

- **Reputation and social responsibility** – the experience peer governments have had with the provider and the provider’s demonstration of being a good citizen that is fair and honest in its dealings.
- **Cost** – the overall cost or rate included in the proposal, which can include consideration of potential future price escalations.

References:

- Sample RFPs (coming soon)
- Sample evaluation criteria/checklist (coming soon)

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